

# ADVANCED PURIFIED WATER ROADMAP



COMMUNITY OUTREACH		2019	2020	2021	2022	2023	2024				2025				2026				2027				2028				2029	2030
							1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
01	Conference and Local Board Presentations						The project team will continue presenting to conferences and board officials																					
02	Tours for Local Community Groups						Tours during and after project construction are planned																					
03	COR/TMWA Employee Education Sessions						Annual employee education sessions planned																					
04	Smart About Water Day, A+ Educational Booth						Annual Smart About Water Day participation planned																					
05	Tours of California IPR Facilities						Additional tours may be arranged in the future																					
06	KUNR Radio and Media Interviews						Future media interviews																					
07	Community Engagement Initiatives						Future engagement initiatives																					
08	A+ Permit Required Public Workshops																											
09	APWF Project Outreach Public Workshops						Design input																					
10	Curriculum Development for Local Educators						Educational curriculum for Sierra NV Journeys and other educators																					
11	Mobile Educational Center Trailer Events						Continued mobilization of the portable educational trailer to events																					
12	Educational Center Ribbon Cutting Ceremony																											
13	Facility Tours and APW Facility Events						APW Facility Tours																					

DESIGN AND PERMITTING		2019	2020	2021	2022	2023	2024				2025				2026				2027				2028				2029	2030
							1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
14	NDEP / RSWRF A+ Workshop																											
15	AECOM Hired for Design Services																											
16	CMAR Hired for Preconstruction Services																											
17	NEPA and Permit Meeting at NDEP																											
18	ICE Hired for Cost Analysis Services																											
19	Design Review – 30% Meeting at NDEP																											
20	Permitting Meeting at NDEP																											
21	Plant Operations Meeting at NDEP																											
22	Independent Expert Panel Meetings																											
23	Phase 1 NDEP Application Package Submitted						AUG 2024																					
24	60% Design Set Submitted to NDEP						AUG 2024																					
25	Design Review – 60% Meeting at NDEP						SEP 2024																					
26	Phase 1 Permits Issued by NDEP						FEB 2025																					
27	90% Design Set Submitted to NDEP						JAN 2025																					
28	Design Review – 90% Meeting at NDEP						MAR 2025																					
29	100% Design Set Submitted to NDEP						APR 2025																					
30	Authorization to Construct Issued by NDEP						MAY 2025																					
31	Phase 2 Permit Application Package Submitted						OCT 2027																					
32	Phase 3 Permit Application Package Submitted						Q4 2028																					

PROJECT FUNDING		2019	2020	2021	2022	2023	2024				2025				2026				2027				2028				2029	2030
							1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
33	Novel Treatment Grant Applications																											
34	\$3M EPA Community Grant Application																											
35	\$30M BOR Title XVI Grant Application																											
36	Submit Letter of Intent for CWSRF (COR)						MAY 2024																					
37	Submit Letter of Intent for DWSRF (TMWA)						MAY 2024																					
38	SRF Applications Preparation						JUN 2024																					
39	Notice of Grant Awards from BOR						JUL 2024																					
40	NEPA Final Environ. Report Complete						AUG 2024																					
41	Clean Water SRF Loan is Secured						DEC 2024																					
42	Drinking Water SRF Loan is Secured						DEC 2024																					
43	GMP 1 Approval for Long Lead Items						FEB 11, 2025																					
44	GMP 2 Approval for CMAR to Begin						APR 24, 2025																					

CONSTRUCTION		2019	2020	2021	2022	2023	2024				2025				2026				2027				2028				2029	2030
							1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
45	Notice to Proceed Issued to CMAR						JUN 2025																					
46	Major work at RSWRF Complete						SEP 2026																					
47	Major work at APWF Complete						APR 2027																					
48	Injection and Extraction Wells Built						MAY 2027																					
49	Pipeline Construction Finished						JUL 2027																					
50	Construction Substantially Complete						Q4 2027																					

STARTUP AND PHASING		2019	2020	2021	2022	2023	2024				2025				2026				2027				2028				2029	2030
							1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
51	Phase 1: Final Connections & Plant Startup																											
52	Phase 2: Injection of APWF A+ Water						Actual milestone TBD																					
53	Phase 3: Potable Use of Extracted A+ Water																											

## Community Outreach

**Note:** A complete list of outreach activities will be included with the public outreach report developed for permit application package 1.

### 01) Conference and Local Board Presentations

Over 35 presentations have been made on the APWF project at the regional, national, and international levels.

### 02) Tours for Local Community Groups

Pilot system tours of treatment trailer and demonstration project, recent engagements have included the mobile educational trailer.

- **May 22, 2023** – Western States Water Council tour of RSWRF – OneWater Nevada Education Trailer.
- **Aug 21, 2023** – Western Nevada Development District (WNDD) – OneWater Nevada Education Trailer.
- **Sep 13, 2023** – Eastern Sierra Water Tour with water-utility professionals – OneWater Nevada Education Trailer.

### 03) COR/TMWA Employee Education Sessions

These sessions were held to educate staff and prepare them to navigate conversations with friends and family regarding the APWF project.

- **Mar 25, 2019** – Employee Education Session on APW Feasibility Study: *Office staff* in TMWA Ready Room
- **Mar 25, 2019** – Employee Education Session on APW Feasibility Study: *Field staff*, held in TMWA Ready Room.
- **Mar 27, 2019** – Employee Education Session on APW Feasibility Study: *Treatment and Operations staff*, held at TMWA's Glendale WTP
- **Aug 15 & 16, 2022** – OneWater Nevada, APW Staff Education Session: *City of Reno Staff*
- **Aug 17, 2022** – OneWater Nevada, APW Staff Education Session: *TMWA Staff*

### 04) Smart About Water Day, A+ Educational Booth

TMWA-led event covering all facets of regional water resource management. The APWF program will have a booth annually at this event.

- **May 7, 2022 & May 6, 2023** – Subject matter experts were on hand to answer questions about A+ APW, with handouts and displays.

### 05) Tours of California IPR Facilities

- **Jan 19, 2023** – Facility Tours with Local Officials: OCWD's Groundwater Replenishment System and the Albert Robles Center
- **Feb 16-17, 2023** – Facility Tours Local Officials: Silicon Valley AW Purification Center, Pure Water Soquel, Pure Water Monterey.
- **Jan 2024** – Facility Tours Local Officials: Pure Water Monterey.

### 06) KUNR Radio and Media Interviews

- **Jul 6, 2023** – KUNR Radio Report: Reno's breaking new ground in wastewater recycling, and other communities are watching. See: <https://knpr.org/news-88-9-knpr/2023-07-06/renos-breaking-new-ground-in-wastewater-recycling-and-other-communities-are-watching>
- **Aug 18, 2023** - TMWA's Dr. Lydia Teel interview regarding the APWF on NPR's "Science Friday," a national radio show broadcast on over 800 radio stations. See: <https://onewaternevada.com/2023/08/18/reno-is-preparing-to-turn-its-wastewater-into-drinking-water/>
- **Oct 11, 2023** - Media Interview: TMWA's John Enloe and Lydia Teel interviewed on Face the State. See: <https://onewaternevada.com/2023/10/16/tmwas-john-enloe-and-dr-lydia-teel-discuss-advanced-purified-water-on-ktvns-face-the-state/>

### 07) Community Engagement Initiatives

- **Nov 7, 2018** – Meeting with American Flat residents to discuss the project and its purpose, address questions and listen to concerns.
- **Nov 18, 2018** – Project website launched for public reference and awareness.
- **Jul 2023** – TMWA bill insert featured OneWater Nevada as the primary story. Mail distribution = 96,049 TMWA customers.
- **Jul 7, 2023** – TMWA E-Newsletter featured OneWater Nevada as the primary story. Email distribution = 131,941 TMWA customers.
- **Aug 15, 2023** - Public Meeting: Silver Knolls Community Organization - Red rock Fire House - 6:30 p.m.
- **Aug 2023** – TMWA and COR emails inviting the public to upcoming APWF meetings. Sent to 7,378 recipients.
- **Sep 2023** – TMWA and COR emails inviting the public to upcoming APWF meetings. Sent to 7,340 recipients.
- **Nov 2023** – Emails inviting the public to the permit required APWF meeting and notice of public comment period. Sent to 7,330 recipients.
- **Nov 2023** – Notice of permit required APWF meeting published in the Reno Gazette Journal (RGJ). The Sunday edition of RGJ reaches 82,651.
- **Nov 2023** – Email invitation to APWF architectural design workshop. Sent to 7,303 recipients.

### 08) A+ Permit Required Public Workshops

- **Aug 6, 2020** – Meeting With NDEP: The Nevada Department of Environmental Protection (NDEP) conducted an online workshop with over 50 participants in attendance. Representatives from OneWater Nevada presented in-depth information about their evaluations to date, water quality results, and shared where Advanced Purified Water is in use in other parts of the country. They described treatment technologies and long-term program objectives. This was in support of the pilot project permit application.
- **Nov 16, 2023** - Public Meeting: A+ Public Workshop - at Reno Stead Airport, Freedom Flight Terminal. Attendees from the Public: 11, Staff Attendees: 15. Twenty-three (23) comments were submitted during the 30-day public comment period. A public outreach report developed for permit application package 1 will include a transcript from the meeting, comments received, and formal responses to public comments. This was in support of the full-scale project permit application.

### 09) APWF Project Outreach Public Workshops

- **Aug 29, 2023** - Public Meeting 1: Tuesday, Public Education Meeting #1 - at Reno Stead Airport, Freedom Flight Terminal - 6:00 p.m. - 8:00 p.m. Attendees from the Public: 12, Staff Attendees: 14.
- **Oct 5, 2023** - Public Meeting 2: Thursday, Public Education Meeting #2 - at Reno Stead Airport, Freedom Flight Terminal - 6:00 p.m. - 8:00 p.m. Attendees from the Public: 19, Staff Attendees: 14.
- **Oct 16, 2023** – North Valleys Water Management Subcommittee Meeting – 6:00 pm at the North Valleys Library
- **Nov 28, 2023** - APWF Architectural Design Public Workshop: Meeting - 6:00 p.m. to 8:00 p.m. at Reno Stead Airport's Freedom Terminal. Focused on architectural design, traffic impacts, and other site development considerations for community member input.

### Future Planned Events – Details Forthcoming

#### 10) Curriculum Development for Local Educators

#### 11) Mobile Educational Center Trailer Events

#### 12) Educational Center Ribbon Cutting Ceremony

#### 13) Facility Tours and AWP Community Events

## Design and Permitting

### 14) NDEP / RSWRF A+ Workshop

- **Apr 19, 2021** – Teams meeting reviewed the RSWRF Advanced Purified Water Demonstration Study results and the draft final report with NDEP and the Independent Expert Advisory Panel. Focused on the advanced water treatment system results and the hydrogeologic observations from the A+ injection study phase.

### 15) AECOM Hired for Design Services

- **Dec 2021** – AECOM awarded contract for design services as the primary consultant developing treatment plant design documents.

### 16) CMAR Hired for Preconstruction Services

- **Apr 2022** – RSCI awarded contract for preconstruction services as the construction manager at risk (CMAR).

### 17) NEPA and Permit Meeting at NDEP

- **Apr 21, 2023** – A+ American Flat – NEPA and Permit discussion in the DCNR Conference Room (Great Basin) and online via Teams.

### 18) ICE Hired for Cost Analysis Services

- **May 2023** – Rock Solid Solutions awarded contract for independent cost estimation services to ensure cost estimates presented by the CMAR are justifiable and accurate.

### 19) Design Review – 30% Meeting at NDEP

- **Nov 13, 2023** – Project 30% design level technical review in the DCNR Conference Room (Humboldt) and online via Teams.

### 20) Permitting Meeting at NDEP

- **Nov 29, 2023** – American Flat Permitting Meeting in the DCNR Conference Room (Humboldt) and online via Teams.

### 21) Plant Operations Meeting at NDEP

- **Dec 14, 2023** – American Flat Operator Meeting in the DCNR Conference Room (Ponderosa) and online via Teams.

### 22) Independent Expert Panel Meetings

- **Feb 01, 2024** – IEP Hydrogeology
- **Feb 20, 2024** – IEP Re-Orientation
- **Mar 27, 2024** – IEP Unregulated Contaminants of Emerging Concern (CECs)
- **May 29, 2024** – IEP In-Person Critical Control Points
- **Jun 2024** – IEP A+ Permit Application Review

# APWF ROADMAP COMPANION DOCUMENT

## Activities, Deliverables, and Team Expectations



### 23) Aug 2024 - Phase 1 NDEP Application Package Submitted

**Note:** This project will have three distinct phases of operation, allowing for rigorous water quality testing prior to use in the potable water system.

PHASE ONE	PHASE TWO	PHASE THREE
<p>Advanced Purified Water (APW) is used for irrigation at the American Flat Farm.</p> <p><b>Required NDEP Permits:</b></p> <ul style="list-style-type: none"> <li>• Category A+</li> <li>• RSWRF outfall mod. (NS2008500) – <i>Allows for irrigation of category A</i></li> <li>• Water Project for wells (drill and equip)</li> <li>• Water Project (permit to construct) for the future potable connection from extraction wells</li> </ul> <p><b>Desired NDEP Design Review:</b></p> <ul style="list-style-type: none"> <li>• Water project for APW treatment facility</li> <li>• UIC application framework</li> </ul> <p><b>Authorizes:</b> Project construction, well drilling and equipping, testing of new infrastructure. The water will be used only for irrigation, no injection will occur in Phase 1.</p>	<p>APW is injected into the aquifer. Extracted water will be used to irrigate.</p> <p><b>Required NDEP Permits:</b></p> <ul style="list-style-type: none"> <li>• RSWRF Outfall Mod. (NS2008500) – <i>Allows for injection of category A+</i></li> <li>• Underground Injection Control (UIC)</li> </ul> <p><b>Authorizes:</b> Injection of water into the aquifer and extraction of water for Farm irrigation. This will allow for injection and extraction well infrastructure testing.</p>	<p>APW is injected the aquifer. Extracted water will be used as potable water.</p> <p><b>Required NDEP Permits:</b></p> <ul style="list-style-type: none"> <li>• Permit to Operate (new potable water sources at extraction wells)</li> </ul> <p><b>Authorizes:</b> Extraction of water and use in the TMWA potable water system (NV0000190).</p>

### Conditional authorization for construction of APWF and Wells.

Deliverables to NDEP	Expectations from NDEP
<p><b>Permit Engineering Report for A+ Permit:</b></p> <ul style="list-style-type: none"> <li>• 60% Design Drawings</li> <li>• Status of the 7 A+ permit application regulatory requirements</li> <li>• Hydrogeology report summary (UIC Application Framework)</li> </ul> <p><b>Permit Applications:</b></p> <ul style="list-style-type: none"> <li>• Major modification application for new RSWRF discharge outfall(s) – Renewal is already required in June 2024</li> <li>• Water project application for the drilling and equipping wells</li> </ul> <p><b>Supporting Material:</b></p> <ul style="list-style-type: none"> <li>• Public outreach report including public comments and formal responses</li> <li>• Request to review APW Treatment Facility for conformity with drinking water regulations</li> <li>• Washoe County Health District letter of project support will be delivered following 60% design</li> </ul>	<ul style="list-style-type: none"> <li>• Review of 60% Design</li> <li>• A+ Permit</li> <li>• Comments on UIC Application Framework</li> <li>• Authorization to Construct (following 100% design review and approval, May 2025)</li> </ul>

# APWF ROADMAP COMPANION DOCUMENT

## Activities, Deliverables, and Team Expectations



### 24) 60% Design Set Submitted to NDEP

- **Aug 2024** – Project 60% design level plans and specifications issued to NDEP.

### 25) Design Review – 60% Meeting at NDEP

- **Sep 2024** – Project 60% design level technical review at NDEP (room TBD) and online via Teams.

### 26) Phase 1 Permits Issued by NDEP

- **Feb 2025** – NDEP issuance of permits will allow TMWA and the COR to present GMP 1 (purchase of long-lead items) for council and board approval in February 2025. It is desired not to move forward with large purchases until NDEP permit authorization is secured.
- Draft permits to construct are conditional to NDEP review and approval of 100% design (May 2025).
- A letter stating a water project review confirms all components in the APWF meets drinking water regulation requirements is desired.

### 27) 90% Design Set Submitted to NDEP

- **Jan 2025** – Project 90% design level plans and specifications issued to NDEP.

### 28) Design Review – 90% Meeting at NDEP

- **Mar 2025** – Project 90% design level technical review at NDEP (room TBD) and online via Teams.

### 29) 100% Design Set Submitted to NDEP

- **Apr 2025** – Project 100% design level plans and specifications issued to NDEP.

### 30) Authorization to Construct Issued by NDEP

- **May 2025** – Final authorization issued by NDEP to construct the facilities in conformance with 100% design, allowing TMWA and the COR to issue the construction notice to proceed (NTP) to the CMAR.



**APWF ROADMAP COMPANION DOCUMENT**  
**Activities, Deliverables, and Team Expectations**



**31) 2028 - Phase 2 NDEP Application Package**

**Note:** This project will have three distinct phases of operation, allowing for rigorous water quality testing prior to use in the potable water system.

PHASE ONE	PHASE TWO	PHASE THREE
<p>Advanced Purified Water (APW) is used for irrigation at the American Flat Farm.</p> <p><b>Required NDEP Permits:</b></p> <ul style="list-style-type: none"> <li>• Category A+</li> <li>• RSWRF outfall mod. (NS2008500) – <i>Allows for irrigation of category A</i></li> <li>• Water Project for wells (drill and equip)</li> <li>• Water Project for future potable connection</li> </ul> <p><b>Desired NDEP Design Review:</b></p> <ul style="list-style-type: none"> <li>• Water project for APW treatment facility</li> <li>• UIC application framework</li> </ul> <p><b>Authorizes:</b>                      Project construction, well drilling and equipping, testing of new infrastructure. The water will be used only for irrigation, no injection will occur in Phase 1.</p>	<p>APW is injected into the aquifer. Extracted water will be used to irrigate.</p> <p><b>Required NDEP Permits:</b></p> <ul style="list-style-type: none"> <li>• RSWRF Outfall Mod. (NS2008500) – <i>Allows for injection of category A+</i></li> <li>• Underground Injection Control (UIC)</li> </ul> <p><b>Authorizes:</b>                      Injection of water into the aquifer and extraction of water for Farm irrigation. This will allow for injection and extraction well infrastructure testing.</p>	<p>APW is injected the aquifer. Extracted water will be used as potable water.</p> <p><b>Required NDEP Permits:</b></p> <ul style="list-style-type: none"> <li>• Permit to Operate (new potable water sources at extraction wells)</li> </ul> <p><b>Authorizes:</b>                      Extraction of water and use in the TMWA potable water system (NV0000190).</p>

**Authorizes operation of APWF and water injection meeting UIC requirements.**

Deliverables to NDEP	Expectations from NDEP
<p><b>UIC/A+ Engineering Report:</b></p> <ul style="list-style-type: none"> <li>• Regulatory Requirements</li> <li>• RSWRF Source Control</li> <li>• Water Quality and Performance Data Collected During the Irrigation Period</li> <li>• Pathogen Control / LRVs</li> <li>• CEC Barriers and Monitoring</li> </ul> <p><b>Permit Applications:</b></p> <ul style="list-style-type: none"> <li>• UIC Permit Application</li> <li>• Major outfall modification application for RSWRF (if needed)</li> </ul>	<ul style="list-style-type: none"> <li>• Review of Engineering Report</li> <li>• UIC Permit(s) for Injection Wells</li> </ul>

**APWF ROADMAP COMPANION DOCUMENT**  
**Activities, Deliverables, and Team Expectations**



**32) 2029-2030 - Phase 3 NDEP Application Package**

**Note:** This project will have three distinct phases of operation, allowing for rigorous water quality testing prior to use in the potable water system.

PHASE ONE	PHASE TWO	PHASE THREE
<p>Advanced Purified Water (APW) is used for irrigation at the American Flat Farm.</p> <p><b>Required NDEP Permits:</b></p> <ul style="list-style-type: none"> <li>• Category A+</li> <li>• RSWRF outfall mod. (NS2008500) – <i>Allows for irrigation of category A</i></li> <li>• Water Project for wells (drill and equip)</li> <li>• Water Project for future potable connection</li> </ul> <p><b>Desired NDEP Design Review:</b></p> <ul style="list-style-type: none"> <li>• Water project for APW treatment facility</li> <li>• UIC application framework</li> </ul> <p><b>Authorizes:</b>                      Project construction, well drilling and equipping, testing of new infrastructure. The water will be used only for irrigation, no injection will occur in Phase 1.</p>	<p>APW is injected into the aquifer. Extracted water will be used to irrigate.</p> <p><b>Required NDEP Permits:</b></p> <ul style="list-style-type: none"> <li>• RSWRF Outfall Mod. (NS2008500) – <i>Allows for injection of category A+</i></li> <li>• Underground Injection Control (UIC)</li> </ul> <p><b>Authorizes:</b>                      Injection of water into the aquifer and extraction of water for Farm irrigation. This will allow for injection and extraction well infrastructure testing.</p>	<p>APW is injected the aquifer. Extracted water will be used as potable water.</p> <p><b>Required NDEP Permits:</b></p> <ul style="list-style-type: none"> <li>• Permit to Operate (new potable water sources at extraction wells)</li> </ul> <p><b>Authorizes:</b>                      Extraction of water and use in the TMWA potable water system (NV0000190).</p>

**Authorizes TMWA to serve Category A+ water from the extraction wells to the public.**

Deliverables to NDEP	Expectations from NDEP
<p><b>Final Engineering Report:</b></p> <ul style="list-style-type: none"> <li>• Intermediate groundwater modeling</li> <li>• Well water quality and aquifer response data</li> <li>• Compliance reports</li> </ul> <p><b>Permit Applications:</b></p> <ul style="list-style-type: none"> <li>• Request for permit to operate the extraction wells into the potable water system</li> </ul>	<ul style="list-style-type: none"> <li>• Review of Engineering Report</li> <li>• Permit to operate extraction wells to the potable water system</li> </ul>



## Project Funding

### 33) Novel Treatment Grant Applications

- **May 2023** – Grant applications submitted for novel adsorbant vessels and biologically activated carbon filters.

### 34) \$3M EPA Community Grant Application

- **Sep 2023** – EPA community grant application submitted and awarded to the project, requesting \$3M.

### 35) \$30M BOR Title XVI Grant Application

- **Dec 7, 2023** – Bureau of Reclamation WaterSMART Title XVI WIIN Act Water Reclamation and Reuse Projects application submitted.

### 36) Submit Letter of Intent for CWSRF (COR)

- **May 2024** – The City of Reno will submit an LOI for the Clean Water State Revolving Fund and begin the process of obtaining a loan for this project. This will be contingent funding if a WIFIA loan is not secured.

### 37) Submit Letter of Intent for DWSRF (TMWA)

- **May 2024** – The Truckee Meadows Water Authority will submit an LOI for the Drinking Water State Revolving Fund and begin the process of obtaining a loan for this project.

### 38) SRF Applications Preparation

- **Jun 2024** – Loan applications for and CWSRF and DWSRF will be prepared by the project team. Approvals by respective council and boards will be required at critical milestones along the loan application and review process.

### 39) Notice of Grant Awards from BOR

- **June 2024** – Announcement of \$30M award for the WaterSMART Title XVI grant.

### 40) NEPA Final Environ. Report Complete

- **Aug 2024** – Environmental Assessment report is complete and ready for submission to funding agencies for review.

### 41) Clean Water SRF Loan is Secured

- **Dec 2024** – Loan approval is required prior to Guaranteed Maximum Price (GMP) 1 being presented to COR council for approval.

### 42) Drinking Water SRF Loan is Secured

- **Dec 2024** – Loan approval is required prior to Guaranteed Maximum Price (GMP) 1 being presented to COR council for approval.

**43) GMP 1 Approved for Long Lead Items**

- **Feb 2025** – GMP 1 for procurement of items with long lead times will be presented to COR council and TMWA board for approval.

**44) GMP 2 Approved for CMAR to Begin**

- **Apr 2025** – GMP 2 for construction costs will be presented to COR council and TMWA board for approval.

## Construction

**45) Notice to Proceed Issued to CMAR**

- **Jun 2025** – The Contractor (CMAR) can mobilize and begin construction.

**46) Major Work at RSWRF Complete**

- **Sep 2026** – Coagulation / Flocculation / Dissolved Air Flotation (CFDAF) facilities are complete.

**47) Major Work at APWF Complete**

- **Apr 2027** – Advanced Purified Water Facility (APWF) facilities are complete.

**48) Injection and Extraction Wells Built**

- **May 2027** – Wells are drilled and equipped; buildings are complete.

**49) Pipeline Construction Finished**

- **Jul 2027** – Pipeline construction between all facilities is complete.

**50) Construction is Substantially Complete**

- **Q4 2027** – The project is substantially complete allowing for startup and commissioning of new infrastructure.

## Startup and Phasing

**51) Phase 1: Final Connections and Plant Startup**

- **Aug 2027** – New infrastructure testing and commissioning. Water produced as a result of the startup activities will be used for irrigation.

**52) Phase 2: Injection of APWF A+ Water**

- **2028** – Water will be injected into the aquifer, allowing for testing and commissioning of injection well infrastructure, and subsurface storage.

**53) Phase 3: Extracted A+ Water to Potable Use**

- **2029-2030** – Following Phase 2 and once the permit to operate is secured, TMWA will use the extraction wells to produce potable water.