

REVISÉD DRAFT

10/05/2018

Water Forward

Implementation Outlook and Adaptive Management Plan

AW will continue implementation of Advanced Metering Infrastructure and Water Loss Control utility initiative

AW will continue to monitor AC Condensate Reuse and CII Ordinances that have recently been adopted into code

NOTE: All process steps are not included on this informational visual

Row No.	Option No.	Task Name	Description	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	FY 2037	FY 2038	FY 2039	FY 2040				
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Planning Cycles	1	Integrated Water Resource Plan Development and Update Process																											
	2		Scope of Work and Project Schedule Development																										
	3		Consultant Procurement																										
	4		Data Gathering and Preliminary Analyses																										
	5		Plan Development Process																										
	6		Target Final Plan Presentation To and Adoption By Council																										
	7		Implementation Plan Development																										
Ongoing Utility Initiatives	8	D1	Advanced Metering Infrastructure	Implement customer facing programs that provide real-time water use information. Savings achieved through identification of customer-side leaks, behavior modification, etc.																									
	9	D2	Water Loss Control - Utility Side	Leak detection, correction, and prevention program to reduce the Infrastructure Leakage Index (ILI) to 2.7 by 2020 and further reduce and sustain a 2.0 ILI from 2040 to 2115.																									
	10	D3	Commercial, Institutional, and Industrial (CII) Ordinances	Already in Code - Require older cooling towers to meet water efficiency benchmarks and use efficient equipment and require efficiency standards for steam boilers in new development.																									
	11	D12	AC Condensate Reuse	Already in Code - Require collection and reuse of condensate water from Air Handling Units (AHUs) for cooling systems from new development with cooling capacity over 200 tons.																									
	12	Expansion of Current Centralized Reclaimed Water Connection Requirements	Stakeholder process will explore expanding existing centralized reclaimed water connection requirements.	Stakeholder process will explore expanding existing centralized reclaimed water connection requirements.																									
	13		Evaluation of potential implementation approaches	Evaluation to include refinement of ordinance scope, applicability, location in code, enforcement considerations.																									
	14		Preliminary stakeholder outreach																										
	15		Develop draft ordinance language																										
	16		Stakeholder outreach and draft code language changes as needed																										
	17		Boards and Commissions and Council action																										
	18		Implementation and monitoring																										
	19		Approach refinement and/or implementation of other option(s) in subsequent plan update cycle																										
	20		Maintain approach and continue monitoring																										

REVISED DRAFT

10/05/2018

Water Forward

Implementation Outlook and Adaptive Management Plan

AW will continue implementation of Advanced Metering Infrastructure and Water Loss Control utility initiatives.

AW will continue to monitor AC Condensate Reuse and CII Ordinances that have recently been adopted into code.

NOTE: All process steps are not included on this informational visual.

[illegible]

REVISÉD DRAFT

10/05/2018

Water Forward

Implementation Outlook and Adaptive Management Plan

AW will continue implementation of Advanced Metering Infrastructure and Water Loss Control utility initiatives.

AW will continue to monitor AC Condensate Reuse and CII Ordinances that have recently been adopted into code.

NOTE: All process steps are not included on this informational visual.

[illegible]

REVISED DRAFT

10/05/2018

Water Forward

Implementation Outlook and Adaptive Management Plan

AW will continue implementation of Advanced Metering Infrastructure and Water Loss Control utility initiatives.

AW will continue to monitor AC Condensate Reuse and CII Ordinances that have recently been adopted into code.

NOTE: All process steps are not included on this informational visual.

[illegible]

REVISÉD DRAFT

10/05/2018

Water Forward

Implementation Outlook and Adaptive Management Plan

AW will continue implementation of Advanced Metering Infrastructure and Water Loss Control utility initiatives.

AW will continue to monitor AC Condensate Reuse and CII Ordinances that have recently been adopted into code.

NOTE: All process steps are not included on this informational visual.

[illegible]

REVISÉD DRAFT

10/05/2018

Water Forward

Implementation Outlook and Adaptive Management Plan

AW will continue implementation of Advanced Metering Infrastructure and Water Loss Control utility initiatives.

AW will continue to monitor AC Condensate Reuse and CII Ordinances that have recently been adopted into code.

NOTE: All process steps are not included on this informational visual.

Row No.		Option No.	Task Name	Description	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	FY 2037	FY 2038	FY 2039	FY 2040		
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Planning Cycles	1		Integrated Water Resource Plan Development and Update Process																									
	2		Scope of Work and Project Schedule Development																									
	3		Consultant Procurement																									
	4		Data Gathering and Preliminary Analyses																									
	5		Plan Development Process																									
	6		Target Final Plan Presentation To and Adoption By Council																									
	7		Implementation Plan Development																									
Potentially a combination	114	S3	Centralized Reclaimed System (Direct Non-Potable Reuse)	Implementation to focus on Reclaimed Master Plan through 2040.																								
	115		Approach refinement and/or implementation of other option(s) identified in plan update cycle																									
	116		Maintain approach and continue implementation																									
	117	S9, S10	Decentralized Reclaimed (Community Scale Distributed Wastewater Reuse and Sewer Mining)																									
	118		Refinement of decentralized option analysis																									
	119		Approach refinement and/or implementation of other option(s) in subsequent plan update cycle																									
	120		Future additional decentralized reclaimed project identification																									
121	Decentralized reclaimed project design and construction	Implementation will consider timing and location of new development opportunities.																										
Utility constructed, owned and operated	122	S1	Aquifer Storage and Recovery																									
	123		Further Study and Modeling, Permitting, Land Acquisition	Initial steps will include further study for pilot and full project, further modelling for operational considerations, land acquisition, legal and permitting considerations, and piloting																								
	124		Pilot Design, Construction, and Testing																									
	125		Approach refinement and/or implementation of other option(s) in subsequent plan update cycle																									
	126		Design of full-scale ASR facility																									
	127		Construction of full-scale ASR facility																									
	128		ASR fill/refill cycles																									
	129	S5	Indirect Potable Reuse (IPR) through Lady Bird Lake Capture Local Inflows to Lady Bird Lake	Note: IPR option could be accelerated if required in a drought situation.																								
	130		Approach refinement and/or implementation of other option(s) in subsequent plan update cycle																									
	131		Alternatives Analysis, Permitting, and Public Outreach																									
	132		Design																									
	133		Construction																									
	134	S7, S2	New Off Channel Reservoir and Brackish Groundwater Desalination																									
135	Continued study and refinement of option		This phase to include public outreach and possible exploratory land acquisition efforts.																									