

Appendix A: 2020 UWMP Checklist

Retail	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
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	Chapter 4 Chapter 3
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	Section 1.1
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	Section 1.2
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	Section 1.3
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	Sections 1.3 through 1.5
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	Section 1.3 Appendix B
	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	n/a
x	Section 3.1	10631(a)	Describe the water supplier service area.	System Description	Section 2
x	Section 3.3	10631(a)	Describe the climate of the service area of the supplier.	System Description	Section 2.1
x	Section 3.4	10631(a)	Provide population projections for 2025, 2030, 2035, 2040 and optionally 2045.	System Description	Section 2.3
x	Section 3.4.2	10631(a)	Describe other social, economic, and demographic factors affecting the supplier's water management planning.	System Description	Section 2.3.3

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x	Sections 3.4 and 5.4	10631(a)	Indicate the current population of the service area.	System Description and Baselines and Targets	Table 2-2
x	Section 3.5	10631(a)	Describe the land uses within the service area.	System Description	Section 2.3
x	Section 4.2	10631(d)(1)	Quantify past, current, and projected water use, identifying the uses among water use sectors.	System Water Use	Section 4.1 Section 4.4
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	Section 4.1.2
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	Section 4.4.3
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	Section 4.4.2 Section 4.4.3 Chapter 2
x	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	Section 4.1.2
x	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	Section 4.4.4
x	Section 4.5	10635(b)	Demands under climate change considerations must be included as part of the drought risk assessment.	System Water Use	Section 5.1.1 Section 4.4
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	Section 4.2
x	Chapter 5	10608.24(a)	Retail suppliers shall meet their water use target by December 31, 2020.	Baselines and Targets	Section 4.2
	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	n/a
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	n/a

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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	Section 4.2
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	Section 4.2
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	Section 5.2
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	Section 5.2 Section 4.4
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	Chapter 3
x	Section 6.1.1	10631(b)(3)	Describe measures taken to acquire and develop planned sources of water.	System Supplies	Section 3.7
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	Section 3.7
x	Section 6.2	10631(b)	Indicate whether groundwater is an existing or planned source of water available to the supplier.	System Supplies	Section 3.2
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	Section 3.2
x	Section 6.2.2	10631(b)(4)(B)	Describe the groundwater basin.	System Supplies	Section 3.2
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	Section 3.2

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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	Section 3.2
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 year.	System Supplies	Section 3.2
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	Section 3.2
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	Section 3.3
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)	Section 4.4 (and subsections)
x	Section 6.2.5	10633(c)	Describe the recycled water currently being used in the supplier's service area.	System Supplies (Recycled Water)	Section 3.1.8 Section 3.1.9
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)	Section 3.1.8 Section 3.1.9
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)	Section 3.1.8 Section 3.1.9
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)	Section 3.1.8 Section 3.1.9
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)	Section 3.1.8 Section 3.1.9
x	Section 6.2.6	10631(g)	Describe desalinated water project opportunities for long-term supply.	System Supplies	Section 3.4
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)	Section 3.1.8 Table 4-2

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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	Section 3.7
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	Section 2.5
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	Section 3.6
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	Chapter 3 Chapter 5
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	Section 5.1 Section 5.2
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	Section 5.1
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	Section 5.1.1
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	Section 5.1.2 Section 5.2
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	Section 5.1.2 Section 5.2
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	Section 5.1 Section 5.2

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x	Chapter 8	10632(a)	Provide a water shortage contingency plan (WSCP) with specified elements below.	Water Shortage Contingency Planning	Chapter 6
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	Section 6.1
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	Section 6.7
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	Section 6.2
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	Section 6.2
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	Section 6.3
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	n/a
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	Section 6.3 Section 6.9
x	Section 8.4	10632(a)(4)(B)	Specify locally appropriate demand reduction actions to adequately respond to shortages.	Water Shortage Contingency Planning	Section 6.3 Section 6.9
x	Section 8.4	10632(a)(4)(C)	Specify locally appropriate operational changes.	Water Shortage Contingency Planning	Section 6.3 Section 6.9
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	Section 6.3 Section 6.9

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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	Section 6.3
x	Section 8.4.6	10632.5	The plan shall include a seismic risk assessment and mitigation plan.	Water Shortage Contingency Plan	Section 6.8
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	Section 6.4
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	Section 6.4
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	Section 6.5
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	Section 6.5
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	Section 6.3
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	Section 6.5
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	Section 6.6
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	Section 6.6
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	Section 6.6
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	Section 6.7

Retail	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
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	Section 6.2
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	Section 1.5 Section 6.7
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	Section 6.11
	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	n/a
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	Chapter 4.3
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	Section 1.4
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	Section 1.3
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	Section 1.5 Section 6.7
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	Section 1.3 Section 1.4
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	Section 1.4

Retail	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
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	Section 1.4 Section 1.5
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	Section 1.5
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	Section 1.5
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	Section 1.5
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	Section 1.5
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	Section 1.5
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	n/a
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	Section 1.5

Appendix B: Notification and Public Hearing Outreach

- City/County Notification
- Public Hearing outreach



January 7, 2021

Joshua Haggmark
City of Santa Barbara
Public Works Department
630 Garden Street
Santa Barbara, CA 93101

Re: Notification of Urban Water Management Plan Review and Amendment Period for the Montecito Water District

Dear Mr. Haggmark,

The Montecito Water District (District) is preparing its 2020 Urban Water Management Plan (UWMP) as required by the California Water Code. The UWMP must be completed by July 1, 2021.

The purpose of this communication is to provide a courtesy notice that the District has initiated its 2020 UWMP update process. As part of the process, the District will hold a public hearing pursuant to Water Code §10642 to allow public input prior to Board adoption consideration. The content of the 2020 UWMP will be presented and reviewed at several Committee and Board Meetings from January 2021 to April 2021. The District invites regional agency and public involvement at these meetings. A draft of the UWMP will be available for review prior to the public hearing. The District will provide formal public notice for the public hearing, anticipated for May 2021.

If you have any questions regarding the above, please contact me at (805) 969-2271 or at nturner@montecitowater.com.

Sincerely,

Nick Turner
General Manager
Montecito Water District

Board of Directors

Tobe Plough
President

Kenneth Coates
Vice President

Brian Goebel
Director

Cori Hayman
Director

Floyd Wicks
Director

**General Manager
and Board Secretary**
Nick Turner

583 San Ysidro Road
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www.montecitowater.com

The District uses recycled paper.
Each ton of recycled paper
saves 7,000 gallons of water.

CC: Jim Crowley, Zanjero Water



January 7, 2021

Bob McDonald, P.E., MPA
General Manager, Carpinteria Valley Water District
1301 Santa Ynez Ave
Carpinteria, CA 93013

Re: Notification of Urban Water Management Plan Review and Amendment Period for the Montecito Water District

Dear Mr. McDonald,

The Montecito Water District (District) is preparing its 2020 Urban Water Management Plan (UWMP) as required by the California Water Code. The UWMP must be completed by July 1, 2021.

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Sincerely,

Nick Turner
General Manager
Montecito Water District

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CC: Jim Crowley, Zanjero Water



January 7, 2021

Jon Turner
Interim General Manager, Montecito Sanitary District
1042 Monte Cristo Lane
Santa Barbara, CA 93108

Re: Notification of Urban Water Management Plan Review and Amendment Period for the Montecito Water District

Dear Mr. Turner,

The Montecito Water District (District) is preparing its 2020 Urban Water Management Plan (UWMP) as required by the California Water Code. The UWMP must be completed by July 1, 2021.

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Sincerely,

Nick Turner
General Manager
Montecito Water District

CC: Jim Crowley, Zanjero Water

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January 7, 2021

Matt Young
Water Resources Program Manager
Santa Barbara County Water Agency
130 E. Victoria St., Suite 200
Santa Barbara, CA 93101

Re: Notification of Urban Water Management Plan Review and Amendment Period for the Montecito Water District

Dear Mr. Young,

The Montecito Water District (District) is preparing its 2020 Urban Water Management Plan (UWMP) as required by the California Water Code. The UWMP must be completed by July 1, 2021.

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Sincerely,

Nick Turner
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CC: Jim Crowley, Zanjero Water



January 7, 2021

Noe Aguilar Vega
Operations Supervisor
Summerland Sanitary District
2435 Wallace Avenue
Summerland, CA 93067

Re: Notification of Urban Water Management Plan Review and Amendment Period for the Montecito Water District

Board of Directors

Tobe Plough
President

Kenneth Coates
Vice President

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Director

Cori Hayman
Director

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Director

**General Manager
and Board Secretary**
Nick Turner

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The Montecito Water District (District) is preparing its 2020 Urban Water Management Plan (UWMP) as required by the California Water Code. The UWMP must be completed by July 1, 2021.

The purpose of this communication is to provide a courtesy notice that the District has initiated its 2020 UWMP update process. As part of the process, the District will hold a public hearing pursuant to Water Code §10642 to allow public input prior to Board adoption consideration. The content of the 2020 UWMP will be presented and reviewed at several Committee and Board Meetings from January 2021 to April 2021. The District invites regional agency and public involvement at these meetings. A draft of the UWMP will be available for review prior to the public hearing. The District will provide formal public notice for the public hearing, anticipated for May 2021.

If you have any questions regarding the above, please contact me at (805) 969-2271 or at nturner@montecitowater.com.

583 San Ysidro Road
Santa Barbara, CA
93108-2124

Ph 805.969.2271
Fax 805.969.7261

info@montecitowater.com
www.montecitowater.com

The District uses recycled paper.
Each ton of recycled paper
saves 7,000 gallons of water.

Sincerely,

Nick Turner
General Manager
Montecito Water District

CC: Jim Crowley, Zanjero Water



May 10, 2021

Matt Young
Water Resources Program Manager
Santa Barbara County Water Agency
130 E. Victoria St., Suite 200
Santa Barbara, CA 93101

Re: Notification of Urban Water Management Plan and Water Shortage Contingency Plan Public Hearing Date

Dear Mr. Young,

The Montecito Water District (District) is preparing updates to its 2020 Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan as required by the California Water Code. The UWMP and Water Shortage Contingency Plan must be completed by July 1, 2021.

The purpose of this communication is to provide notice **pursuant to Water Code §10642, that the District will hold a public hearing on June 22, 2021 at 9:30am concerning adoption of the UWMP and Water Shortage Contingency Plan.** The District invites regional agency and public involvement at the public hearing. A draft of the UWMP and Water Shortage Contingency Plan will be available on the District website for review prior to the public hearing.

If you have any questions regarding the above, please contact me at (805) 969-2271 or at nturner@montecitowater.com.

Sincerely,

Nick Turner
General Manager
Montecito Water District

CC: Jim Crowley, Zanjero Water

Board of Directors

Tobe Plough
President

Kenneth Coates
Vice President

Brian Goebel
Director

Cori Hayman
Director

Floyd Wicks
Director

**General Manager
and Board Secretary**
Nick Turner

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June 1, 2021

Joshua Haggmark
City of Santa Barbara
Public Works Department
630 Garden Street
Santa Barbara, CA 93101

Re: Notification of Urban Water Management Plan and Water Shortage Contingency Plan Public Hearing Date

Board of Directors

Tobe Plough
President

Kenneth Coates
Vice President

Brian Goebel
Director

Cori Hayman
Director

Floyd Wicks
Director

**General Manager
and Board Secretary**
Nick Turner

Dear Mr. Haggmark,

The Montecito Water District (District) is preparing updates to its 2020 Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan as required by the California Water Code. The UWMP and Water Shortage Contingency Plan must be completed by July 1, 2021.

The purpose of this communication is to provide notice **pursuant to Water Code §10642, that the District will hold a public hearing on June 22, 2021 at 9:30am concerning adoption of the UWMP and Water Shortage Contingency Plan.** The District invites regional agency and public involvement at the public hearing. A draft of the UWMP and Water Shortage Contingency Plan is available on the District website for review prior to the public hearing.

If you have any questions regarding the above, please contact me at (805) 969-2271 or at nturner@montecitowater.com.

Sincerely,

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MONTECITO JOURNAL
1206 COAST VILLAGE CIRCLE, SUITE G
SANTA BARBARA, CA 93108
Telephone: (805) 565-1860 / Fax: (805) 969-6654

SUPERIOR COURT
OF THE STATE OF CALIFORNIA
FOR THE COUNTY OF SANTA BARBARA

PROOF OF PUBLICATION
(2015.5 C.C.P.)

State of California)
County of Santa Barbara) ss.

Notice Type: MWD Notice of Public Hearing 2020 Urban Water Management Plan
And Water Shortage Contingency Plan Updates on 6/22/21


I am a citizen of the United States and a resident of the county of Santa Barbara; I am over the age of eighteen years, and am not a party to or interested in the above entitled matter. I am the principal clerk of the printer and publisher of Montecito Journal, a weekly newspaper published in the English language in the City and County of Santa Barbara, which has been adjudged a newspaper of general circulation as defined by the laws of California by the Superior Court of the County of Santa Barbara, State of California, under the date of August 18, 2011, Case No. 1381447. That the notice, of which the annexed is a printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit:

6/2 and 6/9

Executed on June 14, 2021

At Santa Barbara, California

I certify (or declare) under penalty of perjury that the foregoing is true and correct.



Signature
Kelly Mahan Herrick, Editor

**MONTECITO WATER DISTRICT
NOTICE OF PUBLIC HEARING
2020 URBAN WATER MANAGEMENT PLAN and
WATER SHORTAGE CONTINGENCY PLAN UPDATES
TUESDAY, JUNE 22, 2021, 9:30 A.M.
VIA TELECONFERENCE***

Montecito Water District (District) is currently preparing updates to its Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan in compliance with the California Urban Water Management Planning Act.

NOTICE IS HEREBY GIVEN that the Board of Directors of the Montecito Water District (District) will conduct a Public Hearing on Tuesday, June 22, 2021 at 9:30 a.m. via teleconference* to consider input regarding proposed updates to the UWMP and Water Shortage Contingency Plan.

The proposed updates to the UWMP and Water Shortage Contingency Plan are available for public review as of June 2, 2021 on the District web site at: www.montecitowater.com/doc/uwmp2020. If you are unable to access the information via this link, or need accommodations to review the document, please contact:

Adam Kanold
Montecito Water District
583 San Ysidro Road
Santa Barbara, CA 93108
akanold@montecitowater.com
Phone: 805.969.2271

Comments can be provided to the contact above up until the date and time of the Public Hearing.

* In accordance with California Governor Gavin Newsom's Executive Orders issued in response to COVID-19, in person public participation at meetings is suspended and instead meetings are held telephonically and/or electronically. Remote participation information can be found on the meeting agenda and will be posted at the above location, on the website www.montecitowater.com, and available by calling 805-969-2271.

###

Run, MJ Public/legal notices section, June 2 & 9, 2021

**MONTECITO WATER DISTRICT
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###

Run, MJ Public/legal notices section, June 2 & 9, 2021

Appendix C: 2020 UWMP Adoption Resolution

Appendix D: Reduced Delta Reliance Tables

The following presents the proposed reduced Delta reliance analysis as presented in the California Department of Water Resources 2020 UWMP Guidebook Appendix C – Example Approach to Demonstrate Reduced Delta Reliance. The analysis includes the projected State Water Project supply availability. In the future, the District may not utilize for retail service all of the projected SWP volumes shown in the table depending on current conditions of the full District supply portfolio at that time.

Reduced Reliance Calculation

Optional Calculation of Water Use Efficiency -To be completed if Agency does not specifically estimate Water Use Efficiency as a supply

Service Area Water Use Efficiency Demands (Acre-Feet)		2007	2015	2020	2025	2030	2035	2040
Service Area Water Demands with Water Use Efficiency		6,638	4,207	4,495	4,485	4,614	4,719	4,849
Non-Potable Water Demands		-	-	-	-	500	500	500
Potable Service Area Demands with Water Use Efficiency		6,638	4,207	4,495	4,485	4,114	4,219	4,349

Total Service Area Population		2007	2015	2020	2025	2030	2035	2040
Service Area Population		11,772	11,402	11,516	11,790	12,060	12,340	12,610

Water Use Efficiency Since Baseline (Acre-Feet)		2007	2015	2020	2025	2030	2035	2040
Per Capita Water Use (GPCD)		503	329	348	340	305	305	308
Change in Per Capita Water Use from Baseline (GPCD)			(174)	(155)	(164)	(199)	(198)	(196)
Estimated Water Use Efficiency Since Baseline			2,222	1,999	2,163	2,686	2,739	2,762

Total Service Area Water Demands (Acre-Feet)		2007	2015	2020	2025	2030	2035	2040
Service Area Water Demands with Water Use Efficiency		6,638	4,207	4,495	4,485	4,614	4,719	4,849
Estimated Water Use Efficiency Since Baseline		-	2,222	1,999	2,163	2,686	2,739	2,762
Service Area Water Demands without Water Use Efficiency		6,638	6,429	6,494	6,648	7,300	7,458	7,611

Calculation of Supplies Contributing to Regional Self-Reliance

Water Supplies Contributing to Regional Self-Reliance (Acre-Feet)	2007	2015	2020	2025	2030	2035	2040
Water Use Efficiency	-	2,222	1,999	2,163	2,686	2,739	2,762
Water Recycling	-				500	500	500
Stormwater Capture and Use							
Advanced Water Technologies - Desal				1,430	1,430	1,430	1,430
Conjunctive Use Projects	-						
Local and Regional Water Supply and Storage Projects							
Cachuma	1,802	1,160	2,493	1,591	1,591	1,591	1,591
Jameson	1,631	351	1,143	1,073	1,073	1,073	1,073
Juncal Seepage	41	-	256				
Doulton	215	160	446	278	278	278	278
Fox/Alder	-	-	-	400	400	400	400
Groundwater	458	637	155	250	250	250	250
Semi Tropic GW Bank	-	-	-	1,500	1,500	1,500	1,500
Juncal Deduction	-	(289)	(297)	(300)	(300)	(300)	(300)
Other Programs and Projects the Contribute to Regional Self-Reliance							
Water Supplies Contributing to Regional Self-Reliance	4,147	4,241	6,195	8,385	9,408	9,461	9,484

Service Area Water Demands without Water Use Efficiency	2007	2015	2020	2025	2030	2035	2040
Service Area Water Demands without Water Use Efficiency	6,638	6,429	6,494	6,648	7,300	7,458	7,611

Change in Regional Self Reliance (Acre-Feet)	2007	2015	2020	2025	2030	2035	2040
Water Supplies Contributing to Regional Self-Reliance	4,147	4,241	6,195	8,385	9,408	9,461	9,484
Change in Water Supplies Contributing to Regional Self-Reliance		94	2,048	4,238	5,261	5,314	5,337

Change in Regional Self Reliance (As a Percent of Water Demand w/out WUE)	2007	2015	2020	2025	2030	2035	2040
Water Supplies Contributing to Regional Self-Reliance	62.5%	66.0%	95.4%	126.1%	128.9%	126.9%	124.6%
Change in Water Supplies Contributing to Regional Self-Reliance		3.5%	32.9%	63.7%	66.4%	64.4%	62.1%

Calculation of Reliance on Water Supplies from the Delta Watershed

Water Supplies from the Delta Watershed (Acre-Feet)		2007	2015	2020	2025	2030	2035	2040
CVP/SWP Contract Supplies		3,016	1,616	-	1,926	1,908	1,891	1,874
Delta/Delta Tributary Diversions					-	-	-	-
Transfers and Exchanges					-	-	-	-
Other Water Supplies from the Delta Watershed					-	-	-	-
Total Water Supplies from the Delta Watershed		3,016	1,616	-	1,926	1,908	1,891	1,874

Service Area Water Demands without Water Use Efficiency		2007	2015	2020	2025	2030	2035	2040
Service Area Water Demands without Water Use Efficiency		6,638	6,429	6,494	6,648	7,300	7,458	7,611

Change in Supplies from the Delta Watershed (Acre-Feet)		2007	2015	2020	2025	2030	2035	2040
Total Water Supplies from the Delta Watershed		3,016	1,616	-	1,926	1,908	1,891	1,874
Change in Water Supplies from the Delta Watershed			(1,400)	(3,016)	(1,090)	(1,108)	(1,125)	(1,142)

Change in Supplies from the Delta Watershed (As a Percent of Water Demand w/out V)		2007	2015	2020	2025	2030	2035	2040
Total Water Supplies from the Delta Watershed		45.4%	25.1%	0.0%	29.0%	26.1%	25.4%	24.6%
Change in Water Supplies from the Delta Watershed			-20.3%	-45.4%	-16.5%	-19.3%	-20.1%	-20.8%

Appendix E: Annual Water Quality Report



585 San Ysidro Road, Montecito, CA 93108

phone: 805.969.2271

email: info@montecitowater.com

2019 ANNUAL DRINKING WATER CONSUMER CONFIDENCE REPORT

This report explains where your water comes from, provides information on water quality and how it is measured, and presents the District's 2019 test results which show that **drinking water met, or was better than, state and federal water quality standards.**



Message from Nick Turner, General Manager

Montecito Water District takes pride in continuing to deliver a reliable supply of high-quality water to the communities of Montecito and Summerland. As in prior years, the test results

included in this report demonstrate that MWD's water quality met or exceeded all state and federal standards in 2019.

Lead and copper sampling results, as well as other water quality data, are reported in this annual Consumer Confidence Report. To further safeguard water quality for children, in 2019 MWD conducted testing at public and private schools district-wide and lead was not detected. (California Assembly Bill 746 required community water systems to test lead levels in drinking water by July 1, 2019 at all California public, K-12 school sites that were constructed before January 1, 2010.)

For the first time since 2011, Jameson Lake spilled over Juncal Dam in February of 2019. Although the lake was full, water quality issues resulting from the Thomas Fire prevented water delivery for much of the year. MWD implemented innovative and enhanced treatment processes, and is now successfully treating and delivering this important source. With surface water supplies flush and available MWD is strategically resting wells – not pumping – to allow groundwater supplies to recover and replenish following the historic 8-year drought.

Careful supply management and good water quality go hand-in-hand. MWD's current water sources are all rainfall dependent. While 2019 was a year of abundant rainfall, pursuing potential new water sources, such as desalinated and recycled water, remained a top priority. Droughts are forecast to be more severe and longer-lasting in coming years, and MWD plans to be prepared for future water supply challenges.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien. Para información en español llame al 805.969.2271.



Jameson Lake spilling over Juncal Dam. April 6, 2020

Photo by: Alan Prichard, Dam Caretaker

Montecito's Water Quality Summary 2019

Primary Standards (PDWS)	Units	Maximum Contaminant Level	Public Health Goal (MCLG)	Jameson Lake Average	Jameson Lake Range	Ground Water Average	Ground Water Range	Cachuma Lake Average	Cachuma Lake Range	Common Sources of Contamination in Drinking Water
Water Clarity										
Treated Turbidity	NTU	TT = 1 NTU TT = 95% of Samples < 0.3	NA	0.09	0.03 - 0.29 100.0%	0.20	0.10 - 0.20 100%	NA	ND - 0.18 100%	Soil runoff.
Radioactive Contaminants										
Gross Alpha Particle Activity	pCi/L	15	(0)	1.74	1.74	2.63	1.72 - 3.86	NA	NA	Erosion of natural deposits.
Uranium	pCi/L	20	0.43	NA	NA	1.10	0.82 - 1.56	0.83	NA	Erosion of natural deposits.
Inorganic Contaminants										
Aluminum	µg/L	1000	600	23.3	ND - 60	ND	ND	19	ND - 54	Erosion of natural deposits; residue from some surface water treatment processes.
Arsenic	µg/L	10	0.004	ND	ND	0.25	ND - 1.0	1	ND - 1.2	
Fluoride	mg/L	2	1	0.2	0.2	0.8	0.5 - 1.0	0.45	0.38 - 0.6	Erosion of natural deposits; discharge from fertilizer.
Nitrate as N (Nitrogen)	mg/L	10	10	0.7	0.7	1.99	0.6 - 6.4	0.21	ND - 0.33	Runoff or leaching from fertilizer use; leaching from septic tanks and sewage; erosion from natural deposits
Selenium	µg/L	50	30	ND	ND	4.8	2.0 - 9.0	NA	NA	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive).

Primary Standards for Distribution System	Units	Maximum Contaminant Level	Public Health Goal (MCLG)	Distribution System Average	Distribution System Range	Common Sources of Contamination in Drinking Water
Disinfectant						
Free Chlorine Residual	mg/L	MRDLG, 4.0	MRDLG, 4.0	0.63	0.20 - 1.95	Drinking water disinfectant added for treatment
Disinfection By Products						
Total Trihalomethanes	µg/L	80	NA	Highest LRAA, 65.6	32 - 88	By-product of drinking water disinfection
Haloacetic Acids	µg/L	60	NA	Highest LRAA, 475	10 - 79	By-product of drinking water disinfection
Bromate (Cachuma Lake)	µg/L	10	0.1	3.6	2.2 - 5.4	By-product of drinking water disinfection
Total Organic Carbon (DBP Precursor)	µg/L	TT	NA	3.9	3.9 - 5.0	Various natural and manmade sources. Total Organic Carbon (TOC) has no health effects. However, it provides a medium for the formation of disinfection byproducts.
Microbiological Contaminant Samples						
Total Coliform Bacteria	% Tests Positive	<5% of Monthly Samples	0	0.00%	0	Naturally present in the environment.
Cryptosporidium	No. of oocyst/L	TT	0	0	0	Naturally present in the environment.

Lead and Copper Rule (2018)	Units	RAL	PHG	Samples collected	Above RAL	90th Percentile	Common Sources of Contamination in Drinking Water
Lead	µg/L	15	0.2	32	0	ND	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
Copper	µg/L	1300	300	32	0	309	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

Lead and Copper Rule Every three years, a minimum of 30 residences are tested for lead and copper levels at the tap. The most recent set of 32 samples was collected in 2017. All of the samples were well below the regulatory action level (RAL). Copper was detected in 29 samples. The 90th percentile value was at 309 ug/L. Lead was detected in 1 sample (76 ug/L). The 90th percentile value was Non-Detect. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Montecito Water District is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/lead>.

Secondary Standards	Units	Maximum Contaminant Level	Jameson Lake Average	Jameson Lake Range	Ground Water Average	Ground Water Range	Cachuma Lake Average	Cachuma Lake Range	Common Sources of Contamination in Drinking Water
Aesthetic Standards									
Chloride	mg/L	500	5	5	256	142 - 472	28.6	25.6 - 36.4	Runoff or leaching from natural deposits; seawater influence.
Iron	µg/L	300	ND	ND	25	ND - 110	ND	NA	Leaching from natural deposits; industrial wastes.
Manganese	µg/L	50	ND	ND	10	ND - 30	ND	NA	Leaching from natural deposits.
Threshold Odor at 60 degrees celcius	Units	3	0.6	ND - 4	ND	ND	3	1.4 - 8	Naturally-occurring organic minerals.
Specific Conductance	µS/cm	1600	754	754	1602	1140 - 1830	1024	852 - 1109	Substances that form ions in water; seawater influence.
Sulfate	mg/L	500	175	175	197	120 - 261	306	206 - 346	Runoff or leaching from natural deposits; industrial wastes.
Total Dissolved Solids	mg/L	1000	500	500	1043	650 - 1180	708	532 - 810	Runoff or leaching from natural deposits.
Zinc	mg/L	5	ND	ND	0.013	ND - 0.030	NA	NA	Runoff or leaching from natural deposits; industrial wastes.

Secondary Standards	Units	Maximum Contaminant Level	Jameson Lake Average	Jameson Lake Range	Ground Water Average	Ground Water Range	Cachuma Lake Average	Cachuma Lake Range
Additional Constituents Analyzed								
pH	pH units	NS	7.98	7.10 - 8.54	7.4	7.3 - 7.4	7.62	7.10 - 7.82
Total Hardness	mg/L	NS	391	356 - 420	458	190 - 706	430	300 - 492
Total Alkalinity	mg/L	NS	198	180 - 212	210	190 - 230	222	190 - 370
Boron	µg/L	1000 (RAL)	100	100	20	ND - 80	0.38	0.37 - 0.39
Calcium	mg/L	NS	93	93	116	48 - 169	99.7	75.3 - 110
Magnesium	mg/L	NS	22	22	41	17 - 69	45	31 - 52
Sodium	mg/L	NS	20	20	99	65 - 141	60	57 - 63
Potassium	mg/L	NS	3	3	1	1	3.8	3.2 - 4.2
Unregulated Contaminant Monitoring Rule 3 (2014-15)								
Total Chromium	µg/L	NS	0.05	ND - 0.30	ND	ND	0.54	ND - 1.7
Molybdenum	µg/L	NS	1.4	1.1 - 2.3	3.8	ND - 10.0	6.3	ND - 11
Strontium	µg/L	NS	1238	1000 - 1400	923	580 - 1200	1045	670 - 1900
Vanadium	µg/L	NS	0.36	ND - 0.81	1.37	0.24 - 3.30	1.7	ND - 4.0
Chromium 6 (Hexavalent Chromium)	µg/L	NS	0.088	ND - 0.240	0.028	ND - 0.120	0.49	ND - 1.8
Chlorate	µg/L	NS	208	ND - 320	143	ND - 270	253	72.0 - 410
1,4-Dioxane	µg/L	NS	ND	ND	ND	ND	0.024	ND - 0.11
1,1-Dichloroethane	ng/L	NS	ND	ND	ND	ND	31	ND - 130
Chloromethane	ng/L	NS	ND	ND	ND	ND	31	ND - 250
Unregulated Contaminant Monitoring Rule 4 (2019)								
HAA5	µg/L	NS	32.17	23.2 - 47	NA	NA	13	ND - 32
HAA6Br	µg/L	NS	6.92	3.17 - 14.84	NA	NA	14	ND - 24
HAA9	µg/L	NS	38.49	30.67 - 51.5	NA	NA	24	ND - 51
Bromochloroacetic Acid	µg/L	NS	2.53	0.77 - 5.7	NA	NA	3.9	ND - 8.2
Bromodichloroacetic Acid	µg/L	NS	2.96	2 - 4.2	NA	NA	3.5	ND - 5.8
Chlorodibromoacetic Acid	µg/L	NS	0.82	0 - 2.2	NA	NA	2.2	ND - 3.3
Dibromoacetic Acid	µg/L	NS	0.41	0 - 1.8	NA	NA	2.3	ND - 4.2
Dichloroacetic Acid	µg/L	NS	10.44	5.5 - 22	NA	NA	6.0	ND - 16
Monobromoacetic Acid	µg/L	NS	0.19	0 - 0.94	NA	NA	2.3	ND - 4.9
Tribromoacetic Acid	µg/L	NS	ND	ND	NA	NA	2.3	ND - 4.9
Trichloroacetic Acid	µg/L	NS	21.13	12 - 28	NA	NA	4.2	ND - 12

Nitrate as N (Nitrogen): Nitrate in drinking water at levels above 10 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

MWD's highest nitrate level in 2019 was 5.3 mg/L

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include: Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, that can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and herbicides, that may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, agricultural application, and septic systems.

Radioactive contaminants, that can be naturally-occurring or be the result of oil and gas production and mining activities.

People with Sensitive Immune Systems

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Drinking Water Info

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. Environmental Protection Agency's (USEPA's) Safe Drinking Water Hotline (1-800-426-4791).

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the California Department of Public Health (CDPH) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDPH regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Source Water Assessment: A comprehensive source water assessment of the District's drinking water sources was adopted in May 2017. A copy of this report is available for public inspection at the District Office.

Last year, as in years past, your tap water met all EPA and State drinking water health standards. Montecito Water District vigilantly safeguards its water supplies and once again we are proud to report that our system has never violated a maximum contaminant level or any other water quality standard. This brochure is a snapshot of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards. We are committed to providing you information because informed customers are our best allies.

WATER QUALITY TERMINOLOGY

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Primary Drinking Water Standard (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Regulatory Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

mg/L: Milligrams per liter, or parts per million. 1 mg/L is equal to about one drop in 17 gallons of water.

ug/L: Micrograms per liter, or parts per billion. 1 ug/L is equal to about one drop in 17,000 gallons of water.

< : Less than.

NA: Not applicable.

NS: No Standard.

ND: Non-detected.

pCi/L: Pico curies per liter, a measure of radiation.

umhos/cm: Micromhos per centimeter (an indicator of dissolved minerals in water).

NTU: Nephelometric turbidity unit.

LRAA: Locational Running Annual Average

For Water Softeners: MWD's surface water has a hardness range of 21 to 25 grains per gallon, while groundwater has a hardness range of 25 to 41 grains per gallon. One grain per gallon equals 171 mg/L.

Footnotes: The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

Surface water sources include the District's Jameson Lake and Lake Cachuma. The District's Amapola Well, Paden Well No. 2, Ennisbrook Well No. 5, Ennisbrook Well No. 2 and T Mosby Well No. 2 were used as groundwater supply sources.

An average number of 51 coliform samples were collected each month at 12 District sampling stations in compliance with the Federal Revised Total Coliform Rule. All sample results were negative.

Turbidity is a measure of the cloudiness of the water. Montecito Water District monitors for it continuously because turbidity is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants. 100% of the District's samples met the Turbidity Performance standard. The highest single surface water turbidity measurement during the year was 0.29 NTU.

Where Does Our Water Come From?



LOCAL SURFACE WATER

Lake Cachuma (A Primary Water Source)

Tecolote Tunnel

Carries water from Lake Cachuma 6.4 miles through the Santa Ynez mountains to the South Coast.

South Coast Conduit Pipeline

Conveys water from Tecolote Tunnel across the South Coast, from Goleta to Carpinteria.

Cater Treatment Plant City of Santa Barbara

Provides treated water to Montecito Water District via the South Coast Conduit.

Jameson Lake (A Primary Water Source)

Doulton Tunnel

Carries water 2.2 miles from Jameson Lake, and ground water seeps into it providing additional supply.

Bella Vista and Doulton Treatment Plants

The District provides treated water from Jameson Lake and Doulton Tunnel to customers.

POTENTIAL NEW SOURCES

Desalinated water

The District is working toward participation in the regional use of the City of Santa Barbara's desalination facility.

Recycled water

The District is working toward implementation of recycled water / water reuse.

SUPPLEMENTAL SURFACE WATER

State Water Project Table A Allocation and Supplemental Water Purchases

San Luis Reservoir

Stores State Water and supplemental water supplies.

California Aqueduct and the Coastal Branch Pipeline

Convey water from San Luis Reservoir to Lake Cachuma.

LOCAL GROUNDWATER

Groundwater wells

District groundwater resources are limited, but provide an important and reliable supply.

CONSERVATION

Efficient use of water

Customers have reduced overall water use, and are achieving the District's current conservation target of 30% or more. Conservation is a California way of life!

We encourage public participation.

For meeting times, agendas, and additional resources: www.montecitowater.com



For more information please contact **Chad Hurshman**, Water Treatment and Production Superintendent, at 805.969.7924



583 San Ysidro Road, Montecito, CA 93108
www.montecitowater.com

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Nick Turner, P.E.,
General Manager & Board Secretary

Appendix F: Demand Management Measures

Contact Information Update

Date	Feb 22, 2019
Water District	Montecito Water District
District Address	583 San Ysidro Road, Santa Barbara, CA 93108
District Website	www.montecitowater.com

Conservation Coordinator

First Name	Mike
Last Name	Clark
Title	Conservation Coordinator I
Phone	805 969-2271
Email	Mike@montecitowater.com

General Manager

First Name	Nick
Last Name	Turner
Title	General Manager
Phone	805 969-2271
Email	nturner@Montecitowater.com

Other Contact

First Name	Adam
Last Name	Kanold
Title	Asst GM
Phone	805 969-2271
Email	akanold@montecitowater.com

Gallons Per Capita Water Reduction

Reporting Year	2019
Data Year	2018

What was your GPCD the last 5 years?

Year	GPCD
2018	230
2017	198
2016	196
2015	198
2014	225

If not using programmatic method of water efficiency, what is your district implementing to reduce water use? Provide a brief narrative.

The District has an increasing tiered rate structure to encourage efficient water use and c

If your district's GPCD is not declining, please provide a narrative of why and what your district will be doing to accomplish water usage savings.

The District's overall Annual demand was reduced almost 50% during the recent drought

Metering With Commodity Rates



Are all connections metered?

Yes No NA

If not 100% metered, please provide a narrative of why and when your district will be fully metered.

Are all metered connections billed by water usage?

Yes No NA

If no, please provide a brief narrative of why and when your district will be billing by water usage?

Retail Conservation Pricing

Is your district billing utilizing conserving rate structure?

Yes No NA

Website to billing rate structure	
-----------------------------------	--

If no, please provide a brief narrative of why or when your district will be implementing a conserving rate structure.

Water Waste Prohibition

Water Waste Ordinance

Yes

No

NA

Ordinance Website Address	
---------------------------	--

Other Pertinent Links

	Title	Website
1	Ordinance 89	www.montecitowater.com
2	Ordinance 96	www.montecitowater.com
3		
4		
5		

Brief Comments/Narrative

Ordinance 89 is the limit of 1 acre-foot of water per 1 acre of land for all new developer



Water Loss Control

Water Loss Program?

Yes

No

NA

If not using AWWA Water Audit Software, brief description of program and/or link to website.

AWWA Water Audit Software?

Yes

No

NA

Water Audit Data Validity Score	53
Data Validity Level	3
Date of Last Analysis	9/28/2018

Brief Comments/Narrative

The District has been using the AWWA water loss audit software (spreadsheet) since CY



Public Outreach

Briefly list/describe your Public Outreach Programs:

	Title	Website
1	flyers, brochures, bill stuffers, and info packets	www.montecitowater.com
2	SB County Water Agency Regional Water Efficiency Program (RWEF)	www.WaterWiseSB.org
3	flyers, brochures, info packets	www.WaterWiseSB.org
4	News Releases	www.WaterWiseSB.org
5	Landscape water conservation media campaigns	KEYT, radio and SB News press, Newshawk
6	weekly watering Index as a weather based percentage	www.WaterWiseSB.org
7	scrolling photos updated regularly with links to programs	www.WaterWiseSB.org
8	Gardenwise TV Show quarterly	KEYT Local channel
9	Waterwise Garden Contest	www.WaterWiseSB.org
10		

Brief Comments/Narrative

This District has a conservation web page on its website providing resources to the con



School Education Programs

Briefly list/describe your School Education Programs:

	Title	Website
1	"Shows That Teach" school presentations	www.WaterWiseSB.org
2		
3		
4		
5		
6		
7		
8		
9		
10		

Brief Comments/Narrative

We don't have any secondary schools in our District here, and all the Primary schools a



Residential Programs

Briefly list/describe your Residential Programs:

	Title	Website
1	Landscape Irrigation Efficiency Audits, All SFR Customers & New Owners	www.montecitowater.com
2	WaterWise Landscape Recognition Contest	www.waterwisesb.com
3		
4		
5		
6		
7		
8		
9		
10		

Are your programs effective? Yes No NA

Has your district reached program participation saturation? Yes No NA

Brief Comments/Narrative

Close to saturation as a total of 1726 large landscape Audits have been completed out



Commercial, Institutional, and Industrial Programs

Briefly list/describe your CII Programs:

	Title	Website
1	Water Efficiency Audits to businesses and institutions	www.montecitowater.com
2	Award to local school for water saving landscape and drainage project	www.montecitowater.com
3	Hotel door hangers to reduce laundry water use (RWEF program)	www.waterwisesb.com
4		
5		
6		
7		
8		

Are your programs effective? Yes No NA

Has your district reached program participation saturation? Yes No NA

Brief Comments/Narrative

we offer usage Efficiency Audits to our small number of CII Accounts (265), and local plu



Landscape Programs

Briefly list/describe your Landscape Programs:

	Title	Website
1	Water Efficiency Audits offered	www.montecitowater.com
2	Funding for Conservation Brochures, Tabling at Events (RWEF Program)	www.waterwisesb.com
3	Annual Green Gardener Program	www.waterwisesb.com
4		
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10		

Are your programs effective?

Yes No NA

Has your district reached program participation saturation?

Yes No NA

Brief Comments/Narrative

These are the most effective audits done to achieve Conservation here in MWD and du



Contact Information Update

Date	April 16, 2020
Water District	Montecito water District
District Address	583 San Ysidro Road, Santa Barbara, CA 93108
District Website	www.montecitowater.com

Conservation Coordinator

First Name	Michael
Last Name	Clark
Title	Water Conservation Coordinator
Phone	805 969-2271
Email	mike@montecitowater.com

General Manager

First Name	Nick
Last Name	Turner
Title	General Manager
Phone	805 969-2271
Email	nturner@montecitowater.com

Other Contact

First Name	Adam
Last Name	Kanold
Title	Assistant General Manager/Engineering Manager
Phone	(805)969-2271
Email	akanold@montecitowater.com

Gallons Per Capita Water Reduction

Reporting Year	2020
Data Year	2019

What was your GPCD the last 5 years?

Year	GPCD
2019	284
2018	230
2017	198
2016	196
2015	198

If not using programmatic method of water efficiency, what is your district implementing to reduce water use? Provide a brief narrative.

The District has an increasing tiered rate structure to encourage efficient water use and offer all customers a free landscape efficiency visit that seeks to identify and correct/improve systems and practices that lead to high water usage. The District also has the mandated restrictions in place to avoid wasting water such as no washing down of hard surfaces, allowing running water from excessive irrigation or overspray.

If your district's GPCD is not declining, please provide a narrative of why and what your district will be doing to accomplish water usage savings.

The District's overall Annual demand was reduced almost 50% during the recent drought from pre-drought high of 6348 AF (2013) to a low of 3206 AF (2016) due to strict allocations and fine, in addition to aggressive landscape usage audits. Since the drought ended in 2018 and the District eliminated the mandatory allocations, there has been a moderate increase in usage. The District has the same Landscape Efficiency audits offered to all customer classes and emphasizes their importance to all new owners in the District.

Metering With Commodity Rates

Are all connections metered? Yes No NA
If not 100% metered, please provide a narrative of why and when your district will be fully metered.

Are all metered connections billed by water usage? Yes No NA
If no, please provide a brief narrative of why and when your district will be billing by water usage?

Retail Conservation Pricing

Is your district billing utilizing conserving rate structure? Yes No NA

Website to billing rate structure	www.montecitowater.com
-----------------------------------	------------------------

If no, please provide a brief narrative of why or when your district will be implementing a conserving rate structure.

Water Waste Prohibition

Water Waste Ordinance

Yes

No

NA

Ordinance Website Address	www.montecitowater.com
---------------------------	------------------------

Other Pertinent Links

	Title	Website
1	Ordinance 89	www.montecitowater.com
2	Ordinance 96	www.montecitowater.com
3		
4		
5		

Brief Comments/Narrative

Ordinance 89 is the limit of 1 acre-foot of water per 1 acre of land for all new developments to limit new annual demands. Ordinance 96 declares it unlawful to waste water, provides 13 mandated water use restrictions including washing hard surfaces, among other things in line with the State restrictions, and allows for fines if the ordinance is violated.

Water Loss Control

Water Loss Program?

Yes

No

NA

If not using AWWA Water Audit Software, brief description of program and/or link to website.

AWWA Water Audit Software?

Yes

No

NA

Water Audit Data Validity Score	52
Data Validity Level	3
Date of Last Analysis	2018 CALENDAR YEAR

Brief Comments/Narrative

The District has been using the AWWA water loss audit software (spreadsheet) since CY2016. The District now has an in-house staff member trained in performing water loss audits who will be performing District audits moving forward. This person reviewed the 2018 water loss audit developed by other District staff and submitted in October 2019 and which the score for 2018 is shown above. The District is implementing a smart meter program including new ultrasonic water meters and Itron collector network to provide customers with immediate access to real time water usage including leak alerts. The District also is installing magnetic flow meters at all production meter locations to improve accuracy and water loss calculation accuracy.

Public Outreach

Briefly list/describe your Public Outreach Programs:

	Title	Website
1	Pertinent Conservation messaging and FREE Landscape audits	www.montecitowater.com
2	SBCWA Regional Water Efficiency Program (RWEF)	www.WaterWiseSB.org
3	flyers, brochures, info packets	www.WaterWiseSB.org
4	Landscape water conservation media campaigns	www.WaterWiseSB.org
5	TV, radio, news releases	KEYT, radio and SB News press, Newshawk
6	weekly water Index	www.WaterWiseSB.org
7	Gardenwise TV Show quarterly	KEYT Local channel
8	Waterwise Garden Contest	www.WaterWiseSB.org
9		
10		

Brief Comments/Narrative

This District has a conservation web page on its website providing resources to the community for conserving water. The District is also an active participant in the County's local Regional Water Efficiency Program (RWEF) coordinated by SB County Water Agency. The District is pleased to report excellent public outreach programs are conducted in many different media outlets in SB County. The many long established programs and events have proven to be effective elements of an all encompassing education & outreach water conservation campaign for the County.

School Education Programs

Briefly list/describe your School Education Programs:

	Title	Website
1	"Shows That Teach" school presentations	WaterWiseSB.org
2		
3		
4		
5		
6		
7		
8		
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10		

Brief Comments/Narrative

Residential Programs

Briefly list/describe your Residential Programs:

	Title	Website
1	Landscape Irrigation Efficiency Audits, All SFR Customers & New Owners	www.montecitowater.com
2	WaterWise Landscape Recognition Contest	www.WaterWiseSB.org
3		
4		
5		
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7		
8		
9		
10		

Are your programs effective?

Yes
 No
 NA

Has your district reached program participation saturation?

Yes
 No
 NA

Brief Comments/Narrative

In CY 2019, the District completed 82 landscape irrigation audits and continues to track them monthly to see the results of site specific recommendations. Often the District observes a 20-30% reduction in usage when customers begin tracking their own usage & using District schedules and tips to optimize their landscape efficiency. These are the most effective and measurable methods for the District's largest customer class that result in sustainable savings, as evidenced by the District's demand reduction numbers since 2006.

Commercial, Institutional, and Industrial Programs

Briefly list/describe your CII Programs:

	Title	Website
1	Water Efficiency Audits to businesses and institutions	www.montecitowater.com
2	Award to local school for water saving landscape and drainage project	www.montecitowater.com
3	Hotel door hangers to reduce laundry water use (RWEF program)	www.waterwisesb.com
4		
5		
6		
7		
8		

Are your programs effective?

Yes
 No
 NA

Has your district reached program participation saturation?

Yes
 No
 NA

Brief Comments/Narrative

The District offers water efficiency audits for CII properties and performed 1 commercial audit in 2019. The County RWEPP program assisted hotels with providing water saving information to hotel guests. The CII category is near full buildout in the District service area resulting in saturation of this category.

Landscape Programs

Briefly list/describe your Landscape Programs:

	Title	Website
1	Water Efficiency Audits offered	www.montecitowater.com
2	Funding for Conservation Brochures, Tabling at Events (RWEPP Program)	www.waterwisesb.com
3	Annual Green Gardener Program	www.waterwiseSB.com
4		
5		
6		
7		
8		
9		
10		

Are your programs effective?

Yes No NA

Has your district reached program participation saturation?

Yes No NA

Brief Comments/Narrative

As mentioned above, the District performed 82 water efficiency audits in 2019, most of these visits focused on reducing landscape water usage.

Appendix G: Hazard Mitigation Plan



MONTECITO WATER DISTRICT

2018 HAZARD MITIGATION ANNEX

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1.0 PLANNING PROCESS

§201.6(b): In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process **shall** include:

- (1) An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval;
- (2) An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia and other private and non-profit interests to be involved in the planning process; and
- (3) Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.

§201.6(c)(1): [The plan **shall** document] the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.

Hazard mitigation planning is a dynamic process built on realistic assessments of past and present information that engages Montecito Water District (District) personnel to anticipate future hazards and develop meaningful strategies to address possible impacts and identified needs. The hazard mitigation planning process involves the following tasks:



- Organizing resources
- Assessing risks
- Developing mitigation strategies, goals, and priorities
- Adopting a plan
- Implementing the plan
- Monitoring progress
- Revising the plan as necessary

The overall approach to the Hazard Mitigation Plan (HMP) Annex development included building off the baseline understanding of hazards as defined in the 2017 Santa Barbara County Multi-

Jurisdictional Hazard Mitigation Plan, determining ways to reduce those risks, and prioritizing those recommendations for implementation.

1.1 Planning Team / Public Involvement

While District personnel and Risk Management Professionals had lead responsibility for the development of the District's annex, neighboring communities, agencies, and other interested parties were invited to participate on the Planning Team to review the annex during each phase of the document development. Each participating member of the Planning Team had the opportunity to impact all aspects of the planning process. In addition, District and Risk Management Professionals personnel assessed community support through active community involvement. Engaging the public through open planning meeting invitations, online review opportunities, and a public meeting

§201.6(b): In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process **shall** include:

- (1) An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval;
- (2) An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia, and other private and non-profit interests to be involved in the planning process; and

§201.6(c)(1): [The plan **shall** document] the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.

The District solicited participation in the HMP Annex Planning Team by contacting both internal and external stakeholders via email. Internal stakeholders included members of the various District departments. External stakeholders were comprised of representatives from local agencies and the public.

The Planning Team met twice during the course of the project to discuss project progress and obtain valuable input and information for documenting the annex. In addition, a flyer was posted on the District website advertising the date and location of the initial meeting to allow the public an opportunity to learn more about the hazard mitigation planning process and provide feedback regarding the direction planning should go. No members of the public participated in the planning process. The meetings held by the Planning team are detailed over the subsequent pages.

1.2 Planning Team Meeting Descriptions

Planning Team Meeting #1 – Project Initiation, Hazard Identification, and Information Collections

July 19, 2018

Attendees:

- Ryan Bray
- Michael Dyer
- Martha Lange
- Nick Turner

During the Project Initiation, Hazard Identification, and Information Collection Meeting, Risk Management Professionals provided a project overview that detailed the objectives and scope of the annex development. After a review of the project schedule and key tasks, the Planning Team participant's areas of expertise, resultant member responsibilities, and the public meeting was discussed.

HAZARD IDENTIFICATION AND RISK RANKING			
Earthquake	Hazard Rank Factors	Hazard Factor Description	Rank
	Probability/Frequency		0
	Consequence/Severity		0
	Vulnerability	Probability/Frequency	0
	Risk Rank	0	0
	Comments	Rare event - occurs less than once every 30 years	
Wildfire	Hazard Rank Factors	Hazard Factor Description	Rank
	Probability/Frequency		0
	Consequence/Severity		0
	Vulnerability		0
	Risk Rank	0	0
	Comments	Not a Hazard	
Flood	Hazard Rank Factors	Hazard Factor Description	Rank
	Probability/Frequency		0
	Consequence/Severity		0
	Vulnerability		0
	Risk Rank	0	0
	Comments	Not a Hazard	

The Planning Team meeting also served as a mechanism to determine the hazards the annex would profile. To effectively characterize the District's risk and vulnerability, Risk Management Professionals facilitated a discussion of the historical hazards with the Planning Team during this meeting. This meeting also served as a forum to discuss any background information and obtain asset inventory specifics.

The Planning Team determined the initial hazard profile ranking through a facilitated exercise using an automated interactive spreadsheet that asked specific questions regarding potential hazards and then assigned a relative value to each potential hazard accordingly, including numerical rankings (1-5) for the following criteria:

- Consequence/Severity – How wide spread is the impact area?
- Secondary Effects – Could the event trigger another event and separate response?
- Probability/Frequency – Historical view of how often this type of event occurs locally and projected recurrence intervals.
- Warning/Onset – Advance warning of the event, or none.
- Duration – Length of elapsed time where response resources are active.
- Recovery – Length of time until lives and property return to normal.

Section 3 outlines the methodology used for hazard rankings. All Planning Team participants were requested to provide existing plans and technical studies and identify existing mitigation features as part of a detailed information request.

Additionally, the Plan's mitigation goals and objectives were updated with the intention of reducing or eliminating the potential hazard impacts, which also provided the basis for determining the associated mitigation projections. The Planning Team reviewed the goals and objectives from the the California State Multi-Hazard Mitigation Plan, and the Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan as a baseline for determining the District's current mitigation goals.

1.3 Review and incorporation of Existing Plans

§201.6(b): In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process shall include:

(3) Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.

While developing the District's annex, the Planning Team reviewed existing plans (detailed below) and incorporated relevant information into the planning efforts.

2013 State of California Multi-Hazard Mitigation Plan

The State of California Multi-Hazard Mitigation Plan was reviewed to ensure consistency between the State and District plan with respect to identified hazards and vulnerability, goals and objectives, and mitigation actions. The State goals served as the basis for developing the goals at the District level. District goals and objectives are outlined in Section 4.

Santa Barbara County 2017 Multi-Jurisdictional Hazard Mitigation Plan

Like the California Multi-Hazard Mitigation Plan, the County HMP was reviewed to ensure consistency between the County Plan and the District annex. County Plan goals were adopted as the District's goals in addition to utilizing hazard profile information as the basis for determining the hazards which impact the District.

2012 California Adaptation Planning Guide

FEMA, Cal OES, and the California Natural Resources Agency developed the California Adaptation Planning Guide to assist municipalities in recognizing local climate change and to provide guidance addressing potential vulnerabilities. The information was used to develop potential hazards and to provide background information that allowed the Planning Team to make

educated decisions regarding mitigation actions designed to alleviate the effects of climate change.

2.0 PLANNING AREA PROFILE

The District, located in the southern coastal portion of Santa Barbara County California, was formed in 1921, under the name Montecito County Water District, to provide potable water. The District serves the unincorporated communities of Montecito and Summerland with a total service area of approximately 9,888 acres and provides retail water supply to about 11,380 people.

The District is supplied by multiple water sources: Lake Cachuma, the State Water Project, supplemental purchases, and local natural sources including Jameson Lake, Doulton Tunnel, and groundwater basin.

A five-member Board of Directors governs the District. Each director is elected by the District's registered voters for staggered four-year terms.

The District's climate is a temperate Mediterranean style that generally consists of cool wet winters and mild dry summers with coastal fog in some of the summer months. As stated in the District's 2015 Urban Water Management Plan, temperatures in the winter rarely fall below freezing. Spring conditions remain mild with light amounts of rain and fog. During the summer and fall, the climate is usually dry and warm, moderate conditions; however, the area often experiences the hot dry Santa Ana winds during the late summer and early fall periods.

The map on the following page provides an overview of the District' service area.

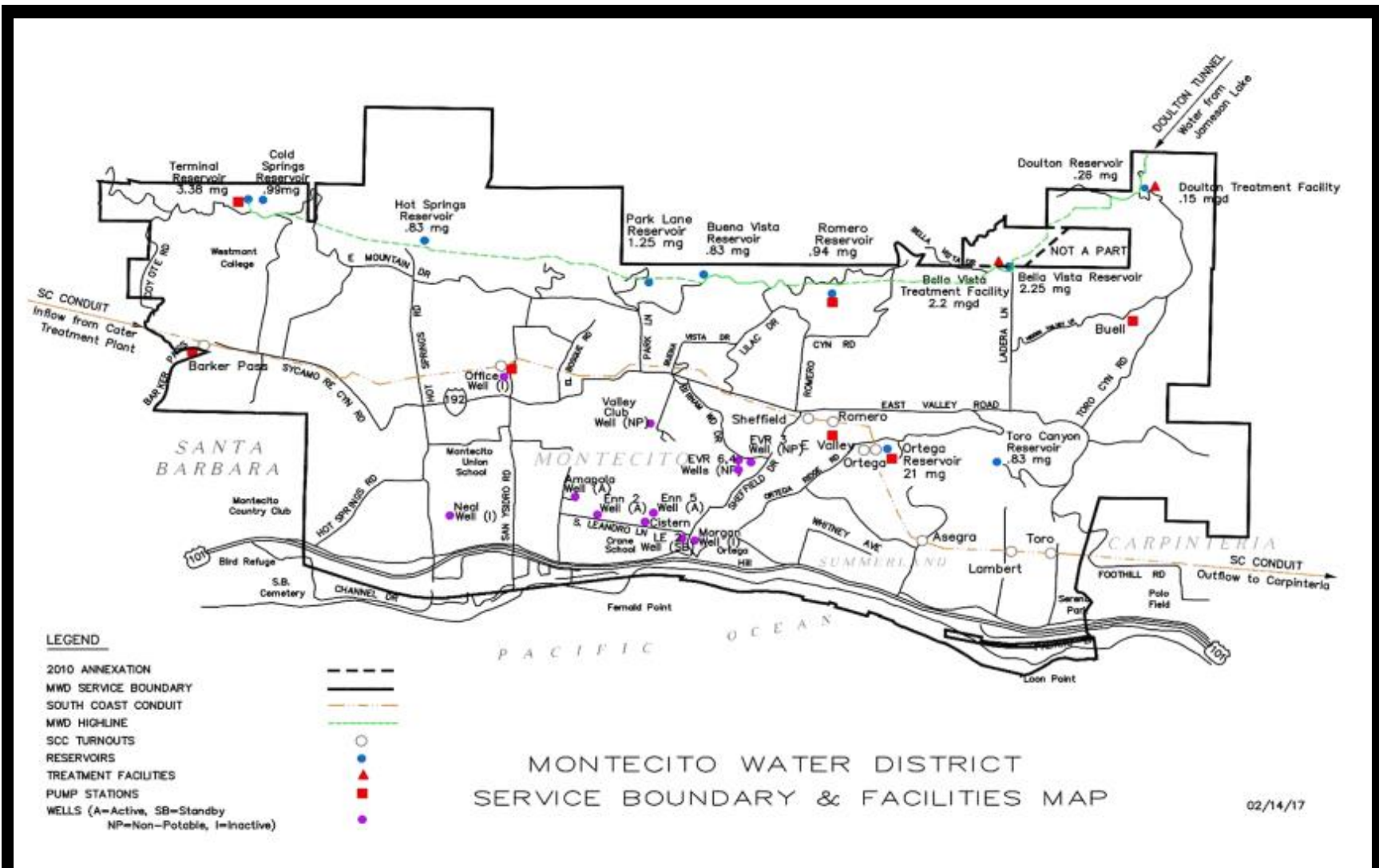


Figure 2.1: Montecito Water District Service Area Map

2.1 Development Trends

§201.6(c)(2)(ii)(C): [The plan **should** describe vulnerability in terms of] providing a general description of land uses and development trends within the community so that mitigation options can be considered in future land use decisions.

The District has a customer base that is approximately 92% residential which, during periods of normal water supplies and hydrologic conditions, accounts for approximately 71% of the water use in the District. The remaining 7% of the customer base is made up of commercial, institutional, and agricultural entities with a few remaining non-potable water users. Table 2.1, taken from the 2015 Urban Water Management Plan, outlines water usage for the District and illustrates how the vast majority of the District service area is comprised of residential customers.

Table 2.1: Water Use By Customer Classification 2015

Customer Type	Percent of Total Service Connections	Percent of Total Water Use
Single-Family Residential	91.8%	70.6%
Multi-Family Residential	1.4%	1.9%
Commercial	3.0%	6.9%
Institutional	2.7%	8.8%
Agricultural	1.0%	8.9%
Non-Potable	0.2%	3.0%

The areas within the District's service area boundary are generally built out, so sharp increases in population and the need for additional infrastructure development are unlikely. Currently, there are no plans to expand the current water infrastructure system. However, following damage sustained due to the Thomas Fire in late 2017 and 2018, there are plans to make repairs to current infrastructure and mitigate further impacts of ground movement.

3.0 RISK ASSESSMENT

The Risk Assessment consists of three steps: Hazard Identification, Hazard Profiling, and Loss Estimates. This section includes the Hazard Identification and Hazard Profiling steps to evaluate the hazards of primary concern to local decision-makers to provide a basis for loss estimates which is also included within this chapter. Additionally, the Risk Assessment provides a foundation for the evaluation of mitigation measures that can help reduce the impacts of a potential hazard event. As an annex to the County's multi-jurisdictional hazard mitigation plan, the Planning Team used the information found in the County's Plan as a basis for elements of the Risk Assessment.

Step 1: Identify Hazards: This step identified the natural and man-made hazards that might affect the District and then narrowed the list to the hazards that are most likely to occur. These hazards included natural, technical, and human-caused events, with an emphasis on the effect disasters may have on critical facilities. The Planning Team participated in a Hazard Identification exercise to identify and rank the potential hazards within the District.

Step 2: Profile Hazard Events: The hazard event profiles are mostly products of the County's multi-jurisdictional Plan. The Planning team utilized the basic understanding of each hazard from the County Plan and then considered how that hazard would impact the District specifically.

Step 3: Loss Estimates: The loss estimate step relied on detailed information regarding the hazard probability and maps that were completed as part of the hazard profiles. This information was utilized to apply the hazard probabilities and recurrence intervals to the assets and inventory (buildings and infrastructure) of the District. This step was critical in determining which assets were subject to the greatest potential damages and which hazard event was likely to produce the greatest potential losses.

The conclusion of this step precipitated a comprehensive loss estimate (vulnerability assessment) for each identified hazard for each specific asset in terms of damages, economic loss, and the associated consequences for the District.

3.1 Hazard Identification

§201.6(c)(2)(i): [The risk assessment **shall** include a] description of the type, location, and extent of all-natural hazards that can affect the jurisdiction. The plan shall include information on previous occurrences of hazard events and on the probability of future hazard events.

§201.6(c)(2)(ii): [The risk assessment **shall** include a] description of the jurisdiction's vulnerability to the hazards described in paragraph (c)(2)(i) of this section. This description **shall** include an overall summary of each hazard and its impact on the community.

§201.6(c)(2)(ii): [The risk assessment] **must** also address National Flood Insurance Program (NFIP) insured structures that have been repetitively damaged by floods.

§201.6(c)(2)(iii): For multi-jurisdictional plans, the risk assessment **must** assess each jurisdiction's risks where they vary from the risks facing the entire planning area.

The hazard identification and ranking were obtained primarily from a Hazard Identification Exercise completed during the initial Planning Team meeting. Each hazard profile includes a summary of the Hazard Identification Exercise identified risk factors and overall rank for each hazard, in addition to the detailed hazard description, historical occurrences, and projected future probability, magnitude, and frequency.

Each member of the Planning Team participated in the Hazard Identification Exercise to identify the potential hazards within the District's service area. The Hazard Identification Workshop was facilitated using an interactive spreadsheet program that asks specific questions on potential hazards and then rates them accordingly. These questions guided the Planning Team in the correct facilitation and application of the program. Table 3.1 summarizes the Hazard Identification Workshop risk factors, lists the descriptions of each factor, provides the specific descriptor choices for each risk factor and description, and summarizes the risk ranking associated with each hazard:

Table 3.1: Hazard Identification Risk Factors

Risk Factor	Description	Descriptors	Value
Probability/ Frequency	Prediction of how often a hazard will occur in the future	Infeasible event - not applicable due to geographic location characteristics	0
		Rare event - occurs less than once every 50 years	1
		Infrequent event - occurs between once every 8 years and once every 50 years (inclusive)	2
		Regular event - occurs between once a year and once every 7 years	3
		Frequent event - occurs more than once a year	4
Consequence/ Severity	Physical Damage - structures and lifelines Economic Impact – loss of function for power, water, sanitation, roads, etc.	No damage	1
		Minor/slight damage to buildings and structures, no loss of lifelines	2
		Moderate building damage, minor loss of lifelines (less than 12 hours)	3
		Moderate building damage, lifeline loss (less than 24 hours)	4
		Extensive building damage, widespread loss of lifelines (water, gas, electricity, sanitation, roads), loss of life	5
Vulnerability	Impact Area - area impacted by a hazard event Secondary Impacts - Capability of triggering additional hazards Onset - Period of time between initial recognition of an approaching hazard and when the hazard begins to impact the community	No physical damage, no secondary impacts	1
		Localized damage area	2
		Localized damage area, minor secondary impacts, delayed hazard onset	3
		Moderate damage area, moderate secondary impacts, moderate warning time	4
		Widespread damage area, significant secondary impacts, no warning time	5

Each hazard was assigned a risk rank (ranging from no/low hazard to severe/high hazard) based on the risk factors determined during the Hazard Identification Workshop. The risk score is calculated by Risk = Probability x Consequence x Vulnerability. Table 3.2 provides the risk ranking matrix used to calculate the risk score.

Table 3.2: Risk Ranking Matrix

Probability/Frequency Description		Risk Ranking Matrix					
Rare Event: Occurs less than once every 50 years	Probability/Frequency	Consequence/Severity					
	Value	1	1	2	3	4	5
	Vulnerability	1	1	2	3	4	5
		2	2	4	6	8	10
		3	3	6	9	12	15
		4	4	8	12	16	20
5		5	10	15	20	25	
Infrequent Event: Occurs between once every 8 years and once every 50 years (inclusive)	Probability/Frequency	Consequence/Severity					
	Value	2	1	2	3	4	5
	Vulnerability	1	2	4	6	8	10
		2	4	8	12	16	20
		3	6	12	18	24	30
		4	8	16	24	32	40
5		10	20	30	40	50	
Regular Event: Occurs between once a year and once every 7 years	Probability/Frequency	Consequence/Severity					
	Value	3	1	2	3	4	5
	Vulnerability	1	3	6	9	12	15
		2	6	12	18	24	30
		3	9	18	27	36	45
		4	12	24	36	48	60
5		15	30	45	60	75	
Frequent Event: Occurs more than once a year	Probability/Frequency	Consequence/Severity					
	Value	4	1	2	3	4	5
	Vulnerability	1	4	8	12	16	20
		2	8	16	24	32	40
		3	12	24	36	48	60
		4	16	32	48	64	80
5		20	40	60	80	100	

The final risk score yields a profile ranking of each hazard, as illustrated in Table 3.3.

Table 3.3: Risk Rank Categorization

Risk Rank Categorization	
High Hazard	50 to 100
Moderately High Hazard	25 to 49
Moderate Hazard	15 to 24
Moderately Low Hazard	5 to 14
Low Hazard	1 to 4

The following illustrates the final hazard ranking developed by the Planning Team to rank each of the identified hazards in order of the highest perceived vulnerability to lowest.

Table 3.4: Hazard Ranking Summary

Hazard Rank	Score
High	
Moderately High	
Wildfire	48
Earthquake	40
Energy Shortage & Resiliency	36
Earth Movement	30
Moderate	
Drought	24
Terrorism	16
Moderately Low	
Flood	12
Dam Failure	8
Low	
HazMat Release	4

3.2 Wildfire Hazard Profile

Wildfire Risk Assessment Summary	
Risk Rank: Moderately High	
Probability/ Frequency:	Regular event – occurs between once a year and once every 7 years
Consequence/ Severity:	Moderate building damage, lifeline loss (less than 24 hours), severe injury or disability
Vulnerability:	Moderate damage area, moderate secondary impacts, moderate warning time
Hazard Risk Rank Score:	48

Wildfire vulnerability for the region is described in the County’s Multi-jurisdictional Hazard Mitigation Plan. The areas north and east of the District’s service area were identified as very high fire hazard severity zones in maps prepared by the Santa Barbara County Fire Department in the County’s Plan.

The Planning Team discussed that during the recent Thomas Fire in 2017/2018, the District only sustained minimal damage. However, the fire was followed by rain and extensive debris flows which caused severe damage to the District. Earth Movement, including debris flow, is discussed in Section 3.5.

Additionally, the Planning team discussed how the impacts of climate change may result in a fire hazard. Increased usage of fossil fuels for transportation and electricity, along with increased deforestation has led to the overloading of the atmosphere with greenhouse gases such as carbon dioxide (CO2). These heat-trapping emissions act as a blanket and increase the overall atmospheric temperature, thus warming the planet. As summers get hotter and longer, the conditions for wildfires increase exponentially. Wildfires in the U.S. have been on an increasing trend and the effects of climate change has shown to aggravate the frequency and duration of wildfires.

3.3 Earthquake Hazard Profile

Earthquake Risk Assessment Summary	
Risk Rank: Moderately High	
Probability/ Frequency:	Infrequent event - occurs between once every 8 years and once every 50 years (inclusive)
Consequence/ Severity:	Moderate building damage, lifeline loss (less than 24 hours), severe injury or disability
Vulnerability:	Widespread damage area, significant secondary impacts, no warning time
Hazard Risk Rank Score:	40

Earthquake vulnerability for the region is described in the County’s Multi-jurisdictional Hazard Mitigation Plan. According to maps developed by the County off Santa Barbara Office of Emergency Management, the Montecito area has minor fault lines running through the District’s service area, with some areas being subject to moderate severity liquefaction. When considered by the Planning Team, it was decided that the pipeline and infrastructure were most likely to be vulnerable to the impacts of an earthquake. However, a mainline would need to be impacted before water service to end users would be interrupted. To date, an earthquake has not been the cause of pipe breakage, but the District is cognizant of the possible damage during a large seismic event.

3.4 Energy Shortage & Resiliency Hazard Profile

Energy Shortage & Resiliency Risk Assessment Summary	
Risk Rank: Moderately High	
Probability/ Frequency:	Regular event - occurs between once a year and once every 7 years
Consequence/ Severity:	Moderate building damage, minor loss of lifelines (less than 12 hours), lost time injury but no disability
Vulnerability:	Moderate damage area, moderate secondary impacts, moderate warning time
Hazard Risk Rank Score:	36

Energy Shortage & Resiliency vulnerability for the region is described in the County’s Multi-jurisdictional Hazard Mitigation Plan. There is currently no system to anticipate the probably of energy shortage without evaluating the failure as a cascade effect from natural hazards (i.e., earthquakes). However, California has implemented numerous conservation measures to ensure an adequate power supply. The Planning Team noted that all parts of the District’s service area are vulnerable to power shortages.

3.5 Earth Movement Hazard Profile

Earth Movement Risk Assessment Summary	
Risk Rank: Moderately High	
Probability/ Frequency:	Infrequent event - occurs between once every 8 years and once every 50 years (inclusive)
Consequence/ Severity:	Extensive building damage, widespread loss of lifelines (water, gas, electricity, sanitation, roads), loss of life
Vulnerability:	Localized damage area, minor secondary impacts, delayed hazard onset
Hazard Risk Rank Score:	30

Landslide and Earth Movement vulnerability for the region is described in the County’s Multi-jurisdictional Hazard Mitigation Plan. The Planning Team discussed its specific vulnerabilities and determined that debris flows, although not specifically outlined in the County’s Plan, represented the most viable hazard to the District.

A debris flow is a geological phenomenon in which water-laden masses of soil and fragmented rock rush down mountain sides, funnel into stream channels, collect objects in their paths, and form thick, muddy deposits on valley floors. Some debris flows are very fast. In areas of steep slopes, geology.com states that some debris flows can reach speeds of over 100 miles an hour.

Debris flows can be triggered in several different ways including the following.

Addition of Moisture A sudden flow of water from heavy rain, or rapid snowmelt, can be channeled over a steep valley filled with debris that is loose enough to be mobilized. The water soaks down into the debris, lubricates the material, adds weight, and triggers a flow

Removal of Support: Streams often erode materials along their banks. This erosion can cut into thick deposits of saturated materials

stacked high up the valley walls. This erosion removes support from the base of the slope and can trigger a sudden flow of debris.

Failure of Landslide Deposits:

Some debris flows originate from older landslides. These older landslides can be unstable masses perched up on a steep slope. A flow of water over the top of the old landslide can lubricate the slide material, or erosion at the base can remove support. Either of these can trigger a debris flow.

Wildfires or Timbering:

Some debris flows occur after wildfires have burned the vegetation from a steep slope or after logging operations have removed vegetation. Before the fire or logging, the vegetation's roots anchored the soil on the slope and removed water from the soil. The loss of support and accumulation of moisture can result in a catastrophic failure. Rainfall that was previously absorbed by vegetation now runs off immediately. A moderate amount of rain on a burn scar can trigger a large debris flow

On January 9th, 2018, the areas of Montecito and Carpinteria experienced a debris flow event as a secondary impact of the 2017 Thomas Fire and subsequent rain fall. According to the event's After-Action Report, millions of tons of mud and rocks flowed out of the mountains toward the ocean creating destruction along the way. There were multiple significant incidents including: natural gas



pipeline explosions, structure fires in Montecito, flooded structures, and persons trapped in structures, attics, and roofs that required rescuing. Helicopters transported multiple burn victims, individuals stranded, and people with traumatic injuries. The debris flow ultimately led to 23 deaths, including two missing persons and numerous injuries.

The District sustained damages as a result of the 2018 debris flow and is currently in the process of repairing facilities while mitigating future debris flow events.

Debris flows, landslides and other earth movement events are a geologic hazard common to every U.S. State, including California's central coast area. According to a US Geological Survey report, landslides cause more than \$1 billion in damages and 25 to 50 deaths in the U.S. each year. Earth movement in California is caused mainly due to increased precipitation and earthquakes. Large winter storms and earthquakes are usually accompanied by landslides that result in fatalities and property damage. The Planning Team reviewed its vulnerability and estimated the entire District is vulnerable to the impacts of a debris flow.

3.6 Drought & Water Shortages Hazard Profile

Drought & Water Shortages Risk Assessment Summary	
Risk Rank: Moderate	
Probability/ Frequency:	Regular event - occurs between once a year and once every 7 years
Consequence/ Severity:	Minor/slight damage to buildings and structures, no loss of lifelines, first aid injury and no disability
Vulnerability:	Moderate damage area, moderate secondary impacts, moderate warning time
Hazard Risk Rank Score:	24

Drought & Water Shortages vulnerability for the region is described in the County’s Multi-jurisdictional Hazard Mitigation Plan. During the recent California drought from 2012-2017, the District was able to provide sufficient water to its end-users. However, conservation efforts lead to a decrease in water usage which resulted in less revenue for the District. The Planning Team identified that, while water shortage doesn’t impact District assets and typically does not prevent water service, the District is vulnerable to high water costs and revenue impacts of reduced water usage.

The Planning Team also discussed Water Shortage as an impact of climate change. Increased population and exploitation of fossil fuels during the past century has led to longer and more prevalent droughts in many parts of the U.S. The global warming phenomenon has led to increased rainfall instead of snowfall in many regions resulting in increased flooding. This, combined with earlier and rapid melting of snow, has led to fluctuation in water availability and resulted in increased floods in wet regions and drought in dry regions. As Southern California temperatures rise and water sources are depleted, the potential for droughts in California, including the District’s service area, are expected to continue to increase.

District personnel would recognize decreased water supply and decreased precipitation, common impacts of climate change, as a drought scenario. As mitigation activities focused on water supply reliability are indifferent to the root cause of water shortage, the Planning

Team has chosen to blend the applicable impacts of climate change with its drought mitigation efforts. All mitigation actions for drought described in Section 4 also consider the impacts of climate change.

3.7 Terrorism Hazard Profile

Terrorism Risk Assessment Summary	
Risk Rank: Moderate	
Probability/ Frequency:	Rare event - occurs less than once every 50 years
Consequence/ Severity:	Moderate building damage, lifeline loss (less than 24 hours), severe injury or disability
Vulnerability:	Moderate damage area, moderate secondary impacts, moderate warning time
Hazard Risk Rank Score:	16

Terrorism vulnerability for the region is described in the County’s Multi-jurisdictional Hazard Mitigation Plan. In 2004, the District completed a Security Vulnerability Assessment which determined the different avenues by which the District could be impacted by acts of Terrorism. For security purposes, a discussion of those vulnerabilities is not included in this annex. However, the Planning Team reviewed the safeguards that have been utilized to prevent a malevolent attack and discussed the areas of vulnerability that remain. For the purpose of this Annex, it should be noted that the Planning Team is conscious of the specific areas that are vulnerable to an act of terrorism.

3.8 Flood Hazard Profile

Flood Risk Assessment Summary	
Risk Rank: Moderately Low	
Probability/ Frequency:	Infrequent event - occurs between once every 8 years and once every 50 years (inclusive)
Consequence/ Severity:	Minor/slight damage to buildings and structures, no loss of lifelines, first aid injury and no disability
Vulnerability:	Localized damage area, minor secondary impacts, delayed hazard onset
Hazard Risk Rank Score:	12

Flood vulnerability for the region is described in the County’s Multi-jurisdictional Hazard Mitigation Plan. As demonstrated in the maps developed by the Santa Barbara County Office of Emergency Management in the County’s Plan, the District’s service area is not prone to flooding. The area is built on a natural slope which allows rain waters to flow toward the coast and into the ocean. Only local flooding in a few specific areas is expected for the area but will likely not severely affect the District. The Planning Team identified the Morgan Well and a cistern tank as the assets recently impacted by flooding following the Thomas Fire and were identified as points of vulnerability.

3.9 Dam Failure Hazard Profile

Dam Failure Risk Assessment Summary	
Risk Rank: Moderately Low	
Probability/ Frequency:	Rare event - occurs less than once every 50 years
Consequence/ Severity:	Minor/slight damage to buildings and structures, no loss of lifelines, first aid injury and no disability
Vulnerability:	Moderate damage area, moderate secondary impacts, moderate warning time
Hazard Risk Rank Score:	8

Dam Failure vulnerability for the region is described in the County’s Multi-jurisdictional Hazard Mitigation Plan. According to maps developed by the Santa Barbara County Office of Emergency Management, the District service area is not within any inundation zones for dam failure. However, some water supply comes from Jameson Lake. If the Juncal Dam, associated with the lake, were to fail, it would impact, not only the District water supply, but a District facility and employee nearby.

3.10 HazMat Release Hazard Profile

HazMat Release Risk Assessment Summary	
Risk Rank: Low	
Probability/ Frequency:	Rare event - occurs less than once every 50 years
Consequence/ Severity:	Minor/slight damage to buildings and structures, no loss of lifelines, first aid injury and no disability
Vulnerability:	Localized damage area
Hazard Risk Rank Score:	4

HazMat Release vulnerability for the region is described in the County’s Multi-jurisdictional Hazard Mitigation Plan. The County Plan outlines how hazardous materials traverse the County via roadways and railways daily exposing communities to risk. The Planning Team discussed the District’s vulnerability to roadway/railway hazards and determined it to be very low. The Planning Team argues that an accident would need to be so severe that it damaged underground water infrastructure in order to impact the District. This scenario was determined to be unlikely. Instead, the District’s vulnerability focused on the District’s small chlorination system. While hazard assessments have determined that it is unlikely for a chlorine release will impact offsite areas, staff still have a minimal risk of exposure at the location.

3.11 Climate Change

With the release of the California Adaptation Planning Guide (APG) in March 2015, the District aimed to include the effects of climate change into the Annex. As identified in the “Understanding Regional Characteristics” portion of the APG, the District is located in the Central Coast Region of California. As a result, the Planning Team considered the following climate change impacts as recommended by the APG:

- Increased Temperatures
- Reduced Precipitation
- Reduced Agricultural Productivity
- Sea Level Rise
- Biodiversity Threat
- Public Health Threats
- Reduced Tourism

The Planning Team engaged in a discussion to determine which impacts posed a viable threat to the District. While some impacts clearly applied, others required additional research. Studies were conducted to look at recorded trends for sea level rise, wildfire, and regional temperature increases. The result of the study was the following list of perceived, feasible impacts that might affect the District over the next 5 to 10 years:

- Increased Temperatures
- Reduced Precipitation

After reviewing the results of each of these impacts, the Planning Team decided to include hazards in the Plan update that represented how the impacts would be felt by the District. For example, increased temperatures and reduced precipitation would be recognized as a drought. Additionally, increased temperatures and reduced precipitation might result in a wildfire. Therefore, the Planning Team identified Drought and Wildfire as perceived hazards. Any information regarding the effects of these impacts on the District will be found under the hazard profiles listed above. Additionally, mitigation strategies that apply to these impacts will be classified under Drought and Wildfire in the mitigation actions identified in Section 4

3.12 Loss Estimates

The loss estimate began with a review of the District’s asset inventory. The Asset Inventory Summary Tables are presented on the following tables.

Table 3.5: Asset Inventory Summary

Type	Name	TOTAL
Wells	Various Well sites	\$1,260,058.00
Building	Administration Property	\$1,920,650.00
Pump Station	Barker Pass Pump Station	\$320,580.00
Water Facility	Bella Vista Treatment Facility	\$4,179,995.00
Water Facility	Doulton Treatment Plant	\$875,287.00
Dam	Juncal Dam Site	\$771,139.00
Reservoir	Ortega Reservoir	\$6,388,866.00
Pump Station	East Valley Pumping Station	\$352,700.00
Pump Station	Ortega Ridge Pump Station	\$458,651.00
Pump Station	East Mountain Pump Station	\$314,460.00
Pump Station	Romero Reservoir Pump Station	\$375,971.00
Pump Station	Buell Pump Station	\$77,891.00
Water Facility	Picay Hydroelectric Plant	\$142,584.00
Water Facility	Alder Creek Flume	\$15,918.00
Total		\$17,454,750

Note: Several of the asset were damaged in the Thomas Fire. The figures provided above the insured value of the assets at the time of the Fire. Actual damage and restoration values would likely be much higher than the figure provided above.

The Planning Team reviewed each asset category and assigned a potential percentage of damage expected due to each identified hazard. In addition, if there were identified water service interruptions the loss of function values was also included. The tables of the following pages identify each asset category, name, total value, and the percent damage/damage value for each asset. The damages for each asset are totaled for each hazard to obtain the overall loss estimate for each hazard.

Table 3.6: Vulnerability Assessment Calculations

Montecito Water District Vulnerability Assessment Calculations			Wildfire		Earthquake		Energy Shortage & Resiliency		Earth Movement		Drought	
Type	Name	TOTAL	% Damage	Loss Estimate	% Damage	Loss Estimate	% Damage	Loss Estimate	% Damage	Loss Estimate	% Damage	Loss Estimate
Wells	Various MWD Wells	\$1,260,058.00	30%	\$378,017	90%	\$1,134,052	10%	\$126,006	10%	\$126,006	0%	\$0
Building	MWD Administration Property	\$1,920,650.00	100%	\$1,920,650	90%	\$1,728,585	5%	\$96,033	2%	\$38,413	0%	\$0
Pump Station	Barker Pass Pump Station	\$320,580.00	5%	\$16,029	10%	\$32,058	10%	\$32,058	0%	\$0	0%	\$0
Water Facility	Bella Vista Treatment Facility	\$4,179,995.00	80%	\$3,343,996	40%	\$1,671,998	0%	\$0	10%	\$418,000	0%	\$0
Water Facility	Doulton Treatment Plant	\$875,287.00	100%	\$875,287	90%	\$787,758	0%	\$0	20%	\$175,057	0%	\$0
Dam	Juncal Dam Site	\$771,139.00	10%	\$77,113	100%	\$771,139	0%	\$0	0%	\$0	0%	\$0
Reservoir	Ortega Reservoir	\$6,388,866.00	5%	\$319,443	10%	\$638,887	0%	\$0	0%	\$0	0%	\$0
Pump Station	East Valley Pumping Station	\$352,700.00	50%	\$176,350	90%	\$317,430	10%	\$35,270	5%	\$17,635	0%	\$0
Pump Station	Ortega Ridge Pump Station	\$458,651.00	10%	\$45,865	90%	\$412,786	10%	\$45,865	0%	\$0	0%	\$0
Pump Station	East Mountain Pump Station	\$314,460.00	50%	\$157,230	90%	\$283,014	10%	\$31,446	0%	\$0	0%	\$0
Pump Station	Romero Reservoir Pump Station	\$375,971.00	5%	\$18,798	90%	\$338,374	10%	\$37,597	0%	\$0	0%	\$0
Pump Station	Buell Pump Station	\$77,891.00	50%	\$38,945	90%	\$70,102	10%	\$7,789	0%	\$0	0%	\$0
Water Facility	Picay Hydroelectric Plant	\$142,584.00	100%	\$142,584	90%	\$128,326	0%	\$0	0%	\$0	0%	\$0
Water Facility	Alder Creek Flume	\$15,918.00	50%	\$7,959	100%	\$15,918	0%	\$0	30%	\$4,775	0%	\$0
Water Service		\$1,807,800.00	25%	\$451,950	100	\$1,807,800	85%	\$1,536,630	40%	\$723,120	\$723,120	25%
			Wildfire	\$7,970,219	Earthquake	\$10,138,226	Energy Shortage & Resiliency	\$1,948,694	Earth Movement	\$1,503,006	Drought	\$451,950

Table 3.7: Vulnerability Assessment Calculations Continued

Montecito Water District Vulnerability Assessment Calculations			Terrorism		Flood		Dam Failure		HazMat Release	
Type	Name	TOTAL	% Damage	Loss Estimate	% Damage	Loss Estimate	% Damage	Loss Estimate	% Damage	Loss Estimate
Wells	Various MWD Wells	\$1,260,058.00	2%	\$25,201	10%	\$126,006	0%	\$0	5%	\$18,901
Building	MWD Administration Property	\$1,920,650.00	2%	\$38,413	1%	\$19,207	0%	\$0	1%	\$19,207
Pump Station	Barker Pass Pump Station	\$320,580.00	2%	\$6,412	1%	\$3,206	0%	\$0	0%	\$0
Water Facility	Bella Vista Treatment Facility	\$4,179,995.00	2%	\$83,600	1%	\$41,800	0%	\$0	0%	\$0
Water Facility	Doulton Treatment Plant	\$875,287.00	2%	\$17,506	1%	\$8,753	0%	\$0	0%	\$0
Dam	Juncal Dam Site	\$771,139.00	2%	\$15,423	100%	\$771,139	100%	\$771,139	0%	\$0
Reservoir	Ortega Reservoir	\$6,388,866.00	2%	\$127,777	1%	\$63,889	0%	\$0	0%	\$0
Pump Station	East Valley Pumping Station	\$352,700.00	2%	\$7,054	1%	\$3,527	0%	\$0	0%	\$0
Pump Station	Ortega Ridge Pump Station	\$458,651.00	2%	\$9,173	1%	\$4,587	0%	\$0	20%	\$9,173
Pump Station	East Mountain Pump Station	\$314,460.00	2%	\$6,289	1%	\$3,145	0%	\$0	0%	\$0
Pump Station	Romero Reservoir Pump Station	\$375,971.00	2%	\$7,519	1%	\$3,760	0%	\$0	0%	\$0
Pump Station	Buell Pump Station	\$77,891.00	2%	\$1,558	1%	\$779	0%	\$0	0%	\$0
Water Facility	Picay Hydroelectric Plant	\$142,584.00	2%	\$2,852	1%	\$1,426	0%	\$0	0%	\$0
Water Facility	Alder Creek Flume	\$15,918.00	2%	\$318	1%	\$159	0%	\$0	0%	\$0
Water Service		\$1,807,800.00	2%	\$36,156	15%	\$271,170	0%	\$0	40%	\$180,780
			Terrorism	\$385,251	Flood	\$1,322,550	Dam Failure	\$1,042,309	HazMat Release	\$228,060

Table 3.8 summarizes the loss estimates for each hazard

Table 3.8: Loss Estimate Summary

Hazard	Estimated Losses
Earthquake	\$10,138,000
Wildfire	\$7,970,000
Energy Shortage & Resiliency	\$1,949,000
Earth Movement	\$1,503,000
Flood	\$1,323,000
Dam Failure	\$1,042,000
Drought	\$452,000
Terrorism	\$385,000
HazMat Release	\$228,000

Note: Values are rounded to the nearest thousand

4.0 MITIGATION STRATEGIES

§201.6(c)(3)(i): [The hazard mitigation strategy **shall** include a] description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.

As an extension of the County’s Multi-jurisdictional Hazard Mitigation Plan, the Planning Team felt it was important to continue with the goals and objectives laid out in the County’s plan. The goals listed below guided the Planning Team in the development of mitigation activities that align with the objectives being upheld throughout the region.

Table 4.1: Hazard Mitigation Planning Goals

Goal 1	Promote disaster resiliency for future development to help them become less vulnerable to hazards
Goal 2	Promote disaster resiliency for existing assets (critical facilities/infrastructure and public facilities) and people to help them become less vulnerable to hazards
Goal 3	Enhance hazard mitigation coordination and communication

Note: Goals are taken from the Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan

4.1 Identification of Mitigation Recommendations

§201.6(c)(3)(ii): [The mitigation strategy **shall** include a] section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure.

§201.6(c)(3)(iv): For multi-jurisdictional plans, there **must** be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan.

Mitigation actions are administrative and/or engineering project recommendations to reduce the District’s vulnerability to the identified hazards. During the second Planning Team meeting, a team-based approach was used to brainstorm mitigation projects based on the identified hazards and associated loss. In addition, the Federal Emergency Management Agency’s (FEMA) Local Mitigation Planning Handbook and the California Adaptation Planning Guide were used to identify actions to mitigate the effects of climate change.

Table 4.2 provides an overview of the mitigation actions, and other relevant information, in no specific order. Following the identification of the mitigation action, a Cost-Benefit Review was conducted in order to determine a prioritization of the items.

Table 4.2: Mitigation Activity Worksheet

Mitigation Activity	Hazards Mitigated	Corresponding Plan Goal	Responsible Agencies/Departments	Resources	Estimated Project Cost	Timeframe	Protects New Buildings	Protects Existing Buildings
2018HMP.01 - Cistern Tank Retaining Wall - Construct a 3-5-foot-high retaining wall within the existing fenced area approximately 80 feet long surrounding the existing cistern	Flood/ Earth Movement	Goal 2	Engineering	Grant Funding	\$25,000	Short	N	Y
2018HMP.02 - Jameson Lake Sedimentation Prevention – Install erosion control within the Jameson Lake watershed to prevent sedimentation in the lake and water quality issues.	Fire/ Earth Movement	Goal 2	Engineering	Grant Funding	\$200,000	Short	N	N
2018HMP.03 - Bella Vista Automatic Transfer Switch – Install an automatic transfer switch at BVPT that would automatically transfer power from Edison to the existing backup generator in the event of power loss.	Fire/ Energy Shortage and Resiliency	Goal 2	Engineering	Grant Funding	\$100,000	Short	N	Y
2018HMP.04 - Office Automatic transfer Switch - Install an automatic transfer switch at MWD Office that would automatically transfer power from Edison to the existing backup generator in the event of power loss.	Fire/ Energy Shortage and Resiliency	Goal 2	Engineering	Grant Funding	\$120,000	Short	N	Y
2018HMP.05 - Barker Pass Backup Generator – Install a backup generator at the Barker Pass Pump Station	Fire/ Energy Shortage and Resiliency	Goal 2	Engineering	Grant Funding	\$180,000	Short	N	Y
2018HMP.06 - Implement structural integrity project at critical facilities	Earthquakes	Goal 2	Engineering	Capital Improvement/ Grant Funding	\$2,000,000 per project	Medium	N	Y

Mitigation Activity	Hazards Mitigated	Corresponding Plan Goal	Responsible Agencies/Departments	Resources	Estimated Project Cost	Timeframe	Protects New Buildings	Protects Existing Buildings
2018HMP.07 - Ensure new structures are built with considerations for seismic activity and earth movement	Earthquake/ Earth Movement	Goal 1	Engineering	Insurance Coverage/ Capital Improvement	\$10,000,000 per project \$750,000 in project planning/consultant fees	Short	Y	N
2018HMP.08 - Develop a policy for purchasing and distributing emergency water supply when water service is interrupted	Earthquake/ Fire/ Drought/ Terrorism	Goal 3	General Manager	Staff Time	Staff Time	Short	Y	N
2018HMP.09 - Update Emergency Plan and train critical in ICS Emergency Management	All-Hazard	Goal 3	General Manager	General Fund	\$20,000 in planning and training costs	Short	N	N
2018HMP.10 - Enhance protective structures surrounding critical facilities.	Earth Movement	Goal 2	Engineering	Capital Improvements/ Grant Funding	\$200,000 per project	Short	N	N
2018HMP.11 - Update Water Shortage Contingency Plan implementing lessons learned from the 2013 CA drought.	Drought	Goal 3	Finance/ Engineering	General Fund	\$50,000 in planning costs	Short	N	N
2018HMP.12 - Develop evacuation Plan and acquire backup communication a for the District's Dam caretaker staff to provide safe egress in a Dam failure scenario	Dam Failure	Goal 3	Engineering	General Fund/ Grant Funding	\$150,000	Medium	N	Y
2018HMP.13 - Upgrade technology (including SCADA) and security systems to withstand the impacts of a cyber-attack. Mention sensitive customer data and better protect sensitive client information.	Terrorism	Goal 3	IT Department	General/ Grant Funding	\$75,000	Medium	Y	Y

Mitigation Activity	Hazards Mitigated	Corresponding Plan Goal	Responsible Agencies/Departments	Resources	Estimated Project Cost	Timeframe	Protects New Buildings	Protects Existing Buildings
2018HMP.14 - Install pressure management system to monitor the water system for malevolent disturbance.	Terrorism	Goal 2	Engineering	Capital Improvements/ Grant Funding	\$1,000,000	Long	N	Y
2018HMP.15 - Conduct security& Awareness training to prepare staff to appropriately react to cyber and in-person attacks.	Terrorism	Goal 3	Administration	General Fund	\$10,000	Medium	N	N
2018HMP.16 - Install Back-up power supply for critical facilities	Energy Shortage	Goal 2	Engineering	Capital Improvements/ Grant Funding	\$100,000 per facility	Medium	N	Y
2018HMP.17 - Update all critical facilities with surge protection equipment	Energy Shortage	Goal 2	Engineering	Capital Improvement Project	\$10,000 per unit	Medium	N	N

4.2 Prioritization of Mitigation Recommendations

§201.6(c)(3)(iii): [The mitigation strategy section **shall** include] an action plan describing how the actions identified in section (c)(3)(ii) will be prioritized, implemented, and administered by the local jurisdiction. Prioritization **shall** include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs.

A simplified Benefit-Cost Review was applied in order to prioritize the mitigation recommendations for implementation. The priority for implementing mitigation recommendations depends upon the overall cost effectiveness of the recommendation, when considering monetary and non-monetary costs and benefits associated with each action. Additionally, the following questions were considered when developing the Benefit-Cost Review:

- How many people will benefit from the action?
- How large an area is impacted?
- How critical are the facilities that benefit from the action?
- Environmentally, does it make sense to do this project for the overall community?

Table 4.3 provides a detailed benefit-cost review for each mitigation recommendation, as well as a relative priority rank (High, Medium, and Low) based upon the judgment of the Planning Team. The general category guidelines are listed below:

- High – Benefits are perceived to exceed costs without further study or evaluation
- Medium – Benefits are perceived to exceed costs, but may require further study or evaluation prior to implementation
- Low – Benefits and costs evaluation requires additional evaluation prior to implementation

It should be noted that values for costs are estimates only

Table 4.3: Benefit Cost Review Summary

Mitigation Activity	Benefits (Pros)	Costs (Cons)	Priority
2018HMP.01 - Cistern Tank Retaining Wall -Construct a 3-5-foot-high retaining wall within the existing fenced area approximately 80 feet long surrounding the existing cistern	<ul style="list-style-type: none"> • Avoided Property Damages • Avoided Emergency Management Costs • Avoided Service Interruptions 	<ul style="list-style-type: none"> • \$25,000 in construction costs • Staff Time 	High
2018HMP.02 - Jameson Lake Sedimentation Prevention – Install erosion control within the Jameson Lake watershed to prevent sedimentation in the lake and water quality issues.	<ul style="list-style-type: none"> • Avoided Property Damages • Avoided Emergency Management Costs • Avoided Service Interruptions 	<ul style="list-style-type: none"> • \$200,000 in construction costs • Staff Time 	Medium
2018HMP.03 - Morgan Well Retaining Wall – Construct a 3-5-foot-high retaining wall around the wellhead approximately 30 feet long.	<ul style="list-style-type: none"> • Avoided Property Damages • Avoided Emergency Management Costs • Avoided Service Interruptions 	<ul style="list-style-type: none"> • \$40,000 in construction costs • Staff Time 	High
2018HMP.04 - Bella Vista Automatic Transfer Switch – Install an automatic transfer switch at BVPT that would automatically transfer power from Edison to the existing backup generator in the event of power loss.	<ul style="list-style-type: none"> • Avoided loss of power • Avoided Emergency Management Costs • Avoided Loss of Services 	<ul style="list-style-type: none"> • \$100,000 in construction Costs 	High

<p>2018HMP.05 - Office Automatic transfer Switch - Install an automatic transfer switch at MWD Office that would automatically transfer power from Edison to the existing backup generator in the event of power loss.</p>	<ul style="list-style-type: none"> • Avoided loss of power • Avoided Emergency Management Costs • Avoided Loss of Services 	<ul style="list-style-type: none"> • \$120,000 in construction costs • Staff Time 	<p>High</p>
<p>2018HMP.06 - Barker Pass Backup Generator – Install a backup generator at the Barker Pass Pump Station</p>	<ul style="list-style-type: none"> • Avoided loss of power • Avoided Emergency Management Costs • Avoided Loss of Services 	<ul style="list-style-type: none"> • \$180,000 in construction Costs 	<p>Medium</p>
<p>2018HMP.07 - Implement structural integrity project at critical facilities</p>	<ul style="list-style-type: none"> • Avoided Property Damage • Avoided Injury/Fatality • Avoided Emergency Management Costs 	<ul style="list-style-type: none"> • \$2,000,000 per project 	<p>Low</p>
<p>2018HMP.08 - Ensure new structures are built with considerations for seismic activity and earth movement</p>	<ul style="list-style-type: none"> • Avoided Property Damage • Avoided Injury/Fatality • Avoided Emergency Management Costs 	<ul style="list-style-type: none"> • \$10,000,000 per project • \$750,000 in project planning/consultant fees 	<p>Low</p>
<p>2018HMP.09 - Develop a policy for purchasing and distributing emergency water supply when water service is interrupted</p>	<ul style="list-style-type: none"> • Avoided Injury/Fatality • Avoided Emergency Management Costs 	<ul style="list-style-type: none"> • Staff Time 	<p>High</p>

2018HMP.10 - Update Emergency Plan and train critical staff in ICS Emergency Management	<ul style="list-style-type: none"> • Avoided Emergency Management Costs 	<ul style="list-style-type: none"> • \$20,000 in planning and training costs 	High
2018HMP.11 - Enhance protective structures surrounding critical facilities.	<ul style="list-style-type: none"> • Avoided Property Damage • Avoided Injury/Fatality • Avoided Emergency Management Costs 	<ul style="list-style-type: none"> • \$200,000 per project 	Low
2018HMP.12 - Update Water Shortage Contingency Plan implementing lessons learned from the 2013 CA drought.	<ul style="list-style-type: none"> • Avoided Service Interruptions • Improved Water Supply reliability 	<ul style="list-style-type: none"> • \$50,000 in planning costs 	Medium
2018HMP.13 - Develop evacuation Plan and acquire backup communication a for the District's Dam caretaker staff to provide safe egress in a Dam failure scenario	<ul style="list-style-type: none"> • Improved Emergency Management • Avoided Injury/Fatality 	<ul style="list-style-type: none"> • \$150,000 in planning costs 	Medium
2018HMP.14 - Upgrade technology (including SCADA) and security systems to withstand the impacts of a cyber-attack and better protect sensitive client information.	<ul style="list-style-type: none"> • Improved Resilience to malevolent acts • Avoided Emergency Management Costs • Improved information security for customers 	<ul style="list-style-type: none"> • \$75,000 in equipment costs 	Medium

<p>2018HMP.15 – Install pressure management system to monitor the water system for malevolent disturbance.</p>	<ul style="list-style-type: none"> • Avoided Property Damage • Avoided Service Interruptions 	<ul style="list-style-type: none"> • \$1,000,000 in construction costs 	<p>Low</p>
<p>2018HMP.16 – Conduct security& Awareness training to prepare staff to appropriately react to cyber and in-person attacks.</p>	<ul style="list-style-type: none"> • Avoided injury/fatality • Avoided Emergency Management Costs 	<ul style="list-style-type: none"> • \$10,000 in training costs 	<p>High</p>
<p>2018HMP.17 – Install Back-up power supply for critical facilities</p>	<ul style="list-style-type: none"> • Avoided loss of Power • Avoided service interruptions 	<ul style="list-style-type: none"> • \$100,000 per facility 	<p>Medium</p>
<p>2018HMP.18 - Update all critical facilities with surge protection equipment</p>	<ul style="list-style-type: none"> • Avoided loss of Power • Avoided service interruptions • Avoided property damage 	<ul style="list-style-type: none"> • \$10,000 per unit 	<p>Medium</p>

5.0 PLAN MAINTENANCE

The Mitigation Strategies section of this annex identifies mitigation actions that have been prioritized based on the loss estimates and the probability of each hazard, which will typically be implemented according to the priority rank. To thoroughly track hazard mitigation status, the District must continuously monitor and document the progress of the implementation of the mitigation actions. Though mitigation actions may be delegated to different departments within the District, the District Engineer will have the responsibility of monitoring overall progress.

5.1 Planning Mechanisms

§201.6(c)(4)(ii): [The plan shall include a] process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms such as comprehensive or capital improvement plans, when appropriate.

The District maintains the following processes to incorporate mitigation strategies into planning mechanisms. The following resources were identified by the Planning Team as being most inherent to District operations and most likely to be avenues for the first steps in hazard mitigation implementation. Also, lists of identified resources are described in Tables 5.1 through 5.5 later in this section.

District Board of Directors

The Board of Directors is responsible for approving projects and programs on a District-wide level. By providing mitigation planning concepts to the Board of Directors, mitigation actions and concepts will be incorporated into relevant planning efforts.

Office of the General Manager

The General Manager provides leadership in the management of the District and execution of District policies. The General Manager serves as the District's chief executive officer and oversees the day-to-day operations of the District's departments. The General Manager will can expand integration of hazard mitigation with the planning, direction, and management of District operations.

Engineering Department

The Engineering Departments oversee the Capital Improvement Program, Water Resources Management, Development Services, and Property Management, and Geographic Information System. Through these programs, the District can incorporate key mitigation actions.

Operations Department

This department operates and maintains the District's own distribution systems and facilities. The Operations Department can expand implementation of hazard mitigation projects on an ongoing basis into the District's infrastructure.

Resource Tables

This section serves as a high-level capability assessment of the District's resources through which hazard mitigation objectives may be achieved. The following subsections attempt to document the Regulatory, Administrative/Technical, Fiscal, Grant funding, and Outreach/Partnerships resources available to the District.

Table 5.1 Regulatory Tools Table

Regulatory Tool	Comments
Urban Water Management Plan	The Plan outlines forecasts for drought probability and magnitude while expanding upon awareness of drought hazard vulnerability.
Capital Improvement Plan	The plan outlines proposed efforts for capital projects and programs needed to carry out the goals and objectives of the District; including those regarding hazard mitigation.
Juncal Dam Inundation Mapping and Emergency Response Plan	The inundation flood maps identify flooding ones downstream of the District owned Juncal Dam and the Emergency Response Plan identifies mitigation efforts in the event of a dam breach.
Emergency Response Plan – District-Wide	The plan outlines the procedures for responding to fire, flood, earthquakes, and other disasters that could occur in the District.

Table 5.2: Administrative/Technical Tools Table

Administrative/Technical Tool	Personnel/Resources
Board of Directors	The Board of Directors can review and approve mitigation proposal for implementations
Administration	Administration is a multi-faceted resource. The District may utilize experts in its many departments for mitigation activity implementation

Table 5.3: Fiscal Tools Table

Fiscal Tool	Available
General Fund	Yes, with Board approval
Capital Improvement Plan	Yes, with Board approval

Table 5.4 Grant Funding Tools Table

Grant Funding Tool	Agency	Purpose	Contact
Pre-Disaster Mitigation Program (PDM)	U.S. Department of Homeland Security, Federal Emergency Management Agency	To provide funding for States, and communities for cost-effective hazard mitigation activities which complement a comprehensive hazard mitigation program and reduce injuries, loss of life, and damage and deconstruction of property.	FEMA 500 C. Street, SW Washington, DC 20472 Phone: (202) 646-4621 www.fema.gov
Hazard Mitigation Grant Program	U.S. Department of Homeland Security, Federal Emergency Management Agency	To prevent future losses of lives property due to disasters; to implement State of local hazard mitigation plans; to enable mitigation measures to be implemented during immediate recovery from a disaster;	FEMA 500 C Street S.W. Washington, DC 20472 Phone (202) 646-4621

		and to provide funding for previously identified mitigation measures to benefit the disaster area.	www.fema.gov
Flood Mitigation Assistance (FMA)	U.S. Department of Homeland Security, Federal Emergency Management Agency	To help States and communities plan and carry out activities designed to reduce the risk of flood damage to structures insurable under the NFIP.	FEMA 500 C Street S.W. Washington, DC 20472 Phone (202) 646-4621 www.fema.gov
Emergency Management Performance Grants (EMPG)	U. S. Department of Homeland Security; Federal Emergency Management Agency	To encourage the development of comprehensive emergency management at the State and local level and to improve emergency management planning, preparedness, mitigation, response, and recovery capabilities.	FEMA 500 C Street S.W. Washington, DC 20472 Phone (202) 646-4621 www.fema.gov
Community Development Grant Program (CDBG)	U.S. Department of Housing and Urban Development	To develop viable urban communities by providing decent housing and a suitable living	HUD 451 7 th Street, S. W. Washington, DC 20410-7000

		environment. Principally for low-to-moderate income individuals.	Phone: (202) 708-3587 www.hud.gov
Public Assistance Program (PA)	U.S. Department of Homeland Security, Federal Emergency Management Agency	To provide supplemental assistance to States, local governments, and certain private nonprofit organizations to alleviate suffering and hardship resulting from major disasters or emergencies declared by the President. Under Section 406, Public Assistance funds may be used to mitigate the impact of future disasters.	FEMA 500 C Street S.W. Washington, DC 20472 Phone (202) 646-4621 www.fema.gov
Emergency Watershed Protection	U.S. Department of Agriculture, Natural Resource Conservation Service	To provide emergency technical and financial assistance to install or repair structures that reduce runoff and prevent soil erosion to safeguard life and property.	NRCS PO BOX 2890 Washington, DC 20013 Phone: (202) 720-3527 www.nrcs.usda.gov
Disaster Mitigation and Technical Assistance Grants	U.S. Department of Commerce, Economic	To help States and localities to develop and /or implement a variety of disaster mitigation strategies.	EDA Herbert C. Hoover Building

	Development Administration		Washington, DC 20230 Phone: (800) 345-1222 www.eda.gov
Watershed Surveys and Planning	U.S. Department of Agriculture, Natural Resource Conservation Service	To provide planning assistance to Federal, State, and local agencies for the development of coordination water and related land resources programs in watersheds and river basins	NRCS PO Box 2890 Washington, DC 20013 Phone: (202) 720-3527 www.nrcs.usda.gov
National Earthquake Hazards Reduction Program (NEHRP)	U.S. Department of Homeland Security, Federal Emergency Management Agency	To mitigate earthquake losses that can occur in many parts of the nation providing earth science data and assessments essential for warning of imminent damaging earthquakes, land-use planning, engineering design, and emergency preparedness decisions.	FEMA 500 C Street S.W. Washington, DC 20472 Phone (202) 646-4621 www.fema.gov
Engineering for Natural Hazards	National Science Foundation	Supports fundamental research that advances knowledge for understanding and mitigating the	National Science Foundation Phone: (703) 292-7024 https://www.nsf.gov

		impact of natural hazards on constructed civil infrastructure	
Pre-Disaster Mitigation Program (PDM)	U.S. Department of Homeland Security, Federal Emergency Management Agency	To provide funding for States, and communities for cost-effective hazard mitigation activities which complement a comprehensive hazard mitigation program and reduce injuries, loss of life, and damage and deconstruction of property.	FEMA 500 C. Street, SW Washington, DC 20472 Phone: (202) 646-4621 www.fema.gov

Table 5.5 Outreach and Partnerships Tools Table

Outreach/Partnership Tools	Comments
District Website	The District website is an open forum for providing hazard information and for accepting ongoing comments from the public. The website will likely be the main avenue for maintaining an open dialogue with the public for hazard mitigation throughout the planning period.
Public Outreach	The District holds several outreach opportunities throughout the year. Public outreach will be able to be expanded to include a broader spectrum of hazard-specific information to improve hazard awareness.
Mutual Aid Agreements	As part of expanding its resilience to the impacts of hazard events, the District intends to review its current mutual aid agreements, identify gaps, and secure new agreements to expand its available mutual resources, if required.

5.2 Periodic assessment Requirements

§201.6(c)(4)(i): [The plan maintenance process shall include a] section describing the method and schedule of monitoring, **evaluating**, and updating the mitigation plan within a five-year cycle.

Planning is an ongoing process and, as such, this annex should be treated as a living document that must grow and adapt in order to keep pace with changes within the District. An annual assessment will be completed to document the changes in site hazards (e.g., updated FIRM maps, contemporary seismic studies, etc.) or the installation and purchase of new equipment (e.g., back-up generators, emergency response equipment, etc.), to ensure they do not have any major effects on the District's hazard vulnerabilities that would impact the conclusions or actions associated with the Plan. Prior to the fifth year of the revision cycle, these annual observations will be reviewed to determine what changes should be implemented in the required Plan update. The results of the annual evaluations will be folded back into each phase of the planning process and should yield decisions on how to update each section of the Plan.

The District Engineer has the responsibility of implementing these annual and five-year requirements. During the annual review, if any updates are deemed minor, then the District Engineer will perform the updates. However, if more major updates are required, then the Planning Team will be reconvened to discuss the effects on the Plan. For the fifth-year revision, the entire Planning Team will reconvene in order to use their expertise to update the Plan in its entirety. Each of the annual assessments will be utilized as an opportunity to evaluate the progress of hazard mitigation action implementation. The District Engineer will be responsible for reviewing the mitigation actions annually, determining which have the potential to be accomplished over the next year, and encouraging implementation with the proper departments. If the Plan is not meeting its goals, the District Engineer will document the shortcomings, suggest modifications, and implement changes to the plan as appropriate.

In addition to these periodic requirements, any significant modification to the District's facilities should be considered with respect to a possible impact on the Plan. All Planning Team members are responsible for providing updates for the District Engineer as necessary. As noted in the following section, the completed Plan will be available on the District's website to allow the public to continue to be involved during these periodic reviews.

5.3 Update Requirements

§201.6(c)(4)(i): [The plan maintenance process **shall** include a] section describing the method and schedule of monitoring, evaluating, and **updating** the mitigation plan within a five-year cycle.

§201.6(c)(4)(iii): [The plan maintenance process **shall** include a] discussion on how the community will continue public participation in the plan maintenance process.

The Emergency Management and Assistance regulations (44 CFR Part 201) state that it is the responsibility of local agencies (i.e., the District) to “at a minimum, review and, update the local mitigation plan every five years from date of plan approval to continue program eligibility”. The evaluation procedures listed below will provide insight into the major changes that need to be included in the five-year update and resubmission to FEMA:

- Annual HMP review with respect to changes in hazard vulnerability (e.g., additional hazards identified, natural hazard events, etc.)
- Annual HMP review with respect to development of new facilities
- Five-year comprehensive update to address the findings of the annual reviews
- Re-submittal of the updated HMP to California Governor’s Office of Emergency Services (Cal OES)/FEMA

Additionally, the risk assessment portion of the plan will be reviewed to determine if the information should be updated or modified. Each department responsible for the various implementation actions will report on:

- Status of their projects
- Implementation processes
- Any difficulties encountered
- How coordination efforts are proceeding
- Which strategies should be revised

Appendix H: Emergency Response Plan