



MADDAUS WATER MANAGEMENT INC.

2020 Water Shortage Contingency Plan Final



2020 Water Shortage Contingency Plan

June 2021

Prepared By:

Arcadis U.S., Inc. 320 Commerce, Suite 200 Irvine California 92602 Phone: 714 730 9052 https://www.arcadis.com Trabuco Canyon Water District 32003 Dove Canyon Drive Trabuco Canyon California 92679 Phone: 949 858 0277 https://www.tcwd.ca.gov/

Prepared For:

Maddaus Water Management, Inc. Danville, California 94526 Sacramento, California 95816 www.maddauswater.com

Our Ref: 30055240

Lisa Maddaus, P.E. Technical Lead

Sarina Sriboonlue, P.E. Project Manager

Contents

A	Acronyms and Abbreviationsv				
1	INT	INTRODUCTION AND WSCP OVERVIEW1-1			
	1.1	1 Water Shortage Contingency Plan Requirements and Organization			
	1.2	.2 Integration with Other Planning Efforts			
2	BAG	CKGRC	UND INFORMATION	2-1	
	2.1	Trabu	co Canyon Water District Service Area	2-1	
	2.2	Relati	onship to Wholesalers	2-3	
	2.3	Relati	onship with Wholesaler Water Shortage Planning	2-5	
	2.3.1	1 ME	Г Water Surplus and Drought Management Plan	2-5	
	2.3.2	2 ME	T Water Supply Allocation Plan	2-6	
	2.3.3	3 MW	DOC Water Supply Allocation Plan	2-8	
3	WA	TER SI	IORTAGE CONTINGENCY PREPAREDNESS AND RESPONSE PLANNING	3-1	
	3.1	Water	Supply Reliability Analysis	3-1	
	3.2	Annu	al Water Supply and Demand Assessment Procedures	3-1	
	3.2. 1	1 Dec	ision-Making Process	3-2	
	3.	2.1.1	District Steps to Approve the Annual Assessment Determination	3-2	
	3.2.2	2 Dat	a and Methodologies	3-3	
	3.	2.2.1	Assessment Methodology	3-3	
	3.	2.2.2	Locally Applicable Evaluation Criteria	3-4	
	3.:	2.2.3	Water Supply	3-5	
	3.	2.2.4	Unconstrained Customer Demand	3-5	
	3.	2.2.5	Planned Water Use for Current Year Considering Dry Subsequent Year	3-5	
	3.:	2.2.6	Infrastructure Considerations	3-6	
	3.	2.2.7	Other Factors	3-6	
	3.3	Six St	andard Water Shortage Levels	3-6	
	3.4	Short	age Response Actions	3-8	
	3.4.1	1 Per	manent Water Conservation Measures	3-8	
	3.4.2	2 Rec	uired Shortage Response Actions	3-10	
	3.	4.2.1	Water Shortage Stage 1	3-10	
	3.	4.2.2	Water Shortage Stage 2	3-11	
	3.4	4.2.3	Water Shortage Stage 3	3-12	
	3.	4.2.4	Water Shortage Stage 4	3-13	

3.4	4.2.	5 Water Shortage Stage 5	3-14	
3.4	4.2.6	6 Water Shortage Stage 6	3-14	
3.4.3	3.4.3 Demand Reduction			
3.4.4 Supply Augmentation				
3.4.5	5 (Operational Changes	3-15	
3.4.6	5 /	Additional Mandatory Restrictions	3-16	
3.4.7	' 1	Emergency Response Plan (Hazard Mitigation Plan)	3-16	
3.4	4.7. ⁻	1 MET's WSDM and WSAP	3-16	
3.4	4.7.2	2 Water Emergency Response Organization of Orange County Emergency Opera 3-16	tions Plan	
3.4	4.7.:	3 Trabuco Canyon Water District Emergency Response Plan	3-17	
3.4.8	3 3	Seismic Risk Assessment and Mitigation Plan	3-17	
3.4.9) (Shortage Response Action Effectiveness	3-19	
3.5	Co	ommunication Protocols	3-19	
3.6	Co	ompliance and Enforcement	3-21	
3.7	3-21 Legal Authorities			
3.8	3 Financial Consequences of WSCP 3-22			
3.9	Monitoring and Reporting3-23			
3.10	WSCP Refinement Procedures			
3.11	Sp	Decial Water Feature Distinction	3-24	
3.12	Pla	an Adoption, Submittal, and Availability	3-24	
REF	ER	ENCES	4-1	

Tables

4

Table 3-1: Water Shortage Contingency Plan Levels	3-7
Table 3-2: Communication Procedures	3-20
Table 3-3: Agency Contacts and Coordination Protocols	3-21

Figures

Figure 2-1: Trabuco Canyon Water District Service Area	2-2
Figure 2-2: Regional Location of the District and Other MWDOC Member Agencies	2-4
Figure 2-3: Resource Stages, Anticipated Actions, and Supply Declarations	2-6

Figure 3-1: Annual Assessment Reporting Timeline	3-3
Figure 3-2: Water Shortage Contingency Plan Annual Assessment Framework	3-4

Appendices

Appendix A.	DWR Submittal Tables
	Table 8-1: Water Shortage Contingency Plan Levels
	Table 8-2: Demand Reduction Actions
	Table 8-3: Supply Augmentation and Other Actions
Appendix B.	Water Conservation Ordinance 2021-22
Appendix C.	Recreational Water Feature Best Practices
Appendix D.	Notice of Public Hearing
Appendix E.	Adopted WSCP Resolution

Acronyms and Abbreviations

AFAcre-FeetAMIAdvanced Metering InfrastructureAMRAutomated Meter ReadingAnnual AssessmentAnnual Water Supply and Demand AssessmentBMPBest Management PracticeCRAColorado River AqueductDistrictTrabuco Canyon Water DistrictDRADrought Risk AssessmentDVLDiamond Valley LakeDWRCalifornia Department of Water ResourcesEAPEmergency Operations Center Actions PlanEOCEmergency Operations Center Actions PlanERPEmergency Response PlanFYFiscal YearFYEFiscal YearFYEFiscal Year EndingHMPHater Resource PlanIRPInterim Agricultural Water ProgramIRPInterim Agricultural Water DistrictM&IMunicipal and IndustrialMETMetropolitan Water District of Southern CaliforniaMetropolitan ActMuncipal and IndustrialMutocolOrange County Water District of Orange CountyNIMSNational Incident Management SystemOCWDOrange County Water DistrictSMPSant Margarita Water DistrictSMPSant Margarita Water DistrictSWPState Water ProjectUWMPUrban Water Management PlanVerter CodeCalifornia Water CodeWeter CodeCalifornia Water CodeWith CodeCalifornia Water CodeWEROCWater SupplierSVPState Water ProjectUWMPUrban Water Management Plan<	%	Percent
AMIAdvanced Metering InfrastructureAMRAutomated Meter ReadingAnnual AssessmentAnnual Water Supply and Demand AssessmentBMPBest Management PracticeCRAColorado River AqueductDistrictTrabuco Canyon Water DistrictDRADrought Risk AssessmentDVLDiamond Valley LakeDWRCalifornia Department of Water ResourcesEAPEmergency Operations Center Actions PlanEOCEmergency Operations Center Actions PlanERPEmergency Response PlanFYFiscal YearFYEFiscal YearFYEFiscal Year EndingHMPHazard Mitigation PlanIAWPInterim Agricultural Water ProgramIRPIntegrated Water Resource PlanIRWDIrvine Ranch Water DistrictM&IMunicipal and IndustrialMETMetropolitan Water District of Southern CaliforniaMetropolitan ActMurcipal Water District ActMWDOCOrange County Water DistrictMWDDSant Juan Basin AuthoritySIBASan Juan Basin AuthoritySIBASan Juan Basin AuthoritySWPState Water ProjectUWMPUrban Water CodeWEROCWater SurplierWater CodeCalifornia Water CodeWEROCWater Surplies AnthoritySMPState Water ProjectUWMPUrban Water Management PlanWater Surplies AnthorityState Water Surplies Orange Contingency PlanWater Surply Allocation PlanWater	AF	Acre-Feet
AMRAutomated Meter ReadingAnnual AssessmentAnnual Water Supply and Demand AssessmentBMPBest Management PracticeCRAColorado River AqueductDistrictTrabuco Canyon Water DistrictDRADrought Risk AssessmentDVLDiamond Valley LakeDWRCalifornia Department of Water ResourcesEAPEmergency Operations Center Actions PlanEOCEmergency Operations PlanEOPEmergency Response PlanFYFiscal YearFYEFiscal Year FYEFYEFiscal Year California Quater DistrictMWPInterim Agricultural Water ProgramIRPIntegrated Water Resource PlanIRVDIrvine Ranch Water DistrictM&IMunicipal and IndustrialMetropolitan ActMetropolitan Water District of Southern CaliforniaMWDOCMunicipal Water District of Orange CountyNIMSNational Incident Management SystemOCWDOrange County Water DistrictRWWTPRobinson Ranch Wastewater Treatment PlantSEMSCalifornia Standardized Emergency Management SystemSJBASan Juan Basin AuthoritySMWDSanta Margarita Water DistrictSWPState Water ProjectUWMPUrban Water SupplierSWPState Water ProjectUWMPWater Supply Allocation PlanWater CodeCalifornia Water CodeWEROCWater Supply Allocation PlanWater Supply Allocation PlanWater Supply Allocation PlanWA	AMI	Advanced Metering Infrastructure
Annual AssessmentAnnual Water Supply and Demand AssessmentBMPBest Management PracticeCRAColorado River AqueductDistrictTrabuco Canyon Water DistrictDRADrought Risk AssessmentDVLDiamond Valley LakeDWRCalifornia Department of Water ResourcesEAPEmergency Operations Center Actions PlanEOCEmergency Operations Center Actions PlanEOCEmergency Operations PlanERPEmergency Response PlanFYFiscal YearFYEFiscal Year EndingHMPHazard Mitigation PlanIAWPIntegrated Water Resource PlanIRPIntegrated Water DistrictM&IMuncipal and IndustrialMETMetropolitan Water District of Southern CaliforniaMetropolitan ActMetropolitan Water District ActMWDOCMunicipal and IndustrialMETResons Ranch Waster DistrictMWDOCOrange County Water DistrictNIMSNational Incident Management SystemOCWDOrange County Water DistrictSUBASan Juan Basin AuthoritySIMASan Juan Basin AuthoritySIMPState Water ProjectUWMPUrban Water SupplierSWPState Water ProjectUWMPWater SupplierSWPWater Supply Allocation PlanWater CodeCalifornia Water CodeWEROCWater Supply Allocation PlanWater Supply Allocation PlanWater Supply Allocation PlanWater Supply Alloca	AMR	Automated Meter Reading
BMPBest Management PracticeCRAColorado River AqueductDistrictTrabuco Canyon Water DistrictDRADrought Risk AssessmentDVLDiamond Valley LakeDWRCalifornia Department of Water ResourcesEAPEmergency Operations Center Actions PlanEOCEmergency Operations CenterEOPEmergency Operations PlanERPEmergency Operations PlanFYFiscal YearFYEFiscal Year EndingHMPHazard Mitigation PlanIAWPInterim Agricultural Water ProgramIRPIntegrated Water Resource PlanIRWDIrvine Ranch Water DistrictM&IMunicipal and IndustrialMETMetropolitan Water District of Southern CaliforniaMetropolitan ActMetropolitan Water DistrictMWDOCMunicipal Water DistrictNIMSNational Incident Management SystemOCWDOrange County Water DistrictRRWWTPRobinson Ranch Wastewater Treatment PlantSEMSCalifornia Standardized Emergency Management SystemSJBASan Juan Basin AuthoritySMWDSanta Margarita Water DistrictSWPState Water ProjectUWMPUrban Water GodeWEROCWater SupplierSWPState Water ProjectWXPAWater Supply Allocation PlanWSDMWater Supply Allocation Plan	Annual Assessment	Annual Water Supply and Demand Assessment
CRAColorado River AqueductDistrictTrabuco Canyon Water DistrictDRADrought Risk AssessmentDVLDiamond Valley LakeDWRCalifornia Department of Water ResourcesEAPEmergency Operations Center Actions PlanEOCEmergency Operations PlanERPEmergency Operations PlanFYFiscal YearFYEFiscal YearFYEFiscal Year EndingHMPHazard Mitigation PlanIRPInterim Agricultural Water ProgramIRPInterim Agricultural Water ProgramIRPIntegrated Water Resource PlanIRWDIrvine Ranch Water DistrictM&IMunicipal and IndustrialMETOpolitan ActMetropolitan Water District of Southern CaliforniaMWDOCMunicipal Water District of Orange CountyNIMSNational Incident Management SystemOCWDOrange County Water DistrictSEMSCalifornia Standardized Emergency Management SystemSJBASan Juan Basin AuthoritySMWDSanta Margarita Water DistrictSupplierUrban Water SupplierSWPState Water ProjectUVMPUrban Water CodeWERCCWater Supply Allocation PlanWASPWater Supply Allocation PlanWSDMWater Sumply Allocation Plan	BMP	Best Management Practice
DistrictTrabuco Canyon Water DistrictDRADrought Risk AssessmentDVLDiamond Valley LakeDWRCalifornia Department of Water ResourcesEAPEmergency Operations Center Actions PlanEOCEmergency Operations CenterEOPEmergency Operations PlanERPEmergency Response PlanFYFiscal YearFYEFiscal Year EndingHMPHazard Mitigation PlanIAWPInterim Agricultural Water ProgramIRPIntegrated Water Resource PlanIRWDIrvine Ranch Water DistrictM&IMunicipal and IndustrialMETMetropolitan Water District of Southern CaliforniaMetropolitan ActMetropolitan Water District of CountyNIMSNational Incident Management SystemOCWDOrange County Water DistrictRRWWTPRobinson Ranch Wastewater Treatment PlantSEMSCalifornia Standardized Emergency Management SystemSJBASan Juan Basin AuthoritySMWDSanta Margarita Water DistrictSupplierUrban Water SupplierSWPState Water ProjectUWMPUrban Water SupplierSWPState Water ProjectUWMPWater Supply Allocation PlanWSDMWater Surply Allocation PlanWSDMWater Surply Allocation Plan	CRA	Colorado River Aqueduct
DRADrought Risk AssessmentDVLDiamond Valley LakeDWRCalifornia Department of Water ResourcesEAPEmergency Operations Center Actions PlanEOCEmergency Operation CenterEOPEmergency Operations PlanERPEmergency Response PlanFYFiscal YearFYEFiscal Year EndingHMPHazard Mitigation PlanIAWPInterim Agricultural Water ProgramIRPIntegrated Water Resource PlanIRWDIrvine Ranch Water DistrictM&IMunicipal and IndustrialMETMetropolitan Water District of Southern CaliforniaMetropolitan ActMetropolitan Water District of Orange CountyNIMSNational Incident Management SystemOCWDOrange County Water DistrictRRWWTPRobinson Ranch Wastewater Treatment PlantSEMSCalifornia Standardized Emergency Management SystemSJBASan Juan Basin AuthoritySMWDSanta Margarita Water DistrictSWPState Water ProjectUWMPUrban Water SupplierSWPState Water ProjectUWMPUrban Water SupplierSWPState Water ProjectUWMPWater Supply Allocation PlanWSDMWater Surply Allocation PlanWSDMWater Surply Allocation Plan	District	Trabuco Canyon Water District
DVLDiamond Valley LakeDWRCalifornia Department of Water ResourcesEAPEmergency Operations Center Actions PlanEOCEmergency Operations CenterEOPEmergency Operations PlanERPEmergency Response PlanFYFiscal YearFYEFiscal Year EndingHMPHazard Mitigation PlanIAWPInterim Agricultural Water ProgramIRPIntegrated Water Resource PlanIRWDIrvine Ranch Water DistrictM&IMunicipal and IndustrialMETMetropolitan Water District of Southern CaliforniaMetropolitan ActMetropolitan Water District of Corange CountyNIMSNational Incident Management SystemOCWDOrange County Water DistrictSIBASan Juan Basin AuthoritySJBASan Juan Basin AuthoritySJBASanta Margarita Water DistrictSyrPState Water ProjectUWMPUrban Water SupplierSVPState Water ProjectUWMPWater SupplierWSDMWater Supply Allocation PlanWSDMWater Supply Allocation Plan	DRA	Drought Risk Assessment
DWRCalifornia Department of Water ResourcesEAPEmergency Operations Center Actions PlanEOCEmergency Operation CenterEOPEmergency Operations PlanERPEmergency Response PlanFYFiscal YearFYEFiscal Year EndingHMPHazard Mitigation PlanIAWPInterim Agricultural Water ProgramIRPIntegrated Water Resource PlanIRWDIrvine Ranch Water DistrictM&IMunicipal and IndustrialMETMetropolitan Water District of Southern CaliforniaMetropolitan ActMetropolitan Water District ActMWDOCMunicipal Water DistrictNIMSNational Incident Management SystemOCWDOrange County Water DistrictRRWWTPRobinson Ranch Water DistrictSJBASan Juan Basin AuthoritySJMDSanta Margarita Water DistrictSwPState Water RropelerSWPUrban Water SupplierWMPUrban Water Management PlanWater CodeCalifornia Water CodeWEROCWater Supply Allocation PlanWSDMWater Surply Allocation PlanWSDMWater Surply Allocation Plan	DVL	Diamond Valley Lake
EAPEmergency Operations Center Actions PlanEOCEmergency Operation CenterEOPEmergency Operations PlanERPEmergency Response PlanFYFiscal YearFYEFiscal Year EndingHMPHazard Mitigation PlanIAWPInterim Agricultural Water ProgramIRPIntegrated Water Resource PlanIRWDIrvine Ranch Water DistrictM&IMunicipal and IndustrialMETMetropolitan Water District of Southern CaliforniaMetropolitan ActMetropolitan Water District of Orange CountyNIMSNational Incident Management SystemOCWDOrange County Water DistrictRRWWTPRobinson Ranch Wastewater Treatment PlantSEMSCalifornia Standardized Emergency Management SystemSJBASan Juan Basin AuthoritySMPState Water SupplierSWPState Water ProjectUWMPUrban Water Management PlanWater CodeCalifornia Water CodeWEROCWater Supply Allocation PlanWSDMWater Surply Allocation PlanWSDMWater Surply Allocation Plan	DWR	California Department of Water Resources
EOCEmergency Operation CenterEOPEmergency Operations PlanERPEmergency Response PlanFYFiscal YearFYEFiscal Year EndingHMPHazard Mitigation PlanIAWPInterim Agricultural Water ProgramIRPIntegrated Water Resource PlanIRWDIrvine Ranch Water DistrictM&IMunicipal and IndustrialMETMetropolitan Water District of Southern CaliforniaMetropolitan ActMetropolitan Water District of Orange CountyNIMSNational Incident Management SystemOCWDOrange County Water DistrictRRWWTPRobinson Ranch Wastewater Treatment PlantSEMSCalifornia Standardized Emergency Management SystemSJBASan Juan Basin AuthoritySMWDSanta Margarita Water DistrictSwPState Water RouplierSWPState Water ProjectUWMPUrban Water SupplierSWPState Water ProjectUWMPWater Supply Allocation PlanWSCPWater Supply Allocation PlanWSDMWater Surply Allocation Plan	EAP	Emergency Operations Center Actions Plan
EOPEmergency Operations PlanERPEmergency Response PlanFYFiscal YearFYEFiscal Year EndingHMPHazard Mitigation PlanIAWPInterim Agricultural Water ProgramIRPIntegrated Water Resource PlanIRWDIrvine Ranch Water DistrictM&IMunicipal and IndustrialMETMetropolitan Water District of Southern CaliforniaMetropolitan ActMetropolitan Water District of Orange CountyNIMSNational Incident Management SystemOCWDOrange County Water DistrictRRWWTPRobinson Ranch Water DistrictSEMSCalifornia Standardized Emergency Management SystemSJBASan Juan Basin AuthoritySMWDSanta Margarita Water DistrictSwPState Water RupplierSWPState Water RupplerWEROCWater SupplierWEROCWater Supply Allocation PlanWSDMWater Surply Allocation PlanWSDMWater Surply Allocation Plan	EOC	Emergency Operation Center
ERPEmergency Response PlanFYFiscal YearFYEFiscal Year EndingHMPHazard Mitigation PlanIAWPInterim Agricultural Water ProgramIRPIntegrated Water Resource PlanIRWDIrvine Ranch Water DistrictM&IMunicipal and IndustrialMETMetropolitan Water District of Southern CaliforniaMetropolitan ActMetropolitan Water District of Orange CountyNIMSNational Incident Management SystemOCWDOrange County Water DistrictRRWWTPRobinson Ranch Waster Water Treatment PlantSEMSCalifornia Standardized Emergency Management SystemSJBASan Juan Basin AuthoritySMWDSanta Margarita Water DistrictSWPUrban Water SupplierSWPState Water ProjectUWMPUrban Water Management PlanWater CodeCalifornia Water CodeWEROCWater Supply Allocation PlanWSCPWater Supply and Drought Management Plan	EOP	Emergency Operations Plan
FYFiscal YearFYEFiscal Year EndingHMPHazard Mitigation PlanIAWPInterim Agricultural Water ProgramIRPIntegrated Water Resource PlanIRWDIrvine Ranch Water DistrictM&IMunicipal and IndustrialMETMetropolitan Water District of Southern CaliforniaMetropolitan ActMetropolitan Water District of Orange CountyNIMSNational Incident Management SystemOCWDOrange County Water DistrictRRWWTPRobinson Ranch Wastewater Treatment PlantSEMSCalifornia Standardized Emergency Management SystemSJBASan Juan Basin AuthoritySMWDSanta Margarita Water DistrictSwPState Water ProjectUWMPUrban Water SupplierSWPState Water ProjectWEROCWater Emergency Response Organization of Orange CountyWSAPWater Supply Allocation PlanWSDMWater Supply and Drought Management Plan	ERP	Emergency Response Plan
FYEFiscal Year EndingHMPHazard Mitigation PlanIAWPInterim Agricultural Water ProgramIRPIntegrated Water Resource PlanIRWDIrvine Ranch Water DistrictM&IMunicipal and IndustrialMETMetropolitan Water District of Southern CaliforniaMetropolitan ActMetropolitan Water District of Orange CountyNIMSNational Incident Management SystemOCWDOrange County Water DistrictRRWWTPRobinson Ranch Wastewater Treatment PlantSEMSCalifornia Standardized Emergency Management SystemSJBASan Juan Basin AuthoritySMWDSanta Margarita Water DistrictSWPUrban Water SupplierSWPState Water ProjectUWMPUrban Water CodeWEROCWater Emergency Response Organization of Orange CountyWSDMWater Supply Allocation PlanWSDMWater Supply and Drought Management Plan	FY	Fiscal Year
HMPHazard Mitigation PlanIAWPInterim Agricultural Water ProgramIRPIntegrated Water Resource PlanIRWDIrvine Ranch Water DistrictM&IMunicipal and IndustrialMETMetropolitan Water District of Southern CaliforniaMetropolitan ActMetropolitan Water District ActMWDOCMunicipal Water District of Orange CountyNIMSNational Incident Management SystemOCWDOrange County Water DistrictRRWWTPRobinson Ranch Wastewater Treatment PlantSEMSCalifornia Standardized Emergency Management SystemSJBASan Juan Basin AuthoritySMWDSanta Margarita Water DistrictSupplierUrban Water SupplierSWPState Water ProjectUWMPUrban Water Management PlanWater CodeCalifornia Water CodeWEROCWater Emergency Response Organization of Orange CountyWSDMWater Surply Allocation PlanWSDMWater Surplus and Drought Management Plan	FYE	Fiscal Year Ending
IAWPInterim Agricultural Water ProgramIRPIntegrated Water Resource PlanIRWDIrvine Ranch Water DistrictM&IMunicipal and IndustrialMETMetropolitan Water District of Southern CaliforniaMetropolitan ActMetropolitan Water District ActMWDOCMunicipal Water District of Orange CountyNIMSNational Incident Management SystemOCWDOrange County Water DistrictRRWWTPRobinson Ranch Wastewater Treatment PlantSEMSCalifornia Standardized Emergency Management SystemSJBASan Juan Basin AuthoritySMWDSanta Margarita Water DistrictSwpPState Water ProjectUWMPUrban Water Management PlanWater CodeCalifornia Water CodeWEROCWater Emergency Response Organization of Orange CountyWSDMWater Surply Allocation Plan	HMP	Hazard Mitigation Plan
IRPIntegrated Water Resource PlanIRWDIrvine Ranch Water DistrictM&IMunicipal and IndustrialMETMetropolitan Water District of Southern CaliforniaMetropolitan ActMetropolitan Water District ActMWDOCMunicipal Water District of Orange CountyNIMSNational Incident Management SystemOCWDOrange County Water DistrictRRWWTPRobinson Ranch Wastewater Treatment PlantSEMSCalifornia Standardized Emergency Management SystemSJBASan Juan Basin AuthoritySMWDSanta Margarita Water DistrictSupplierUrban Water SupplierSWPState Water ProjectUWMPUrban Water Management PlanWater CodeCalifornia Water CodeWEROCWater Emergency Response Organization of Orange CountyWSCPWater Supply Allocation PlanWSDMWater Surplus and Drought Management Plan	IAWP	Interim Agricultural Water Program
IRWDIrvine Ranch Water DistrictM&IMunicipal and IndustrialMETMetropolitan Water District of Southern CaliforniaMetropolitan ActMetropolitan Water District ActMWDOCMunicipal Water District of Orange CountyNIMSNational Incident Management SystemOCWDOrange County Water DistrictRRWWTPRobinson Ranch Wastewater Treatment PlantSEMSCalifornia Standardized Emergency Management SystemSJBASan Juan Basin AuthoritySMWDSanta Margarita Water DistrictSwPState Water ProjectUWMPUrban Water Management PlanWater CodeCalifornia Water CodeWEROCWater Emergency Response Organization of Orange CountyWSAPWater Surply Allocation PlanWSCPWater Surply Allocation PlanWSDMWater Surplys and Drought Management Plan	IRP	Integrated Water Resource Plan
M&IMunicipal and IndustrialMETMetropolitan Water District of Southern CaliforniaMetropolitan ActMetropolitan Water District ActMWDOCMunicipal Water District of Orange CountyNIMSNational Incident Management SystemOCWDOrange County Water DistrictRRWWTPRobinson Ranch Wastewater Treatment PlantSEMSCalifornia Standardized Emergency Management SystemSJBASan Juan Basin AuthoritySMWDSanta Margarita Water DistrictSupplierUrban Water SupplierSWPState Water ProjectUWMPUrban Water Management PlanWater CodeCalifornia Water CodeWEROCWater Emergency Response Organization of Orange CountyWSCPWater Supply Allocation PlanWSDMWater Surplus and Drought Management Plan	IRWD	Irvine Ranch Water District
METMetropolitan Water District of Southern CaliforniaMetropolitan ActMetropolitan Water District ActMWDOCMunicipal Water District of Orange CountyNIMSNational Incident Management SystemOCWDOrange County Water DistrictRRWWTPRobinson Ranch Wastewater Treatment PlantSEMSCalifornia Standardized Emergency Management SystemSJBASan Juan Basin AuthoritySMWDSanta Margarita Water DistrictSupplierUrban Water SupplierSWPState Water ProjectUWMPUrban Water Management PlanWater CodeCalifornia Water CodeWEROCWater Emergency Response Organization of Orange CountyWSCPWater Supply Allocation PlanWSDMWater Surplus and Drought Management Plan	M&I	Municipal and Industrial
Metropolitan ActMetropolitan Water District ActMWDOCMunicipal Water District of Orange CountyNIMSNational Incident Management SystemOCWDOrange County Water DistrictRRWWTPRobinson Ranch Wastewater Treatment PlantSEMSCalifornia Standardized Emergency Management SystemSJBASan Juan Basin AuthoritySMWDSanta Margarita Water DistrictSupplierUrban Water SupplierSWPState Water ProjectUWMPUrban Water CodeWEROCWater Emergency Response Organization of Orange CountyWSAPWater Supply Allocation PlanWSDMWater Surplus and Drought Management Plan	MET	Metropolitan Water District of Southern California
MWDOCMunicipal Water District of Orange CountyNIMSNational Incident Management SystemOCWDOrange County Water DistrictRRWWTPRobinson Ranch Wastewater Treatment PlantSEMSCalifornia Standardized Emergency Management SystemSJBASan Juan Basin AuthoritySMWDSanta Margarita Water DistrictSupplierUrban Water SupplierSWPState Water ProjectUWMPUrban Water Management PlanWater CodeCalifornia Water CodeWEROCWater Emergency Response Organization of Orange CountyWSAPWater Shortage Contingency PlanWSDMWater Surplus and Drought Management Plan	Metropolitan Act	Metropolitan Water District Act
NIMSNational Incident Management SystemOCWDOrange County Water DistrictRRWWTPRobinson Ranch Wastewater Treatment PlantSEMSCalifornia Standardized Emergency Management SystemSJBASan Juan Basin AuthoritySMWDSanta Margarita Water DistrictSupplierUrban Water SupplierSWPState Water ProjectUWMPUrban Water Management PlanWater CodeCalifornia Water CodeWEROCWater Emergency Response Organization of Orange CountyWSAPWater Supply Allocation PlanWSCPWater Surplus and Drought Management Plan	MWDOC	Municipal Water District of Orange County
OCWDOrange County Water DistrictRRWWTPRobinson Ranch Wastewater Treatment PlantSEMSCalifornia Standardized Emergency Management SystemSJBASan Juan Basin AuthoritySMWDSanta Margarita Water DistrictSupplierUrban Water SupplierSWPState Water ProjectUWMPUrban Water Management PlanWater CodeCalifornia Water CodeWEROCWater Emergency Response Organization of Orange CountyWSAPWater Supply Allocation PlanWSCPWater Surplus and Drought Management Plan	NIMS	National Incident Management System
RRWWTPRobinson Ranch Wastewater Treatment PlantSEMSCalifornia Standardized Emergency Management SystemSJBASan Juan Basin AuthoritySMWDSanta Margarita Water DistrictSupplierUrban Water SupplierSWPState Water ProjectUWMPUrban Water Management PlanWater CodeCalifornia Water CodeWEROCWater Emergency Response Organization of Orange CountyWSAPWater Supply Allocation PlanWSCPWater Surplus and Drought Management Plan	OCWD	Orange County Water District
SEMSCalifornia Standardized Emergency Management SystemSJBASan Juan Basin AuthoritySMWDSanta Margarita Water DistrictSupplierUrban Water SupplierSWPState Water ProjectUWMPUrban Water Management PlanWater CodeCalifornia Water CodeWEROCWater Emergency Response Organization of Orange CountyWSAPWater Supply Allocation PlanWSCPWater Shortage Contingency PlanWSDMWater Surplus and Drought Management Plan	RRWWTP	Robinson Ranch Wastewater Treatment Plant
SJBASan Juan Basin AuthoritySMWDSanta Margarita Water DistrictSupplierUrban Water SupplierSWPState Water ProjectUWMPUrban Water Management PlanWater CodeCalifornia Water CodeWEROCWater Emergency Response Organization of Orange CountyWSAPWater Supply Allocation PlanWSCPWater Supply and Drought Management PlanWSDMWater Surplus and Drought Management Plan	SEMS	California Standardized Emergency Management System
SMWDSanta Margarita Water DistrictSupplierUrban Water SupplierSWPState Water ProjectUWMPUrban Water Management PlanWater CodeCalifornia Water CodeWEROCWater Emergency Response Organization of Orange CountyWSAPWater Supply Allocation PlanWSCPWater Shortage Contingency PlanWSDMWater Surplus and Drought Management Plan	SJBA	San Juan Basin Authority
SupplierUrban Water SupplierSWPState Water ProjectUWMPUrban Water Management PlanWater CodeCalifornia Water CodeWEROCWater Emergency Response Organization of Orange CountyWSAPWater Supply Allocation PlanWSCPWater Shortage Contingency PlanWSDMWater Surplus and Drought Management Plan	SMWD	Santa Margarita Water District
SWPState Water ProjectUWMPUrban Water Management PlanWater CodeCalifornia Water CodeWEROCWater Emergency Response Organization of Orange CountyWSAPWater Supply Allocation PlanWSCPWater Shortage Contingency PlanWSDMWater Surplus and Drought Management Plan	Supplier	Urban Water Supplier
UWMPUrban Water Management PlanWater CodeCalifornia Water CodeWEROCWater Emergency Response Organization of Orange CountyWSAPWater Supply Allocation PlanWSCPWater Shortage Contingency PlanWSDMWater Surplus and Drought Management Plan	SWP	State Water Project
Water CodeCalifornia Water CodeWEROCWater Emergency Response Organization of Orange CountyWSAPWater Supply Allocation PlanWSCPWater Shortage Contingency PlanWSDMWater Surplus and Drought Management Plan	UWMP	Urban Water Management Plan
WEROCWater Emergency Response Organization of Orange CountyWSAPWater Supply Allocation PlanWSCPWater Shortage Contingency PlanWSDMWater Surplus and Drought Management Plan	Water Code	California Water Code
WSAPWater Supply Allocation PlanWSCPWater Shortage Contingency PlanWSDMWater Surplus and Drought Management Plan	WEROC	Water Emergency Response Organization of Orange County
WSCP Water Shortage Contingency Plan WSDM Water Surplus and Drought Management Plan	WSAP	Water Supply Allocation Plan
WSDM Water Surplus and Drought Management Plan	WSCP	Water Shortage Contingency Plan
that of our plot and brought management han	WSDM	Water Surplus and Drought Management Plan

1 INTRODUCTION AND WSCP OVERVIEW

The Water Shortage Contingency Plan (WSCP) is a strategic planning document designed to prepare for and respond to water shortages. This WSCP complies with California Water Code (Water Code) Section 10632, which requires that every urban water supplier (Supplier) shall prepare and adopt a WSCP as part of its Urban Water Management Plan (UWMP). This level of detailed planning and preparation is intended to help maintain reliable supplies and reduce the impacts of supply interruptions.

The WSCP is Trabuco Canyon Water District (District)'s operating manual that is used to prevent catastrophic service disruptions through proactive, rather than reactive, management. A water shortage, when water supply available is insufficient to meet the normally expected customer water use at a given point in time, may occur due to a number of reasons, such as drought, climate change, and catastrophic events. This plan provides a structured guide for the District to deal with water shortages, incorporating prescriptive information and standardized action levels, along with implementation actions in the event of a catastrophic supply interruption. This way, if and when shortage conditions arise, the District's governing body, its staff, and the public can easily identify and efficiently implement pre-determined steps to manage a water shortage. A well-structured WSCP allows real-time water supply availability assessment and structured steps designed to respond to actual conditions, to allow for efficient management of any shortage with predictability and accountability.

The WSCP also describes the District's procedures for conducting an Annual Water Supply and Demand Assessment (Annual Assessment) that is required by Water Code Section 10632.1 and is to be submitted to the California Department of Water Resources (DWR) on or before July 1 of each year, or within 14 days of receiving final allocations from the State Water Project (SWP), whichever is later. The District's 2020 WSCP is included as an appendix to its 2020 UWMP which will be submitted to DWR by July 1, 2021. However, this WSCP is created separately from the District's 2020 UWMP and can be amended, as needed, without amending the UWMP. Furthermore, the Water Code does not prohibit a Supplier from taking actions not specified in its WSCP, if needed, without having to formally amend its UWMP or WSCP.

1.1 Water Shortage Contingency Plan Requirements and Organization

The WSCP provides the steps and water shortage response actions to be taken in times of water shortage conditions. The WSCP has prescriptive elements, such as an analysis of water supply reliability; the water shortage response actions for each of the six standard water shortage levels that correspond to water shortage percentages ranging from 10% to greater than 50%; an estimate of potential to close supply gap for each measure; protocols and procedures to communicate identified actions for any current or predicted water shortage conditions; procedures for an Annual Assessment; monitoring and reporting requirements to determine customer compliance; and reevaluation and improvement procedures for evaluating the WSCP.

This WSCP is organized into three main sections, with Section 3 aligned with Water Code Section 16032 requirements.

Section 1 Introduction and WSCP Overview gives an overview of the WSCP fundamentals.

Section 2 Background provides a background on the District's water service area.

Section 3 Water Shortage Contingency Preparedness and Response Planning

Section 3.1 Water Supply Reliability Analysis provides a summary of the water supply analysis and water reliability findings from the 2020 UWMP.

Section 3.2 Annual Water Supply and Demand Assessment Procedures provide a description of procedures to conduct and approve the Annual Assessment.

Section 3.3 Six Standard Water Shortage Stages explains the WSCP's six standard water shortage levels corresponding to progressive ranges of up to 10, 20, 30, 40, 50, and more than 50% shortages.

Section 3.4 Shortage Response Actions describes the WSCP's shortage response actions that align with the defined shortage levels.

Section 3.5 Communication Protocols addresses communication protocols and procedures to inform customers, the public, interested parties, and local, regional, and state governments, regarding any current or predicted shortages and any resulting shortage response actions.

Section 3.6 Compliance and Enforcement describes customer compliance, enforcement, appeal, and exemption procedures for triggered shortage response actions.

Section 3.7 Legal Authorities is a description of the legal authorities that enable the District to implement and enforce its shortage response actions.

Section 3.8 Financial Consequences of the WSCP provides a description of the financial consequences of and responses for drought conditions.

Section 3.9 Monitoring and Reporting describes monitoring and reporting requirements and procedures that ensure appropriate data is collected, tracked, and analyzed for purposes of monitoring customer compliance and to meet state reporting requirements.

Section 3.10 WSCP Refinement Procedures addresses reevaluation and improvement procedures for monitoring and evaluating the functionality of the WSCP.

Section 3.11 Special Water Feature Distinction is a required definition for inclusion in a WSCP per the Water Code.

Section 3.12 Plan Adoption, Submittal, and Implementation provides a record of the process the Trabuco Canyon Water District followed to adopt and implement its WSCP.

1.2 Integration with Other Planning Efforts

As a retail water supplier in Orange County, the District considered other key entities in the development of this WSCP, including the Municipal Water District of Orange County ([MWDOC] (regional wholesale supplier) and the Metropolitan Water District of Southern California ([MET] (regional wholesaler for Southern California and the direct supplier of imported water to MWDOC). As a MWDOC member agency, the District also developed this WSCP with input from several coordination efforts led by MWDOC.

Some of the key planning and reporting documents that were used to develop this WSCP are:

- **MWDOC's 2020 UWMP** provides the basis for the projections of the imported supply availability over the next 25 years for the District's service area.
- MWDOC's 2020 WSCP provides a water supply availability assessment and structured steps designed to respond to actual conditions that will help maintain reliable supplies and reduce the impacts of supply interruptions.
- 2021 Orange County Water Demand Forecast for MWDOC and OCWD Technical Memorandum (Demand Forecast TM) provides the basis for water demand projections for MWDOC's member agencies as well as Anaheim, Fullerton, and Santa Ana.
- MET's 2020 Integrated Water Resources Plan (IRP) is a long-term planning document to ensure water supply availability in Southern California and provides a basis for water supply reliability in Orange County.
- MET's 2020 UWMP was developed as a part of the 2020 IRP planning process and was used by MWDOC as another basis for the projections of supply capability of the imported water received from MET.
- **MET's 2020 WSCP** provides a water supply assessment and guide for MET's intended actions during water shortage conditions.
- **2020 Local Hazard Mitigation Plan (HMP)** provides the basis for the seismic risk analysis of the water system facilities.
- Orange County Local Agency Formation Commission's 2020 Municipal Service Review for MWDOC Report provides a comprehensive service review of the municipal services provided by MWDOC.
- Water Master Plan and Sewer Master Plan of the District provide information on water infrastructure planning projects and plans to address any required water system improvements.
- **Groundwater Management Plans** provide the groundwater sustainability goals for the basins in the MWDOC's service area and the programs, actions, and strategies activities that support those goals.

2 BACKGROUND INFORMATION

The District was organized on February 26, 1962, under Division XII of the Water Code. Governed by a five-member Board of Directors, the District provides water, wastewater treatment and recycled water services for its service area.

The District encompasses an area of approximately 8,200 acres in the southeastern portion of Orange County at the foothills of the Santa Ana Mountains. Prior to 2000, the District was entirely within the unincorporated area of Orange County. In 2000, the City of Rancho Santa Margarita was incorporated and now covers the eastern portion of the District. The eastern portion of the District is accessed via Santa Margarita Parkway or Antonio Parkway and Plano Trabuco Road with the western portion of the District being accessed via El Toro Road or Santiago Canyon Road. Live Oak Canyon Road/Trabuco Canyon Road is the main artery through the central portion of the District between El Toro Road and Plano Trabuco Road.

2.1 Trabuco Canyon Water District Service Area

The District is located in the southeastern portion of Orange County at the foothills of the Santa Ana Mountains and encompasses approximately 8,200 acres. The service area includes communities within the City of Rancho Santa Margarita, City of Lake Forest, City of Mission Viejo, Trabuco Canyon and other areas of unincorporated Orange County. The District operates one water treatment plant, two wells, nine pump stations, eight treated water storage reservoirs and manages 66-mile water distribution system with approximately 4,118 service connections.

The terrain is generally steep hills and canyons throughout the central area of the District. The east and west sides consist of more gentle terrain made up primarily of rolling hills. Elevations within the District range from approximately 985 feet above mean sea level in the lower Aliso Creek area and the southern area of Dove Canyon, to nearly 2,400 feet in the northeasterly portion of the District adjacent to the Cleveland National Forest. A map of the District's water service area is shown on Figure 2-1.



Figure 2-1: Trabuco Canyon Water District Service Area

Although the District supplements its water supply portfolio with recycled water, the WSCP only applies to its potable water supply. The District is directly involved in wastewater services through its ownership and operation of the wastewater collection system in its service area. The District also owns and operates the Robinson Ranch Wastewater Treatment Plant (RRWWTP) that provides collection and treatment for developments to the east side of the service area. The District's non-potable water supply consists of urban runoff and recycled wastewater from the eastern and main portion of the District. In the eastern portion of the District, 100% of the wastewater is recycled at the RRWWTP. The central portion of the District is on septic and cannot be recycled and the western portion of the District (SMWD) and sent to SMWD's Chiquita Water Treatment Plant for treatment and disposal (TCWD, 2021). The District will determine the recycled water demand reduction actions for recycled water based on the availability of supply and to meet necessary wastewater discharge permit requirements.

2.2 Relationship to Wholesalers

The Metropolitan Water District of Southern California: MET is the largest water wholesaler for domestic and municipal uses in California, serving approximately 19 million customers. MET wholesales imported water supplies to 26 member cities and water districts in six Southern California counties. Its service area covers the Southern California coastal plain, extending approximately 200 miles along the Pacific Ocean from the City of Oxnard in the north to the international boundary with Mexico in the south. This encompasses 5,200 square miles and includes portions of Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura counties. Approximately 85% of the population from the aforementioned counties reside within MET's boundaries.

MET is governed by a Board of Directors comprised of 38 appointed individuals with a minimum of one representative from each of MET's 26 member agencies. The allocation of directors and voting rights are determined by each agency's assessed valuation. Each member of the Board shall be entitled to cast one vote for each ten million dollars (\$10,000,000) of assessed valuation of property taxable for district purposes, in accordance with Section 55 of the Metropolitan Water District Act (Metropolitan Act). Directors can be appointed through the chief executive officer of the member agency or by a majority vote of the governing board of the agency. Directors are not compensated by MET for their service.

MET is responsible for importing water into the region through its operation of the Colorado River Aqueduct (CRA) and its contract with the State of California for SWP supplies. Member agencies receive water from MET through various delivery points and pay for service through a rate structure made up of volumetric rates, capacity charges and readiness to serve charges. Member agencies provide estimates of imported water demand to MET annually in April regarding the amount of water they anticipate they will need to meet their demands for the next five years.

The Municipal Water District of Orange County: In Orange County, MWDOC and the cities of Anaheim, Fullerton, and Santa Ana are MET member agencies that purchase imported water directly from MET. Furthermore, MWDOC purchases both treated potable and untreated water from MET to supplement its retail agencies' local supplies.

The District is one of MWDOC's 28 member agencies receiving imported water from MWDOC. The District's location within MWDOC's service area is shown on Figure 2-2.



Figure 2-2: Regional Location of the District and Other MWDOC Member Agencies

2.3 Relationship with Wholesaler Water Shortage Planning

The WSCP is designed to be consistent with MET's Water Shortage and Demand Management (WSDM) Plan, MWDOC's Water Supply Allocation Plan (WSAP), and other emergency planning efforts as described below. MWDOC's WSAP is integral to the WSCP's shortage response strategy in the event that MET or MWDOC determines that supply augmentation (including storage) and lesser demand reduction measures would not be sufficient to meet a projected shortage levels needed to meet demands.

2.3.1 MET Water Surplus and Drought Management Plan

MET evaluates the level of supplies available and existing levels of water in storage to determine the appropriate management stage annually. Each stage is associated with specific resource management actions to avoid extreme shortages to the extent possible and minimize adverse impacts to retail customers should an extreme shortage occur. The sequencing outlined in the WSDM Plan reflects anticipated responses towards MET's existing and expected resource mix.

Surplus stages occur when net annual deliveries can be made to water storage programs. Under the WSDM Plan, there are four surplus management stages that provides a framework for actions to take for surplus supplies. Deliveries in Diamond Valley Lake (DVL) and in SWP terminal reservoirs continue through each surplus stage provided there is available storage capacity. Withdrawals from DVL for regulatory purposes or to meet seasonal demands may occur in any stage.

The WSDM Plan distinguishes between shortages, severe shortages, and extreme shortages. The differences between each term are listed below.

- **Shortage**: MET can meet full-service demands and partially meet or fully meet interruptible demands using stored water or water transfers as necessary (Stages 1-3).
- Severe Shortage: MET can meet full-service demands only by making withdrawals from storage, calling on its water transfers, and possibly calling for extraordinary conservation and reducing deliveries under the Interim Agricultural Water Program (IAWP) (Stages 4-5).
- **Extreme Shortage**: MET must allocate available imported supplies to full-service customers (Stage 6).

There are six shortage management stages to guide resource management activities. These stages are defined by shortfalls in imported supply and water balances in MET's storage programs. When MET must make net withdrawals from storage to meet demands, it is considered to be in a shortage condition. Figure 2-3 gives a summary of actions under each surplus and shortage stages when an allocation plan is necessary to enforce mandatory cutbacks. The goal of the WSDM plan is to avoid Stage 6, an extreme shortage (MET, 1999).



Figure 2-3: Resource Stages, Anticipated Actions, and Supply Declarations Source: MET, 1999.

MET's Board of Directors adopted a Water Supply Condition Framework in June 2008 in order to communicate the urgency of the region's water supply situation and the need for further water conservation practices. The framework has four conditions, each calling increasing levels of conservation. Descriptions for each of the four conditions are listed below:

- Baseline Water Use Efficiency: Ongoing conservation, outreach, and recycling programs to achieve permanent reductions in water use and build storage reserves.
- Condition 1 Water Supply Watch: Local agency voluntary dry-year conservation measures and use of regional storage reserves.
- Condition 2 Water Supply Alert: Regional call for cities, counties, member agencies, and retail water agencies to implement extraordinary conservation through drought ordinances and other measures to mitigate use of storage reserves.
- Condition 3 Water Supply Allocation: Implement MET's WSAP.

As noted in Condition 3, should supplies become limited to the point where imported water demands cannot be met, MET will allocate water through the WSAP (MET, 2021a).

2.3.2 MET Water Supply Allocation Plan

MET's imported supplies have been impacted by a number of water supply challenges as noted earlier. In case of extreme water shortage within the MET service area is the implementation of its WSAP.

MET's Board of Directors originally adopted the WSAP in February 2008 to fairly distribute a limited amount of water supply and applies it through a detailed methodology to reflect a range of local conditions and needs of the region's retail water consumers (MET, 2021a).

The WSAP includes the specific formula for calculating member agency supply allocations and the key implementation elements needed for administering an allocation. MET's WSAP is the foundation for the urban water shortage contingency analysis required under Water Code Section 10632 and is part of MET's 2020 UWMP.

MET's WSAP was developed in consideration of the principles and guidelines in MET's 1999 WSDM Plan with the core objective of creating an equitable "needs-based allocation." The WSAP's formula seeks to balance the impacts of a shortage at the retail level while maintaining equity on the wholesale level for shortages of MET supplies of greater than 50% cutbacks. The formula takes into account a number of factors, such as the impact on retail customers, growth in population, changes in supply conditions, investments in local resources, demand hardening aspects of water conservation savings, recycled water, extraordinary storage and transfer actions, and groundwater imported water needs.

The formula is calculated in three steps: 1) based period calculations, 2) allocation year calculations, and 3) supply allocation calculations. The first two steps involve standard computations, while the third step contains specific methodology developed for the WSAP.

Step 1: Base Period Calculations – The first step in calculating a member agency's water supply allocation is to estimate their water supply and demand using a historical based period with established water supply and delivery data. The base period for each of the different categories of supply and demand is calculated using data from the two most recent non-shortage years.

Step 2: Allocation Year Calculations – The next step in calculating the member agency's water supply allocation is estimating water needs in the allocation year. This is done by adjusting the base period estimates of retail demand for population growth and changes in local supplies.

Step 3: Supply Allocation Calculations – The final step is calculating the water supply allocation for each member agency based on the allocation year water needs identified in Step 2.

In order to implement the WSAP, MET's Board of Directors makes a determination on the level of the regional shortage, based on specific criteria, typically in April. The criteria used by MET includes current levels of storage, estimated water supplies conditions, and projected imported water demands. The allocations, if deemed necessary, go into effect in July of the same year and remain in effect for a 12-month period. The schedule is made at the discretion of the Board of Directors (MET, 2021b).

As demonstrated by the findings in MET's 2020 UWMP, both the Water Reliability Assessment and the Drought Risk Assessment (DRA) demonstrate that MET is able to mitigate the challenges posed by hydrologic variability, potential climate change, and regulatory risk on its imported supply sources through the significant storage capabilities it has developed over the last two decades, both dry-year and emergency storage (MET, 2021a).

Although MET's 2020 UWMP forecasts that MET will be able to meet projected imported demands throughout the projected period from 2025 to 2045, uncertainty in supply conditions can result in MET needing to implement its WSAP to preserve dry-year storage and curtail demands (MET, 2021b).

2.3.3 MWDOC Water Supply Allocation Plan

To prepare for the potential allocation of imported water supplies from MET, MWDOC worked collaboratively with its 28 retail agencies to develop its own WSAP that was adopted in January 2009 and amended in 2016. The MWDOC WSAP outlines how MWDOC will determine and implement each of its retail agency's allocation during a time of shortage.

The MWDOC WSAP uses a similar method and approach, when reasonable, as that of the MET's WSAP. However, MWDOC's plan remains flexible to use an alternative approach when MET's method produces a significant unintended result for the member agencies. The MWDOC WSAP model follows five basic steps to determine a retail agency's imported supply allocation.

Step 1: Determine Baseline Information – The first step in calculating a water supply allocation is to estimate water supply and demand using a historical based period with established water supply and delivery data. The base period for each of the different categories of demand and supply is calculated using data from the last two non-shortage years.

Step 2: Establish Allocation Year Information – In this step, the model adjusts for each retail agency's water need in the allocation year. This is done by adjusting the base period estimates for increased retail water demand based on population growth and changes in local supplies.

Step 3: Calculate Initial Minimum Allocation Based on MET's Declared Shortage Level – This step sets the initial water supply allocation for each retail agency. After a regional shortage level is established, MWDOC will calculate the initial allocation as a percentage of adjusted Base Period Imported water needs within the model for each retail agency.

Step 4: Apply Allocation Adjustments and Credits in the Areas of Retail Impacts and Conservation– In this step, the model assigns additional water to address disparate impacts at the retail level caused by an across-the-board cut of imported supplies. It also applies a conservation credit given to those agencies that have achieved additional water savings at the retail level as a result of successful implementation of water conservation devices, programs and rate structures.

Step 5: Sum Total Allocations and Determine Retail Reliability – This is the final step in calculating a retail agency's total allocation for imported supplies. The model sums an agency's total imported allocation with all of the adjustments and credits and then calculates each agency's retail reliability compared to its Allocation Year Retail Demand.

The MWDOC WSAP includes additional measures for plan implementation, including the following (MWDOC, 2016):

- **Appeal Process** An appeals process to provide retail agencies the opportunity to request a change to their allocation based on new or corrected information. MWDOC anticipates that under most circumstances, a retail agency's appeal will be the basis for an appeal to MET by MWDOC.
- Melded Allocation Surcharge Structure At the end of the allocation year, MWDOC would only charge an allocation surcharge to each retail agency that exceeded their allocation if MWDOC exceeds its total allocation and is required to pay a surcharge to MET. MET enforces allocations to retail agencies through an allocation surcharge to a retail agency that exceeds its total annual allocation at the end of the 12-month allocation period. MWDOC's surcharge would be assessed

according to the retail agency's prorated share (acre-feet [AF] over usage) of MWDOC amount with MET. Surcharge funds collected by MET will be invested in its Water Management Fund, which is used to in part to fund expenditures in dry-year conservation and local resource development.

- **Tracking and Reporting Water Usage** MWDOC will provide each retail agency with water use monthly reports that will compare each retail agency's current cumulative retail usage to their allocation baseline. MWDOC will also provide quarterly reports on its cumulative retail usage versus its allocation baseline.
- **Timeline and Option to Revisit the Plan** The allocation period will cover 12 consecutive months and the Regional Shortage Level will be set for the entire allocation period. MWDOC only anticipates calling for allocation when MET declares a shortage; and no later than 30 days from MET's declaration will MWDOC announce allocation to its retail agencies.

3 WATER SHORTAGE CONTINGENCY PREPAREDNESS AND RESPONSE PLANNING

The District's WSCP is a detailed guide of how the District intends to act in the case of an actual water shortage condition. The WSCP anticipates a water supply shortage and provides pre-planned guidance for managing and mitigating a shortage. Regardless of the reason for the shortage, the WSCP is based on adequate details of demand reduction and supply augmentation measures that are structured to match varying degrees of shortage will ensure the relevant stakeholders understand what to expect during a water shortage situation.

3.1 Water Supply Reliability Analysis

Per Water Code Section 10632 (a)(1), the WSCP shall provide an analysis of water supply reliability conducted pursuant to Water Code Section 10635, and the key issues that may create a shortage condition when looking at the District's water asset portfolio.

Understanding water supply reliability, factors that could contribute to water supply constraints, availability of alternative supplies, and what effect these have on meeting customer demands provides the District with a solid basis on which to develop appropriate and feasible response actions in the event of a water shortage. In the 2020 UWMP, the District conducted a Water Reliability Assessment to compare the total water supply sources available to the water supplier with long-term projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and a drought lasting five consecutive water years (TCWD, 2021).

The District also conducted a DRA to evaluate a drought period that lasts five consecutive water years starting from the year following when the assessment is conducted. An analysis of both assessments determined that the District is capable of meeting all customers' demands from 2021 through 2045 for a normal year, a single dry year, and a drought lasting five consecutive years with significant imported water supplemental drought supplies from MWDOC/MET and ongoing conservation program efforts. The District receives the majority of its water supply from imported water from MWDOC/MET, as well as supplemental supplies from local groundwater from the San Juan Basin, local recycled water, and local surface water from Irvine Lake. Local recycled water from the RRWWTP adds reliability for non-potable demand for the east side of the District's service area.

As a result, there is no projected shortage condition due to drought that will trigger customer demand reduction actions until MWDOC notifies the District of insufficient imported supplies. More information is available in the District's 2020 UWMP Sections 6 and 7 (TCWD, 2021).

3.2 Annual Water Supply and Demand Assessment Procedures

Per Water Code Section 10632.1, the District will conduct an Annual Assessment pursuant to subdivision (a) of Section 10632 and by July 1st of each year, beginning in 2022, submit an Annual Assessment with information for anticipated shortage, triggered shortage response actions, compliance and enforcement actions, and communication actions consistent with the Supplier's WSCP.

The District must include in its WSCP the procedures used for conducting an Annual Assessment. The Annual Assessment is a determination of the near-term outlook for supplies and demands and how a perceived shortage may relate to WSCP shortage stage response actions in the current calendar year. This determination is based

on information available to the District at the time of the analysis. Starting in 2022, the Annual Assessment will be due by July 1 of every year.

This section documents the decision-making process required for formal approval of the District's Annual Assessment determination of water supply reliability each year and the key data inputs and the methodologies used to evaluate the water system reliability for the coming year, while considering that the year to follow would be considered dry.

3.2.1 Decision-Making Process

The following decision-making process describes the functional steps that the District will take to formally approve the Annual Assessment determination of water supply reliability each year.

3.2.1.1 District Steps to Approve the Annual Assessment Determination

The Annual Assessment will be predicated on the MWDOC Annual Assessment. MWDOC surveys its member agencies annually for anticipated water demands and supplies for the upcoming year. MWDOC utilizes this information to plan for the anticipated imported water supplies for the MWDOC service area. This information is then shared and coordinated with MET and is incorporated into their analysis of their service area's annual imported water needs. Based on the year's supply conditions and WSDM actions, MET will present a completed Annual Assessment for its member agencies' review from which they will then seek Board approval in April of each year. Additionally, MET expects that any triggers or specific shortage response actions that result from the Annual Assessment would be approved by their Board at that time. Based upon MET's Assessment and taking into consideration information provided to MWDOC through the annual survey, MWDOC will provide an anticipated estimate of imported supplies for the District to incorporate into the Annual Assessment.

The Annual Assessment findings will determine the approval process. If a shortage is identified, the Annual Assessment will be taken to the Board of Directors for approval and formally submitted to DWR prior to the July 1 deadline. If no shortage is identified, the Annual Assessment will be approved by the General Manager and formally submitted to DWR prior to the July 1 deadline.



Figure 3-1: Annual Assessment Reporting Timeline

3.2.2 Data and Methodologies

The following paragraphs document the key data inputs and methodologies that are used to evaluate the water system reliability for the coming year, while considering that the year to follow would be considered dry.

3.2.2.1 Assessment Methodology

The District will evaluate water supply reliability for the current year and one dry year for the purpose of the Annual Assessment. The Annual Assessment determination will be based on considerations of unconstrained water demand, local water supplies, MWDOC/MET imported water supplies, planned water use, and infrastructure considerations. The balance between projected local supplies coupled with MET imported supplies and anticipated unconstrained demand will be used to determine what, if any, shortage stage is expected under the WSCP framework as presented in Figure 3-2. The WSCP's standard shortage stages are defined in terms of shortage percentages. Shortage percentages will be calculated by dividing the difference between water supplies and unconstrained demand by total unconstrained demand. This calculation will be performed separately for anticipated current year conditions and for assumed dry year conditions.



Figure 3-2: Water Shortage Contingency Plan Annual Assessment Framework

3.2.2.2 Locally Applicable Evaluation Criteria

Within Orange County, there are no significant local applicable criteria that directly affect reliability. Through the years, the water agencies in Orange County have made tremendous efforts to integrate their systems to provide flexibility to interchange with different sources of supplies. There are emergency agreements in place to ensure all parts of the County have an adequate supply of water. For the agencies in Southern Orange County, most of their demands are met with imported water where their limitation is based on the capacity of their system, which is very robust. The San Juan Basin Authority (SJBA) has recently adopted the concept of "adaptive management" of the Basin to vary pumping from year to year based on actual basin conditions derived from monitoring efforts, with the implication that during dry periods groundwater pumping will be lower than in wet periods (SJBA, 2016). Magnitude is bracketed by firm yield on the low end and a maximum yield consisting of natural and artificial recharge, where the yield for a given year is established in the spring based on the groundwater levels in the spring and planned artificial recharge during the spring, through fall (SJBA, 2013).

The District will also continue to monitor emerging supply and demand conditions related to supplemental imported water from MWDOC/MET and take appropriate actions consistent with the flexibility and adaptiveness inherent to the WSCP. The District's Annual Assessment was based on the District's service area, water sources, water supply reliability, and water use as described in Water Code Section 10631, including available data from state, regional, or local agency population, land use development, and climate change projections within the service area of the District. Some conditions that affect MWDOC's wholesale supply and demand, such as groundwater replenishment, surface water and local supply production, can differ significantly from earlier projections throughout the year.

If a major earthquake on the San Andreas Fault occurs, it has the potential to damage all three key regional water aqueducts and disrupt imported supplies for up to six months. The region would likely impose a water use reduction ranging from 10-25% until the system is repaired. However, MET has taken proactive steps to handle such disruption, such as constructing DVL, which mitigates potential impacts. DVL, along with other local reservoirs, can store a six to twelve-month supply of emergency water (MET, 2021b).

3.2.2.3 Water Supply

As detailed in the District's 2020 UWMP, the District meets all of its customers' demands with a combination of imported water, groundwater, recycled water, and surface water. The District's main source of water supply is imported water from MWDOC/MET, with the rest of the District's water supply portfolio made up of groundwater from the San Juan Basin, local recycled water, and surface water from Irvine Lake. In fiscal year (FY) 2019-20, the District relied on 63% imported water, 10% groundwater, 21% recycled water, and 6% surface water. It is projected that by 2045, the water supply portfolio will change to approximately 34% imported water, 21% recycled water, and 44% surface water, as the District pumps groundwater when available but does not plan for it due to the seasonal fluctuations of groundwater availability (TCWD, 2021).

3.2.2.4 Unconstrained Customer Demand

The WSCP and Annual Assessment define unconstrained demand as expected water use prior to any projected shortage response actions that may be taken under the WSCP. Unconstrained demand is distinguished from observed demand, which may be constrained by preceding, ongoing, or future actions, such as emergency supply allocations during a multi-year drought. WSCP shortage response actions to constrain demand are inherently extraordinary; routine activities such as ongoing conservation programs and regular operational adjustments are not considered as constraints on demands.

The District's DRA reveals that its supply capabilities are expected to balance anticipated total water use and supply, assuming a five-year consecutive drought from FY 2020-21 through FY 2024-25 (TCWD, 2021). Water demands in a five-year consecutive drought are calculated as a six percent increase in water demand above a normal year for each year of the drought (CDM Smith, 2021).

3.2.2.5 Planned Water Use for Current Year Considering Dry Subsequent Year

Water Code Section 10632(a)(2)(B)(ii) requires the Annual Assessment to determine "current year available supply, considering hydrological and regulatory conditions in the current year and one dry year."

The Annual Assessment will include two separate estimates of the District's annual water supply and unconstrained demand using: 1) current year conditions, and 2) assumed dry year conditions. Accordingly, the Annual Assessment's shortage analysis will present separate sets of findings for the current year and dry year scenarios. The Water Code does not specify the characteristics of a dry year, allowing discretion to the Supplier. The District will use its discretion to refine and update its assumptions for a dry year scenarios in each Annual Assessment as information becomes available and in accordance with best management practices (BMPs).

Supply and demand analyses for the single-dry year case was based on conditions affecting the SWP as this supply availability fluctuates the most among MET's, and therefore MWDOC and the District's, sources of supply. FY 2013-14 was the single driest year for SWP supplies with an allocation of 5% to Municipal and Industrial (M&I) uses. Unique to this year, the 5% SWP allocation was later reduced to 0%, before ending up at its final allocation of 5%, highlighting the stressed water supplies for the year. Furthermore, on January 17, 2014 Governor Brown declared the drought State of Emergency citing 2014 as the driest year in California history. Additionally, within MWDOC's service area, precipitation for FY 2013-14 was the second lowest on record, with 4.37 inches of rain, significantly impacting water demands.

The water demand forecasting model developed for the Demand Forecast TM isolated the impacts that weather and future climate can have on water demand through the use of a statistical model. The impacts of hot/dry

weather conditions are reflected as a percentage increase in water demands from the normal year condition (average of FY 2017-18 and FY 2018-19). For a single dry year condition (FY 2013-14), the model projects a 6% increase in demand for the Orange County Groundwater Basin area where the District's service area is located (CDM Smith, 2021). Detailed information of the model is included in the District's 2020 UWMP.

The District has documented that it is 100% reliable for single dry year demands from 2025 through 2045 with a demand increase of 6% from normal demand with significant reserves held by MET, local groundwater supplies, and water use efficiency (TCWD, 2021).

3.2.2.6 Infrastructure Considerations

The Annual Assessment will include consideration of any infrastructure issues that may pertain to near-term water supply reliability, including repairs, construction, and environmental mitigation measures that may temporarily constrain capabilities, as well as any new projects that may add to system capacity. The District's infrastructure capabilities are constantly monitored by operations and engineering staff and communicated if adjustments in water supplies are required throughout the year.

Within the next five years, the District will initiate several projects that will enhance supply reliability and resiliency, including the addition of approximately 1,300,000 gallons of system storage for operational and emergency purposes. In the fiscal year ending (FYE) 2022, the District will be updating its water and sewer system Master Plan in conjunction with a condition assessment of its critical facilities, which will guide capital improvement investments to increase system and supply reliability. The District will also implement Advanced Metering Infrastructure (AMI) technology by 2023 to improve meter reading frequency and timely consumption information to end-users – a proven approach to increasing water use efficiency and reducing water waste.

3.2.2.7 Other Factors

For the Annual Assessment, any known issues related to water quality would be considered for their potential effects on water supply reliability. The following are locally applicable factors that can influence or disrupt supplies, along with other unique considerations that are included as part of the Annual Assessment:

- Construction projects
- Planned and unplanned outages on any of the major imported water systems
- Demand fluctuations with weather changes
- Natural disasters, such as fires, earthquakes, or pandemics
- Electrical outages, including Public Safety Power Shutoffs (PSPS) called by Southern California Edison
- Water quality; local or imported sources of water
- Equipment failures
- Water Treatment Plant or Water Reclamation Plant disruptions
- Legal or regulatory issues that disrupt water reliability

3.3 Six Standard Water Shortage Levels

Per Water Code Section 10632 (a)(3)(A), the District must include the six standard water shortage levels that represent shortages from the normal reliability as determined in the Annual Assessment. The shortage levels have been standardized to provide a consistent regional and statewide approach to conveying the relative severity of water supply shortage conditions. This is an outgrowth of the severe statewide drought of 2012-2016,

and the widely recognized public communication and state policy uncertainty associated with the many different local definitions of water shortage Levels.

The six standard water shortage levels correspond to progressively increasing estimated shortage conditions (up to 10, 20, 30, 40, 50, and greater than 50% shortage compared to the normal reliability condition) and align with the response actions the Supplier would implement to meet the severity of the impending shortages (Table 3-1).

Table	3-1:	Water	Shortage	Contingency	Plan	Levels
10010	~	110101	ononago	ooningono,		201010

Submittal Table 8-1 Water Shortage Contingency Plan Levels				
Shortage Level	Percent Shortage Range	Shortage Response Actions		
0	0% (Normal)	Normal Conditions (No shortage exists) – The District proceeds with planned water efficiency best practices to support consumer demand reduction in line with state mandated requirements and local District goals for water supply reliability. Permanent water waste prohibitions are in place as stipulated in the District's Water Conservation Ordinance 2021-22.		
1	Up to 10%	Level 1 Water Shortage – Condition exists when the District notifies its water users that due to drought or other supply reductions, a consumer demand reduction of up to 10% is necessary to make more efficient use of water and respond to existing water conditions. The District shall implement the mandatory Level 1 conservation measures identified in this WSCP. The type of event that may prompt the District to declare a Level 1 Water Supply Shortage may include, among other factors, a finding that its wholesale water provider calls for extraordinary water conservation.		
2	11% to 20%	Level 2 Water Shortage – Condition exists when the District notifies its water users that due to drought or other supply reductions, a consumer demand reduction of up to 20% is necessary to make more efficient use of water and respond to existing water conditions. Upon declaration of a Level 2 Water Supply Shortage condition, the District shall implement the mandatory Level 2 conservation measures identified in this WSCP.		
3	21% to 30%	Level 3 Supply Shortage – Condition exists when the District declares a water shortage emergency condition pursuant to California Water Code section 350 and notifies its residents and businesses that up to 30% consumer demand reduction is required to ensure sufficient supplies for human consumption, sanitation and fire protection. The District must declare a Water Supply Shortage Emergency in the manner and on the grounds provided in California Water Code section 350.		

Submittal Table 8-1 Water Shortage Contingency Plan Levels			
Shortage Level	Percent Shortage Range	Shortage Response Actions	
4	31% to 40%	Level 4 Water Shortage - Condition exists when the District declares a water shortage emergency condition pursuant to California Water Code section 350 and notifies its residents and businesses that up to 40% consumer demand reduction is required to ensure sufficient supplies for human consumption, sanitation and fire protection. The District must declare a Water Supply Shortage Emergency in the manner and on the grounds provided in California Water Code section 350.	
5	41% to 50%	Level 5 Water Shortage - Condition exists when the District declares a water shortage emergency condition pursuant to California Water Code section 350 and notifies its residents and businesses that up to 50% or more consumer demand reduction is required to ensure sufficient supplies for human consumption, sanitation and fire protection. The District must declare a Water Supply Shortage Emergency in the manner and on the grounds provided in California Water Code section 350.	
6	>50%	Level 6 Water Shortage – Condition exists when the District declares a water shortage emergency condition pursuant to California Water Code section 350 and notifies its residents and businesses that greater than 50% or more consumer demand reduction is required to ensure sufficient supplies for human consumption, sanitation and fire protection. The District must declare a Water Supply Shortage Emergency in the manner and on the grounds provided in California Water Code section 350.	
NOTES:			

3.4 Shortage Response Actions

Water Code Section 10632 (a)(4) requires the WSCP to specify shortage response actions that align with the defined shortage levels. The District has defined specific shortage response actions that align with the defined shortage levels in DWR Tables 8-2 and 8-3 (Appendix A). These shortage response actions were developed with consideration to the system infrastructure and operations changes, supply augmentation responses, customer-class or water use-specific demand reduction initiatives, and increasingly stringent water use prohibitions.

3.4.1 Permanent Water Conservation Measures

The District's Water Conservation Ordinance 2021-22 (Appendix B) establishes Permanent Water Conservation Measures that are in effect at all times in the District's service area. These measures are intended to promote

water conservation as a permanent way of life, even during years of normal or above normal precipitation and water supplies. The following is an abbreviated list of permanent measures; the entire list is provided in Water Conservation Ordinance 2021-22, found in Appendix B.

- Limit on watering or irrigating of landscapes with potable, or drinking water, to between 6 p.m. and 8 a.m.
 - Exceptions exist for watering with a bucket; a hose with a shutoff nozzle; with drip irrigation; manually watering to establish new landscape; or for short periods of time to adjust or repair an irrigation system.
- No irrigation during or after measurable rainfall for 48 hours.
- Limit on incidental runoff from outdoor irrigation.
- Prohibition on irrigating turf with drinking water on public medians.
- No washing down hard or paved surfaces. Exception made be made for safety or sanitary hazards washing, but only with use of hand-held bucket or a low-volume, high-pressure cleaning machine or broom.
- Obligation to fix leaks or breaks in plumbing systems within seven days.
- Decorative water features must be equipped with water re-circulating device.
- No installation of single-pass cooling systems.
- No installation of non-recirculating water systems in commercial car wash and laundry systems.
- Washing of vehicles permissible with use of hand-held bucket or hand-held hose equipped with a shut-off nozzle.
- Commercial lodging establishments must provide guests option to decline daily linen service.
- Restaurants required to use water conserving dish wash spray valves.

In addition, the District has embedded water conservation into various policies, programs, and business practices which are not included in the State's regulations and which all contribute to ongoing structural water savings, including:

- Customer billing The District meters 100% of its retail connections, reads each meter monthly and bills monthly.
- Meter Reading Technology The District is planning a large-scale implementation of Automated Meter Reading/Advanced Metering Infrastructure (AMR/AMI) technology in FYE 2022 and FYE 2023. The District's AMI system will allow end users to access near real-time consumption information and receive high use and leakage alerts.
- Customer assistance and site surveys Water use site surveys are offered to customers to assist in high usage investigations, leak detection, and overall efficiency assessments.
- Indoor and outdoor rebates and incentives (with MWDOC and MET) Through MET and MWDOC, the District offers customers rebates on various high efficiency plumbing devices.
- Reducing system water loss The District conducts water systems audits on its distribution system annually using the American Water Works Association Water Audit Software.

3.4.2 Required Shortage Response Actions

Water Code Section 10632(a)(4) requires the WSCP to specify shortage response actions that align with the defined shortage levels, and include, at a minimum, all the following:

- Locally appropriate supply augmentation actions;
- Locally appropriate demand reduction actions to adequately respond to shortages;
- Locally appropriate operational changes;
- Additional, mandatory prohibitions against specific water use practices that are in addition to statemandated prohibitions and appropriate to the local conditions; and
- An estimate of the extent to which the gap between supplies and demand will be reduced by implementation of each action.

Shortage response actions included in this WSCP are a mix of prohibitions on end use, demand reduction methods, supply augmentation, and operational change measures. DWR defines prohibitions on end uses as measures to address areas that are the responsibility of end users, such as a broken sprinkler or leaking faucet. Consumption reduction methods are actions invoked by a water agency to reduce consumption, such as expanding public information campaigns and offering water use surveys. Supply augmentation is defined as any action designed to increase the existing supply availability such as the use of emergency storage or acquiring additional transfer water. Operational changes are defined as actions taken by the District to change the way in which existing supplies are used within its service area. Examples of operational changes include reducing hydrant flushing or adjusting operations for sewer line cleaning.

The first two water shortage stages focus on response actions that seek to limit impacts on customer quality of life while addressing the water shortage condition. Water Shortage Stage 1 looks to emphasize the District's Permanent Water Conservation BMPs with an accompanying public awareness campaign. Water Shortage Stage 2 expands on the BMPs with additional mandatory prohibitions along with targeted outreach to high and/or overbudget water users. An increase in mandatory prohibitions and the use of emergency storage withdrawals in Stages 5 and 6 reflect the urgency responding to worsening water shortage conditions.

Shortage response actions from previous stages are assumed to remain in effect as the water shortage stages increase. The mix of shortage response actions in any given stage is designed to produce an additional 10% demand reduction above the previous stage's reduction. The following subsections list the combinations of shortage response actions associated with each of the six WSCP Water Shortage Stages. Per the requirements in Water Code Section 10632(a)(4), each action is assigned an estimate of the extent to which the gap between supplies and demand will be reduced by implementation of the action.

A user-friendly matrix of the shortage response actions for each Water Shortage Stage is presented in DWR Table 8-2 (Appendix A).

3.4.2.1 Water Shortage Stage 1

The District shall declare a Water Shortage Stage 1 when it determines there is a water shortage, or threatened shortage, condition of up to 10%. Shortage response actions listed under this stage look to emphasize the Permanent Water Conservation Measures listed in Section 3.4.1 and DWR Table 8-2 (Appendix A) and detailed

in the District's Water Conservation Ordinance 2021-22. In addition, the following shortage response actions have been included in Stage 1 to elicit a voluntary customer demand reduction of up to 10%:

- 1. **Increase Public Awareness.** The District will increase public awareness of the water supply situation through messaging and will call for voluntary conservation (Demand Reduction).
- 2. Encourage Voluntary Outdoor Water Use Efficiency. In combination with increased public awareness, customers will be encouraged to use water efficiently, particularly outdoors with efficient irrigation practices (Demand Reduction).
- 3. **Promote Rebates for Indoor and Outdoor Water Use Efficiency**. In combination with increased messaging, the District will promote existing rebates and incentives from MWDOC and MET, and augment rebates where feasible.
- 4. **Require Water Users to Fix Leaks.** All leaks, breaks, or other malfunctions in the water user's plumbing or distribution system must be repaired within 72 hours of notification by the District unless other arrangements are made with the District (Mandatory Prohibition)/
- 5. **Reinforce Permanent Water Conservation Measures**. Reinforce and promote the Permanent Water Conservation Measures (Mandatory Prohibition).

3.4.2.2 Water Shortage Stage 2

The District shall declare a Water Shortage Stage 2 when it determines there is a water shortage, or threatened shortage, condition of up to 20%. To reduce demand during a Moderate Water Shortage condition and all higher levels of conditions, the District will increase its public education and outreach efforts to build awareness for conservation practices and all Permanent Water Conservation BMPs. The shortage response actions the District may implement under a Stage 2 appear below:

- 1. **Expanded Public Awareness.** The District will expand public awareness of the water shortage situation while leveraging regional outreach and marketing efforts by MWDOC and MET (Demand Reduction).
- 2. **Targeted Outreach to Irrigation Customers Using Drinking Water**. The District will target communication and outreach to dedicated irrigation customers using drinking water (Demand Reduction).
- 3. Voluntary Watering Day Limits. Customers are encouraged to <u>voluntarily</u> limit watering or irrigating of lawn or landscaped area with potable water to 3 days per week April through October and 1 day per week November through March. Exceptions to the water days limit include:
 - a. Drip emitters or in-line drip systems;
 - b. Irrigating by use of a handheld bucket or similar container;
 - c. Irrigating with a hand-held hose equipped with a positive self-closing water shut off nozzle; or
 - d. Irrigating for short periods of time for the express purpose of adjusting or repairing an irrigation system (Demand Reduction).
- 4. **Requirement for Water Users to Fix Leaks**. All leaks, breaks, or other malfunctions in the water user's plumbing or distribution system must be repaired within 48 hours of notification by the District unless other arrangements are made with the District (Mandatory Prohibition).

- 5. **Targeted Outreach to Commercial Agriculture and Nurseries.** Commercial agriculture and nurseries using drinking water will be consulted regarding the conservation measures to be taken to achieve water savings (Demand Reduction).
- Encouraging Recreational Water Features Best Practices. All pool owners and operators and their agents or contractors shall, to the extent feasible, adhere to the District's BMPs (Appendix C) for the construction and operation of water use efficient recreational water features, such as pools or spas (Demand Reduction).
- 7. Voluntary Drinking Water Served Upon Request. Eating or drinking establishments, including but not limited to a restaurant, hotel, cafe, cafeteria, bar, or other public place where food or drinks are sold, served, or offered for sale, are encouraged to refrain from providing drinking water to any person unless expressly requested (Demand Reduction).

3.4.2.3 Water Shortage Stage 3

The District shall declare a Water Shortage Stage 3 when it determines there is a water shortage, or threatened shortage, condition of up to 30%. During a Stage 3 condition, the District will strategically customize its public outreach campaign to specific user groups and communities and implement additional mandatory prohibitions and shortage response actions to those implemented in Stage 1 and Stage 2. The shortage response actions the District may implement under a Stage 3 appear below:

- 1. **Targeted Outreach and Assistance to High Water Users.** The District will target outreach and assistance to high use customers to achieve further water savings through expanded onsite water use surveys. (Demand Reduction).
- 2. Enhanced Conservation Program Activity. The District may enhance water conservation program activities or incentive levels to further increase customer participation in activities that lead to long-term structural water savings (Demand Reduction).
- 3. Watering Day Limits. Watering or irrigating of lawn or landscaped area with drinking water is limited to 3 days per week April through October and 1 day per week November through March. Exceptions to the water days limit include:
 - a. Drip emitters or in-line drip systems;
 - b. Irrigating by use of a handheld bucket or similar container, or with a hand-held hose equipped with a positive self-closing water shut off nozzle;
 - c. Irrigating for short periods of time for the express purpose of adjusting or repairing an irrigation system; or
 - d. Irrigating for maintenance of existing landscape necessary for fire protection. (Mandatory Prohibition)
- 4. **Irrigation Limits on Commercial Agriculture and Nurseries.** Commercial agriculture and nursery use of drinking water is reduced by 30% of five-year average use monthly (Demand Reduction).
- 5. **Requirement for Water Users to Fix Leaks.** All leaks, breaks, or other malfunctions in the water user's plumbing or distribution system must be repaired within 24 hours of notification by the District unless other arrangements are made with the District (Mandatory Prohibition).

- 6. Limits on Use of Potable Water for Construction. The use of recycled or non-potable water, when available, is required for construction purposes. Potable or drinking water for construction purposes shall only be permitted by, and in accordance with the provisions of, a construction water use permit obtained from the District Chief Engineer or their designee, otherwise, recycled water is to be used (Operational Change).
- 7. Limits on Street Sweeping with Drinking Water. The use of recycled or non-potable water, when available, is required for street sweeping purposes (Operational Change).
- 8. **Reduce Frequency of Line Cleaning and Flushing**. The District, to the extent feasible, will minimize the use of or flushing of drinking water when performing operational duties including, but not limited to, sewer line cleaning, fire hydrant flushing, valve exercising, and angle stop repairs (Operational Change).

3.4.2.4 Water Shortage Stage 4

The District shall declare a Water Shortage Stage 4 when it determines there is a water shortage, or threatened shortage, condition of up to 40%. During a Stage 4 condition, the District will implement additional mandatory prohibitions and shortage response actions to those implemented in Stages 1, 2, and 3. The shortage response actions the District may implement under a Stage 4 appear below:

- 1. **Watering Day Limits.** Watering or irrigating of lawn or landscaped area with drinking water is limited to 2 days per week April through October and 1 day per week November through March. Exceptions to the water days limit include:
 - a. Drip emitters or in-line drip systems;
 - b. Irrigating by use of a handheld bucket or similar container, or with a hand-held hose equipped with a positive self-closing water shut off nozzle;
 - c. Irrigating for short periods of time for the express purpose of adjusting or repairing an irrigation system; or
 - d. Irrigating for maintenance of existing landscape necessary for fire protection. (Mandatory Prohibition)
- 2. Limits on Commercial Agriculture and Nurseries. Commercial agriculture and nursery irrigation with drinking water is limited to 60% of monthly five-year average use (Demand Reduction).
- 3. **Prohibition on Vehicle Washing.** Washing of autos, trucks, trailers, boats, airplanes or other types of mobile equipment is prohibited. Washing is permitted at commercial car wash facilities. The use of water by all types of commercial car washes shall be reduced in volume by 50% (Mandatory Prohibition).
- 4. **Prohibition on Filling Decorative Water Features**. Filling, refilling, or adding water to decorative water features that use potable water is prohibited (Mandatory Prohibition).
- 5. No New Potable Water Service. Upon declaration of a Stage 4 condition, no new potable water service will be provided, no new temporary meters or permanent meters will be provided, and no will-serve letters will be issued, except under the following circumstances:
 - a. District approved plans and specifications have been issued; or
 - b. A valid permit has been issued for the project; or
 - c. The project is necessary to protect the public health, safety, and welfare; or

d. The applicant provides substantial evidence of an enforceable commitment that water demands for the project will be offset prior to the provision of a new water meter(s) to the satisfaction of the District (Operational Change).

3.4.2.5 Water Shortage Stage 5

The District shall declare a Water Shortage Stage 5 when it determines there is a water shortage, or threatened shortage, condition of up to 50%. During a Stage 5 condition, the District will implement additional mandatory prohibitions and shortage response actions to those implemented in Stages 1 through 4. The shortage response actions the District may implement under a Stage 5 appear below:

- 1. **Expand Enforcement and Outreach to High Users.** The District will expand its efforts to target and assist over-budget accounts, including escalating enforcement of any and all mandatory restrictions the account may not be in compliance with, pursuant to any declared water shortage stage (Demand Reduction).
- 2. Flow Restrictors to Non-Compliant Accounts. The District may require a flow restrictor to be installed on services where the account holder is non-responsive to outreach and other mandatory restrictions, pursuant to any declared water shortage stage (Demand Reduction).
- 3. **Prohibition on Watering Turf with Drinking Water.** Watering or irrigating of lawn or turf with potable water is prohibited. Exemptions to this prohibition may be made for municipal parks with active recreational fields, such as parks with athletic fields, however, the applied water must be limited to the amount which will just keep the turfgrass alive to minimize affects to public health and safety (Mandatory Prohibition).
- 4. **Watering Day Limits.** Watering or irrigating of trees, woody shrubs, or food-producing crops for residential use with drinking water is limited to 1 day per week in all months. Exceptions to the water days limit include:
 - a. Irrigating for maintenance of existing landscape necessary for fire protection (Mandatory Prohibition).
- 5. **Limits on Commercial Agriculture and Nurseries.** Commercial agriculture and nursery irrigation with drinking water is limited to 50% of monthly five-year average use (Demand Reduction).
- 6. **Prohibition on Filling All Recreational Water Features.** Filling, re-filling, or adding of potable water to recreational water features such as pools or spas that do not adhere to the District's BMPs is prohibited (Mandatory Prohibition).

3.4.2.6 Water Shortage Stage 6

The District shall declare a Water Shortage Stage 6 when it determines there is a water shortage, or threatened shortage, of over 50%. During a Stage 6 condition, the District will implement additional mandatory prohibitions and shortage response actions to those implemented in Stages 1 through 5. The shortage response actions the District may implement under a Stage 6 appear below:

1. **Conduct Emergency Public Outreach**. The District would conduct emergency public outreach, as part of the District's overall emergency response programs. Messaging to focus on limiting water to essential uses only (Demand Reduction).

- 2. Water Supply Allocation, as Necessary. As deemed necessary, an allocation of water supply under a Water Shortage Stage 6 condition, beyond the District's shortage response actions under the Water Shortage Stages outlined in this Section, may be implemented (Demand Reduction).
- 3. **Prohibition on Watering with Drinking Water.** All outdoor irrigation with potable water is prohibited with the exception of maintenance of existing landscape necessary for fire protection (Mandatory Prohibition).
- 4. **Prohibition on Commercial Nurseries Using Drinking Water.** Commercial agriculture and nursery irrigation with potable water is prohibited (Demand Reduction).
- 5. **Prohibition of Vehicle Washing.** Washing of autos, trucks, trailers, boats, airplanes or other types of mobile equipment is prohibited. Washing is also prohibited at a commercial car wash (Mandatory Prohibition).
- 6. **Other Water Response Shortage Action, as Needed.** The District reserves the right to implement other shortage response actions to appropriately respond to a water shortage emergency.

3.4.3 Demand Reduction

The demand reduction measures that would be implemented to address shortage levels are described in DWR Table 8-2 (Appendix A). This table indicates which actions align with specific defined shortage levels and estimates the extent to which that action will reduce the gap between supplies and demands to demonstrate to the that choose suite of shortage response actions can be expected to deliver the expected outcomes necessary to meet the requirements of a given shortage level. This table also identifies the enforcement action, if any, associated with each demand reduction measure.

3.4.4 Supply Augmentation

The supply augmentation actions are described in DWR Table 8-3 (Appendix A). These augmentations represent short-term management objectives triggered by the MET's WSDM Plan and do not overlap with the long-term new water supply development or supply reliability enhancement projects. Supply Augmentation is made available to the District through MWDOC and MET. The District relies on MET's reliability portfolio of water supply programs including existing water transfers, storage and exchange agreements to supplement gaps in the District's supply/demand balance. MET has developed significant storage capacity (over 5 million AF) in reservoirs and groundwater banking programs both within and outside of the Southern California region. Additionally, MET can pursue additional water transfer and exchange programs with other water agencies to help mitigate supply/demand imbalances and provide additional dry-year supply sources.

3.4.5 Operational Changes

During shortage conditions, operations may be affected by supply augmentation or demand reduction responses. The District will consider their operational procedures when it completes its Annual Assessment or as needed to identify changes that can be implemented to address water shortage on a short-term basis, such as temporarily altering maintenance cycles, deferring planned system outages, and adjusting the flow and routing of water through its system to more effectively distribute available supply across the service area. Specific operational changes are identified in 3.4.2.

3.4.6 Additional Mandatory Restrictions

Water Code Section 10632(a)(4)(D) calls for "additional, mandatory prohibitions against specific water use practices that are in addition to state-mandated prohibitions and appropriate to the local conditions" to be included among the WSCP's shortage response actions. The District has identified additional mandatory restrictions in the Water Conservation Ordinance 2021-22 (Appendix B).

3.4.7 Emergency Response Plan (Hazard Mitigation Plan)

A catastrophic water shortage would be addressed according to the appropriate water shortage level and response actions. It is likely that a catastrophic shortage would immediately trigger Shortage Level 6 and response actions have been put in place to mitigate a catastrophic shortage. In addition, there are several Plans that address catastrophic failures and align with the WSCP, including MET's WSDM and WSAP and the Water Emergency Response Organization of Orange County (WEROC)'s Emergency Operations Plan (EOP).

3.4.7.1 MET's WSDM and WSAP

MET has comprehensive plans for stages of actions it would undertake to address a catastrophic interruption in water supplies through its WSDM and WSAP. MET also developed an Emergency Storage Requirement to mitigate against potential interruption in water supplies resulting from catastrophic occurrences within the Southern California region, including seismic events along the San Andreas Fault. In addition, MET is working with the state to implement a comprehensive improvement plan to address catastrophic occurrences outside of the Southern California region, such as a maximum probable seismic event in the Sacramento-San Joaquin River Delta that would cause levee failure and disruption of SWP deliveries.

3.4.7.2 Water Emergency Response Organization of Orange County Emergency Operations Plan

In 1983, the Orange County water community identified a need to develop a plan on how agencies would respond effectively to disasters impacting the regional water distribution system. The collective efforts of these agencies resulted in the formation of the WEROC to coordinate emergency response on behalf of all Orange County water and wastewater agencies, develop an emergency plan to respond to disasters, and conduct disaster training exercises for the Orange County water community. WEROC was established with the creation of an indemnification agreement between its member agencies to protect each other against civil liabilities and to facilitate the exchange of resources. WEROC is unique in its ability to provide a single point of contact for representation of all water and wastewater utilities in Orange County during a disaster. This representation is to the county, state, and federal disaster coordination agencies. Within the Orange County Operational Area, WEROC is the recognized contact for emergency response for the water community, including the District.

As a member of WEROC, the District will follow WEROC's EOP in the event of an emergency and coordinate with WEROC to assess damage, initiate repairs, and request and coordinate mutual aid resources in the event that the District is unable to provide the level of emergency response support required by the situation.

The EOP defines the actions to be taken by WEROC Emergency Operations Center (EOC) staff to reduce the loss of water and wastewater infrastructure; to respond effectively to a disaster; and to coordinate recovery operations in the aftermath of any emergency involving extensive damage to Orange County water and wastewater utilities. The EOP includes activation notification protocol that will be used to contact partner agencies

to inform them of the situation, activation status of the EOC, known damage or impacts, or resource needs. The EOP is a standalone document that is reviewed annually and approved by the Board every three years.

WEROC is organized on the basis that each member agency is responsible for developing its own EOP in accordance with the California Standardized Emergency Management System (SEMS), National Incident Management System (NIMS), and Public Health Security and Bioterrorism Preparedness and Response Act of 2002 to meet specific emergency needs within its service area.

The WEROC EOC is responsible for assessing the overall condition and status of the Orange County regional water distribution and wastewater collection systems including MET facilities that serve Orange County. The EOC can be activated during an emergency situation that can result from both natural and man-made causes, and can be activated through automatic, manual, or standby for activation.

WEROC recognized four primary phases of emergency management, which include:

- **Preparedness:** Planning, training, and exercises that are conducted prior to an emergency to support and enhance response to an emergency or disaster.
- **Response:** Activities and programs designed to address the immediate and short-term effects of the onset of an emergency or disaster that helps to reduce effects to water infrastructure and speed recovery. This includes alert and notification, EOC activation, direction and control, and mutual aid.
- **Recovery:** This phase involved restoring systems to normal, in which short-term recovery actions are taken to assess the damage and return vital life-support systems to minimum operating standards, while long-term recovery actions have the potential to continue for many years.
- **Mitigation/Prevention:** These actions prevent the occurrence of an emergency or reduce the area's vulnerability in ways that minimize the adverse impacts of a disaster or emergency. MWDOC's HMP outlines threats and identifies mitigation projects.

The EOC Action Plans (EAP) provide frameworks for EOC staff to respond to different situations with the objectives and steps required to complete them, which will in turn serve the WEROC member agencies. In the event of an emergency which results in a catastrophic water shortage, the District will declare a water shortage condition of up to Level 6 for the impacted area depending on the severity of the event, and coordination with WEROC is anticipated to begin at Level 4 or greater (WEROC, 2018).

3.4.7.3 Trabuco Canyon Water District Emergency Response Plan

The District will also refer to its current American Water Infrastructure Act Risk and Resilience Assessment and Emergency Response Plan in the event of a catastrophic supply interruption.

3.4.8 Seismic Risk Assessment and Mitigation Plan

Per the Water Code Section 10632.5, Suppliers are required to assess seismic risk to water supplies as part of their WSCP. The plan also must include the mitigation plan for the seismic risk(s). Given the great distances that imported supplies travel to reach Orange County, the region is vulnerable to interruptions along hundreds of miles of aqueducts, pipelines and other facilities associated with delivering the supplies to the region. Additionally, the infrastructure in place to deliver supplies are susceptible to damage from earthquakes and other disasters.

In lieu of conducting a seismic risk assessment specific to the District's 2020 UWMP, the District has included the previously prepared regional HMP by MWDOC as the regional imported water wholesaler that is required under the federal Disaster Mitigation Act of 2000 (Public Law 106-390).

MWDOC's HMP identified that the overarching goals of the HMP were the same for all of its member agencies, which include:

- Goal 1: Minimize vulnerabilities of critical infrastructure to minimize damages and loss of life and injury to human life caused by hazards.
- Goal 2: Minimize security risks to water and wastewater infrastructure.
- Goal 3: Minimize interruption to water and wastewater utilities.
- Goal 4: Improve public outreach, awareness, education, and preparedness for hazards in order to increase community resilience.
- Goal 5: Eliminate or minimize wastewater spills and overflows.
- Goal 6: Protect water quality and supply, critical aquatic resources, and habitat to ensure a safe water supply.
- Goal 7: Strengthen Emergency Response Services to ensure preparedness, response, and recovery during any major or multi-hazard event.

MWDOC's HMP evaluates hazards applicable to all jurisdictions in its entire planning area, prioritized based on probability, location, maximum probable extent, and secondary impacts. The identification of hazards is highly dependent on the location of facilities within the District's jurisdiction and takes into consideration the history of the hazard and associated damage, information provided by agencies specializing in a specific hazard, and relies upon the District's expertise and knowledge.

Earthquake fault rupture and seismic hazards, including ground shaking and liquefaction, are among the highest ranked hazards to the region as a whole because of its long history of earthquakes, with some resulting in considerable damage. A significant earthquake along one of the major faults could cause substantial casualties, extensive damage to infrastructure, fires, damages and outages of water and wastewater facilities, and other threats to life and property.

Nearly all of Orange County is at risk of moderate to extreme ground shaking, with liquefaction possible throughout much of Orange County but the most extensive liquefaction zones occur in coastal areas. Based on the amount of seismic activity that occurs within the region, there is no doubt that communities within Orange County will continue to experience future earthquake events, and it is a reasonable assumption that a major event will occur within a 30-year timeframe.

The mitigation actions identify the hazard, proposed mitigation action, location/facility, local planning mechanism, risk, cost, timeframe, possible funding sources, status, and status rationale, as applicable. Mitigation actions for MWDOC's member agencies for seismic risks may include (MWDOC, 2019):

- Secure above ground assets in all buildings, booster stations, pressure reducing stations, emergency interties, water systems, and pipelines.
- Conduct assessment of infrastructure to ensure seismic retrofitting is in place.
- Replace aging infrastructure throughout the District.
- Install backup power for critical facilities to ensure operability during emergency events.
- Enhance emergency operability by implementing communication infrastructure improvements.
3.4.9 Shortage Response Action Effectiveness

For each specific Shortage Response Action identified in the plan, the WSCP also estimates the extent to which that action will reduce the gap between supplies and demands identified in DWR Table 8-2 (Appendix A). To the extent feasible, the District has estimated percentage savings for the chosen suite of shortage response actions, which can be anticipated to deliver the expected outcomes necessary to meet the requirements of a given shortage level.

3.5 Communication Protocols

Timely and effective communication is a key element of the WSCP implementation. In the context of water shortage response, the purpose may be an emergency water shortage situation, such as may result from an earthquake, or a longer-term, non-emergency, shortage condition, such as may result from a drought. In an emergency, the District, in coordination with MWDOC and the District's neighboring water suppliers, will activate the communication protocol detailed in the WEROC EOP. In a non-emergency water shortage situation, the District will follow the communication protocols described below.

Per the Water Code Section 10632 (a)(5), the District has established communication protocols and procedures to inform customers, the public, interested parties, and local, regional, and state governments regarding any current or predicted shortages as determined by the Annual Assessment described pursuant to Section 10632.1; any shortage response actions triggered or anticipated to be triggered by the Annual Assessment described pursuant described pursuant to Section 10632.1; and any other relevant communications.

Non-emergency water shortage communication protocols are focused on communicating the water shortage contingency planning actions that can be derived from the results of the Annual Assessment, and it would likely trigger based upon the decision-making process in Section 3.2. Prior to water shortage level declaration, the District will pursue outreach to inform customers of water shortage levels and definitions, targeted water savings for each drought stage, guidelines that customers are to follow during each stage, and sources of current information on the District's supply and demand response status.

The type and degree of communication varies with each shortage level, thus predefined and actionable communication protocols improve the District's ability to message necessary events. These communication objectives and tools are summarized in Table 3-2.

To reduce water consumption during any water shortage stage, the District will increase its public education and outreach efforts to build awareness of needed actions from the public. In addition, the District's outreach campaign will be regularly revisited to reflect current conditions. Communication strategies established from previous stages are assumed to be built upon or intensified should water shortage conditions worsen.

Shortage level	Communication Objectives	Communication Tools
		Water bill inserts
1	Compliance with response actions, 10%	Website information
	reduction in water use	Social media outreach
		Leverage MWDOC water education programs
		Conduct issue briefings with elected officials and other
		key civic and business leaders
2	Compliance with response actions, 20% reduction in water use	Target outreach to dedicated irrigation accounts, particularly with Homeowners Associations (HOAs)
		Leverage nublic service announcements from MWDOC
		and MET
		Increase staff and Board member presence at local
	Compliance with response estions 20%	events
3	reduction in water use	Direct communication with high water users
		Direct communication with commercial and industrial
		users, including nurseries
4	Compliance with response actions, 40%	Conduct specialized outreach to reduce discretionary
		outdoor use while minimizing landscape damage
5	Compliance with response actions, 50% reduction in water use	Suspend promotion of long-term efficiency programs to focus on imminent needs

Table 3-2: Communication Procedures

Shortage level	Communication Objectives	Communication Tools
6	Compliance with response actions, >50% reduction in water use	Crisis communication that reflects emergency conditions and the need to focus on health and public safety

3.6 Compliance and Enforcement

Per the Water Code Section 10632 (a)(6), the District has defined customer compliance, enforcement, appeal, and exemption procedures for triggered shortage response actions. Procedures to ensure customer compliance are described in Section 3.5 and customer enforcement, appeal, and exemption procedures are defined in the Water Conservation Ordinance 2021-22 (Appendix B).

3.7 Legal Authorities

Per Water Code Section 10632 (a)(7)(A), the District has provided a description of the legal authorities that empower the District to implement and enforce its shortage response in Water Conservation Ordinance 2021-22 (Appendix B).

Per Water Code Section 10632 (a)(7) (B), the District shall declare a water shortage emergency condition to prevail within the area served by such wholesaler whenever it finds and determines that the ordinary demands and requirements of water consumers cannot be satisfied without depleting the water supply of the distributor to the extent that there would be insufficient water for human consumption, sanitation, and fire protection.

Per Water Code Section 10632 (a)(7)(C), the District shall coordinate with any agency or county within which it provides water supply services for the possible proclamation of a local emergency under California Government Code, California Emergency Services Act (Article 2, Section 8558). Table 3-3 identifies the contacts for all cities or counties for which the Supplier provides service in the WSCP, along with developed coordination protocols, can facilitate compliance with this section of the Water Code in the event of a local emergency as defined in subpart (c) of Government Code Section 8558.

Contact	Agency	Coordination Protocols
Director of Public Works	County of Orange	Call/email
City Manager	City of Mission Viejo	Call/email

Table 3-3: Agency Contacts and Coordination Protocols

Contact	Agency	Coordination Protocols
City Manager	City of Rancho Santa Margarita	Call/email
City Manager	City of Lake Forest	Call/email

3.8 Financial Consequences of WSCP

Per Water Code Section 10632(a)(8), Suppliers must include a description of the overall anticipated financial consequences to the Supplier of implementing the WSCP. This description must include potential reductions in revenue and increased expenses associated with implementation of the shortage response actions. This should be coupled with an identification of the anticipated mitigation actions needed to address these financial impacts.

During a catastrophic interruption of water supplies, prolonged drought, or water shortage of any kind, the District will experience a reduction in revenue due to reduced water sales. Throughout this period of time, expenditures may increase or decrease with varying circumstances. Expenditures may increase in the event of significant damage to the water system, resulting in emergency repairs. Expenditures may also decrease as less water is pumped through the system, resulting in lower power costs. Water shortage mitigation actions will also impact revenues and require additional costs for drought response activities such as increased staff costs for tracking, reporting, and communications.

The District receives water revenue from a service charge and a commodity charge based on consumption. The service charge recovers costs associated with providing water to the serviced property. The service charge does not vary with consumption and the commodity charge is based on water usage. Rates have been designed to recover the full cost of water service in the charges. Therefore, the total cost of purchasing water would decrease as the usage or sale of water decreases. In the event of a drought emergency, the District will impose excessive water use penalties on its customers, which may include additional costs associated with reduced water revenue, staff time taken for penalty enforcement, and advertising the excessive use penalties. The excessive water use penalties are further described in the District's Water Conservation Ordinance 2021-22 (Appendix B).

However, there are significant fixed costs associated with maintaining a minimal level of service. The District will monitor projected revenues and expenditures should an extreme shortage and a large reduction in water sales occur for an extended period of time. To overcome these potential revenue losses and/or expenditure impacts, the District may use reserves. If necessary, the District may reduce expenditures by delaying implementation of its Capital Improvement Program and equipment purchases to reallocate funds to cover the cost of operations and critical maintenance, adjust the work force, implement a drought surcharge, and/or make adjustments to its water rate structure.

Based on current water rates, a volumetric cutback of 50% and above of water sales may lead to a range of reduction in revenues. The impacts to revenues will depend on a proportionate reduction in variable costs related to supply, pumping, and treatment for the specific shortage event. The District has set aside reserve funding to mitigate short-term water shortage situation.

3.9 Monitoring and Reporting

Per Water Code Section 10632(a)(9), the District is required to provide a description of the monitoring and reporting requirements and procedures that have been implemented to ensure appropriate data is collected, tracked, and analyzed for purposes of monitoring customer compliance and to meet state reporting requirements.

Monitoring and reporting key water use metrics is fundamental to water supply planning and management. Monitoring is also essential in times of water shortage to ensure that the response actions are achieving their intended water use reduction purposes, or if improvements or new actions need to be considered (see Section 3.10). Monitoring for customer compliance tracking is also useful in enforcement actions.

Under normal water supply conditions, potable water production figures are recorded daily. Weekly and monthly reports are prepared and monitored. This data will be used to measure the effectiveness of any water shortage contingency level that may be implemented. As levels of water shortage are declared by MET and MWDOC, the District will follow implementation of those levels as appropriate based on the District's risk profile provided in District's 2020 UWMP Chapter 6 and continue to monitor water demand levels. When MET calls for extraordinary conservation, MET's Drought Program Officer will coordinate public information activities with MWDOC and monitor the effectiveness of ongoing conservation programs.

The District will participate in monthly member agency manager meetings with both MWDOC to monitor and discuss monthly water allocation charts. This will enable the District to be aware of imported on a timely basis as a result of specific actions taken responding to the District's WSCP.

3.10 WSCP Refinement Procedures

Per Water Code Section 10632 (a)(10), the District must provide reevaluation and improvement procedures for systematically monitoring and evaluating the functionality of the WSCP in order to ensure shortage risk tolerance is adequate and appropriate water shortage mitigation strategies are implemented as needed.

The District's WSCP is prepared and implemented as an adaptive management plan. The District will use the monitoring and reporting process defined in Section 3.9 to refine the WSCP. In addition, if certain procedural refinements or new actions are identified by District staff, or suggested by customers or other interested parties, the District will evaluate their effectiveness, incorporate them into the WSCP, and implement them quickly at the appropriate water shortage level.

It is envisioned that the WSCP will be periodically re-evaluated to ensure that its shortage risk tolerance is adequate and the shortage response actions are effective and up to date based on lessons learned from implementing the WSCP. The WSCP will be revised and updated during the UWMP update cycle to incorporate updated and new information. For example, new supply augmentation actions will be added, and actions that are no longer applicable for reasons such as program expiration will be removed. However, if revisions to the WSCP are warranted before the UWMP is updated, the WSCP will be updated outside of the UWMP update cycle. In the course of preparing the Annual Assessment each year, District staff will routinely consider the functionality the overall WSCP and will prepare recommendations for the District Board of Directors if changes are found to be needed.

3.11 Special Water Feature Distinction

Per Water Code Section 10632 (b), the District has defined water features in that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas, as defined in subdivision (a) of Section 115921 of the Health and Safety Code, in the Water Shortage Response Ordinance 2021-22 (Appendix B).

3.12 Plan Adoption, Submittal, and Availability

Per Water Code Section 10632 (a)(c), the District provided notice of the availability of the draft 2020 UWMP and draft 2020 WSCP and notice of the public hearing to consider adoption of the WSCP. The public review drafts of the 2020 UWMP and the 2020 WSCP were posted prominently on the District's <u>website</u> in advance of the public hearing on June 16, 2021. Copies of the draft WSCP were also made available for public inspection at the Trabuco Canyon Water District Clerk's and Utilities Department offices and public hearing notifications were published in local newspapers. A copy of the published Notice of Public Hearing is included in Appendix D.

The District] held the public hearing for the draft 2020 UWMP and draft WSCP on June 16, 2021, at the Board meeting. The Trabuco Canyon Water District Board reviewed and approved the 2020 UWMP and the WSCP at its June 16, 2021 meeting after the public hearing. See Appendix E for the resolution approving the WSCP.

By July 1, 2021, the District's adopted 2020 UWMP and WSCP was filed with DWR, California State Library, and the County of Orange. The District will make the WSCP available for public review on its website no later than 30 days after filing with DWR.

Based on DWR's review of the WSCP, the District will make any amendments in its adopted WSCP, as required and directed by DWR.

If the District revises its WSCP after UWMP is approved by DWR, then an electronic copy of the revised WSCP will be submitted to DWR within 30 days of its adoption.

4 **REFERENCES**

- CDM Smith. (2021, March 30). Orange County Water Demand Forecast for MWDOC and OCWD Technical Memorandum.
- Trabuco Canyon Water District (TCWD). (2021, July). 2020 Urban Water Management Plan.
- Metropolitan Water District of Southern California (MET). (2021a, April). *Water Shortage Contingency Plan*. http://www.mwdh2o.com/PDF_About_Your_Water/Draft%20Metropolitan%20Water%20Shortage%20Con tingency%20Plan%20April%202021.pdf
- Metropolitan Water District of Southern California (MET). (2021b, April). 2020 Urban Water Management Plan. http://www.mwdh2o.com/PDF_About_Your_Water/Draft%20Metropolitan%202020%20Urban%20Water% 20Management%20Plan%20April%202021.pdf
- Metropolitan Water District of Southern California (MET). (1999, August). Water Surplus and Drought Management Plan.

http://www.mwdh2o.com/PDF_About_Your_Water/2.4_Water_Supply_Drought_Management_Plan.pdf

- Municipal Water District of Orange County (MWDOC). (2016). Water Supply Allocation Plan.
- Municipal Water District of Orange County (MWDOC). (2019, August). Orange County Regional Water and Wastewater Hazard Mitigation Plan.
- San Juan Basin Authority. (2016, August). 2016 Adaptive Pumping Management Plan. http://www.sjbauthority.com/assets/downloads/20160830_APM_Memo.pdf. Accessed on January 26, 2021.
- San Juan Basin Authority. (2013, November). San Juan Basin Groundwater and Facilities Management Plan. http://sjbauthority.com/assets/downloads/20131126%20FINAL%20SJBA%20SJBGFMP.pdf
- Water Emergency Response Organization of Orange County (WEROC). (2018, March). WEROC Emergency Operations Plan (EOP).



DWR Submittal Tables

Table 8-1: Water Shortage Contingency Plan LevelsTable 8-2: Demand Reduction ActionsTable 8-3: Supply Augmentation and Other Actions

Submittal Table 8-1 Water Shortage Contingency Plan Levels			
Shortage Level	Percent Shortage Range	Shortage Response Actions (Narrative description)	
0	0% (Normal)	Normal Conditions (No shortage exists) – The District proceeds with planned water efficiency best practices to support consumer demand reduction in line with state mandated requirements and local District goals for water supply reliability. Permanent water waste prohibitions are in place as stipulated in the District's Conservation Ordinance 2021-22.	
1	Up to 10%	Level 1 Water Shortage – Condition exists when the Trabuco Canyon Water District notifies its water users that due to drought or other supply reductions, a consumer demand reduction of up to 10% is necessary to make more efficient use of water and respond to existing water conditions. The District shall implement the mandatory Level 1 conservation measures identified in this ordinance. The type of event that may prompt the District to declare a Level 1 Water Supply Shortage may include, among other factors, a finding that its wholesale water provider calls for extraordinary water conservation.	
2	11% to 20%	Level 2 Water Shortage – Condition exists when the Trabuco Canyon Water District notifies its water users that due to drought or other supply reductions, a consumer demand reduction of up to 20% is necessary to make more efficient use of water and respond to existing water conditions. Upon declaration of a Level 2 Water Supply Shortage condition, the District shall implement the mandatory Level 2 conservation measures identified in this ordinance.	
3	21% to 30%	Level 3 Supply Shortage – Condition exists when the District declares a water shortage emergency condition pursuant to California Water Code section 350 and notifies its residents and businesses that up to 30% consumer demand reduction is required to ensure sufficient supplies for human consumption, sanitation and fire protection. The District must declare a Water Supply Shortage Emergency in the manner and on the grounds provided in California Water Code section 350.	
4	31% to 40%	Level 4 Water Shortage - Condition exists when the Trabuco Canyon Water District declares a water shortage emergency condition pursuant to California Water Code section 350 and notifies its residents and businesses that up to 40% consumer demand reduction is required to ensure sufficient supplies for human consumption, sanitation and fire protection. The District must declare a Water Supply Shortage Emergency in the manner and on the grounds provided in California Water Code section 350.	
5	41% to 50%	Level 5 Water Shortage - Condition exists when the Trabuco Canyon Water District declares a water shortage emergency condition pursuant to California Water Code section 350 and notifies its residents and businesses that up to 50% or more consumer demand reduction is required to ensure sufficient supplies for human consumption, sanitation and fire protection. The District must declare a Water Supply Shortage Emergency in the manner and on the grounds provided in California Water Code section 350.	
6	>50%	Level 6 Water Shortage – Condition exists when the Trabuco Canyon Water District declares a water shortage emergency condition pursuant to California Water Code section 350 and notifies its residents and businesses that greater than 50% or more consumer demand reduction is required to ensure sufficient supplies for human consumption, sanitation and fire protection. The District must declare a Water Supply Shortage Emergency in the manner and on the grounds provided in California Water Code section 350.	
NOTES:			

Submittal Table 8-2: Demand Reduction Actions					
Shortage Level	Demand Reduction Actions Drop down list These are the only categories that will be accepted by the WUEdata online submittal tool. Select those that apply.	How much is this going to reduce the shortage gap? Include units used (volume type or percentage)	Additional Explanation or Reference <i>(optional)</i>	Penalty, Charge, or Other Enforcement? <i>For Retail</i> <i>Suppliers Only</i> <i>Drop Down List</i>	
0	Landscape - Limit landscape irrigation to specific times	On-going Long Term-Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	Limit on watering or irrigating of landscapes with potable, or drinking water, to between 6 p.m. and 8 a.m. Exceptions exist for watering with a bucket; a hose with a shutoff nozzle; with drip irrigation; manually watering to establish new landscape; or for short periods of time to adjust or repair an irrigation system.	Yes	
0	Landscape - Limit landscape irrigation to specific times	On-going Long Term-Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	No irrigation during or after measurable rainfall for 48 hours.	Yes	
0	Landscape - Restrict or prohibit runoff from landscape irrigation	On-going Long Term-Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	Limit on incidental runoff from outdoor irrigation.	Yes	
0	Landscape - Prohibit certain types of landscape irrigation	On-going Long Term-Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	Prohibition on irrigating turf with drinking water on public medians.	Yes	
0	Other - Prohibit use of potable water for washing hard surfaces	On-going Long Term-Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	No washing down hard or paved surfaces. Exception made be made for safety or sanitary hazards washing, but only with use of hand-held bucket or a low-volume, high- pressure cleaning machine or broom.	Yes	
0	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	On-going Long Term-Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	Obligation to fix leaks or breaks in plumbing systems within seven days.	Yes	
0	Other water feature or swimming pool restriction	On-going Long Term-Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	Decorative water features must be equipped with water re-circulating device.	Yes	
0	Other	On-going Long Term-Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	No installation of single-pass cooling systems.	Yes	
0	Other	On-going Long Term-Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	No installation of non-recirculating water systems in commercial car wash and laundry systems.	Yes	
0	Other	On-going Long Term-Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	Washing of vehicles permissible with use of hand-held bucket or hand-held hose equipped with a shut-off nozzle.	Yes	
0	CII - Lodging establishment must offer opt out of linen service	On-going Long Term-Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	Commercial lodging establishments must provide guests option to decline daily linen service.	Yes	

ubmittal Tal	ble 8-2: Demand Reduction Actions			
Shortage Level	Demand Reduction Actions Drop down list These are the only categories that will be accepted by the WUEdata online submittal tool. Select those that apply.	How much is this going to reduce the shortage gap? Include units used (volume type or percentage)	Additional Explanation or Reference <i>(optional)</i>	Penalty, Charge, or Other Enforcement? <i>For Retail</i> <i>Suppliers Only</i> <i>Drop Down List</i>
0	CII - Commercial kitchens required to use pre-rinse spray valves	On-going Long Term-Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	Restaurants required to use water conserving dish wash spray valves.	Yes
1	Expand Public Information Campaign	3%	Increase Public Awareness. The District will increase public awareness of the water supply situation through messaging and will call for voluntary conservation. (Demand Reduction)	No
1	Other	3%	Encourage Voluntary Outdoor Water Use Efficiency. In combination with increased public awareness, customers will be encouraged to use water efficiently, particularly outdoors with efficient irrigation practices. (Demand Reduction)	No
1	Provide Rebates on Plumbing Fixtures and Devices	2%	Promote Rebates for Indoor and Outdoor Water Use Efficiency. In combination with increased messaging, the District will promote existing rebates and incentives from MWDOC and MET, and augment rebates where feasible.	No
1	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	1%	Require Water Users to Fix Leaks. All leaks, breaks, or other malfunctions in the water user's plumbing or distribution system must be repaired within seventy-two (72) hours of notification by the District unless other arrangements are made with the District. (Mandatory Prohibition)	Yes
1	Other	1%	Reinforce Permanent Water Conservation Measures. Reinforce and promote the Permanent Water Conservation Measures. (Mandatory Prohibition)	No
2	Expand Public Information Campaign	5%	Expanded Public Awareness. The District will expand public awareness of the water shortage situation while leveraging regional outreach and marketing efforts by MWDOC and MWD. (Demand Reduction).	No

ubmittal Ta	ble 8-2: Demand Reduction Actions			
Shortage Level	Demand Reduction Actions Drop down list These are the only categories that will be accepted by the WUEdata online submittal tool. Select those that apply.	How much is this going to reduce the shortage gap? Include units used (volume type or percentage)	Additional Explanation or Reference <i>(optional)</i>	Penalty, Charge, or Other Enforcement? <i>For Retail</i> <i>Suppliers Only</i> <i>Drop Down List</i>
2	Landscape - Other landscape restriction or prohibition	2%	Targeted Outreach to Irrigation Customers Using Drinking Water. The District will target communication and outreach to dedicated irrigation customers using drinking water. (Demand Reduction)	No
2	Landscape - Limit landscape irrigation to specific days	3%	Voluntary Watering Day Limits. Customers are encouraged to voluntarily limit watering or irrigating of lawn or landscaped area with potable water to 3 days per week April through October and 1 day per week November through March. Exceptions to the water days limit include: Drip emitters or in-line drip systems; Irrigating by use of a handheld bucket or similar container; Irrigating with a hand-held hose equipped with a positive self-closing water shut off nozzle; or Irrigating for short periods of time for the express purpose of adjusting or repairing an irrigation system. (Demand Reduction)	No
2	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	1%	Requirement for Water Users to Fix Leaks. All leaks, breaks, or other malfunctions in the water user's plumbing or distribution system must be repaired within forty-eight (48) hours of notification by the District unless other arrangements are made with the District. (Mandatory Prohibition)	Yes
2	CII - Other CII restriction or prohibition	1%	Targeted Outreach to Commercial Agriculture and Nurseries. Commercial agriculture and nurseries using drinking water will be consulted regarding the conservation measures to be taken to achieve water savings. (Demand Reduction).	No

ubmittal Tal	Die 8-2: Demand Reduction Actions			
Shortage Level	Demand Reduction Actions Drop down list These are the only categories that will be accepted by the WUEdata online submittal tool. Select those that apply.	How much is this going to reduce the shortage gap? Include units used (volume type or percentage)	Additional Explanation or Reference <i>(optional)</i>	Penalty, Charge, or Other Enforcement? <i>For Retail</i> <i>Suppliers Only</i> <i>Drop Down List</i>
2	Other water feature or swimming pool restriction	1%	Encouraging Recreational Water Features Best Practices. All pool owners and operators and their agents or contractors shall, to the extent feasible, adhere to the District's Best Management Practices (Appendix X) for the construction and operation of water use efficient recreational water features, such as pools or spas. (Demand Reduction)	No
2	CII - Restaurants may only serve water upon request	1%	Voluntary Drinking Water Served Upon Request. Eating or drinking establishments, including but not limited to a restaurant, hotel, cafe, cafeteria, bar, or other public place where food or drinks are sold, served, or offered for sale, are encouraged to refrain from providing drinking water to any person unless expressly requested. (Demand Reduction)	No
3	Other	5%	Targeted Outreach and Assistance to High Water Users. The District will target outreach and assistance to high use customers to achieve further water savings through expanded onsite water use surveys. (Demand Reduction)	No
3	Provide Rebates for Landscape Irrigation Efficiency	2%	Enhanced Conservation Program Activity. The District may enhance water conservation program activities or incentive levels to further increase customer participation in activities that lead to long- term structural water savings. (Demand Reduction)	No

	Sie 6-2. Demanu Reduction Actions			
Shortage Level	Demand Reduction Actions Drop down list These are the only categories that will be accepted by the WUEdata online submittal tool. Select those that apply.	How much is this going to reduce the shortage gap? Include units used (volume type or percentage)	Additional Explanation or Reference <i>(optional)</i>	Penalty, Charge, or Other Enforcement? <i>For Retail</i> <i>Suppliers Only</i> <i>Drop Down List</i>
3	Landscape - Limit landscape irrigation to specific days	5%	Watering Day Limits. Watering or irrigating of lawn or landscaped area with drinking water is limited to 3 days per week April through October and 1 day per week November through March. Exceptions to the water days limit include: Drip emitters or in-line drip systems; Irrigating by use of a handheld bucket or similar container, or with a hand-held hose equipped with a positive self-closing water shut off nozzle; Irrigating for short periods of time for the express purpose of adjusting or repairing an irrigation system; or Irrigating for maintenance of existing landscape necessary for fire protection. (Mandatory Prohibition)	Yes
3	Landscape - Other landscape restriction or prohibition	3%	Irrigation Limits on Commercial Agriculture and Nurseries. Commercial agriculture and nursery use of drinking water is reduced by 30% of five-year average use monthly. (Demand Reduction)	Yes
3	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	1%	Requirement for Water Users to Fix Leaks. All leaks, breaks, or other malfunctions in the water user's plumbing or distribution system must be repaired within twenty-four (24) hours of notification by the District unless other arrangements are made with the District. (Mandatory Prohibition)	Yes

Shortage Level	Demand Reduction Actions Drop down list These are the only categories that will be accepted by the WUEdata online submittal tool. Select those that apply.	How much is this going to reduce the shortage gap? Include units used (volume type or percentage)	Additional Explanation or Reference <i>(optional)</i>	Penalty, Charge, or Other Enforcement? For Retail Suppliers Only Drop Down List
3	Other	1%	Limits on Use of Potable Water for Construction. The use of recycled or non- potable water, when available, is required for construction purposes. Potable or drinking water for construction purposes shall only be permitted by, and in accordance with the provisions of, a construction water use permit obtained from the District Chief Engineer or their designee, otherwise, recycled water is to be used. (Operational Change)	Yes
3	Other	1%	Limits on Street Sweeping with Drinking Water. The use of recycled or non-potable water, when available, is required for street sweeping purposes. (Operational Change)	Yes
3	Decrease Line Flushing	1%	Reduce Frequency of Line Cleaning and Flushing. The District, to the extent feasible, will minimize the use of or flushing of drinking water when performing operational duties including, but not limited to, sewer line cleaning, fire hydrant flushing, valve exercising, and angle stop repairs. (Operational Change)	Yes
4	Landscape - Limit landscape irrigation to specific days	5%	Watering Day Limits. Watering or irrigating of lawn or landscaped area with drinking water is limited to 2 days per week April through October and 1 day per week November through March. Exceptions to the water days limit include: Drip emitters or in-line drip systems; Irrigating by use of a handheld bucket or similar container, or with a hand-held hose equipped with a positive self-closing water shut off nozzle; Irrigating for short periods of time for the express purpose of adjusting or repairing an irrigation system; or Irrigating for maintenance of existing landscape necessary for fire protection. (Mandatory Prohibition)	Yes

Submittal Table 8-2: Demand Reduction Actions					
Shortage Level	Demand Reduction Actions Drop down list These are the only categories that will be accepted by the WUEdata online submittal tool. Select those that apply.	How much is this going to reduce the shortage gap? Include units used (volume type or percentage)	Additional Explanation or Reference <i>(optional)</i>	Penalty, Charge, or Other Enforcement? <i>For Retail</i> <i>Suppliers Only</i> <i>Drop Down List</i>	
4	Other	2%	Limits on Commercial Agriculture and Nurseries. Commercial agriculture and nursery irrigation with drinking water is limited to 60% of monthly five-year average use. (Demand Reduction)	Yes	
4	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water	1%	Prohibition on Vehicle Washing. Washing of autos, trucks, trailers, boats, airplanes or other types of mobile equipment is prohibited. Washing is permitted at commercial car wash facilities. The use of water by all types of commercial car washes shall be reduced in volume by 50%. (Mandatory Prohibition)	Yes	
4	Water Features - Restrict water use for decorative water features, such as fountains	1%	Prohibition on Filling Decorative Water Features. Filling, refilling, or adding water to decorative water features that use potable water is prohibited. (Mandatory Prohibition)	Yes	
4	Moratorium or Net Zero Demand Increase on New Connections	2%	No New Potable Water Service. Upon declaration of a Stage 4 condition, no new potable water service will be provided, no new temporary meters or permanent meters will be provided, and no will-serve letters will be issued, except under the following circumstances: District approved plans and specifications have been issued; or A valid permit has been issued for the project; or The project is necessary to protect the public health, safety, and welfare; or The applicant provides substantial evidence of an enforceable commitment that water demands for the project will be offset prior to the provision of a new water meter(s) to the satisfaction of the District. (Operational Change)	Yes	

Submittal Tat	omittal Table 8-2: Demand Reduction Actions			
Shortage Level	Demand Reduction Actions Drop down list These are the only categories that will be accepted by the WUEdata online submittal tool. Select those that apply.	How much is this going to reduce the shortage gap? Include units used (volume type or percentage)	Additional Explanation or Reference <i>(optional)</i>	Penalty, Charge, or Other Enforcement? <i>For Retail</i> <i>Suppliers Only</i> <i>Drop Down List</i>
5	Other	5%	Expand Enforcement and Outreach to High Users. The District will expand its efforts to target and assist over-budget accounts, including escalating enforcement of any and all mandatory restrictions the account may not be in compliance with, pursuant to any declared water shortage stage. (Demand Reduction)	No
5	Other	1%	Flow Restrictors to Non-Compliant Accounts. The District may require a flow restrictor to be installed on services where the account holder is non-responsive to outreach and other mandatory restrictions, pursuant to any declared water shortage stage. (Demand Reduction)	Yes
5	Landscape - Other landscape restriction or prohibition	2%	Prohibition on Watering Turf with Drinking Water. Watering or irrigating of lawn or turf with potable water is prohibited. Exemptions to this prohibition may be made for municipal parks with active recreational fields, such as parks with athletic fields, however, the applied water must be limited to the amount which will just keep the turfgrass alive to minimize affects to public health and safety. (Mandatory Prohibition)	Yes
5	Landscape - Limit landscape irrigation to specific days	3%	Watering Day Limits. Watering or irrigating of trees, woody shrubs, or food-producing crops for residential use with drinking water is limited to 1 day per week in all months. Exceptions to the water days limit include: Irrigating for maintenance of existing landscape necessary for fire protection. (Mandatory Prohibition)	Yes

Submittal Table 8-2: Demand Reduction Actions				
Shortage Level	Demand Reduction Actions Drop down list These are the only categories that will be accepted by the WUEdata online submittal tool. Select those that apply.	How much is this going to reduce the shortage gap? Include units used (volume type or percentage)	Additional Explanation or Reference <i>(optional)</i>	Penalty, Charge, or Other Enforcement? <i>For Retail</i> <i>Suppliers Only</i> <i>Drop Down List</i>
5	Landscape - Other landscape restriction or prohibition	2%	Limits on Commercial Agriculture and Nurseries. Commercial agriculture and nursery irrigation with drinking water is limited to 50% of monthly five-year average use. (Demand Reduction)	Yes
5	Water Features - Restrict water use for decorative water features, such as fountains	2%	Prohibition on Filling All Recreational Water Features. Filling, re-filling, or adding of potable water to recreational water features such as pools or spas that do not adhere to the District's Best Management Practices is prohibited. (Mandatory Prohibition)	Yes
6	Expand Public Information Campaign	5%	Conduct Emergency Public Outreach . The District would conduct emergency public outreach, as part of the District's overall emergency response programs. Messaging to focus on limiting water to essential uses only. (Demand Reduction)	No
6	Other	0->50%	Water Supply Allocation, as Necessary. As deemed necessary, an allocation of water supply under a Water Shortage Stage 6 condition, beyond the District's shortage response actions under the Water Shortage Stages outlined in this Section, may be implemented. (Demand Reduction)	Yes
6	Landscape - Prohibit all landscape irrigation	3%	Prohibition on Watering with Drinking Water. All outdoor irrigation with potable water is prohibited with the exception of maintenance of existing landscape necessary for fire protection. (Mandatory Prohibition)	Yes
6	Landscape - Prohibit all landscape irrigation	5%	Prohibition on Commercial Nurseries Using Drinking Water. Commercial agriculture and nursery irrigation with potable water is prohibited. (Demand Reduction)	Yes

Submittal Table 8-2: Demand Reduction Actions				
Shortage Level	Demand Reduction Actions Drop down list These are the only categories that will be accepted by the WUEdata online submittal tool. Select those that apply.	How much is this going to reduce the shortage gap? Include units used (volume type or percentage)	Additional Explanation or Reference <i>(optional)</i>	Penalty, Charge, or Other Enforcement? <i>For Retail</i> <i>Suppliers Only</i> <i>Drop Down List</i>
6	Other	1%	Prohibition of Vehicle Washing. Washing of autos, trucks, trailers, boats, airplanes or other types of mobile equipment is prohibited. Washing is also prohibited at a commercial car wash. (Mandatory Prohibition)	Yes
6	Other	5%	Other Water Response Shortage Action, as Needed. The District reserves the right to implement other shortage response actions to appropriately respond to a water shortage emergency.	Yes
NOTES:				-

Submittal Table 8-3: Supply Augmentation and Other Actions				
Shortage Level	Supply Augmentation Methods and Other Actions by Water Supplier Drop down list These are the only categories that will be accepted by the WUEdata online submittal tool	How much is this going to reduce the shortage gap? Include units used (volume type or percentage)	Additional Explanation or Reference (optional)	
1 through 6	Other Purchases	0 - 100%	Additional imported water purchases through MWDOC	
1 through 6	Other Purchases	0 - 100%	Additional groundwater pumping in the Orange County Groundwater Basin	
NOTES:	•			



Water Conservation Ordinance 2021-22

Below is the weblink to the current ordinance (last accessed on May 26, 2021)

https://www.tcwd.ca.gov/transparency/ordinances



Recreational Water Feature Best Practices



Trabuco Canyon Water District

RECREATIONAL WATER FEATURE BEST PRACTICES FOR LONG-TERM WATER USE EFFICIENCY

Implementation of the following Best Practices are encouraged for the construction and operation of any residential pool or spa installation within the District:

- Installation and usage of a pool/spa cover or use of cover elements over 75% of the pool surface to reduce evaporation.
- Installation and usage of a cartridge filtering system to reduce the waste associated with backwash of filters.
- Installation and usage of non-mechanical, sensor-based automatic manual or timer-based fill mechanisms to prevent over-filling and waste.



Notice of Public Hearing

Fernando Paludi, General Manager Michael Perea, District Secretary Cindy Byerrum, District Treasurer Atkinson, Andelson, Loya, Ruud & Romo, District General Legal Counsel



BOARD OF DIRECTORS

Don Chadd, President Stephen Dopudja, Vice President Glenn Acosta, Director Edward Mandich, Director Michael Safranski, Director

March 19, 2021

City of Mission Viejo Attn: Mark Chagnon, Director of Public Works 200 Civic Center Mission Viejo, California 92691

Subject: Trabuco Canyon Water District 2020 Urban Water Management Plan Update

The Trabuco Canyon Water District (TCWD) is in the process of preparing and updating its 2020 Urban Water Management Plan (UWMP) in compliance with the Urban Water Management Planning Act and the Water Conservation Act of 2009, commonly referred to as SBX7-7. An update of the TCWD's UWMP is required every five (5) years.

Water Code section 10621(b) requires an urban water supplier updating its UWMP to notify cities and counties within its service area of the update at least sixty (60) days prior to holding a public hearing. This letter serves as TCWD's notice that it is preparing and updating its 2020 UWMP, to be adopted and submitted to the California Department of Water Resources before the July 1, 2021 deadline. TCWD will be adopting its Water Shortage Contingency Plan as part of the 2020 UWMP.

TCWD is also considering an Addendum to the 2015 UWMP to demonstrate consistency with the Delta Plan Policy to Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit. 23, § 5003). The 2015 UWMP Addendum and a copy of TCWD's draft 2020 UWMP will be available for review on the TCWD website (<u>www.tcwd.ca.gov</u>) in spring of 2021, and TCWD will subsequently hold noticed public hearings on the 2020 UWMP, Water Shortage Contingency Plan, and 2015 UWMP Addendum in advance of their proposed adoption.

TCWD invites you to submit comments and consult with TCWD regarding its 2020 UWMP update and 2015 UWMP Addendum. TCWD anticipates holding a public comment period in spring 2021, with a public hearing planned during that time.

If you have any input for the matters contained in this notice letter, require additional information, or would like to set up a meeting to discuss TCWD's 2020 UWMP update, please contact me at (949) 858-0277, ext. 130, or by email at llausten@tcwd.ca.gov.

Sincerely.

Lorrie Lausten, P.E. District Engineer

Fernando Paludi, General Manager Michael Perea, District Secretary Cindy Byerrum, District Treasurer Atkinson, Andelson, Loya, Ruud & Romo, District General Legal Counsel



BOARD OF DIRECTORS

Don Chadd, President Stephen Dopudja, Vice President Glenn Acosta, Director Edward Mandich, Director Michael Safranski, Director

March 19, 2021

City of Lake Forest Attn: Gayle Ackerman, Planning Director 25550 Commercentre Drive, Suite 100 Lake Forest, California 92630

Subject: Trabuco Canyon Water District 2020 Urban Water Management Plan Update

The Trabuco Canyon Water District (TCWD) is in the process of preparing and updating its 2020 Urban Water Management Plan (UWMP) in compliance with the Urban Water Management Planning Act and the Water Conservation Act of 2009, commonly referred to as SBX7-7. An update of the TCWD's UWMP is required every five (5) years.

Water Code section 10621(b) requires an urban water supplier updating its UWMP to notify cities and counties within its service area of the update at least sixty (60) days prior to holding a public hearing. This letter serves as TCWD's notice that it is preparing and updating its 2020 UWMP, to be adopted and submitted to the California Department of Water Resources before the July 1, 2021 deadline. TCWD will be adopting its Water Shortage Contingency Plan as part of the 2020 UWMP.

TCWD is also considering an Addendum to the 2015 UWMP to demonstrate consistency with the Delta Plan Policy to Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit. 23, § 5003). The 2015 UWMP Addendum and a copy of TCWD's draft 2020 UWMP will be available for review on the TCWD website (www.tcwd.ca.gov) in spring of 2021, and TCWD will subsequently hold noticed public hearings on the 2020 UWMP, Water Shortage Contingency Plan, and 2015 UWMP Addendum in advance of their proposed adoption.

TCWD invites you to submit comments and consult with TCWD regarding its 2020 UWMP update and 2015 UWMP Addendum. TCWD anticipates holding a public comment period in spring 2021, with a public hearing planned during that time.

If you have any input for the matters contained in this notice letter, require additional information, or would like to set up a meeting to discuss TCWD's 2020 UWMP update, please contact me at (949) 858-0277, ext. 130, or by email at llausten@tcwd.ca.gov.

Sincerely ul

Lorrie Lausten, P.E. District Engineer

Fernando Paludi, General Manager Michael Perea, District Secretary Cindy Byerrum, District Treasurer Atkinson, Andelson, Loya, Ruud & Romo, District General Legal Counsel



BOARD OF DIRECTORS

Don Chadd, President Stephen Dopudja, Vice President Glenn Acosta, Director Edward Mandich, Director Michael Safranski, Director

March 19, 2021

County of Orange, OC Public Works Attn: Jim Treadaway, Planning Director 300 North Flower Street Santa Ana, California 92703

Subject: Trabuco Canyon Water District 2020 Urban Water Management Plan Update

The Trabuco Canyon Water District (TCWD) is in the process of preparing and updating its 2020 Urban Water Management Plan (UWMP) in compliance with the Urban Water Management Planning Act and the Water Conservation Act of 2009, commonly referred to as SBX7-7. An update of the TCWD's UWMP is required every five (5) years.

Water Code section 10621(b) requires an urban water supplier updating its UWMP to notify cities and counties within its service area of the update at least sixty (60) days prior to holding a public hearing. This letter serves as TCWD's notice that it is preparing and updating its 2020 UWMP, to be adopted and submitted to the California Department of Water Resources before the July 1, 2021 deadline. TCWD will be adopting its Water Shortage Contingency Plan as part of the 2020 UWMP.

TCWD is also considering an Addendum to the 2015 UWMP to demonstrate consistency with the Delta Plan Policy to Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit. 23, § 5003). The 2015 UWMP Addendum and a copy of TCWD's draft 2020 UWMP will be available for review on the TCWD website (www.tcwd.ca.gov) in spring of 2021, and TCWD will subsequently hold noticed public hearings on the 2020 UWMP, Water Shortage Contingency Plan, and 2015 UWMP Addendum in advance of their proposed adoption.

TCWD invites you to submit comments and consult with TCWD regarding its 2020 UWMP update and 2015 UWMP Addendum. TCWD anticipates holding a public comment period in spring 2021, with a public hearing planned during that time.

If you have any input for the matters contained in this notice letter, require additional information, or would like to set up a meeting to discuss TCWD's 2020 UWMP update, please contact me at (949) 858-0277, ext. 130, or by email at llausten@tcwd.ca.gov.

Sincerely.

Lorrie Lausten, P.E. District Engineer

Fernando Paludi, General Manager Michael Perea, District Secretary Cindy Byerrum, District Treasurer Atkinson, Andelson, Loya, Ruud & Romo, District General Legal Counsel



BOARD OF DIRECTORS

Don Chadd, President Stephen Dopudja, Vice President Glenn Acosta, Director Edward Mandich, Director Michael Safranski, Director

March 19, 2021

City of Rancho Santa Margarita Attn: Cheryl Kuta, Planning Director 22112 El Paseo Rancho Santa Margarita, California 92688

Subject: Trabuco Canyon Water District 2020 Urban Water Management Plan Update

The Trabuco Canyon Water District (TCWD) is in the process of preparing and updating its 2020 Urban Water Management Plan (UWMP) in compliance with the Urban Water Management Planning Act and the Water Conservation Act of 2009, commonly referred to as SBX7-7. An update of the TCWD's UWMP is required every five (5) years.

Water Code section 10621(b) requires an urban water supplier updating its UWMP to notify cities and counties within its service area of the update at least sixty (60) days prior to holding a public hearing. This letter serves as TCWD's notice that it is preparing and updating its 2020 UWMP, to be adopted and submitted to the California Department of Water Resources before the July 1, 2021 deadline. TCWD will be adopting its Water Shortage Contingency Plan as part of the 2020 UWMP.

TCWD is also considering an Addendum to the 2015 UWMP to demonstrate consistency with the Delta Plan Policy to Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit. 23, § 5003). The 2015 UWMP Addendum and a copy of TCWD's draft 2020 UWMP will be available for review on the TCWD website (www.tcwd.ca.gov) in spring of 2021, and TCWD will subsequently hold noticed public hearings on the 2020 UWMP, Water Shortage Contingency Plan, and 2015 UWMP Addendum in advance of their proposed adoption.

TCWD invites you to submit comments and consult with TCWD regarding its 2020 UWMP update and 2015 UWMP Addendum. TCWD anticipates holding a public comment period in spring 2021, with a public hearing planned during that time.

If you have any input for the matters contained in this notice letter, require additional information, or would like to set up a meeting to discuss TCWD's 2020 UWMP update, please contact me at (949) 858-0277, ext. 130, or by email at llausten@tcwd.ca.gov.

Sincerely,

Duit

Lorrie Lausten, P.E. District Engineer

Fernando Paludi, General Manager Michael Perea, District Secretary Cindy Byerrum, District Treasurer Atkinson, Andelson, Loya, Ruud & Romo, District General Legal Counsel



BOARD OF DIRECTORS

Don Chadd, President Stephen Dopudja, Vice President Glenn Acosta, Director Edward Mandich, Director Michael Safranski, Director

March 19, 2021

County of Orange Attn: Mr. Hugh Nguyen, Clerk Recorder 12 Civic Center Plaza, Room 101 Santa Ana. California 92701

Subject: Trabuco Canyon Water District 2020 Urban Water Management Plan Update

The Trabuco Canyon Water District (TCWD) is in the process of preparing and updating its 2020 Urban Water Management Plan (UWMP) in compliance with the Urban Water Management Planning Act and the Water Conservation Act of 2009, commonly referred to as SBX7-7. An update of the TCWD's UWMP is required every five (5) years.

Water Code section 10621(b) requires an urban water supplier updating its UWMP to notify cities and counties within its service area of the update at least sixty (60) days prior to holding a public hearing. This letter serves as TCWD's notice that it is preparing and updating its 2020 UWMP, to be adopted and submitted to the California Department of Water Resources before the July 1, 2021 deadline. TCWD will be adopting its Water Shortage Contingency Plan as part of the 2020 UWMP.

TCWD is also considering an Addendum to the 2015 UWMP to demonstrate consistency with the Delta Plan Policy to Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit. 23, § 5003). The 2015 UWMP Addendum and a copy of TCWD's draft 2020 UWMP will be available for review on the TCWD website (www.tcwd.ca.gov) in spring of 2021, and TCWD will subsequently hold noticed public hearings on the 2020 UWMP, Water Shortage Contingency Plan, and 2015 UWMP Addendum in advance of their proposed adoption.

TCWD invites you to submit comments and consult with TCWD regarding its 2020 UWMP update and 2015 UWMP Addendum. TCWD anticipates holding a public comment period in spring 2021, with a public hearing planned during that time.

If you have any input for the matters contained in this notice letter, require additional information, or would like to set up a meeting to discuss TCWD's 2020 UWMP update, please contact me at (949) 858-0277, ext. 130, or by email at llausten@tcwd.ca.gov.

Sinceret

Duth

Lorrie Lausten, P.E. **District Engineer**

 Turner and the notice us storage Centers - Orange formult neuron neuron neuron storage formers - Cystast intensity to the neuron storage formers - Cystast intensity - Contract Barrent Mitchell, Urel Contract Barrent Contract Barrent Mitchell, Urel Contract Barrent Barrent Barrent Contract Barrent TATULATION AND ALL AND AL ğ , Clerk of the Court ,Clerk HAMMER Deputy (Adjunto) Register Publish: Orange County And a set of the sector in a point of the sector in a poin For more information, or if you would like assistance in presenting your comments to the Board of Directors at the public hearing, please compart Michael Pereo, District Secretary of (949) 858-0277 or via email at mperea@tcwd.ca.gov. nis summons June I, 872021 1140404/ a written ref Published: Ortunge County Register BEST DELIVERY IN THE GAME! outstanding coverage of the Dodgers, Angels and ALL local baseball action. Turn to the Sports section for IF YOU'RE OC's Former Antomotive Expert Reports Reviews Interactive Tools DOREGISTER COM/CARS Dealer Specials Local Car News Latest Consume CLICK HERE All the Local to Buy and Sell and Reviews OC's Best ocregister.com/subscribe ACAR Nobody Beats Our Coverage. 25

AFFIDAVIT OF PUBLICATION STATE OF CALIFORNIA,)

County of Orange

) ss.

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the above entitled matter. I am the principal clerk of The Orange County Register, a newspaper of general circulation, published in the city of Santa Ana, County of Orange, and which news-paper has been adjudged to be a newspaper of general circulation by the Superior Court of the County of Orange, State of California, under the date of November 19, 1905, Case No. A-21046, that the notice, of which the annexed is a true 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:

June 1, 8, 2021

"I certify (or declare) under the penalty of perjury under the laws of the State of California that the foregoing is true and correct":

Executed at Santa Ana, Orange County, California, on

Date: June 8, 2021

Sandra Campos

Signature The Orange County Register 2190 S. Towne Centre Pl. Anaheim, CA 92806

PROOF OF PUBLICATION



T RABUCO CAN YON WATER DISTRICT NOTICE OF PUBLIC HEARING 2020 URBAN WATER MANAGEMENT PLAN UPDATE AND WATER SHORTAGE CONTINGENCY PLAN

NOTICE IS HEREBY GIVEN that the Board of Directors of the Trabuco Canyon Water District (TCWD or District) will hold a public hearing on **Wednesday**, June 16, 2021 at 7:00 p.m., or as soon thereafter as the Agenda permits, in the District's Administrative Facility located at 32003 Dove Canyon Drive, Trabuco Canyon, CA 92079, to consider the District's proposed 2020 Urban Water Management Plan ("UWMP"), 2020 Water Shortage Contingency Plan ("WSCP"), and Appendix C as an Addendum to its 2015 UWMP in advance of their proposed adoption.

The public hearing is being held in accordance with the Urban Water Management Planning Act (California Water Code Section's 10610 through 10656; herein referred to as the "Act"). The Act requires "every urban water supplier providing water for municipal purposes to more than 3,000 customers or supply ing more than 3,000 acre-feet of water annually" to prepare, adopt, and file a UWMP with the California Department of Water Resources and review and update its UWMP every five years. The purpose of the public hearing will be to solicit public comment prior to adoption of the proposed updated UWMP and WSCP.

Copies of the proposed 2020 UWMP, 2020 WSCP, and Appendix C as an Addendum to its 2015 UWMP are available for public inspection at the District's Adminiistration Facility, which is located at 32003 Dove Canyon Drive, Trabuco Canyon, CA 92679, during normal business hours of 7:00 a.m. to 4:00 p.m. It will also be available on the District's website at www.tcwd.ca.gov

TCWD's public hearing is scheduled for **Wednesday**, June 16, 2021 at 7:00 p.m., and as a result of the COVID-19 emergency and the Governor's Executive Orders to protect public health by limiting public eatherings and requiring social distancing, at this time, the meeting is scheduled to occur via the following virtual imeeting application. Instructions for joining the meeting are as follows:

COMPUTER AUDIO: https://zoom.us/j/91386811652

TELE PHONE AUD IO: 1 (669) 900-6833

MEETING ID: 913 8681 1652

For more information, or if you would like assistance in presenting your comments to the Board of Directors at the public hearing, please contact Michael Perea, District Secretary at (949) 858-0277 or via email at mperea@tcwd.ca.gov.

Published: Orange County Register



Adopted WSCP Resolution

RESOLUTION NO. 2021-1291

RESOLUTION OF THE BOARD OF DIRECTORS OF THE TRABUCO CANYON WATER DISTRICT ADOPTING THE TRABUCO CANYON WATER DISTRICT REVISED WATER SHORTAGE CONTINGENCY PLAN

WHEREAS, the Trabuco Canyon Water District ("District" or "TCWD") is a county water district organized and operating pursuant to California Water Code ("Water Code") Sections 30000 and following; and

WHEREAS, the California Legislature enacted Assembly Bill 797 (Water Code Section 10610 *et seq.*, known as the Urban Water Management Planning Act, as amended ("Act")) during the 1983-1984 Regular Session, which mandates that every supplier providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre feet of water annually, must prepare an Urban Water Management Plan and Water Shortage Contingency Plan ("Contingency Plan"), the primary objective of which is to ensure the appropriate level of reliability in the supplier's water service to meet the needs of its customers during normal, dry and multiple dry years, and to ensure for the conservation and efficient use of water; and

WHEREAS, following the end of the most recent drought, the California Legislature modified the Act in 2018 to include additional water shortage planning requirements; and

WHEREAS, significant amendments to the Water Code, specifically Water Code Section 10632, now mandate new elements to Urban Water Management Plans, including Contingency Plans, which must include an annual drought risk assessment, evaluation of State Water Shortage Levels and Statewide water use prohibitions; and

WHEREAS, TCWD is an urban water supplier which is subject to the provisions and requirements of the Act; and

WHEREAS, Section 375 *et seq.* of the Water Code permits public entities which supply water at retail or wholesale to adopt and enforce a water conservation program to reduce the quantity of water used by the people therein for the purpose of conserving the water supplies of such public entity; and

WHEREAS, Section 350 *et seq.* of the Water Code permits thegoverning body of a distributor of a public water supply to declare a water shortage emergency condition to prevail within the area served by such distributor whenever it finds and determines that the ordinary demands and requirements of water consumers cannot be satisfied without depleting the water supply of the distributor to the extent there would be insufficient water for human consumption, sanitation and fire protection; and

WHEREAS, pursuant to Section 31000 *et seq*. of the Water Code, the District has the authority to adopt rules and regulations necessary to furnish sufficient water for any present or future beneficial use; and

WHEREAS, TCWD's Urban Water Management Plan ("Plan") is required to be periodically reviewed at least once every five years and TCWD shall make amendments or changes to the Plan which are indicated by the review; and

WHEREAS, the Plan must be updated, adopted, and submitted to the California Department of Water Resources ("DWR") not later than July 1, 2021; and

WHEREAS, the Plan must be submitted to the California State Library, and the cities and county within which TCWD provides water, shall be provided with a copy of the Trabuco Canyon Water District Urban Water Management Plan Update ("2020 UWMP"), including the TCWD Water Shortage Contingency Plan, no later than 30 days after adoption thereof; and

WHEREAS, TCWD prepared for public review a draft TCWD Water Shortage Contingency Plan ("TCWD Contingency Plan") as part of the Plan and held a properly noticed public hearing on June 21, 2021, with respect to the , including the Contingency Plan included therein, during which TCWD received community input on the Plan and the Contingency Plan, and considered the economic impacts of the 2020 UWMP and the Contingency Plan, including a method for determining TCWD's urban water use target; and

WHEREAS, the Board of Directors ("Board") of TCWD were furnished with copies of the Contingency Plan as part of their consideration of such 2020 UWMP; and

WHEREAS, the Board has determined that the adoption of the Contingency Plan, as part of the 2020 UWMP, as provided for under Water Code Section 10632, at this time, is appropriate.

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE TRABUCO CANYON WATER DISTRICT DOES HEREBY RESOLVE, DETERMINE, AND ORDER AS FOLLOWS:

Section 1. The foregoing recitals are true and correct and are incorporated herein by this reference.

<u>Section 2.</u> The Board of Directors hereby adopts the Contingency Plan, as part of the 2020 UWMP, which Contingency Plan is incorporated herein by this reference, and will implement the Contingency Plan in accordance with the terms set forth therein.

<u>Section 3.</u> The District Secretary of TCWD is hereby directed to submit the Contingency Plan, as a component of the 2020 UWMP, to the California Department of Water Resources, the California State Library, and any city or county within which TCWD provides water service, no later than 30 days from the date of adoption of this Resolution, as provided for under Water Code Section 10644(a)(1).

<u>Section 4.</u> The General Manager, the District Secretary, and the District's staff and consultants, are authorized to take any and all other and further actions necessary or desirable to implement the directives and intention of this Resolution or to otherwise comply with the provisions of the Act.

[Remainder of this page intentionally left blank]

ADOPTED, SIGNED AND APPROVED this 16th day of June, 2021.

TRABUCO CANYON WATER DISTRICT

By: President/Vice President

By:

District Secretary

STATE OF CALIFORNIA)
) ss.
COUNTY OF ORANGE)

I, Michael Perea, District Secretary of the Trabuco Canyon Water District, do hereby certify that the foregoing resolution was duly adopted by the Board of said District at a regular meeting of such Board held on the 16th day of June, 2021 of which meeting all of the members of the Board had due notice and at which a quorum thereof were present and acting throughout and for which notice and an agenda was prepared and posted as required by law and that at said meeting such resolution was adopted by the following vote:

AYES: Chadd, Dopudja, Acosta, Mandich, Safranski

NOES: None

ABSTAIN: None

ABSENT: None

District Secretary, Trabuco Canyon Water District
STATE OF CALIFORNIA)) ss. COUNTY OF ORANGE)

I, Michael Perea, District Secretary of the Trabuco Canyon Water District, do hereby certify that the foregoing is a full, true, and correct copy of Resolution No. 2021-1291 of such Board and that the same has not been amended, rescinded or repealed.

Dated this 16th day of June, 2021.

District Secretary, Trabuco Canyon Water District

Arcadis U.S., Inc. 320 Commerce, Suite 200 Irvine California 92602 Phone: 714 730 9052 www.arcadis.com

Maddaus Water Management, Inc. Danville, California 94526 Sacramento, California 95816 www.maddauswater.com