Operations Committee Meeting - August 21, 2019

1. Agenda Packet
   Documents:
   
   190821 AGENDA PACKET - POSTED ON 08162019.PDF

2. Related Agenda Items
   Documents:
   
   MEDIA INDEX BY AGENDA ITEM - POSTED ON 08212019.PDF
AGENDA

DATE: Wednesday, August 21, 2019              TIME: 10:00 a.m.

1. CALL MEETING TO ORDER AND ROLL CALL.

2. ITEMS TO BE ADDED, WITHDRAWN, OR REORDERED IN THE AGENDA.

3. PUBLIC COMMENT.
   Opportunity for members of the public to address the Committee. (Government Code Section 54954.3).

4. ACTION AGENDA.
   The following items on the Action Agenda call for discussion and action by the Committee. All items are placed on the Agenda so that the Committee may discuss and take action on the item if the Committee is so inclined, including items listed for information.


B. Consideration to Approve the Water Supply Assessment for the National City Bayfront Projects

C. Overview of Water Treatment Management and Update of City of San Diego Transfer Facility (No Enclosure)

D. Consideration of the Request for Qualifications for Professional Services to Prepare a Feasibility Study on Maximizing Reservoir Assets and Expand Local Water Supply

5. CLOSED SESSION.
   At any time during the regular session, the Committee may adjourn to closed session to discuss real property matters within the attorney-client privilege, subject to the appropriate disclosures. (Government Code Section 54956.8).

6. NEXT MEETING DATE: Wednesday, September 4, 2019 at 10:00 a.m.

7. ADJOURNMENT.

This agenda was posted at least seventy-two (72) hours before the meeting in a location freely accessible to the Public on the exterior bulletin board at the main entrance to the Authority’s office and it is also posted on the Authority’s website at www.sweetwater.org. No action may be taken on any item not appearing on the posted agenda, except as provided by California Government Code Section 54954.2. Any writings or documents provided to a majority of the members of the Sweetwater Authority Governing Board regarding any item on this agenda will be made available for public inspection at the Authority Administration Office, located at 505 Garrett Avenue, Chula Vista, CA 91910, during normal business hours. Upon request, this agenda will be made available in appropriate alternative formats to persons with disabilities, as required by Section 202 of the Americans with Disabilities Act of 1990. Any person with a disability who requires a modification or accommodation in order to participate in a meeting should direct such request to the Board Secretary at (619) 409-6703 at least forty-eight (48) hours before the meeting, if possible.

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A Public Water Agency
Serving National City, Chula Vista and Surrounding Areas
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TO: Governing Board (Operations Committee)
FROM: Management
DATE: August 16, 2019


SUMMARY
Munther and Susan George, the owners of a vacant parcel at 18 Loualta Way, Chula Vista, have requested authorization through their agent to be served water remotely for a proposed single-family residence that is to be constructed on the subject parcel. The parcel and the proposed remote water service are illustrated in the attached sketch.

The parcel does not front an Authority water main within a public right-of-way or an Authority easement, creating a remote service condition. Based on staff review of the water system in this area and the Water Distribution System Master Plan, it has been determined that a water main extension is not required to serve the subject parcel. In accordance with the Authority’s Rates and Rules, a remote service subject to Governing Board approval is required to serve the parcel. As further required for approval, a private utility easement to allow access for the remote water service through the neighboring parcel has been recorded.

PREVIOUS BOARD ACTION(S):
The Board considers requests for remote services on a case-by-case basis.

FISCAL IMPACT
There will be no cost to the Authority associated with the remote service. The property Owner will pay for all costs associated with the installation of a new water service as part of the development of the subject parcel.

POLICY
It is the Authority’s practice for the Board to consider approval of a remote service to serve an area where it is determined that a water main extension is not required.

Strategic Plan Goal 2: System and Water Supply Reliability: Achieve an uninterrupted, long-term water supply through investment, maintenance, and innovation.
Memo to: Governing Board (Operations Committee)
Subject: Request for Remote Service – George Single Family Dwelling,
18 Loualta Way, Chula Vista
August 16, 2019
Page 2 of 2

- Objective SR 7: Review proposed development plans and install necessary infrastructure to ensure the facilities meet the required demand, achieve code compliance, avoid cross-connections, and have minimal-to-zero financial impacts to the Authority’s ratepayers.

**ALTERNATIVES**

1. Approve the Owner’s request to remotely serve the parcel at 18 Loualta Way, Chula Vista (A.P.N. 569-320-25-00). The Owner will pay all costs associated with the installation of the new water service as part of the development of the subject parcel.

2. Reject the remote service request.

**RECOMMENDATION**

Staff recommends the Governing Board approve the Owner’s request to remotely serve the parcel at 18 Loualta Way, Chula Vista (A.P.N. 569-320-25-00). The Owner will pay all costs associated with the installation of the new water service as part of the development of the subject parcel.

**ATTACHMENT**

Sketch – George Single Family Dwelling
Request for Remote Service
18 Loualta Way, Chula Vista
APN: 569-320-25-00

50 Feet

Private Access and Utility Easement (green)
Proposed Single Family Dwelling
Proposed Remote Service
Proposed Water Meter

18 Loualta Way
APN: 569-320-25-00

20 Loualta Way
APN: 569-320-26-00

16 Loualta Way
APN: 569-320-21-00

486 Hilltop Drive
APN: 569-320-11-00

VICTINITY MAP

I:\eng\Dev\George SFR\Committee Mtg. Docs\Remote Service Req_George SFR-Sketch
I:\eng_pool\Arturo\SKETCHES\2019\Remote Service Req_George SFR
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TO: Governing Board (Operations Committee)  
FROM: Management  
DATE: August 16, 2019  
SUBJECT: Consideration to Approve the Water Supply Assessment for the National City Bayfront Projects  

SUMMARY  
The San Diego Unified Port District (Port), in a joint effort with the City of National City, is preparing an Environmental Impact Report (EIR) for the National City Bayfront Projects (Project), in accordance with the California Environmental Quality Act (CEQA).  

The Port provided the Authority a copy of the Notice of Preparation and Initial Study for the Project EIR. In response, the Authority provided the Port with a comment letter dated January 31, 2019, indicating that the Project may be subject to the preparation of a Water Supply Assessment (WSA) pursuant to California Water Code (CWC) Section 10910 and California Senate Bill 610 (SB 610). As the CEQA lead agency, the Port then submitted a letter to the Authority dated April 26, 2019, requesting the preparation of a WSA for the Project. Both letters referenced above are included as Attachments A and B, respectively.  

Project Overview  
Per Attachment B, the Project consists of six different projects with a total coverage area of 80.49 acres. Proposed land use designations include commercial, industrial, and expansion of an existing park. The following table describes existing and proposed developments for the six different projects:  

<table>
<thead>
<tr>
<th>Site</th>
<th>Area (acres)</th>
<th>Existing Use</th>
<th>Proposed Use</th>
</tr>
</thead>
</table>
| 1    | 6.2          | Vacant and National City Rail Depot | • Retain existing National City Rail Depot  
• Vacant parcels are unknown but EIR is analyzing:  
  o 150-room hotel with approximately 250,000 square feet (sf)  
  o 15,500 sf restaurant  
  o 12,000 sf of retail space. |
| 2    | 6.8          | Maritime operations associated with Pasha Automotive Services | • Up to 4,000 linear feet of new railroad tracks consisting of two 2,000 linear feet parallel sets of tracks  
• Retain existing maritime operations associated with Pasha Automotive Services |
Memo to: Governing Board (Operations Committee)  
Subject: Consideration to Approve the Water Supply Assessment for the National City Bayfront Projects  
August 16, 2019  
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<table>
<thead>
<tr>
<th>Site</th>
<th>Area (acres)</th>
<th>Existing Use</th>
<th>Proposed Use</th>
</tr>
</thead>
</table>
| 3    | 21.2 (land) 25.7 (water) | Vacant, Pier 32 Marina, and maritime operations associated with Pasha Automotive Services | **Phase 1**  
- Retain existing Pier 32 Marina  
- Add Recreational Vehicle (RV) park consisting of 135 RV sites and 18,000 sf of supporting facilities (e.g. administration building, restrooms, and maintenance building)  
- 40,000 sf of dry boat storage  
- 60 modular cabins for overnight stays for a total of 25,200 sf  
- Additional in-water features such as floating docks and gangways  
**Phase 2**  
Remove 65 RV sites constructed in Phase 1, for a final configuration of 70 RV sites, and construct the following:  
- 40-room hotel with a total of 50,000 sf  
- 60-room hotel including 16,500 sf of retail space for a total of 83,000 sf  
- 282-room hotel with a total of 500,000 sf  
- 81-room hotel with a total of 70,000 sf |
| 4    | 7.76 | Pepper Park and maritime operations associated with Pasha Automotive Services | Add 2.5 acres to the existing Pepper Park for a total size of 7.76 acres |
| 5    | 6.76 | Maritime operations associated with the National City marine terminal | Reconfigure existing maritime operations associated with the National City marine terminal |
| 6    | 6.07 | Roadway with parking | Close roadway and use space for maritime operations associated with Pasha Automotive Services |

**Water Supply Assessment (WSA)**

The Project was not specifically addressed in the Authority's 2015 Urban Water Management Plan; therefore, at the Port's request, the Authority prepared the WSA, which is intended to be used by the Port in its CEQA evaluation. The WSA prepared by the Authority includes a thorough discussion of the Authority's total projected water supplies available during normal, single dry, and multiple dry year periods during a 20-year projection, and whether the projected water supplies will meet the projected water demands associated with the proposed Project.

The WSA concludes that there will be sufficient water supplies to meet the Project water demands during normal, single dry and multiple dry year periods during the 20-year
projection. However, during the third and last year of the multiple dry year period, the 2015 Urban Water Management Plan from the San Diego County Water Authority (CWA) concludes that there will be a shortage of imported water supplies of approximately 9% when compared to the previous year. Therefore, the water demands for the Project for the third and final year of the multiple dry year period would need to be met by an equal amount of increased water conservation in the Authority's service area.

In addition, the WSA indicates that the Authority has infrastructure limitations that would not allow it to meet the preliminary fire flow demands provided by the National City Fire Department plus the maximum day demands for Site Nos. 1 and 3 of the proposed Project. To meet the required fire flow demands plus maximum day demands, the Project proponent(s) would need to replace the existing 12-inch polyvinylchloride (PVC) water mains adjacent to Site Nos. 1 and 3 with 16-inch PVC water mains.

The WSA also cautions that drought conditions and legal issues in the Colorado River Basin, plus legal and regulatory issues involving utilization of the Sacramento-San Joaquin River Delta to convey State Water Project water, may jeopardize the ability of the Metropolitan Water District of Southern California, CWA, and the Authority to provide a supply of water to serve the Project.

In accordance with SB 610, the water provider must prepare and approve a WSA for a project meeting the parameters found in CWC Section 10910 et seq. within the stipulated time frame of SB 610, after receiving a request from a CEQA lead agency. SB 610 allows the water provider to request a one-time 30-day extension from the CEQA lead agency. In accordance with SB 610, the Authority requested a 30-day extension from the Port and the Port granted the request in a letter dated July 10, 2019. This letter is included as Attachment C.

In accordance with SB 610, the Authority’s Governing Board must formally approve the WSA for the Project so the CEQA lead agency can include the WSA in its CEQA evaluation. The WSA is included as Attachment D.

**PAST BOARD ACTION**
There has been none.

**FISCAL IMPACT**
There is no fiscal impact.

**POLICY**
California Senate Bill 610 (SB 610) requires that the Authority, as the water provider, prepare and approve a WSA within the stipulated time of SB 610 after receiving a request from the CEQA lead agency.

Strategic Plan Goal 2: System and Water Supply Reliability (SR) - Achieve an uninterrupted, long-term water supply through investment, maintenance, innovation and developing local water resources.
Objective SR7: Review proposed development plans and install necessary infrastructure to ensure the facilities meet the required demand, achieve code compliance, avoid cross-connections, and have minimal-to-zero financial impacts to the Authority's ratepayers.

ALTERNATIVES
1. Approve the Water Supply Assessment (WSA) for the National City Bayfront Projects.

2. Direct staff to modify the Water Supply Assessment (WSA) for the National City Bayfront Projects to indicate the required water distribution system improvements will be funded and implemented by the Authority.

RECOMMENDATION
Staff recommends that the Governing Board approve the Water Supply Assessment for the National City Bayfront Projects.

ATTACHMENTS
A. Letter from the Authority to the Port, dated January 31, 2019, regarding the Project & Plan Amendments, Notice of Preparation

B. Letter from the Port to the Authority, dated April 26, 2019, regarding Request for WSA for Project EIR

C. Letter from the Port to the Authority, dated July 10, 2019, regarding 30-Day Extension for WSA for Project EIR

D. WSA for Project, dated August 2019
Attachment A

Letter from Sweetwater Authority to the San Diego Unified Port District, dated January 31, 2019 – National City Bayfront Projects & Plan Amendments, Notice of Preparation
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January 31, 2019

Ms. Anna Buzaitis
Program Manager, Planning and Green Port
San Diego Unified Port District
3165 Pacific Highway
San Diego, CA 92101

Subject: National City Bayfront Projects & Plan Amendments, Notice of Preparation
SWA File: (Dev) NC Bayfront

Dear Ms. Buzaitis:

Thank you for providing Sweetwater Authority (Authority) with a copy of the Notice of Preparation and Initial Study for the preparation of an Environmental Impact Report (EIR) for the National City Bayfront Projects and Plan Amendments (Project) prepared by the San Diego Unified Port District (SDUPD). Based on the Authority's review, the following comments are provided.

Water Supply Assessment

As described in the Notice of Preparation, the Project includes the construction of up to five hotels with 463 rooms, RV park areas, modular cabins, an expanded marina, and tourist/visitor-serving commercial development including commercial and retail uses. Please note that this project may be subject to the preparation of a Water Supply Assessment pursuant to California Water Code Section 10912 (Section 10912) and California Senate Bill 610 (SB610). SB 610 requires that once the SDUPD, as lead agency, determines that a "project" as defined by Section 10912 is subject to CEQA, and determines the type of CEQA document required, a request be made to the water provider to prepare a Water Supply Assessment (WSA) to be included in the Project's Draft EIR. Upon determination by the SDUPD that a WSA is required for the project, a request for its preparation shall be made to the Authority. The Authority is available to consult with the SDUPD to assist with information to help make a determination for the WSA requirement.

Water Utilities

There are multiple distribution water mains (mains), service laterals, and water appurtenances located within the Project site. To minimize the potential for conflicts between water facilities and designated public spaces within the Project, the Authority requests that water facilities located within Project areas be relocated to
Ms. Anna Buzaitis  
Re: National City Bayfront Projects & Plan Amendments, Notice of Preparation  
January 31, 2019  
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roads, such as within the realigned Marina Way, and away from planned development areas and environmental buffers. Please note that the relocation of existing Authority facilities and new facilities to serve the project would be subject to the Authority's Rates and Rules, Design Standards, and Standard Specifications for the Construction of Water Facilities, all of which can be found on the Authority's website. The Authority recommends early coordination regarding relocation of facilities in order to avoid Project impacts and/or delays.

Please continue to include the Authority on the Project’s distribution list. If you have any questions, please contact Jason Mettler at (819) 409-6755, or jmettler@sweetwater.org.

Sincerely,

SWEETWATER AUTHORITY

[Signature]

Luis Valdez, P.E.
Engineering Manager

cc: Mr. Ron Mosher, Sweetwater Authority
    Mr. Jason Mettler, Sweetwater Authority
    Mr. Israel Marquez, Sweetwater Authority
Attachment B

Letter from the San Diego Unified Port District to Sweetwater Authority, dated April 26, 2019 – Request for Water Supply Assessment for National City Bayfront Projects EIR
April 26, 2019

Jason Mettler  
Sweetwater Authority  
505 Garrett Avenue  
PO Box 2328  
Chula Vista, CA 91912-2328

SUBJECT: Request for Water Supply Assessment for National City Bayfront Projects EIR

Dear Mr. Mettler:

Per your request in a letter dated January 31, 2019 (see attached), and in accordance with Senate Bill 610 (California Water Code Section 10910 et al), this letter serves as the San Diego Unified Port District's request for Sweetwater Authority to prepare a Water Supply Assessment for the National City Bayfront Projects Environmental Impact Report (EIR). The Project is a joint effort with the City of National City, with the Port serving as the CEQA Lead Agency for the EIR.

Enclosed with this letter Is a table that Identifies the following for each of the six (6) main Sites of the project being evaluated in the EIR:

- Site size
- Existing land use/zoning
- Proposed land use/zoning
- Existing use of Site
- Proposed use of Site
- Address of Site (if applicable)
- APN of Site (if applicable)
- Anticipated Building Construction Type
- Square footage of buildings
- Preliminary fire flow estimates

A map that corresponds to the Site # shown on the table Is also enclosed.

If you have any questions, please contact me at (619) 686-7263 or email me at abuzaiti@portofsandiego.org. Thank you in advance for your help.

Sincerely,

Anna Buzaitis  
Program Manager, Planning

cc: Ray Pe, Principal Planner, City of National City

encl: Letter dated 1/31/19; Table of Project Information; Map of Site
<table>
<thead>
<tr>
<th>Site</th>
<th>Parcel Size (acres)</th>
<th>Proposed Land Use(s)</th>
<th>Existing Use</th>
<th>Proposed Use</th>
<th>Address of Site</th>
<th>GPM</th>
<th>Proposed Time (hours)</th>
<th>Building Construction Type</th>
<th>Total Square Footage</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6.2 acres</td>
<td>Commercial Manufacturing; Industrial Tourism</td>
<td>Commercial manufacturing; Industrial tourism</td>
<td>RV park: 3,000 GPM; 3 hours</td>
<td>No address; is generally north of West 32nd Street, west of Marina Way, east of Tidelands Avenue, and south of the National Distribution Center (1200 Bay Marina Drive, National City, CA 91950)</td>
<td>3,000</td>
<td>3</td>
<td>RC Rail Depot; future use for vacant parcels is unknown and is based on allowed uses in zone. For vacant parcels, CIR is analyzing the following &quot;scenario&quot; development: 195-room hotel = 15,000 sf + restaurant = 13,000 sf total</td>
<td>BUILDING CONSTRUCTION TYPE IS N/A</td>
<td>Up to 6,000 linear feet of new railroad tracks, which consist of two parallel sets of tracks, 3,000 linear feet each</td>
</tr>
<tr>
<td>2</td>
<td>6.8 acres</td>
<td>Commercial Manufacturing; Industrial Tourism</td>
<td>Services</td>
<td>282-room hotel with a total of 500,000sf</td>
<td>No address; is generally north of West 32nd Street, west of Marina Way, east of Tidelands Avenue, and south of the National Distribution Center (1200 Bay Marina Drive, National City, CA 91950)</td>
<td>6,000</td>
<td>4</td>
<td>Retail: TYPE V-B</td>
<td>BUILDING CONSTRUCTION TYPE IS N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>3</td>
<td>21.2 acres</td>
<td>Commercial Manufacturing; Commercial Tourism</td>
<td>Pepper Fish; Marine operations associated with Pasha Automotive Services</td>
<td>RV park with up to 135 RV sites and 13,000 sf of supporting facilities (e.g., service building, restroom, maintenance building). SUPPORTING FACILITIES ARE TYPED V-A.</td>
<td>No address; 32nd Street, between Tidelands Avenue and West 32nd Street</td>
<td>13,000</td>
<td>4</td>
<td>Marine-Related Maritime operations; maritime operations associated with Pasha Automotive Services</td>
<td>BUILDING CONSTRUCTION TYPE IS N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>4</td>
<td>7.76 acres</td>
<td>Park/Parkway; Marine Terminal</td>
<td>Park/Parkway</td>
<td>Pasha</td>
<td>No address; is generally south of West 32nd Street, west of Pepper Park, and north of Sweetwater Channel.</td>
<td>N/A</td>
<td>N/A</td>
<td>BUILDING CONSTRUCTION TYPE IS N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>5</td>
<td>6.07 acres</td>
<td>Marine Terminal</td>
<td>Marine Terminal</td>
<td>Close to marina space for marine operations associated with Pasha Automotive Services</td>
<td>No address; is generally north of West 32nd Street, west of Pepper Park, and north of Sweetwater Channel.</td>
<td>N/A</td>
<td>N/A</td>
<td>BUILDING CONSTRUCTION TYPE IS N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
National City Bayfront Projects EIR

Project Components for Water Supply Assessment
Hi Erick,

Per our conversation, the purpose of this email is to document the minor correction of the square footage of supporting facilities in Phase 1 of Project 3 in the Water Supply Assessment (WSA) for the National City Bayfront Projects. More specifically, my original request to prepare the WSA incorrectly noted that the supporting facilities (e.g., administration building, restrooms, and a maintenance building) as proposed to be 13,000sf, instead of the correct square footage of 18,000sf. The following is the correction to the draft WSA shown in track changes:

1. **Phase 1**: Retaining the existing Pier 32 Marina and adding a Recreational Vehicle (RV) Park consisting of
   a. 135 RV sites and 18,000 sf of supporting facilities such as administration building, restrooms, and a maintenance building.

In addition, on 8/13/19, the City of National City Fire Marshal indicated that the change from 13,000sf to 18,000sf increases the fire flow from “3,000 GPM; 3 hours @ 20 PSI” to “3,500 GPM; 3 HRS @ 20 PSI.”

Please let me know if you have any questions on this.

Thank you,
Anna

Hi Jason,

Attached please find attached the Port’s request to Sweetwater Authority to prepare a Water Supply Assessment.

Please call or email me if you have any questions.

Thank you,
Anna

Anna Buzaitis
Program Manager, Planning & Green Port
3165 Pacific Highway, San Diego, CA 92101
(o) (619) 686.7263 • (c) 619.458.5519
Attachment C

Letter from the San Diego Unified Port District to Sweetwater Authority, dated July 10, 2019 – 30-Day Extension for Water Supply Assessment for National City Bayfront Projects EIR
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July 10, 2019

Erick Del Bosque, PE
Sweetwater Authority
505 Garrett Avenue
Chula Vista, CA 91910

Subject: 30-Day Extension for Water Supply Assessment for National City Bayfront Projects Environmental Impact Report

Dear Erick,

Per your request, the San Diego Unified Port District ("District") hereby agrees to grant a 30-day extension to Sweetwater Authority for completion of the Water Supply Assessment (WSA) for the National City Bayfront Projects Environmental Impact Report. The District agrees to this waiver based on the understanding that Sweetwater Authority staff will work to have the WSA docketed for adoption by Sweetwater Authority's Governing Board in August 2019.

If you have any questions regarding this letter, please contact me at (619) 686-7263 or via email at abuzaiti@portofsandiego.org.

Sincerely,

Anna Buzaitis
Program Manager, Planning

cc: Ray Pe, Principal Planner, City of National City
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Attachment D

Water Supply Assessment for the National City Bayfront Projects, dated August 2019
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WATER SUPPLY ASSESSMENT

National City Bayfront Projects

August 2019

Sweetwater Authority
Prepared by
Sweetwater Authority Staff

National City Bayfront Projects
Water Supply Assessment

Sweetwater Authority
505 Garrett Avenue
Chula Vista, CA 91910
www.sweetwater.org
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Section 1 – Introduction

The City of National City and the San Diego Unified Port District (Port) are currently preparing an Environmental Impact Report (EIR) in accordance with the California Environmental Quality Act (CEQA), for the National City Bayfront Projects, with the Port serving as the CEQA Lead Agency for the EIR. The National City Bayfront Projects meets the definition of a “Project” as described in California Water Code Section 10912(a) and as such, a Water Supply Assessment (WSA) pursuant to Senate Bill (SB) 610 is required for the project. The National City Bayfront Projects includes the following developments:

1. A commercial and tourist development for
   a. A 150-room hotel with an approximate size of 250,000 square feet (sf).
   b. A restaurant with an approximate size of 15,500 sf.
   c. Retail space with an approximate size of 12,000 sf.

2. A new connector rail track consisting of two 2,000 linear feet parallel sets of tracks for a total of 4,000 linear feet, plus maritime operations associated with Pasha Automotive Services.

3. Phase 1: Retaining the existing Pier 32 Marina and adding a Recreational Vehicle (RV) Park consisting of
   a. 135 RV sites and 18,000 sf of supporting facilities such as administration building, restrooms, and a maintenance building.
   b. 40,000 sf of dry boat open storage consisting of steel racks with no walls.
   c. 60 modular cabins for overnight stays to be made from shipping containers. Each cabin will have 420 sf for a total of 25,200 sf.
   d. Water features such as floating docks and gangways.

   Phase 2: Remove 65 RV sites constructed in Phase 1, for a final configuration of 70 RV sites, and construct
   a. A 40-room hotel with a total of 50,000 sf.
   b. A 60-room hotel and 16,500 sf of retail space for a total of 83,000 sf.
   c. A 282-room hotel with a total of 500,000 sf.
   d. An 81-room hotel with a total of 70,000 sf.

4. Expanding Pepper Park by 2.5 acres for a total size of 7.76 acres.

5. Reconfigure maritime operations associated with the National City Marine Terminal.

6. Closing 6.07 acres of Tideland Avenue and using the space for maritime operations associated with Pasha Automotive Services.
Section 2 – Identification of the Public Water Provider

In accordance with California Water Code (CWC) Section 10912(c), Sweetwater Authority is the “public water system” for the area in which the National City Bayfront Projects is proposed. As such, the Port, as the Lead Agency for CEQA, requested that Sweetwater Authority prepare a WSA. This request along with a 30-day extension from the Port to prepare the WSA are attached in Appendix A. The WSA is intended to be used by the City of National City and the Port in their evaluation of the Project under the CEQA process.

Sweetwater Authority was formed by the condemnation of a private water company that served the cities of Chula Vista and National City, and a portion of the County of San Diego. The condemnation suit was filed by the South Bay Irrigation District (SBID) and the City of National City on May 10, 1968, and was finalized on August 30, 1977. SBID and the City of National City formed Sweetwater Authority by the Joint Powers Agreement of February 1, 1972. The Agreement was amended and re-adopted on July 22, 1977. Sweetwater Authority was formed pursuant to the provisions of Article 1, Chapter 5, Division 7, Title 1, of the Government Code of the State of California. Sweetwater Authority is empowered by the Joint Powers Agreement to acquire, own, lease, operate, manage, maintain, and improve the water system.

SBID was formed in March 1951, under the Irrigation Law of California (Division 11, Section 20500 of the CWC), and includes the western area of the City of Chula Vista and the unincorporated area of Bonita within and adjacent to the Sweetwater River Valley. It also overlaps small segments of the cities of National City and San Diego. On May 1, 1990, SBID transferred ownership of the water system, including all of the property deeds and easements to Sweetwater Authority. The City of National City is part of the urbanized South Bay region of the San Diego metropolitan area located on the San Diego Bay. Incorporated in 1887, National City is the second oldest city in the County of San Diego. SBID and the City of National City are member agencies of the San Diego County Water Authority (CWA).

Section 3 – Previous Water Supply Assessments

Sweetwater Authority has prepared previous WSAs for other projects in National City, in consultation with CWA and the City of National City pursuant to Public Resources Code Section 21151.9, and CWC Sections 10631, 10657, 10910, 10911, 10912, and 10915 referred to as SB 610, and Business and Professions Code Section 11010. SB 610 amended State law, effective January 1, 2002, to improve the link between information on water supply availability and certain land use decisions made by cities and counties. The previous WSAs prepared for projects in the near vicinity of the National City Bayfront Projects and reviewed by Sweetwater Authority in preparation of this WSA are:
Section 4 – Urban Water Management Plan

Sweetwater Authority prepares an Urban Water Management Plan (UWMP) every five years, in accordance with CWC Sections 10610 through 10656 of the Urban Water Management Planning Act (Act), which were added by Statute 1983, Chapter 1009, and became effective on January 1, 1984. The Act, which was Assembly Bill (AB) 797, requires that every urban water supplier providing water for municipal purposes to more than 3,000 customers, or supplying more than 3,000 acre-feet of water annually, shall prepare and adopt an UWMP in accordance with the pre-described requirements.

The Act requires urban water suppliers to file plans with the California Department of Water Resources (DWR) describing and evaluating reasonable and practical efficient water uses, reclamation, and conservation activities. As required by law, Sweetwater Authority’s UWMP includes projected water supplies required to meet future demands. Sweetwater Authority prepared UWMPs in 1985, 1990, 1995, 2000, 2005, 2010, and 2015 and filed those UWMPs with DWR.

The Water Conservation Act of 2009, enacted on November 10, 2009, requires all water suppliers to further increase water use efficiency. The legislation, known as SBx7-7, sets an overall goal of reducing per capita urban water use by 20% by 2020. SBx7-7 requires that every urban water supplier shall include in its UWMP a status update regarding ability to meet the 2020 target. Sweetwater Authority’s 2015 UWMP contains the SBx7-7 required elements.

On May 31, 2016, California Governor Jerry Brown signed into law two new bills that require urban water providers throughout California to set new permanent water use targets for their service areas by 2022. SB 606 and AB 1668 provide a framework for setting water use targets, as well as implementing and enforcing the new water use requirements. While many details for implementing the new water use requirements will be determined over the next several years, the overall framework includes:

- A standard for indoor residential water use of 55 gallons per person per day, dropping incrementally to 50 gallons beginning in 2030.
- A standard for outdoor residential water use (to be determined) based upon a community’s climate and the amount of landscaped area.
- A standard for water loss due to leaks in water system pipes (to be determined).

There are no immediate impacts to Sweetwater Authority customers from SB 606 and AB 1668. Therefore, these future requirements do not impact the National City Bayfront Projects at this time.
The adopted 2015 UWMP did not account for the water demands associated with the National City Bayfront Projects. Therefore, in accordance with CWC section 10910(c)(3), and Government Code section 66473.7(a)(2), this WSA includes a discussion of whether Sweetwater Authority's total projected water supplies, available during normal, single dry, and multiple dry water years during a 20-year projection, would meet the projected water demand associated with the proposed project, in addition to Sweetwater Authority's existing and planned future uses, including agricultural and manufacturing uses. Applicable information from Sweetwater Authority's 2015 UWMP has been used in the preparation of this WSA.

Section 5 – Water Demands

5.1 Project Demand Analysis

Sweetwater Authority's water system provides water service to approximately 191,000 consumers within the City of National City, a portion of the City of San Diego, and the SBID, which consists of a portion of the City of Chula Vista and the unincorporated portion of the County of San Diego known as Bonita. Sweetwater Authority's service area covers 32 square miles and contains approximately 33,224 service connections. In addition, the water system has emergency interconnections to three water agencies: Otay Water District, the City of San Diego, and the California American Water Company. At the present time, there are no plans for expansion of Sweetwater Authority's service area.

Projected demands for years 2020 through 2040 were calculated using the SANDAG 2050 Regional Growth Forecast for population and multiplying the population by 105 gallons per capita per day (GPCD). The GPCD represents the average demand in Sweetwater Authority's service area over fiscal years 2005 – 2015. This ten-year period included both wet and dry years, and also incorporates water savings that took place in recent years as a result of the drought. Therefore, the 105 GPCD rate is considered to be a realistic anticipation of future water demands under a variety of hydrologic conditions and taking into consideration long-term water savings.

5.1.1 Climate

Climate conditions within the service area are characteristically Mediterranean along the coast, with mild temperatures year-round. The majority of the service area is within two miles of the San Diego Bay. However, the Bonita area and the reservoirs are located farther inland, and experience slightly hotter summers and colder winters. More than 80 percent of the region's rainfall occurs in the period from December through March. Average annual rainfall is approximately 11.3 inches per year at the Sweetwater Reservoir based on records dating back to 1888. Climate data is included in Table 1, and consists of the 131-year Sweetwater Reservoir average monthly rainfall, and...
Sweetwater Reservoir's average monthly high temperature based on records dating back to 1961. Average monthly evapotranspiration (ETo) data was obtained from the California Irrigation Management Information System (CIMIS) website for the Otay Lakes Station.

### Table 1
**Climate Data**

<table>
<thead>
<tr>
<th></th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ave precip (in.)</td>
<td>2.14</td>
<td>2.16</td>
<td>1.91</td>
<td>0.83</td>
<td>0.36</td>
<td>0.07</td>
<td>0.05</td>
<td>0.06</td>
<td>0.19</td>
<td>0.60</td>
<td>1.05</td>
<td>1.89</td>
</tr>
<tr>
<td>Ave temp (°F)</td>
<td>69.8</td>
<td>69.6</td>
<td>70.3</td>
<td>72.8</td>
<td>73.8</td>
<td>77.1</td>
<td>82.7</td>
<td>85.3</td>
<td>83.7</td>
<td>80.0</td>
<td>74.6</td>
<td>69.1</td>
</tr>
<tr>
<td>ETo</td>
<td>2.24</td>
<td>2.72</td>
<td>4.11</td>
<td>4.91</td>
<td>5.37</td>
<td>5.90</td>
<td>6.32</td>
<td>6.05</td>
<td>4.86</td>
<td>3.84</td>
<td>2.74</td>
<td>2.00</td>
</tr>
</tbody>
</table>

#### 5.1.2 Population

Population and housing growth data for Sweetwater Authority's service area was obtained from the SANDAG 2050 Regional Growth Forecast Series 13 Model for years 2020 through 2040. The projections predict that Sweetwater Authority’s service area will increase in population by approximately 17% from 2019 to 2040, which represents an annual growth rate of less than 1% per year. These estimates do not include potential increases in population due to the National City Bayfront Projects as this is a development that is not proposing housing, but do include other redevelopment projects identified in Chula Vista’s Vision 2020 General Plan, the Port’s Chula Vista Bayfront Master Plan, and National City’s Downtown Specific Plan and Westside Specific Plan. Population projections are shown in Table 2 and are the same as those calculated for Sweetwater Authority’s 2015 UWMP.

### Table 2
**SANDAG Population**

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
<th>2040</th>
</tr>
</thead>
<tbody>
<tr>
<td>SANDAG 2050 Population Projection</td>
<td>190,654</td>
<td>191,244</td>
<td>194,318*</td>
<td>200,286</td>
<td>213,907</td>
<td>222,966</td>
</tr>
</tbody>
</table>

* SANDAG's Series 13 projections show a population decrease in the South Bay Irrigation District’s (SBID) service area between 2020 and 2025; however, this population decrease could not be justified. Therefore, Sweetwater Authority has adjusted the 2025 population for its service area by interpolating between SANDAG estimates for SBID from 2020 to 2030. This interpolation modifies the 2025 population from 191,664 per the SANDAG Series 13 model to 194,318 as shown in Table 2.

#### 5.1.3 Demand Assessment

Table 3 shows the historical and projected water demands by use sector through 2040. The projected water demands below were calculated using the population estimates in Table 2 and multiplying them by 105 GPCD. These total water demands through 2040 are identical to those presented in Sweetwater Authority’s 2015 UWMP; however, estimated water demands per sector might differ slightly from those presented in
Sweetwater Authority’s 2015 UWMP because the UWMP did not include water estimates for non-revenue water. Non-revenue water is the amount of water that is not accounted for in Sweetwater Authority’s water usage, such as water used for firefighting purposes, water lost through water leaks, and water not accounted for due to discrepancies in water meter accuracy.

**Table 3**

**Historical and Projected Potable Water Demands**
(Not including the National City Bayfront Projects)
(acre-feet)

<table>
<thead>
<tr>
<th>Water Use Sectors</th>
<th>Fiscal Year Ending 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential 2</td>
<td>16,884</td>
</tr>
<tr>
<td>Commercial 3,4</td>
<td>4,320</td>
</tr>
<tr>
<td>Industrial</td>
<td>411</td>
</tr>
<tr>
<td>Public (Landscape)</td>
<td>1,742</td>
</tr>
<tr>
<td>Irrigation/Agricultural</td>
<td>44</td>
</tr>
<tr>
<td>Other 3</td>
<td>18</td>
</tr>
<tr>
<td>Non-Revenue Water</td>
<td>2,422</td>
</tr>
<tr>
<td>Total</td>
<td>25,841</td>
</tr>
</tbody>
</table>

**Notes:**
1. Fiscal Year July 1 through June 30
2. Residential includes domestic and irrigation for single-family, multi-family, and mobile homes.
3. Commercial includes domestic and irrigation for businesses and golf courses.
4. Prior to Fiscal Year 1991-92, commercial included mobile homes and apartments. Beginning in Fiscal Year 1991-92, mobile homes and apartments have been included in residential.
5. “Other” included construction meters and golf courses through Fiscal Year 1989-90. Subsequent to Fiscal Year 1989-90, “Other” only includes construction meters.

The National City Bayfront Projects consist of six different projects and the estimated demands for each project are shown in Table 4. Per email communication with the Port dated July 18, 2019, Project Nos. 1, 2, 3 (Phase 1), 4, 5, and 6 are expected to be completed by 2022, while Project No. 3 (Phase 2) is expected to be completed by 2025.

The demands in Table 4 for year 2025 were developed by Sweetwater Authority based on project areas and number of hotel rooms provided by the Port; water usage per equivalent dwelling unit established in Sweetwater Authority’s 2016 Water Capacity Fee August 2019
Report; actual audited water use data for commercial, industrial, and public (landscape) land use types within Sweetwater Authority’s service area for Fiscal Year (FY) 2018; and total acreage within Sweetwater Authority’s service area for the aforementioned land use types. Since the National City Bayfront Projects is expected to be built out by 2025, calculated demands for 2025 were carried over to years 2030, 2035, and 2040 since no new demands will be anticipated after the year 2025.

Table 4
National City Bayfront Projects Projected Water Demands

<table>
<thead>
<tr>
<th>Project No.</th>
<th>Land Use 1</th>
<th>Acres 1</th>
<th>Water Use 2 (gal/ac/day)</th>
<th>Projected Water Demand (acre-feet/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2020</td>
</tr>
<tr>
<td>1</td>
<td>Commercial (Hotels, Restaurants and Retail)</td>
<td>6.2</td>
<td>3,052</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>Industrial (Marine-Related Industrial)</td>
<td>6.8</td>
<td>54</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>Commercial (Hotels, RV Park, Boat Storage, etc.)</td>
<td>21.2 (land) 25.7 (water)</td>
<td>3,052</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>Landscape (Park/Plaza)</td>
<td>7.76</td>
<td>483</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>Industrial (Marine Terminal)</td>
<td>6.76</td>
<td>54</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>Industrial (Marine-Related Industrial)</td>
<td>6.07</td>
<td>54</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

Notes:
1. Based on the Port’s transmittal to Sweetwater Authority dated April 26, 2019.
2. Based on actual FY 2018 audited consumption within Sweetwater Authority’s service area for each land use type, while using total acreage for commercial, industrial, and parks/recreation land use types identified in Sweetwater Authority’s 2015 Water Distribution System Master Plan.
3. Demands for project no. 3 are based on the 21.2 acres for land and exclude the 25.7 acres of water.

Revised water demands for Sweetwater Authority’s service area including the National City Bayfront Projects are shown in Table 5. The total water demands associated with the National City Bayfront Projects were not included in any of Sweetwater Authority’s previous UWMPs. In addition, the total water demands have not been specifically included in CWA’s 2015 UWMP. However, the water demands from the National City Bayfront Projects can be met by purchasing additional water from CWA.
### Table 5
Historical and Projected Potable Water Demands
(Including the National City Bayfront Projects)
(acre-feet)

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5. “Other” included construction meters and golf courses through Fiscal Year 1989-90. Subsequent to Fiscal Year 1989-90, “Other” only includes construction meters.

### Section 6 – Demand Management Measures

Sweetwater Authority recognizes water conservation as a priority in its water use planning to manage water demand. The long-term goal of Sweetwater Authority’s water use efficiency program is to achieve and maintain water conservation goals for various use categories that are reasonable for that category. Specific objectives of Sweetwater Authority’s water use efficiency program are:

- Eliminate wasteful practices in water use
- Continue to develop information on both current and potential water conservation practices
- Ongoing, timely implementation of conservation practices
- Public information and education activities to spread knowledge of efficient water use techniques and devices

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Sweetwater Authority started a water conservation program in 1990. Initial efforts included a long-term public information program and cooperation with the conservation efforts of CWA. The water conservation program expanded significantly during the 1987-1992 drought, and the backbone of a long-term efficiency program was formed. Since that time and including the 2014-2017 drought, Sweetwater Authority has continued to revamp the conservation program by developing a variety of innovative and effective approaches to demand management.

Water use efficiency programs are developed and implemented on the premise that water conservation increases water supply by reducing the demand on available supply, which is vital to the optimal use of the region’s supply resources. Sweetwater Authority actively participates in countywide and regional demand management programs through CWA and Metropolitan Water District of Southern California (Metropolitan). As a member of CWA, Sweetwater Authority benefits from regional programs performed on behalf of its member agencies. Sweetwater Authority also participates in water use efficiency programs operated on a shared-cost basis among CWA, Metropolitan, and their member agencies.

The vast majority of water savings results from the installation of residential and commercial Ultra Low Flow Toilets (ULFT), High Efficiency Toilets (HET), and High Efficiency Washers (HEW). In 2008, Sweetwater Authority shifted emphasis towards more water efficient landscaping and commercial appliances. These programs continue to evolve. The resulting savings in supply from these programs and State mandated water conservation measures directly relates to additional available water in the San Diego region for beneficial use within CWA’s service area, including Sweetwater Authority. In partnership with CWA, and local land use agencies, Sweetwater Authority’s water use efficiency efforts are expected to grow and expand.

Sweetwater Authority’s fiscal year 2019-20 adopted budget includes just over $159,000 for water use efficiency education and customer incentive programs which complement the regional conservation programs available to Sweetwater Authority customers. These programs also reduce local and imported water demand.

Demonstrating its commitment to conservation, Sweetwater Authority officials became an original signatory to the Memorandum of Understanding (MOU) Regarding Urban Water Conservation in California, which created the California Urban Water Conservation Council (CUWCC) in 1991 in an effort to reduce California’s long-term water demands. As defined in the MOU, one of several water conservation Best Management Practices (BMP) was “a policy, program, practice, rule, regulation or ordinance or the use of devices, equipment or facilities which meets either of the following criteria: (a) An established and generally accepted practice among water suppliers that results in more efficient use or conservation of water; (b) A practice for which sufficient data are available from existing water conservation projects to indicate that significant conservation or conservation related benefits can be achieved; that the practice is technically and economically reasonable and not environmentally or socially
unacceptable; and that the practice is not otherwise unreasonable for most water suppliers to carry out."

From the time Sweetwater Authority became a signatory in 1991 until the BMPs were terminated in 2014, Sweetwater Authority made implementation of the CUWCC BMPs for water conservation a foundational element of its demand management programs, and a key component in its water resource management strategy. In 2014, sections of the California Water Code were significantly modified to address new demand management measures, technologies, and approaches to water use efficiency. These revisions have been incorporated into Sweetwater Authority’s water use efficiency programs and resulting demand management measures. The current demand management measures implemented by Sweetwater Authority are described below.

6.1 Water Waste Prevention

The following water waste prohibitions are designed to encourage efficient water use within the region, and provide a method for meeting demand reduction goals, should an extended water shortage occur.

Regional - The County of San Diego enforces several state and local ordinances requiring water conservation, to assure available water resources are put to beneficial use for all citizens of the county. California Plumbing Code, Section 402, requires the installation of water conserving fixtures in new construction. Section 67.101 of the County's Code of Regulatory Ordinances simply prohibits water waste: "No person shall waste or cause or permit to be wasted any water furnished or delivered by any agency distributing for public benefit any water dedicated to or provided for public use within the unincorporated territory of the county of San Diego."

In addition, the State Legislature determined in the Water Conservation in Landscaping Act (Government Code sections 65591 et seq.) that the State’s water resources are in limited supply. The Legislature also recognized that while landscaping is essential to the quality of life in California, landscape design, installation, maintenance, and management must be water efficient. Land use agencies including the cities and counties are required by the Act to enforce California’s Model Water Efficient Landscape Ordinance, or a similar ordinance which is at least as effective. For property within the County of San Diego, Section 6717(c)(1) of the County’s Zoning Ordinance meets this requirement as it applies to new and rehabilitated public and private landscapes that require a permit on developer installed residential landscapes. The County’s Water Conservation and Landscape Design Manual implements Zoning Ordinance Section 6712(d), which requires efficient irrigation uses (including rain sensors), transitional zones, use of native plantings, restriction on turf, use of mulch, the preservation of existing vegetation and natural features, and the use of reclaimed water when available.
Within the City of Chula Vista, landscape water efficiency is regulated through the City of Chula Vista Landscape Water Conservation Ordinance (Chapter 20.12). The general purpose of this chapter is to establish water use standards for landscapes in Chula Vista that implement the landscape design requirements established by the Water Conservation in Landscaping Act. Similarly, the City Council of the City of National City passed Ordinance 2010-2331 amending Title 18 of the Municipal Code by amending Chapter 18.54 establishing water efficient landscape regulations. The City of National City's landscape regulations were subsequently amended in 2015 and reaffirmed in Chapter 18.44.190.

Agency - Resolution 14-18, passed on September 24, 2014, adopted Sweetwater Authority's drought response plan. For use during emergency conditions such as drought or catastrophic interruption in service where additional water use restrictions are necessary, Sweetwater Authority's drought response plan established a four-level drought response plan allowing for water use cutbacks up to 40% or more, and established an allocation method of rationing water during drought levels. The plan sets customer guidelines for water conservation.

Resolution 15-18, passed June 24, 2015, amended Sweetwater Authority's drought response plan to align with state-wide emergency regulations imposed by the State Water Resources Control Board in response to statewide water supply conditions. In September 2014, a Level 2 Drought Watch was declared, which implemented mandatory water use restrictions. The activation of a Level 2 Drought Alert from Level 1, which had essentially been in effect since 2008, came after the implementation of statewide mandatory water use restrictions and mandatory water reduction of 25%.

Sweetwater Authority's drought response plan was subsequently revised multiple times from 2014 through 2016 in response to state activities and mandates. The current drought response plan adopted with Resolution 16-10, attached in Appendix B, passed on June 22, 2016. Also on June 22, 2016, Sweetwater Authority's Governing Board voted to rescind the Level 2 Drought Alert and resume a Level 1 Drought Watch status, following action taken by the State Water Resources Control Board to adopt a statewide water conservation approach that replaced the prior percentage-based water conservation standard. This new approach to water conservation is due to improved water supply conditions across the entire state, investments in drought-resistant local water supplies, and strong conservation efforts by all Californians. The new standard requires water agencies to self-certify the level of available water supplies assuming three additional dry years. Agencies that face a supply shortage after the third dry year will have a conservation standard equal to the shortage.

On April 7, 2017, Governor Jerry Brown officially declared a five-year long drought over in most of California, lifting the state-wide drought emergency that had been in effect since January 2014. The declaration left in place the requirement that agencies report on their urban water usage, and continued the prohibition on eight wasteful water practices. On May 31, 2018, Governor Jerry Brown signed into law two new bills that
will require urban water providers throughout California to set new permanent water use targets for their service areas by 2022. SB 606 and AB 1668 provide the framework; however, there are no immediate effects on Sweetwater Authority customers from these new laws.

6.2 Metering

All service connections located within Sweetwater Authority’s service area are metered. Sweetwater Authority requires the installation of water meters on all new services throughout its distribution system and bills by volume of water metered.

6.3 Conservation Pricing

Sweetwater Authority’s water rate structure is set up as an increasing block rate, which increases the cost of water in four tiers for single-family residential use. This encourages single-family residential users to limit their water use by charging more for units above a base amount. New rates became effective on January 1, 2019 with the adoption of Resolution 18-22, following the Water Rate Study produced in 2018.

The Tier 1 rate applies to all single-family residential customers for their first 10 hundred cubic feet (HCF) of bi-monthly water use. Rates increase with increased water use up to Tier 4, which applies to customers with a bi-monthly water use greater than 27 HCF. All other water users such as multi-family, commercial, industrial, public, and construction are billed at a single uniform rate, which is between the third and fourth tier rate of the residential customer for multi-family, commercial, and industrial users, and above the fourth tier for public agencies and construction use. Resolution 18-22 allowed charges from CWA and Metropolitan to Sweetwater Authority to be passed-through to customers, which can range from $1.05/HCF to $2.07/HCF depending on the Tier for single-family residential or the customer classification if not single-family residential.

6.4 Public Education and Outreach

Wholesale Agency Assistance Program – This demand management measure applies only to wholesale agencies. CWA provides conservation-related technical support and information to its member agencies, and manages regional programs on behalf of its member agencies. Sweetwater Authority, CWA, and Metropolitan share funding for some conservation incentives.

Public Information Programs – Sweetwater Authority promotes water conservation in coordination with the Water Conservation Garden, local land use agencies, neighboring water agencies, CWA, and Metropolitan. Regional activities include: public service announcements, demonstration gardens, conservation strategy meetings, water awareness month activities, water efficiency workshops, and landscape water use classes and contests. Sweetwater Authority independently distributes public information through its website, social media accounts, bill inserts, on-hold telephone messages,
annual Consumer Confidence Report/Calendar, newsletters, news releases, brochures, keynote speakers, classroom presentations, facility tours, video library, and participation in year-round special events and community festivals. Sweetwater Authority participates in regional drought, conservation, and environmental stewardship public outreach programs including the WaterSmart programs, the WaterSense Program from the Environmental Protection Agency, Climate Change Workgroups, and city Clean-Green programs.

- **Literature-Brochures.** Sweetwater Authority provides brochures and literature on a variety of water conservation topics including gray water, lawn watering, Xeriscape planting, WaterSmart, California Friendly and Naturescape gardening, drip irrigation, swimming pool maintenance, leak detection, and general household conservation tips. These are made available to residents through a literature rack at Sweetwater Authority's Administration Office and website, through individual and group mailings, through distribution to residential complex managers, through online and electronic media, and through distribution at public appearances by Sweetwater Authority Board members and staff.

- **Newsletters/Brochures.** Sweetwater Authority publishes a consumer newsletter, "On Tap" quarterly, incorporating conservation tips and programs. Brochures are developed and distributed to deal with specific conservation issues and to provide detailed information on drought response measures. Drought information is provided in English and Spanish and bulk mailed to all physical addresses in Sweetwater Authority's service area.

- **Personal Letters and Emails.** Sweetwater Authority sends a personalized letter or email to notify consumers of reported or observed water waste on their property. These documents are sent to elicit cooperation in Sweetwater Authority's efforts to use water efficiently, and are sent with appropriate conservation materials, such as a lawn-watering guide, leak detection information, or general conservation tips.

- **Seminars.** Sweetwater Authority works with local agencies to cooperatively host periodic conservation seminars for groups of water users, targeted toward high water use consumers, or toward specific types of use. These seminars include information on current water saving methods and devices, and contacts for additional assistance and information, as well as a summary of local agency information and contact persons for cooperative efforts between Sweetwater Authority and its consumers.

- **Speakers Bureau.** Sweetwater Authority staff are available to address civic and community groups, clubs, associations, and other organizations on a wide variety of water issues. Speakers provide conservation handouts to interested audience members at these appearances. The Sweetwater Authority speakers' bureau is promoted through involvement in civic groups, through the customer newsletter,
through letters to local libraries and schools, and through periodic newspaper announcements of availability.

- **Committees.** Sweetwater Authority maintains a permanent Communications Committee to provide assistance and suggestions to staff regarding water awareness issues. This committee can be convened as needed to provide assistance and suggestions to staff regarding conservation issues and address consumer concerns resulting from water reduction allocations.

- **Exhibits and Related Materials.** Sweetwater Authority is an agency member of the Water Conservation Garden at Cuyamaca College. This garden promotes water conservation, has over 5 acres of displays, and offers a variety of water conservation educational programs. Sweetwater Authority also participates in local business and community fairs to distribute water-saving devices, conservation literature, and to answer consumer questions face-to-face. Materials are provided to local merchants and libraries for their distribution and displays on general water conservation issues. Sweetwater Authority also partners with neighboring water agencies to put on water conservation public awareness events, including water-efficiency technology expos and landscape contests.

Sweetwater Authority partners with the Living Coast Discovery Center to provide displays featuring relationship of good water stewardship to environmental sustainability. Sweetwater Authority also promotes sustainable water practices and water conservation through partnerships with the City of Chula Vista’s Green programs, Climate Change Initiatives, and Naturescape Program.

- **News Relations.** Sweetwater Authority provides formal press releases and feature story information to local print, radio and television reporters, as well as to trade and special interest publications.

- **Advertising.** Sweetwater Authority has purchased advertising or content space in local newspapers, and chamber publications to promote water conservation and understanding of water issues. Sweetwater Authority monitors Facebook and social media posts and strategically purchases boosts, retweets etc. to increase message exposure.

**School Education Programs** – Since 1991, Sweetwater Authority has had an active school education program, which includes water conservation messages. Sweetwater Authority currently has two partnerships to educate students in its service area. The Hydro Station is a partnership with the Chula Vista Elementary School District and Otay Water District. In this experience, more than 4,000 fifth grade students will visit Sweetwater Authority’s Richard A. Reynolds Groundwater Desalination Facility and learn about careers in the water industry.
In 2018, Sweetwater Authority established a partnership with Olivewood Gardens located in National City. This program sees 2,500 students per year and curriculum includes information on water efficiency and the safety of drinking tap water.

Sweetwater Authority provides funding for the Water Conservation Garden's Ms. Smarty Plants school programs and assemblies. These activities are fact-filled and engage students in water conservation, their relationship with ecosystems and inspire critical thinking skills related to the efficient use of water. Programs meet or exceed CA State Standards and Next Generation Science Standards. E-STEAM and Common Core are incorporated.

Sweetwater Authority also participates in CWA's countywide education programs. CWA offers students from kindergarten through high school, a wide array of educational opportunities including water testing kits, and computer programs.

- **Junior and Senior High School Education Programs.** Sweetwater Authority hosts an annual High School Photo Contest with schools in its service area. The winning photos are selected and used in the annual Water Quality Report which also serves as a calendar. Cash prizes are awarded to the students.

- **Mini-Grant Program for Local Schools.** Sweetwater Authority provides mini-grants to teachers for the development and presentation of water-based lessons, to assist with providing conservation demonstration gardens at local school sites, and to host use of San Diego County's Splash Science Lab and Green Machine at local schools.

### 6.5 System Loss Programs

**System Water Audits, Leak Detection, and Repair** – Sweetwater Authority’s system water audits, leak detection, and repair programs contribute to better water management and reduction in real and apparent water loss.

- **Water Audits.** Sweetwater Authority conducts annual water audits of its water distribution system, which comply with the requirements of SB 555, to identify real (physical) and apparent (non-physical) system water losses. Sweetwater Authority also conducts a monthly assessment of its distribution system for unbilled and non-revenue water loss. Using these comparisons, Sweetwater Authority can evaluate the need for implementation of a formal water loss reduction program. System loss is determined by comparing total water use with total water production. Sweetwater Authority’s 12-month average water loss was 2.6% as calculated in a recent water audit.

- **Leak Detection.** A Supervisory Control and Data Acquisition (SCADA) system was installed in the distribution system in 2001, and is used to monitor water flow throughout the system. Rapid changes in water quantity and/or pressure at any
of the monitoring points within the system are immediately evaluated. Leaks are rare, and with this system, they are quickly detected and corrected. A leak detection survey was performed on 19.49 miles of the distribution system in September 2002. There was no total annual water loss for surveyed portions of the system.

- **Water System Improvements.** Routine and preventative maintenance is performed on the distribution system. In addition, Sweetwater Authority implements a capital improvement program to maintain and renew transmission, distribution, and storage facilities.

- **Facility Inspection.** Critical facilities, including pump stations and valve vaults, are inspected bi-weekly. Other distribution facilities are inspected weekly. As part of Sweetwater Authority's preventative maintenance program, each system valve is exercised at least every three years, and each fire hydrant is visually inspected and maintained every one to two years.

- **Meter Maintenance and Replacement Program.** A 15-year repair/replacement program covers every service meter within Sweetwater Authority system. Meters sized below \( rac{1}{2} \)-inch are volumetrically tested and replaced as needed. Meters sized 1-\( \frac{1}{4} \) to 2-inches are calibrated and rebuilt as necessary. Consumer meters sized at 3-inches and larger are calibrated and maintained annually.

- **Water Theft.** Sweetwater Authority monitors incidents of water theft, and has the ability to charge up to three times the water service rate when it is determined that water theft has occurred.

6.6 Water Conservation Coordinator

Sweetwater Authority first designated a Conservation Coordinator in 1991. During this same year, Sweetwater Authority used three temporary staff positions to handle the increased volume of conservation-related activities caused by the drought. In June 1992, a Water Conservation – Information Specialist staff position was created. Sweetwater Authority currently has a Program Manager, Program Specialist, and Program Analyst, who manage and administer the water use efficiency program.

6.7 Other Demand Management Measures

Residential Programs – The following programs are available to Sweetwater Authority's residential customers to reduce residential water use and improve water use efficiency.

- **Water Survey Programs for Single-Family and Multi-Family Residential Consumers.** The Residential Survey Program is free to both single-family and multi-family residential consumers and has been available since 1995. The program helps consumers learn how to save water in their own homes, which in
turn saves the consumers money. The survey is customized to the property and may include a review of landscaping, outdoor irrigation system, indoor use, identification of indoor leaks, a complete educational packet, information about other water conservation programs, and free faucet aerators and low-flow showerheads. An irrigation surveyor may perform a meter leak detection test, check the irrigation system, suggest seasonal adjustments for a consumer's individual water schedule, check the soil to ensure that watering coincides with moisture absorption, discuss proper lawn maintenance, and offer low water use landscape information.

- **High-Efficiency Washing Machine Rebate Program.** Since 2000, Sweetwater Authority has participated in CWA's rebate program. New technology in washing machine design provides for more efficient water use and savings. Residential and commercial consumers have taken advantage of the up to $185 rebates to replace their standard top-loading washers with low-water use, energy-efficient models. The current rebate is $135. Prior to March 10, 2004, high-efficiency washers had water efficiency factor values of 9.5 or less. With greater availability of ultra-high efficiency washers, rebates are now limited to machines with an integrated water factor of 3.7 or less. The integrated water efficiency factor is determined by the amount of water it takes to wash a cubic foot of laundry. The lower the efficiency factor, the greater the water efficiency of the clothes washer.

- **Residential Toilet Replacement Program.** Since 1991, Sweetwater Authority has participated in regional Ultra Low Flow and High Efficiency Toilet voucher and/or rebate programs offered by CWA and Metropolitan. The current program offers rebates to multi-family residential consumers who have purchased water efficient devices to replace older, less efficient units. Since 1992, toilets manufactured in the United States must comply with a 1.06 gallons per flush (gpf) maximum flow. Toilets with consistently lower water use continue to be developed. Beginning in 2008, rebates are only available for high efficiency and dual flush toilets to encourage customers to install toilets that have met more rigorous water efficiency standards.

- **Single-Source Gray Water Retrofit Rebates.** Since 2013, Sweetwater Authority has offered residential customers a $75 towards the purchase and installation of laundry-to-landscape gray water systems.

- **Carwash Rebates.** Sweetwater Authority customers are eligible to receive a reimbursement of up to $10 in the form of a bill credit for up to 4 washes per year. Carwashes must be located within Sweetwater Authority's service area and the carwash provider must reclaim and recycle their water.

**Large Landscape Conservation Programs and Incentives** – From 1991 to 2004, large landscape (defined as landscape with one acre or more) irrigation surveys were available to consumers at no charge through the **Professional Assistance for Landscape**
Management (PALM) program, sponsored by CWA. Using methodology developed by the Irrigation Training and Research Center at California Polytechnic State University at San Luis Obispo, the surveyor performs catch can tests, makes numerous soil and plant observations, and calculates ETo based irrigation schedule.

Beginning in 2005, residential and commercial consumers with large landscapes (initially defined as over 2,000 square feet) are eligible to receive the following services at no charge through the programs sponsored by Sweetwater Authority, CWA, Metropolitan, and DWR. These programs are available for limited durations and routinely adjusted in response to participation levels and overall verifiable water savings achieved:

- **Landscape Transformation Program.** Customers can receive a rebate for replacing turf with sustainable landscaping features through this program sponsored by CWA and Metropolitan.

- **Landscape Irrigation Audits.** Audits are available at no charge to residential and commercial consumers with a minimum of 1 acre of irrigated landscaping. Site audits include a review of irrigation conditions, watering schedule, and sprinkler distribution uniformity by a trained technician. Landscape area measurement and water use recommendations are provided.

- **Weather-Based and Soil Moisture Sensor Irrigation Controllers.** Rebates are available to residential and commercial consumers with irrigated landscaping for weather-based irrigation controllers to retrofit old timers, and/or to add soil moisture sensors to an existing compatible irrigation controller.

- **Rotating Irrigation Nozzles.** Rebates are available for rotating irrigation nozzles. Rebates are only available for devices listed on the Qualified Product List, maintained by Metropolitan. No site size minimum applies to this incentive program; however the current rotating nozzle rebate is only available in quantities of 30 or greater per eligible customer.

- **Cisterns.** Customers can receive a rebate for installing a cistern to collect rainwater from their roofs, which can be used for irrigation. The rebate amount depends on the size of the cistern installed.

**Conservation Programs for Commercial, Industrial, and Institutional (CII) Accounts** – Sweetwater Authority participates in the Metropolitan’s Save Water, Save a Buck program which offers rebates to consumers for water-efficient devices. A limited number of rebates are available for commercial plumbing fixtures (high efficiency toilets, high efficiency ultra-low-flow and waterless urinals), cleaning equipment (single and multi-load commercial clothes washers and water brooms) water efficient medical equipment (X-ray processors, dry vacuum pumps, and steam sterilizer retrofits), food service equipment (connectionless food steamers, air cooled ice machines, and spray...
valves used for pre-rinsing dishes in commercial kitchens), and cooling tower conductivity controllers. New rebates are added to the program, and rebate values are adjusted as water savings potentials are validated. The rebates reduce the costs for businesses, and the equipment produces long-term savings in water, sewer, and energy costs.

- **Water Savings Performance Program.** The Water Savings Incentive Program (WSIP) is designed for non-residential customers improving their water efficiency through upgraded equipment or services that do not qualify for standard rebates. WSIP is unique because it provides an incentive based on the measured amount of water saved. This “pay-for-performance” design lets customers implement custom projects for their sites. Any project that saves at least 10,000,000 gallons of water could qualify. Metropolitan provides this incentive which is pays up to $0.60/1,000 gallons of water saved.

- **Grants.** Sweetwater Authority offers grants of up to $5,000 each for water efficiency projects in the Authority’s service area. Current grant programs are the Savings Through Efficiency Program (STEP) and the Water Efficiency Education Program (WEEP). STEP provides grant funding for commercial, industrial, and institutional customers for equipment retrofits or innovative projects or devices which maximize water use efficiency. WEEP provides grant funds for publicly accessible educational displays, programs, projects, or instructional media that teaches the importance of using water efficiently.

As more and better data are collected over time, the demand management measures are refined and revised based upon the most objective criteria available. Agency-specific implementation schedules and coverage goals are based on industry best practices, standardized criteria, and state requirements.

**6.8 Effect of Demand Management Measures on Projected Water Demands**

Water conservation as a result of the demand management measures described in this WSA are not accounted for in the projected water demands for the National City Bayfront Projects and Sweetwater Authority’s service area; therefore, the projected demands are conservative and support the conclusion found in Section 9 of this WSA.

**Section 7 – Water Supply**

Water used in Sweetwater Authority’s service area comes from various sources. These sources include local fresh groundwater, brackish groundwater, surface water, and imported water from the Colorado River and the State Water Project. The imported water is delivered by CWA, either purchased from or wheeled by Metropolitan, and is then purchased by Sweetwater Authority. Imported water can either be purchased as
treated water or as untreated water, with treatment at Sweetwater Authority's Robert A. Perdue Water Treatment Plant. Since 1955, local sources have met approximately 45 percent of the water needs within Sweetwater Authority's service area, while the 55 percent balance has been met with imported water. The percentage of local to imported water can vary greatly year to year due to local rainfall amounts.

7.1 Local Supply

7.1.1 Surface Water Sources

Sweetwater Authority has a variety of senior water rights on the Sweetwater River which allow it to divert water from the Sweetwater River. These rights include pre-1914 appropriative rights perfected under common law and early California statutes, modern appropriative rights under the auspices of the State Water Resources Control Board, and rights to enforce restrictive covenants on parcels of land in the Middle Sweetwater River. All of Sweetwater Authority's water rights in the Sweetwater River, including pre-1914 water rights, were previously owned by the South Bay Irrigation District (SBID), which acquired them in 1977 by eminent domain from California American Water and through license on Loveland Reservoir in March 1985. These water rights transferred to Sweetwater Authority in 1990 when SBID transferred all of its assets to Sweetwater Authority.

Sweetwater Authority owns and operates two storage reservoirs known as Sweetwater Reservoir and Loveland Reservoir, which were constructed in 1888 and 1945, respectively, and are used to divert and retain water from the Sweetwater River. Sweetwater Reservoir has an approximate capacity of 28,079 acre-feet, and Loveland Reservoir has an approximate capacity of 25,387 acre-feet, for a combined capacity of 53,466 acre-feet. The watershed for the Sweetwater River is approximately 230 square miles and both reservoirs are located in this watershed. Sweetwater Reservoir is downstream of Loveland Reservoir and has an adjacent treatment plant capable of producing 30 million gallons of water per day (MGD). Local supply from Sweetwater Reservoir varies from zero to 100 percent depending on local runoff conditions. To make use of the local supply from Loveland Reservoir, Sweetwater Authority releases water through the dam's Bunger valve so water can travel downstream through the Sweetwater River and make its way to Sweetwater Reservoir; however, Sweetwater Authority can only transfer water from Loveland Reservoir to Sweetwater Reservoir when river and environmental conditions are optimal. Sweetwater Authority last completed a water transfer from Loveland Reservoir to Sweetwater Reservoir in February to March 2019.

During wet years when Sweetwater and Loveland Reservoirs are at or near full capacity, they are capable of providing up to a two-year supply to Sweetwater Authority customers. Surface water production for the past sixteen fiscal years is shown below in Table 6.
Table 6
Surface Water Production from 2004 through 2019

<table>
<thead>
<tr>
<th>Fiscal Year Ending</th>
<th>Total Surface Water Produced (acre-feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>1,595</td>
</tr>
<tr>
<td>2005</td>
<td>7,011</td>
</tr>
<tr>
<td>2006</td>
<td>10,276</td>
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<tr>
<td>2007</td>
<td>590</td>
</tr>
<tr>
<td>2008</td>
<td>3,647</td>
</tr>
<tr>
<td>2009</td>
<td>4,427</td>
</tr>
<tr>
<td>2010</td>
<td>898</td>
</tr>
<tr>
<td>2011</td>
<td>8,165</td>
</tr>
<tr>
<td>2012</td>
<td>10,253</td>
</tr>
<tr>
<td>2013</td>
<td>12,927</td>
</tr>
<tr>
<td>2014</td>
<td>3,961</td>
</tr>
<tr>
<td>2015</td>
<td>0</td>
</tr>
<tr>
<td>2016</td>
<td>0</td>
</tr>
<tr>
<td>2017</td>
<td>1,675</td>
</tr>
<tr>
<td>2018</td>
<td>6,621</td>
</tr>
<tr>
<td>2019</td>
<td>3,351</td>
</tr>
</tbody>
</table>

Note: Local supply from Sweetwater Reservoir for fiscal years ending in 2015 and 2016 was zero due to regional drought conditions.

7.1.2 Groundwater Sources

Sweetwater Authority produces groundwater from the Coastal Plain of San Diego Groundwater Basin (CPSD Basin) identified in the State of California Department of Water Resources (DWR) Bulletin 118 as Basin Number 9-033. Sweetwater Authority adopted an interim groundwater management plan in November 2001 that governs groundwater management until a groundwater management plan could be prepared in accordance with Water Code Section 10750 (AB 3030). The interim groundwater management plan is included as Appendix C. However, in 2014, the State of California passed the Sustainable Groundwater Management Act (SGMA), so instead of preparing an AB 3030 groundwater management plan, which are no longer permitted, Sweetwater Authority is currently in the process of preparing a Groundwater Sustainability Plan (GSP) in accordance with SGMA. DWR has designated the CPSD Basin a low priority basin, per section 10722.4 of the CWC. DWR has not identified the CPSD Basin as being subject to critical conditions of overdraft nor has it been identified as overdrafted nor has DWR projected that the CPSD Basin will become overdrafted if present management conditions continue. Accordingly, a GSP is not required for the CPSD...
Basin, but Sweetwater Authority is nevertheless utilizing SGMA, including the preparation of a GSP to sustainably manage its groundwater resources.

The principal aquifer units of the CPSD Basin include recent alluvium with offshore marine sediment, Quaternary marine and non-marine deposits, and the San Diego Formation (SDF). Although groundwater occurs in the overlying sedimentary deposits, the SDF is the principal aquifer within the basin. The SDF consists of fine-grained to medium-grained sandstone, cobble conglomerate, and mudstone (often described as very fine sandy silt). The formation was deposited during a major late Pliocene marine transgression. The CPSD Basin is bounded to the east by the La Nacion Fault, to the south by the U.S./Mexico International Border, to the west by San Diego Bay, and to the north by the Mission Valley Basin. Basin recharge is derived from seasonal runoff from precipitation, discharge from the Sweetwater and Loveland Reservoirs, and underflow from the reservoirs.

Within the CPSD Basin, Sweetwater Authority operates the National City Wells, which produce potable groundwater (Total Dissolved Solids [TDS] approximately 600 mg/l) and the Richard A. Reynolds Groundwater Desalination Facility (Desalination Facility) that produces drinking water from brackish groundwater (TDS between 1,600 and 2,500 mg/l). Both well fields pump from the SDF.

The National City Wells consist of three wells: Nos. 2, 3, and 4. Well Nos. 3 and 4 operate daily, while the oldest well, No. 2, serves as a backup. Sweetwater Authority has produced an average of 1,860 acre-feet per year from the National City Wells from 1954 to 2019.

The Desalination Facility commenced operation in 1999. The facility was designed to take groundwater from four alluvial wells and five deep SDF wells, located on the north side of the Sweetwater River. A sixth SDF well was later constructed and added to the Desalination Facility. The facility removes the TDS from the brackish groundwater using reverse osmosis technology (R/O). Currently, the alluvial wells are not operated for the following reasons: 1) summertime vegetative distress in the Sweetwater River; 2) surface water influence on the relatively shallow alluvial formation, and 3) the R/O membranes not being approved for surface water treatment by the California Department of Public Health.

Phase I of the Desalination Facility was designed to produce four MGD of drinking water, but the facility was constructed with space to accommodate a Phase 2 expansion. Sweetwater Authority completed a Phase 2 expansion of the Desalination Facility in 2017 and added five additional SDF wells for a total of eleven SDF wells. The Desalination Facility currently has the ability to produce a maximum of 10 MGD and on average produces 8 MGD. Additionally, Sweetwater Authority is currently participating in studies with the United States Geological Survey (USGS) to evaluate the SDF Aquifer, and to make safe use of the available yield from the aquifer. Groundwater production for the past sixteen fiscal years is shown below in Table 7.
Table 7
Groundwater Production from 2004 through 2019

<table>
<thead>
<tr>
<th>Fiscal Year Ending</th>
<th>Total GW Produced (acre-feet)</th>
<th>Source (acre-feet)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>NC Wells</td>
<td>Desalination Facility</td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>3,637</td>
<td>1,595</td>
<td>2,042</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>3,779</td>
<td>1,793</td>
<td>1,986</td>
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<td>2006</td>
<td>3,941</td>
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</tr>
<tr>
<td>2007</td>
<td>5,398</td>
<td>2,161</td>
<td>3,237</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>5,887</td>
<td>2,188</td>
<td>3,699</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>5,399</td>
<td>1,945</td>
<td>3,454</td>
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<tr>
<td>2010</td>
<td>5,351</td>
<td>2,175</td>
<td>3,176</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>5,627</td>
<td>2,113</td>
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<td>2013</td>
<td>5,466</td>
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<td>3,363</td>
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<tr>
<td>2014</td>
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<tr>
<td>2015</td>
<td>5,278</td>
<td>2,031</td>
<td>3,247</td>
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<tr>
<td>2016</td>
<td>4,751</td>
<td>1,854</td>
<td>2,897</td>
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<td>2017</td>
<td>2,349</td>
<td>1,781</td>
<td>568</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>8,802</td>
<td>1,733</td>
<td>7,069</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>9,685</td>
<td>1,961</td>
<td>7,724</td>
<td></td>
</tr>
</tbody>
</table>

Note: The Desalination Facility was offline for most of the fiscal year ending in 2017 for construction of Phase 2 of the facility, hence, the small production from the Desalination Facility that year.

Table 8 shows historic and projected water supplies from local sources only, in 5-year increments since 1980. Historic and projected water supplies from imported sources are shown in Section 7.2 of this WSA.

Table 8
Historic and Normal Water Year Projected Local Supplies

<table>
<thead>
<tr>
<th>Fiscal Year Ending</th>
<th>Local Supply (acre-feet)</th>
<th>Total Local Supply (acre-feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sweetwater Reservoir</td>
<td>National City Wells</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1980</td>
<td>17,392</td>
<td>1,308</td>
</tr>
<tr>
<td>1985</td>
<td>20,052</td>
<td>1,219</td>
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</tr>
<tr>
<td>2015</td>
<td>0^1</td>
<td>2,031</td>
</tr>
</tbody>
</table>
### 7.1.3 Water Recycling

Sweetwater Authority does not produce or distribute recycled water. Several potential changes in the service area could have significant impacts on the future potable water demands. These include:

- The previously planned construction of a new LSP Southbay, LLC Energy Power Plant with up to 5 MGD of recycled water demand. However, it does not appear that this project will move forward.
- The development of the Chula Vista Bayfront. This planned project will cover approximately 550 acres along San Diego Bay. The land uses being considered include parks and open space. This development will increase the demand for potable water.

Due to these developments, Sweetwater Authority completed a master plan for the distribution of recycled water within its service area. Additionally, Sweetwater Authority has participated in studies with CWA, Otay Water District (Otay) and the City of Chula Vista to analyze potential water recycling plant locations within Sweetwater Authority’s service area, but implementation of recycled water within Sweetwater Authority’s service area was found to be cost prohibitive; therefore, the use of recycled water has not been considered in the preparation of this WSA. However, this section provides a summary of the results of the master planning effort and the plant siting study.

#### 7.1.3.1 Sweetwater Authority’s Recycled Water Master Plan

Sweetwater Authority’s Recycled Water Master Plan evaluated 8 recycled water system alternatives with demands ranging from 4,300 acre-feet per year to 5,470 acre-feet per year. Recycled water sources included both a new recycled water plant that would be constructed by Sweetwater Authority and the City of Chula Vista, and a supply from the City of San Diego’s South Bay Water Reclamation Facility. A preferred alternative was

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### Table: Local Supply (acre-feet)

<table>
<thead>
<tr>
<th>Fiscal Year Ending</th>
<th>Sweetwater Reservoir</th>
<th>National City Wells</th>
<th>Reynolds Desal. Facility</th>
<th>Total Local Supply (acre-feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>7,400&lt;sup&gt;3&lt;/sup&gt;</td>
<td>2,100&lt;sup&gt;3&lt;/sup&gt;</td>
<td>6,200&lt;sup&gt;3&lt;/sup&gt;</td>
<td>15,700&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
<tr>
<td>2025</td>
<td>7,400&lt;sup&gt;3&lt;/sup&gt;</td>
<td>2,100&lt;sup&gt;3&lt;/sup&gt;</td>
<td>6,200&lt;sup&gt;3&lt;/sup&gt;</td>
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<td>2,100&lt;sup&gt;3&lt;/sup&gt;</td>
<td>6,200&lt;sup&gt;3&lt;/sup&gt;</td>
<td>15,700&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

**Notes:**
1. Local supply from Sweetwater Reservoir for fiscal year ending in 1990 and 2015 was zero due to regional drought conditions.
2. The Reynolds Desalination Facility became operational in 1999; therefore, production for fiscal years ending in 1980 through 1995 was zero.
3. Projected local supplies for fiscal years ending in 2020 through 2040 are consistent with Sweetwater Authority’s 2015 UWMP.
identified that included demands of 4,300 acre-feet per year and a supply from the South Bay Water Reclamation Facility. However, approximately 2,700 acre-feet per year is related to the development of a new water-cooled power plant that is unlikely to be constructed. At this time, it is unclear if the power plant will be developed, and if it is developed, whether it will be air or water-cooled. Without the development of the water-cooled plant, it is likely that development of a recycled water system within Sweetwater Authority’s service area would be cost prohibitive.

7.1.3.2 Membrane Bioreactor Studies

Sweetwater Authority participated in CWA’s Membrane Bioreactor Study. Recent technology advancements have made satellite treatment plants utilizing membrane bioreactor (MBR) technology a feasible cost effective alternative to traditional centralized wastewater treatment plants. MBR technology has the ability to comply with strict effluent requirements, operate reliably with minimal operator attendance, and occupy far less space than traditional systems, which allows it to be easily sited close to the recycled water consumers. The study includes evaluation of "scraping" plants taking raw sewage from the City of Chula Vista by intercepting existing regional sewer lines, treating it locally through a miniature version of a wastewater treatment plant and putting the residuals back in the sewer downstream of the withdrawal point.

A second MBR Study was a collaborative project involving Otay and the City of Chula Vista, with Sweetwater Authority as the Lead Agency. The intent was to determine if an MBR Recycled Water Treatment Plant (MBR Plant) is feasible in order to provide recycled water to both, or either, Sweetwater Authority and Otay, as well as to determine if the City of Chula Vista can find an alternative to acquiring needed wastewater capacity from the City of San Diego's Metropolitan Wastewater System (Metro System).

The results of the study showed the cost of installing a recycled water distribution system in Sweetwater Authority’s service area is prohibitively expensive. Therefore, Sweetwater Authority has determined that it will not participate in any near-term studies regarding an MBR Plant to serve recycled water in its service area. However, it may appear to be feasible for Otay and the City of Chula Vista.

7.2 Imported Supply

Sweetwater Authority represents two (City of National City and South Bay Irrigation District) of the 24 member agencies of CWA. Member agency status entitles Sweetwater Authority to directly purchase water from CWA on a wholesale basis. One hundred percent of Sweetwater Authority's imported water is purchased from CWA, a member agency of Metropolitan. The statutory relationships between CWA and its member agencies, and Metropolitan and its member agencies, respectively, establish the scope of Sweetwater Authority's entitlements to water from these two agencies.
CWA was organized on June 9, 1944 under the County Water Authority Act for the sole purpose of importing Colorado River water into San Diego County. The imported water, now a combination of Colorado River water, State Water Project water, and conserved water by the Imperial Irrigation District through the Quantification Settlement Agreement of 2003, is sold wholesale to the 24 member agencies of CWA. The member agencies are autonomous and their City Councils or Boards of Directors set local policies and pricing structures.

Imported water delivered by CWA is either purchased from or wheeled by Metropolitan from Metropolitan facilities, located just south of the San Diego/Riverside county line. Metropolitan is a public agency organized in 1928 by a vote of the electorates of 13 Southern California cities. Since its formation, Metropolitan has grown to include 27 member agencies of which CWA is the largest. Metropolitan was formed for the purpose of developing, storing, and distributing water to the residents of Southern California. The historical quantities of water purchased from CWA since 1985 by Sweetwater Authority are shown in Table 9. Projected purchased water supplies are shown in Table 10 and include the water demands for the National City Bayfront Projects.

### Table 9
**Historic Imported Supplies**

<table>
<thead>
<tr>
<th>Fiscal Year Ending</th>
<th>Total Imported Water (acre-feet)</th>
<th>Untreated</th>
<th>Treated</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td>4,634</td>
<td>---</td>
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<tr>
<td>1986</td>
<td>20,842</td>
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<tr>
<td>1987</td>
<td>16,384</td>
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<td>1989</td>
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<tr>
<td>1991</td>
<td>20,508</td>
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<td>20,508</td>
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<tr>
<td>1992</td>
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<tr>
<td>1993</td>
<td>6,188</td>
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<tr>
<td>1994</td>
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<td>1995</td>
<td>5,045</td>
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<td>1996</td>
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<tr>
<td>1999</td>
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<tr>
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<td>5,429</td>
<td>91</td>
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<td>2001</td>
<td>14,381</td>
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<tr>
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<td>18,858</td>
<td>18,858</td>
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<tr>
<td>2003</td>
<td>19,752</td>
<td>19,752</td>
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</tr>
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<td>2004</td>
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<td>2007</td>
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<td>11,371</td>
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<tr>
<td>Fiscal Year Ending</td>
<td>Total Imported Water (acre-feet)</td>
<td>Source (acre-feet)</td>
<td></td>
</tr>
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<tr>
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<td>Treated</td>
</tr>
<tr>
<td>2008</td>
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<td>2009</td>
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<td>2010</td>
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<td>2016</td>
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<td>2017</td>
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<td>1</td>
</tr>
<tr>
<td>2019</td>
<td>4,013</td>
<td>3,772</td>
<td>241</td>
</tr>
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</table>

Table 10
Normal Water Year Projected Imported Supplies

<table>
<thead>
<tr>
<th>Fiscal Year Ending</th>
<th>Total Imported Water (acre-feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>6,788</td>
</tr>
<tr>
<td>2025</td>
<td>7,257</td>
</tr>
<tr>
<td>2030</td>
<td>7,952</td>
</tr>
<tr>
<td>2035</td>
<td>9,554</td>
</tr>
<tr>
<td>2040</td>
<td>10,619</td>
</tr>
</tbody>
</table>

Note: Projected imported supply values were calculated by adding the projected water demands for the National City Bayfront Projects shown in Table 4 to the projected imported water supplies from Sweetwater Authority’s 2015 UWMP.

7.2.1 Metropolitan’s 2015 Regional UWMP

Metropolitan’s 2015 Regional UWMP was adopted by the Metropolitan Board of Directors on May 10, 2016. The 2015 Regional UWMP provides member agencies, retail water utilities, cities, and counties within its service area with water supply information for purposes of developing local UWMPs, water supply assessments, and written verifications. As part of this process, Metropolitan also used SANDAG’s 2050 Regional Growth Forecast in calculating regional water demands for the CWA’s service area, in addition to using the Southern California Association of Governments (SCAG) 2012 Regional Transportation Plan/Sustainable Community Strategy (2012 Regional Transportation Plan). Metropolitan incorporated SANDAG’s 2050 Regional Growth Forecast and the SCAG 2012 Regional Transportation Plan into the 2015 Regional UWMP. Since the 2005 Regional UWMP update, conditions in the Sacramento/San Joaquin Delta (Delta) have changed significantly, reducing exports from Northern California. Metropolitan’s 2015 UWMP references the California WaterFix and
EcoRestore, formerly referred to as the Bay Delta Conservation Plan (BDCP), proposed by state, federal, and local water agencies to make State Water Project system operation improvements, including some related to restoration and protection of the Delta ecosystem and contributing watersheds. The California WaterFix program would construct and operate new water distribution facilities that are designed to be more environmentally friendly than the current system configuration. The program would include water delivery upgrades, river flow improvement, and habitat restoration and protection. It is anticipated that California EcoRestore would lead to the restoration of at least 30,000 acres of the Delta (or upstream). Both programs are being evaluated and implemented through DWR consistent with CEQA, NEPA, Endangered Species Act, and other environmental laws. As directed by Governor Newsom in 2019 and building on work already conducted, DWR rescinded the twin tunnel WaterFix program and is pursuing a new environmental review and planning process for a single tunnel solution to modernize Delta conveyance. This approach is consistent with the Governor’s April 2019 Executive Order N-10-19 directing state agencies to develop a portfolio of statewide water actions and investments. Modernizing Delta conveyance paired with complementary projects that improve water recycling, recharge depleted groundwater reserves, strengthen existing levee protections and improve Delta water quality will help ensure a resilient water supply for Metropolitan, CWA, and Sweetwater Authority. CWA’s Board of Directors supports this new approach, and Governor Newsom has made water supply reliability a major priority for his administration.

Copies of Metropolitan’s 2015 Regional UWMP are available at Metropolitan’s Administration Office or online at: www.mwdh2o.com.

7.2.2 San Diego County Water Authority’s 2015 UWMP

CWA’s Board of Directors adopted the CWA’s 2015 UWMP on June 23, 2016. The purpose of the report is to provide a statement regarding CWA’s supplies and implementation of CWA plans and programs to meet the future water supply requirements of its member agencies. CWA’s 2015 UWMP contains documentation on CWA/Imperial Irrigation District Water Conservation and Transfer Agreement, All American Canal and Coachella Canal Lining Projects, and a potential expansion of the Carlsbad Desalination Plant to provide an additional 5,600 acre-feet of desalinated water supply by 2025. The Carlsbad Desalination Plant currently supplies 56,000 acre-feet of desalinated water per year to the region. The documentation included in CWA’s 2015 UWMP was prepared for use by CWA’s member agencies in preparation of local UWMPs, water supply assessments, and written verifications required under state law. Written verifications required under state law such as this WSA strengthen Sweetwater Authority’s verification of water supply reliability.
Section 8 – Supply and Demand Assessment

8.1 Normal Year Assessment

Table 11 shows the forecasted normal water year projections for Sweetwater Authority's service area, including the National City Bayfront Projects. The projections show that Sweetwater Authority anticipates having adequate water supplies to meet projected demands through 2040. Demand totals shown in Table 11 are the same quantities as the demands shown in Table 5.

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
<th>2040</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imported Water</td>
<td>6,788</td>
<td>7,257</td>
<td>7,952</td>
<td>9,554</td>
<td>10,619</td>
</tr>
<tr>
<td>Surface Water</td>
<td>7,400</td>
<td>7,400</td>
<td>7,400</td>
<td>7,400</td>
<td>7,400</td>
</tr>
<tr>
<td>Groundwater</td>
<td>2,100</td>
<td>2,100</td>
<td>2,100</td>
<td>2,100</td>
<td>2,100</td>
</tr>
<tr>
<td>Desalinated Groundwater</td>
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<td>6,200</td>
<td>6,200</td>
<td>6,200</td>
<td>6,200</td>
</tr>
<tr>
<td>Supply Totals</td>
<td>22,488</td>
<td>22,957</td>
<td>23,652</td>
<td>25,254</td>
<td>26,319</td>
</tr>
<tr>
<td>Demand Totals</td>
<td>22,488</td>
<td>22,957</td>
<td>23,652</td>
<td>25,254</td>
<td>26,319</td>
</tr>
<tr>
<td>Difference</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

8.2 Single Dry Year Assessment

For the single dry year assessment, supplies were calculated by evaluating the availability of each supply. For groundwater from the National City Wells and desalinated water from the Desalination Facility, it is assumed that supplies would be reliable and available at normal levels in a single dry year because groundwater supplies from these facilities are considered drought-proof due to the CPSD Basin not being in an overdraft condition nor being expected to be in an overdraft condition through 2040 due to Sweetwater Authority’s sustainable groundwater management practices. For surface water supplies from Sweetwater Reservoir, it is anticipated that 56% of supplies would be available, which is consistent with Sweetwater Authority’s 2015 UWMP. Per information from CWA’s 2015 UWMP, it is anticipated that imported water would be available to meet demands in a single dry year, which is further verified with information contained in Metropolitan’s 2015 UWMP.

Based upon modeling performed by CWA, which was confirmed by reviewing local trends in Sweetwater Authority’s service area, demands would increase by 7% in a single dry year; therefore, Sweetwater Authority would purchase additional water supplies from CWA to meet the increased demands. Table 12 shows forecasted single dry year projections for Sweetwater Authority’s service area, including the National City Bayfront Projects. The projections show that Sweetwater Authority anticipates having adequate water supplies to meet projected demands through 2040.

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8.3 Multiple Dry Year Assessment

For the multiple dry year assessment, supplies were also calculated by evaluating the availability of each supply. For groundwater from the National City Wells and desalinated water from the Desalination Facility, it is assumed that supplies would be reliable and available at normal levels in multiple dry years because groundwater supplies from these facilities are considered drought-proof due to the CPSD Basin not being in an overdraft condition nor being expected to be in an overdraft condition through 2040 due to Sweetwater Authority's sustainable groundwater management practices. For surface water supplies from Sweetwater Reservoir, it is anticipated that 80% of supplies would be available in the first two years of a multiple dry year period, which is consistent with Sweetwater Authority’s 2015 UWMP. For the third year of a multiple dry year period, it is anticipated that surface water supplies from Sweetwater Reservoir would drop down to 56% of normal, which is also consistent with Sweetwater Authority’s 2015 UWMP. The CWA’s 2015 UWMP indicates that there would be imported supply reliability in the first two years of a multiple dry year period, but that in the third year, there is a possibility of a small shortage in imported water availability. The potential deficit would result in a shortage of approximately 9% from the previous year, per the CWA’s 2015 UWMP.

Based upon modeling performed by CWA, which was confirmed by reviewing local trends in Sweetwater Authority’s service area, demands would increase by 7% of normal in the first year, 11% of normal in the second year, and 7% of normal in the third year of a multiple dry year period.

Because the CWA’s 2015 UWMP demonstrates that there would be supply reliability for the first two years of a multiple dry year period, in the first two years, it is anticipated that Sweetwater Authority would purchase additional imported water supplies from CWA to meet demands. However, because there would be a small potential reliability shortfall in the third year of a multiple dry year period, it is anticipated that Sweetwater Authority would increase conservation efforts to reduce demands. This scenario is consistent with how Sweetwater Authority addressed the most recent drought. Therefore, the projections show that Sweetwater Authority anticipates having adequate water supplies to meet projected demands, as shown in Table 13.
Table 13
Multiple Dry Year Supply and Demand Assessment

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
<th>2040</th>
</tr>
</thead>
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<td></td>
<td></td>
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<td></td>
</tr>
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<td>5,920</td>
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<td>2,100</td>
<td>2,100</td>
<td>2,100</td>
<td>2,100</td>
</tr>
<tr>
<td>Desalinated</td>
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<td>6,200</td>
<td>6,200</td>
<td>6,200</td>
<td>6,200</td>
</tr>
<tr>
<td>Groundwater</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Supply Totals</strong></td>
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<td>24,564</td>
<td>25,308</td>
<td>27,022</td>
<td>28,161</td>
</tr>
<tr>
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<td>24,564</td>
<td>25,308</td>
<td>27,022</td>
<td>28,161</td>
</tr>
<tr>
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<td><strong>Third Year</strong></td>
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</tr>
</tbody>
</table>

8.4 Fire Flow Assessment

Even though the projections show that Sweetwater Authority would have sufficient water supplies to meet the demands of the National City Bayfront Projects, fire flow analyses conducted by Sweetwater Authority show that Sweetwater Authority's water distribution system has limitations in meeting some of the fire flow demands indicated on the Port's request to prepare a WSA plus the maximum day demands for the gravity pressure zone of Sweetwater Authority's service area, where the proposed National City Bayfront Projects would be located. The fire flow demands provided of 6,250 gallons per minute (gpm) for Project No. 1 and 7,250 gpm for the 81 room hotel on Project No. 3 Phase 2, both at 20 pounds per square inch for 4 hours, plus including maximum day demands for Sweetwater Authority's distribution system, would not be met through the existing 12-inch polyvinylchloride (PVC) pipelines in the vicinity of Project Nos 1 and 3. In order to meet the fire flow demands plus maximum day demands, existing Sweetwater Authority 12-PVC pipelines would need to be upgraded to 16-inch PVC pipelines, as shown in Appendix D. Alternatively, Projects No. 1 and No. 3 Phase 2 could be
Sweetwater Authority
Water Supply Assessment
National City Bayfront Projects

downscaled to meet the fire flow demands plus maximum day demands without the need for water infrastructure improvements.

Section 9 – Conclusion: Availability of Sufficient Supplies

Sweetwater Authority is committed to developing local resources within and outside its service area to offset the region’s need for imported water from Metropolitan and CWA. Within its service area, Sweetwater Authority expanded its Desalination Facility in 2017, which reclaims brackish groundwater from the underlying San Diego Formation. Sweetwater Authority has studied the development of recycled water in its service area and concluded that it is prohibitively expensive at this time. However, Sweetwater Authority continues to support other agencies that are developing this very important local resource.

Sweetwater Authority, as with other water agencies in the region, continues to rely on imported water from Metropolitan and CWA to bridge the gap between its available local supply and current and future demands within its service area. The CWA’s 2015 UWMP identifies projects and programs to help ensure that the existing and planned water users within Sweetwater Authority’s service area have an adequate supply. Metropolitan has also prepared and adopted an updated 2015 Integrated Water Resources Plan (IWRP) that outlines strategies for water reliability. Implementation of these strategies by Metropolitan, CWA, and local water agencies will assure adequate supply to support growth and redevelopment within the region. However, it should be noted that programs in the updated Metropolitan planning documents require future discretionary decisions by Metropolitan’s Board of Directors. Until these programs are fully implemented by Metropolitan to manage current changed conditions and other uncertainties, the San Diego region will remain susceptible to potential shortages. Metropolitan, CWA, and Sweetwater Authority do have shortage response plans in place to manage any potential shortages. The plans include shortage response actions, such as dry-year storage withdrawals, voluntary and mandatory water use restrictions, and public outreach. Sweetwater Authority is currently on Level 1 – Drought Watch status of its Drought Response Plan. Sweetwater Authority’s Drought Response Plan is included in Appendix B.

This WSA demonstrates that there will be sufficient water supplies, over a 20-year planning horizon, to meet the projected demands of the proposed National City Bayfront Projects, in addition to existing and planned future users, including agricultural and manufacturing uses, under normal, single dry-year, and multiple dry-year scenarios. However, in March 2019, the United States Bureau of Reclamation (Reclamation) and the states dependent on Colorado River water transmitted to the United States Congress plans to alleviate stress on water supplies from the Colorado River. These plans known as the Drought Contingency Plans (DCPs) for the Upper and Lower Basins of the Colorado River were authorized by Congress in April 2019 in the Colorado River Drought Contingency Plan Authorization Act. The DCPs obligate Lower Basin states, of
which California is a part of, to water supply cutbacks at specified storage levels in Lake Mead retained by Hoover Dam, commit Reclamation to additional water conservation efforts, and coordinate Upper Basin operations to protect Lake Powell storage levels and hydropower generation. Under the Lower Basin DCP, California committed to Colorado River water delivery cutbacks for the first time in history, but the Imperial Irrigation District (IID) in Southern California, one of the biggest water rights holders of Colorado River water, did not approve the Lower Basin DCP. IID has filed a suit in state court alleging that state approval of the DCPs violated the California Environmental Quality Act.

Due to uncertainty with the pending suit filed by IID and the possibility that Metropolitan would need to cut back Colorado River water deliveries in accordance with the Lower Basin DCP; in addition to uncertainty with legal and regulatory issues involving utilization of the Delta to convey State Water Project water; and the potential for prolonged droughts due to climate change that could last more than the multiple three dry-year scenario required to be analyzed for this WSA, Sweetwater Authority cannot guarantee that at some point in the future, supply of imported water could be diminished from those projected in this WSA, which would impact water availability for the National City Bayfront Projects.

This WSA does not create a right or any entitlement to water service (CWC § 10914). The WSA is not a commitment to serve the project, but it is a review of Sweetwater Authority's total projected water demands and supplies. Based on presently available information, the WSA and its analyses and conclusions are conditioned in part on the ability of Metropolitan and CWA to continue to supply imported water to meet Sweetwater Authority's needs.

In addition, as indicated in Section 8.4, Sweetwater Authority's water distribution system has limitations in meeting some of the fire flow demands for the National City Bayfront Projects plus meeting the maximum day demands for the gravity pressure zone of Sweetwater Authority's service area, where the proposed projects would be located. Sweetwater Authority recommends that the Port and the City of National City upgrade existing pipelines in the vicinity of Project Nos. 1 and 3, from 12-inch PVC to 16-inch PVC, in order to accommodate the required fire flow demands plus maximum day demands. Alternatively, the Port and the City of National City could choose to downscale Projects No. 1 and No. 3 Phase 2 to meet the fire flow demands plus maximum day demands without the need for water infrastructure improvements.
Appendix A

Request from the San Diego Unified Port District to Prepare a Water Supply Assessment
July 10, 2019

Erick Del Bosque, PE
Sweetwater Authority
505 Garrett Avenue
Chula Vista, CA 91910

Subject: 30-Day Extension for Water Supply Assessment for National City Bayfront Projects Environmental Impact Report

Dear Erick,

Per your request, the San Diego Unified Port District ("District") hereby agrees to grant a 30-day extension to Sweetwater Authority for completion of the Water Supply Assessment (WSA) for the National City Bayfront Projects Environmental Impact Report. The District agrees to this waiver based on the understanding that Sweetwater Authority staff will work to have the WSA docketed for adoption by Sweetwater Authority's Governing Board in August 2019.

If you have any questions regarding this letter, please contact me at (619) 666-7263 or via email at abuzaiti@portofsandiego.org.

Sincerely,

Anna Buzaitis
Program Manager, Planning

cc: Ray Pe, Principal Planner, City of National City
April 26, 2019

Jason Mettler
Sweetwater Authority
505 Garrett Avenue
PO Box 2328
Chula Vista, CA 91912-2328

SUBJECT: Request for Water Supply Assessment for National City Bayfront Projects EIR

Dear Mr. Mettler:

Per your request in a letter dated January 31, 2019 (see attached), and in accordance with Senate Bill 610 (California Water Code Section 10910 et al), this letter serves as the San Diego Unified Port District’s request for Sweetwater Authority to prepare a Water Supply Assessment for the National City Bayfront Projects Environmental Impact Report (EIR). The Project is a joint effort with the City of National City, with the Port serving as the CEQA Lead Agency for the EIR.

Enclosed with this letter is a table that identifies the following for each of the six (6) main Sites of the project being evaluated in the EIR:

- Site size
- Existing land use/zoning
- Proposed land use/zoning
- Existing use of Site
- Proposed use of Site
- Address of Site (if applicable)
- APN of Site (if applicable)
- Anticipated Building Construction Type
- Square footage of buildings
- Preliminary fire flow estimates

A map that corresponds to the Site # shown on the table is also enclosed.

If you have any questions, please contact me at (619) 686-7263 or email me at abuzaiti@portofsandiego.org. Thank you in advance for your help.

Sincerely,

Anna Buzaitis
Program Manager, Planning

cc: Ray Pe, Principal Planner, City of National City

encl: Letter dated 1/31/19; Table of Project Information; Map of Site
<table>
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<th>Description</th>
<th>Type Code</th>
<th>Building Construction Type IIA</th>
<th>Construction of New Buildings (66)%</th>
<th>Idental Code</th>
<th>Notes</th>
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</table>

**Notes:**
- All buildings are constructed of Type T-1 wood and steel-framed construction.
- Buildings are equipped with automatic sprinkler systems.
- All buildings are required to have fire-resistance ratings of at least 2 hours.
- Buildings are required to have emergency exitways with automatic doors.
- Buildings are required to have smoke detectors and fire alarms.
- Buildings are required to have fireproofing materials in all areas.
National City Bayfront Projects EIR
*Project Components for Water Supply Assessment*
Del Bosque, Erick

From: Anna Buzaitis <abuzaiti@portofsandiego.org>
Sent: Wednesday, August 14, 2019 12:29 PM
To: Del Bosque, Erick
Cc: Ray Pe (rpe@nationalcityca.gov)
Subject: RE: Request to Prepare Water Supply Assessment

Hi Erick,

Per our conversation, the purpose of this email is to document the minor correction of the square footage of supporting facilities in Phase 1 of Project 3 in the Water Supply Assessment (WSA) for the National City Bayfront Projects. More specifically, my original request to prepare the WSA incorrectly noted that the supporting facilities (e.g., administration building, restrooms, and a maintenance building) as proposed to be 13,000sf, instead of the correct square footage of 18,000sf. The following is the correction to the draft WSA shown in track changes:

1. **Phase 1**: Retaining the existing Pier 32 Marina and adding a Recreational Vehicle (RV) Park consisting of
   a. 135 RV sites and 43,000-18,000 sf of supporting facilities such as administration building, restrooms, and a maintenance building.

In addition, on 8/13/19, the City of National City Fire Marshal indicated that the change from 13,000sf to 18,000sf increases the fire flow from “3,000 GPM; 3 hours @ 20 PSI” to “3,500 GPM; 3 HRS @ 20 PSI.”

Please let me know if you have any questions on this.

Thank you,
Anna

From: Anna Buzaitis
Sent: Friday, April 26, 2019 12:59 PM
To: Mettler, Jason <jmettler@sweetwater.org>
Cc: Ray Pe (rpe@nationalcityca.gov) <rpe@nationalcityca.gov>
Subject: Request to Prepare Water Supply Assessment

Hi Jason,

Attached please find attached the Port’s request to Sweetwater Authority to prepare a Water Supply Assessment.

Please call or email me if you have any questions.

Thank you,
Anna

Anna Buzaitis
Program Manager, Planning & Green Port
3165 Pacific Highway, San Diego, CA 92101
(o) (619) 696.7263 • (c) 619.458.5519
Ms. Anna Buzaitis  
Program Manager, Planning and Green Port  
San Diego Unified Port District  
3165 Pacific Highway  
San Diego, CA 92101  

Subject: National City Bayfront Projects & Plan Amendments, Notice of Preparation  
SWA File: (Dev) NC Bayfront  

Dear Ms. Buzaitis:

Thank you for providing Sweetwater Authority (Authority) with a copy of the Notice of Preparation and Initial Study for the preparation of an Environmental Impact Report (EIR) for the National City Bayfront Projects and Plan Amendments (Project) prepared by the San Diego Unified Port District (SDUPD). Based on the Authority’s review, the following comments are provided.

Water Supply Assessment

As described in the Notice of Preparation, the Project includes the construction of up to five hotels with 463 rooms, RV park areas, modular cabins, an expanded marina, and tourist/visitor-serving commercial development including commercial and retail uses. Please note that this project may be subject to the preparation of a Water Supply Assessment pursuant to California Water Code Section 10912 (Section 10912) and California Senate Bill 610 (SB 610). SB 610 requires that once the SDUPD, as lead agency, determines that a “project” as defined by Section 10912 is subject to CEQA, and determines the type of CEQA document required, a request be made to the water provider to prepare a Water Supply Assessment (WSA) to be included in the Project’s Draft EIR. Upon determination by the SDUPD that a WSA is required for the project, a request for its preparation shall be made to the Authority. The Authority is available to consult with the SDUPD to assist with information to help make a determination for the WSA requirement.

Water Utilities

There are multiple distribution water mains (mains), service laterals, and water appurtenances located within the Project site. To minimize the potential for conflicts between water facilities and designated public spaces within the Project, the Authority requests that water facilities located within Project areas be relocated to

A Public Water Agency  
Serving National City, Chula Vista and Surrounding Areas
roads, such as within the realigned Marina Way, and away from planned development areas and environmental buffers. Please note that the relocation of existing Authority facilities and new facilities to serve the project would be subject to the Authority's Rates and Rules, Design Standards, and Standard Specifications for the Construction of Water Facilities, all of which can be found on the Authority's website. The Authority recommends early coordination regarding relocation of facilities in order to avoid Project impacts and/or delays.

Please continue to include the Authority on the Project's distribution list. If you have any questions, please contact Jason Mettler at (619) 409-6755, or jmettler@sweetwater.org.

Sincerely,

SWEETWATER AUTHORITY

[Signature]

Luis Valdez, P.E.
Engineering Manager

cc: Mr. Ron Mosher, Sweetwater Authority
    Mr. Jason Mettler, Sweetwater Authority
    Mr. Israel Marquez, Sweetwater Authority
Appendix B

Sweetwater Authority’s Drought Resolution 16-10 and Drought Response Plan
RESOLUTION 16-10

RESOLUTION OF THE GOVERNING BOARD OF SWEETWATER AUTHORITY DEACTIVATING LEVEL 2 – DROUGHT ALERT OF THE DROUGHT RESPONSE PLAN

WHEREAS, by Resolution 09-12 Sweetwater Authority (Authority) adopted its Drought Response Plan based upon the need to conserve water supplies for the greatest public benefit, increase the efficient uses of water, discourage waste of water, and avoid or minimize the effects of any future shortage; and

WHEREAS, since initial adoption of the Authority’s Drought Response Plan, Governor Brown has issued a series of executive orders to strengthen the state’s ability to manage water and habitat effectively in drought conditions, and called on all Californians to take action to conserve water; and

WHEREAS, in response to each of the Governor’s Executive Orders and continuing drought conditions, the State Water Resource Control Board (SWRCB) subsequently amended and readopted a series of emergency statewide regulations to reduce outdoor water use, require urban water suppliers to implement mandatory outdoor irrigation restrictions, and allow local suppliers to impose fines or conduct other progressive enforcement actions for those who violate emergency regulations; and

WHEREAS, in response to SWRCB Emergency Drought regulatory requirements, the Sweetwater Authority Governing Board has amended the Authority’s Drought Response Plan multiple times to update water conservation measures and water waste prohibitions; and

WHEREAS, on September 24, 2014, the Authority’s Governing Board amended the Authority’s Drought Response Plan to include the mandatory water restrictions and activated Level 2 of the Authority’s Drought Response Plan; and

WHEREAS, the Authority’s customers have responded to ongoing drought conditions by regularly exceeding mandatory water use reduction goals and along with much of the state, conserving water at unprecedented levels; and

WHEREAS, on May 9, 2016, in light of water supply conditions and positive statewide water conservation achievements, Governor Brown issued Executive Order B-37-16, that directed the SWRCB and Department of Water Resources (DWR) to update temporary emergency water restrictions and transition to permanent, long-term improvements in water use which include a new framework for determining urban water agency water use reduction targets, and permanently prohibits specific water waste practices; and

WHEREAS, it is no longer necessary to enforce the full range of mandatory water use restrictions required in Level 2 – Drought Alert in order to meet the new emergency short term and permanent longer term water conservation water reduction targets.
NOW THEREFORE BE IT RESOLVED by the Governing Board of the Authority, as follows:

SECTION 1. All of the above recitals are true.

SECTION 2. The Governing Board called a public hearing for June 22, 2016, at 3:30 p.m. for the purposes of receiving public comments and protests concerning this Resolution. Notice of the public hearing was given by publication in a newspaper of general circulation within the Authority, once, seven (7) days in advance of the public hearing, in accordance with Government Code section 6061. At the Regular Board Meeting, the Governing Board of Sweetwater Authority reviewed the amendments to the Authority's Drought Response Plan, which are proposed to be adopted to implement the mandatory conservation measures. At the time and place set for the public hearing, this Resolution was considered and the Governing Board heard and considered the comments of all persons appearing at the hearing and all written comments and protests submitted prior to the close of the hearing.

SECTION 3. The Governing Board of the Authority directs deactivation of Level 2-Drought Alert, and a return to Level 1 - Drought Watch as defined and provided for within the Authority's Drought Response Plan.

SECTION 4. The Governing Board directs that all documents and other materials constituting the record of proceedings be maintained by the General Manager, or his designee, on file at Sweetwater Authority, located at 505 Garrett Avenue, Chula Vista, California 91910.

SECTION 5. This Resolution shall become effective as of the date of adoption and shall be published within ten (10) days of adoption, pursuant to California Water Code Section 376.

PASSED, APPROVED, AND ADOPTED by the Governing Board of Sweetwater Authority at a regular meeting duly held on the 22nd day of June 2016 by the following vote:

AYES: Directors Castaneda, Cerda, Morrison, Preciado, Thomas, and Van Deventer
NOES: None
ABSENT: Director Zamudio
ABSTAIN: None

Teresa Thomas, Vice Chair

Attest: Janet Gonzalez, Board Secretary

SECTION 1. Declaration of Policy.
California Water Code Sections 350 et seq. permits distributors of a public water supply to declare a water shortage emergency condition and adopt regulations and restrictions of the delivery of water to conserve the water supply for the greatest public benefit with particular regard to domestic use, sanitation, and fire protection.

California Water Code Section 370 et seq. permits the use of allocation-based conservation water pricing to encourage water users to conserve water, increase efficient uses of water, and further discourage waste of water.

California Water Code Sections 375 et seq. permits public entities which supply water at retail for the benefit of persons within the service area of the public entity to adopt and enforce water conservation programs to reduce the quantity of water used by water customers for the purpose of conserving the water supplies of such public entity.

The Governing Board hereby establishes this Drought Response Plan based upon the need to conserve water supplies for the greatest public benefit, increase the efficient uses of water, discourage waste of water, and avoid or minimize the effects of any future shortage. This Drought Response Plan is in addition to any other regulatory requirements and mandated water use prohibitions enacted by the State of California.

SECTION 2. Findings.
The Governing Board finds and determines that a water shortage could exist based upon the occurrence of one (1) or more of the following conditions:

A) A general extended water supply shortage due to increased demand or limited supplies.

B) The supply and/or distribution of water by the San Diego County Water Authority (CWA) or certain other agencies become inadequate.

C) A major failure of the supply, storage, and distribution facilities of the Metropolitan Water District of Southern California (MWD), the CWA, or Sweetwater Authority (Authority) occurs.

D) The Governor proclaims a State of Emergency to exist throughout the State of California due to severe drought conditions.

The Governing Board also finds and determines that the conditions prevailing in the San Diego region require that the water resources available be put to maximum beneficial use; the waste or unreasonable use, or unreasonable method of use of water be discouraged; and that the conservation of such water be achieved to the maximum extent reasonable and beneficial use thereof in the interest of the customers of the Authority and for the public welfare.
SECTION 3. Application.
This Drought Response Plan shall apply to all persons who use any water provided by the Authority.

A) This Drought Response Plan is only intended to further the conservation of water. It is not intended to implement any provision of federal, state, or local statutes, ordinances, or regulations relating to the protection of water quality or control of drainage or runoff.

B) Nothing in this Drought Response Plan is intended to limit the ability of the Authority to declare and respond to an emergency, including an emergency that affects the ability of the Authority to supply water.

C) The provisions of this Drought Response Plan do not apply to use of water from private wells or other approved alternate water sources including, but not limited to grey water and rain water catchment systems.

Unless otherwise specified herein, The Authority's General Manager or a designated representative, is hereby authorized and directed to implement the provisions of this Drought Response Plan.

SECTION 5. Revenue Neutral Water Conservation Pricing Structure.
The Authority may establish a revenue neutral water conservation pricing structure, enabling the Authority to retain current revenue projections while encouraging customer conservation by adopting changes to its inclining block rate structure. The revenue neutral conservation pricing structure would involve changes in water commodity rates and charges in current block rate tiers or the addition of new block rate tiers to encourage conservation by water users. Adoption of any such water conservation pricing structure shall be subject to the requirements of all applicable laws including, but not limited to, Proposition 218.

SECTION 6. Reduction Levels.
The identified water conservation levels specified in this Drought Response Plan enable the Authority to control water use demands, assure reasonable and beneficial use of water, prevent unreasonable use of water within the Authority's service area, and plan and implement water management measures necessary to conserve water in a fair and orderly manner for the benefit of the public.

Water use reduction goals are percentage water reductions from a base (Base). The Base is the annual average of potable water used by all Authority customers during either the immediately preceding period in which no mandatory water use or supply restrictions were implemented, or a specified period aligned with state agency and/or wholesale water supplier’s reference period. The Base period will be set by Board declaration and continue until changed by subsequent declaration.
Customer target water allocations (Target Water Allocations) will be established for each property based upon each property’s average historic water use during the Base period, less the percentage water use reduction goal to be achieved. When the Governing Board declares a water shortage emergency during a Level 2 – Drought Alert condition, a Level 3 – Drought Critical condition, or a Level 4 – Drought Emergency condition, no customer account shall use more than the Target Water Allocation for that parcel each billing cycle.

Most customers receive their water bills on a bi-monthly basis, or six (6) times a year, therefore a Target Water Allocation will be calculated for each billing cycle. The Target Water Allocation will be printed on each bill for both the current and next billing period. This will allow all customers to see their Target Water Allocation for the next billing cycle. The Target Water Allocation shall be the Base less the percentage of the particular drought level. For example, if a customer has a Base for September bills of 20 HCF and the Drought Level is 3, or 40 percent, then the customer’s Target Water Allocation is 12 HCF.

Notwithstanding the below-noted general occurrences that trigger each level of drought response, the Governing Board may consider hydrologic conditions and social, political, and economic indicators and in its reasonable discretion determine the appropriate level of drought response. The Governing Board may consider short term (one year or less) and/or long term (multiple dry year) projected water supply shortfalls to determine appropriate percentage reduction goals. The Governing Board may increase the level of drought response for reasons including but not limited to notification of regional supply reductions, localized emergency events causing a local supply shortage, and/or a State agency or wholesale water supplier imposing mandatory water use restrictions or prohibitions on the Authority or end users.

The four levels of drought are defined as:

A) **Level 1 - Drought Watch.** A Level 1 – Drought Watch condition may occur when a program is initiated by the CWA and/or MWD, and/or the State Water Resources Control Board (SWRCB) to reach up to a ten percent (10%) water use reduction goal. Under a Level 1 – Drought Watch condition, Authority customers are requested to reduce consumption up to ten percent (10%) from the Base, and are required to comply with the water waste prohibitions as set forth in section 7. At a Level 1 – Drought Watch condition, the current water pricing structure would remain in effect with no imposition of a revenue neutral water conservation pricing structure. The General Manager shall declare a Level 1 – Drought Watch condition.

B) **Level 2 - Drought Alert.** A Level 2 – Drought Alert condition may occur when a program is initiated by CWA, MWD, and/or the SWRCB to reach up to a twenty percent (20%) water use reduction goal. Under a Level 2 – Drought Alert condition, Authority customers are requested to reduce consumption up to twenty percent (20%) from the Base, and are required to comply with the water waste prohibitions and water conservation measures as set forth in section 7. The Governing Board has sole authority to declare a Level 2 – Drought Alert
condition, and may also implement a revenue-neutral water conservation pricing structure.

If during a Level 2 – Drought Alert condition the Governing Board implements a revenue-neutral water conservation pricing structure, then the Authority’s policy titled “Adjustment to Customer’s Water Bill” shall be suspended. The Governing Board may additionally declare a water shortage emergency, in the manner and on the criteria provided in California Water Code Section 350 et seq. and adopt appropriate regulations and restrictions under such authority.

C) Level 3 - Drought Critical. A Level 3 – Drought Critical condition may occur when a program is initiated by CWA, MWD and/or the SWRCB to reach up to a forty percent (40%) water use reduction goal. Under a Level 3 – Drought Critical condition, Authority customers are requested to reduce consumption up to forty percent (40%) from the Base, and are required to comply with the water waste prohibitions and water conservation measures as set forth in section 7. The Governing Board has sole authority to declare a Level 3 – Drought Critical condition, and may also implement a revenue-neutral water conservation pricing structure.

If during a Level 3 – Drought Critical condition the Governing Board implements revenue-neutral water conservation pricing, then the Authority’s policy titled “Adjustment to Customer’s Water Bill” shall be suspended. The Governing Board may additionally declare a water shortage emergency, in the manner and on the criteria provided in California Water Code Section 350 et seq. and adopt appropriate regulations and restrictions under such authority.

D) Level 4 - Drought Emergency. A Level 4 – Drought Emergency condition may occur when a program is initiated by CWA, MWD and/or the SWRCB to reach in excess of a forty percent (40%) water use reduction goal. During a Level 4 – Drought Emergency condition, Authority customers are requested to reduce consumption by more than forty percent (40%) from the Base, and are required to comply with the water waste prohibitions and water conservation measures as set forth in section 7. The Governing Board has sole authority to declare a Level 4 – Drought Emergency condition, and may also implement a revenue-neutral water conservation pricing structure.

If during a Level 4 – Drought Emergency condition the Governing Board implements revenue-neutral water conservation pricing, then the Authority’s policy titled “Adjustment to Customer’s Water Bill” shall be suspended. The Governing Board may additionally declare a water shortage emergency, in the manner and on the criteria provided in California Water Code Section 350 et seq. and adopt appropriate regulations and restrictions under such authority.


These measures are established to encourage all Authority customers to use available water wisely and take all reasonable steps to reduce their water use, are aligned with
state imposed end user water waste prohibitions, and are designed to increase the efficiency of water use throughout the service area. Authority customers are to carefully manage indoor and outdoor water use and eliminate water waste. “Use Water Wisely” is the underlying theme designed to achieve a water conservation ethic for all customers, which is especially important during the drought.

A) State Wide Water Waste Prohibitions – The following practices have been determined by the state to waste water, and are therefore prohibited by end users at all times, including during a Level 1 – Drought Watch condition, Level 2 – Drought Alert, Level 3 – Drought Critical, and Level 4 – Drought Emergency:

1. Customers are prohibited from hosing off sidewalks, driveways, or other hardscapes except where necessary to address an immediate health and safety need or to comply with a term or condition in a permit issued by a State or federal agency.
2. Customers are prohibited from washing automobiles with hoses not equipped with a shut-off nozzle.
3. Customers are prohibited from using non-re-circulated water in a fountain or other decorative water feature.
4. Customers are prohibited from watering lawns in a manner that causes runoff.
5. Customers are prohibited from watering lawns within forty-eight (48) hours after measurable precipitation.
6. Customers are prohibited from irrigating ornamental turf on public street medians with potable water.

B) Water Conservation Measures – The following end user water conservation measures are designed to be more restrictive with each drought level, to conserve available supplies for future use.

In addition to the above noted state water waste prohibitions, the following measures shall apply at all times, including during a Level 1 – Drought Watch condition:

1. Water should be used reasonably and productively at all times.
2. Customers are to repair major water leaks immediately and minor water leaks within twenty-four (24) hours of discovery.
3. Customers are encouraged to restrict hose washing of parking areas, tennis courts, patios, or other paved areas to periods of immediate safety or sanitary hazards.
4. Customers are encouraged to use an automatic shut-off nozzle when using a hand-held hose for spraying, landscape watering, trailer/vessel washing, or structure washing.
5. Customers are encouraged to minimize the application of water to outdoor landscapes in a manner that causes runoff; such that no water flows onto
adjacent properties, non-irrigated areas, private and public walkways, roadways, parking lots or structures.

6. Customers are encouraged to limit the application of potable water to outdoor landscapes during and within forty-eight (48) hours after measurable rainfall.

7. Customers are encouraged to use drip methods or hand irrigation whenever possible and prudent to water landscaped areas, including trees and shrubs that are not irrigated by a landscape irrigation system; limit sprinkler operation to the hours of 6:00 p.m. to 9:00 a.m. the following morning, except for the first thirty (30) days necessary to establish a new lawn; and to irrigate no more than three (3) days per week.

8. Customers are encouraged to use re-circulating systems for recreational water features.

9. Serve and refill water in restaurants and other food service establishments only upon requests.

10. Offer guests in hotels, motels, and other commercial lodging establishments the option of not laundering towels and linens daily.

The above noted state water waste prohibitions and these additional measures apply during a Drought Alert – Level 2. To the extent any of the following measures conflict with measures in Level 1, the following language will replace the conflicting language in the measures in Level 1.

1. Customers shall repair major water leaks immediately and minor water leaks within twenty-four (24) hours of discovery.

2. Customers are to restrict hose washing of, parking areas, tennis courts, patios, or other paved areas to periods of immediate safety or sanitary hazards.

3. Customers must use an automatic shut-off nozzle when using a hand-held hose for spraying, trailer/vessel washing, or structure washing.

4. Customers are to use a hand-held hose equipped with a positive shut-off nozzle or bucket to water landscaped areas, including trees and shrubs that are not irrigated by a landscape irrigation system.

5. Customers are restricted from watering outdoor landscapes in a manner that causes runoff such that water flows onto adjacent properties, non-irrigated areas, private and public walkways, roadways, parking lots or structures.

6. Customers are restricted from applying potable water to outdoor landscapes during and within forty-eight (48) hours after measurable rainfall.

7. Customers are to restrict outdoor landscape sprinkler operation to the hours of 6:00 p.m. to 9:00 a.m. the following morning; and to irrigate no more than two (2) days per week, or as otherwise determined by the Governing Board in its reasonable discretion, which may include limitations to specific days of the week.
8. Customers are encouraged to limit lawn watering and landscape irrigation using sprinklers to no more than ten (10) minutes per watering station per day. This recommendation does not apply to landscape irrigation systems using water efficient devices, including but not limited to weather-based controllers, drip/micro-irrigation systems and stream rotor sprinklers.

9. Stop operating ornamental fountains, decorative water features, and recreational water features unless the water is part of a recirculating system.

10. Customers are encouraged to stop filling or re-filling pools, ornamental lakes and/or ponds, except to the extent needed to sustain aquatic life.

11. Eating and drinking establishments, or other public places where food or drink are served and/or purchased, are limited to serving drinking water only upon request.

12. Operators of hotels and motels other commercial lodging establishments shall offer guests the option of not laundering towels and linens daily, and shall prominently display notice of this option in each guest room using clear and easily understood language.

13. Customers are prohibited from irrigating with potable water landscapes outside newly constructed homes and buildings in a manner inconsistent with regulations or other requirements established by the California Building Standards Commission and the Department of Housing and Community Development.

The above-noted state water waste prohibitions, measures in Levels 1 and 2, and the following additional measures apply during a Drought Critical — Level 3. To the extent any of the following measures conflict with measures in Levels 1 and 2, the following language will replace the conflicting language in the lower level requirements.

1. Customers shall stop washing sidewalks, driveways, parking areas, tennis courts, patios, or other paved areas except to address immediate health and safety or to comply with a term or condition in a permit issued by a state or federal agency.

2. Customers shall stop hand-washing vehicles. Customers are encouraged to stop washing vehicles except at commercial carwashes that re-circulate (reclaim) water onsite, or by high pressure/low volume wash systems.

3. Customers are prohibited from watering outdoor landscapes in a manner that causes runoff such that water flows onto adjacent properties, non-irrigated areas, private and public walkways, roadways, parking lots or structures.

4. Customers shall only operate landscape sprinklers between the hours of 6:00 p.m. to 9:00 a.m. the following morning.

5. Customers are to restrict residential and commercial landscape irrigation to no more than two (2) days per week, or as otherwise determined by the Governing
BOARD in its reasonable discretion, which may include limitations to specific days of the week.

6. Customers are to limit lawn watering and landscape irrigation using sprinklers to no more than ten (10) minutes per watering station per day. This does not apply to landscape irrigation systems using water efficient devices, including but not limited to weather-based controllers, drip/micro-irrigation systems and stream rotor sprinklers.

7. Customers shall stop operating ornamental fountains or similar decorative water features with potable water. This prohibition does not apply to decorative fountains and landscape water features which are connected to alternative water sources.

8. Customers are encouraged to stop filling or re-filling pools, ornamental lakes and/or ponds, except to the extent needed to sustain aquatic life, provided that such animals are of significant value and have been actively managed within the water feature prior to declaration of a drought response level under this ordinance.

9. No new potable water service shall be provided, no new temporary meters or permanent meters shall be provided, and no statements of immediate ability to serve or provide potable water service (such as will serve letters, certificates, or letters of availability) shall be issued, except under the following circumstances:
   a. A valid, unexpired building permit has been issued for a project; or
   b. A project is necessary to protect the public’s health, safety, and welfare; or
   c. The applicant provides substantial evidence of an enforceable commitment that water demands for a project will be offset prior to the provision of a new water meter(s) to the satisfaction of the Authority.

   This provision shall not be construed to preclude the resetting or turn-on of meters to provide continuation of water service or to restore service that has been interrupted for a period of one (1) year or less.

The above-noted state water waste prohibitions, measures in Levels 1, 2, and 3, and the following additional measures apply during a Drought Emergency – Level 4. To the extent any of the following measures conflict with measures in Levels 1, 2 and 3, the following language will replace the conflicting language in the lower level requirements.

1. Stop all landscape irrigation except:
   a. Crops and landscape products of commercial growers and nurseries
   b. Maintenance of existing landscaping necessary for fire protection as specified by the fire marshal of the local fire protection agency having jurisdiction over the property to be irrigated
   c. Maintenance of existing landscaping for erosion control
d. Maintenance of plant materials identified to be rare or essential to the well-being of rare animals

e. Maintenance of landscaping within active public parks and playing fields, day care centers, school grounds, cemeteries, and golf course greens, provided that such irrigation does not exceed two (2) days per week

f. Watering of livestock

g. Public works projects and actively irrigated environmental mitigation projects

SECTION 8. Mandatory Restrictions.

When customers of the Authority can no longer meet water use reduction goals as defined for any drought level through requested efforts, or when the amount of water supply available to the Authority for service to customers is determined to be inadequate to the extent that there would be insufficient water for human consumption, sanitation and fire protection, the Governing Board may activate by resolution mandatory water use reductions, and/or additional prohibitions or measures in accordance with California Water Code 350 et seq.

SECTION 9. Violations and Penalties.

Any customer who violates a state water waste prohibition at any time, and/or uses, causes to be used, or permits the use of water in violation of this Drought Response Plan during a Level 2 – Drought Alert condition, or Level 3 – Drought Critical condition, or Level 4 – Drought Emergency condition is guilty of an offense punishable as provided:

A) Each day that a violation of a prohibited water conservation measure occurs is a separate offense.

B) Progressive administrative fines may be levied for each violation as follows:

1. First violation of any prohibition - written warning.
2. Second violation of any prohibition within one (1) year - $50.
3. Third violation of any prohibition within one (1) year - $100.
4. Fourth violation of any prohibition within one (1) year - $200.
5. Each violation thereafter of any prohibition within one (1) year - $500.
6. Any violation occurring more than one (1) year from the previous will be treated as a first violation.

Customers using more than the Target Water Allocation will be notified of their overage and given one (1) full billing cycle to bring their usage below the Target Water Allocation. Failure to do so may result in the implementation of the following administrative fines levied as follows, and/or other measures the Authority may determine at a later date:
1. First and second allocation overage violation - written warning.
2. Third violation of any allocation overage within one (1) year - $100.
3. Fourth violation of any allocation overage within one (1) year - $200.
4. Each violation thereafter of allocation overage within one (1) year - $500.
5. Any allocation overage violation occurring more than one (1) year from the previous will be treated as a first violation.

Should mandatory water use reductions and/or conditions be activated by resolution, any person who willfully uses, causes to be used, or permits the use of water in violation of this Drought Response Plan, adopted by Resolution 16-09 is guilty of an offense punishable as provided herein.

A) Each violation of this Drought Response Plan may be prosecuted as a misdemeanor punishable by imprisonment in the county jail for not more than thirty (30) days or by a fine not exceeding one thousand dollars ($1,000 - U.S.A. currency), or by both, as provided in California Water Code Section 377.

B) Willful violations of mandatory conservation measures which may be put into place during any drought level may be enforced by discontinuing service to the property at which the violation occurs, as provided by California Water Code Section 356 et seq.

C) All remedies provided herein, both civil and criminal, shall be cumulative, and not exclusive.

SECTION 10. Exemptions and Appeals.
In order to encourage the efficient use of water for sanitary, health care, and conservation benefit purposes, specific customer classes are exempted from the water use reduction penalties.

A) An exemption gives specified accounts the allowance not to meet their target conservation goals without monetary penalty.

B) Exemptions are under the discretion of the Authority and can be removed at any time. The Authority has identified and provided an exemption from penalties to water accounts for:

1. Residential water use that is:
   a. Less than or equal to 28 HCF in the bi-monthly billing periods for bills received in July, August, September and October, and 22 HCF for bi-monthly billing periods for bills received all other months during Drought Level 2.
   b. Less than or equal to 17 HCF in the bi-monthly billing period during Drought Level 3.
   c. Less than or equal to 11 HCF in the bi-monthly billing period during Drought Level 4.
2. Related to a medical nature, in order to ensure the health and safety of the general public.

3. Commercial establishments that provide an opportunity for conservation by offering services that allow individuals alternative means for completing water dependent tasks.

Any customer desiring to initiate a Target Water Allocation Appeal may do so at any time. Any customer desiring to appeal a penalty may do so within two (2) weeks of receipt of the bi-monthly or monthly bill. Any such request must be in writing utilizing the appeal form and filed with the General Manager or his/her designee. Customers shall have the right to appeal the decision of the General Manager or his/her designee to the Governing Board by filing a written appeal within seven (7) days of receipt of the written decision of the General Manager, or his/her designee. The Governing Board may delegate to a committee of its members the authority to consider and rule upon the written appeal.

SECTION 11. Activation and Deactivation.

The Governing Board of Sweetwater Authority hereby directs the General Manager to implement this Drought Response Plan by making appropriate declarations, determinations, and findings necessary and establish a Level 1 – Drought Watch condition. The declaration of any change in a Level 1 – Drought Watch condition shall be reported to the Governing Board at its next Regular Meeting. The declaration of a Level 2 – Drought Alert condition, Level 3 – Drought Critical condition and Level 4 – Drought emergency condition shall be made by the Governing Board, in accordance with the provisions hereof.

Following the declaration of any drought level, the General Manager shall implement the applicable provisions of this Drought Response Plan and make appropriate public announcements and notices. The designated drought response level shall become effective immediately upon announcement, unless otherwise stated at the time of resolution by the Governing Board.

Except for deactivation of a Level 1 – Drought Watch condition, which can be implemented by the General Manager and reported to the Governing Board at its next Regular Meeting, the deactivation of a drought response level shall be by resolution of the Governing Board.
Appendix C

Sweetwater Authority’s Resolution 01-19 and Interim Groundwater Management Plan
RESOLUTION 01-19

RESOLUTION OF THE GOVERNING BOARD
OF SWEETWATER AUTHORITY
ADOPTING AN INTERIM
GROUNDWATER MANAGEMENT PLAN

WHEREAS, Sweetwater Authority and its predecessors have been engaged in groundwater management activities associated with the Authority’s groundwater projects in the Sweetwater Valley (Department of Water Resources Basin Number 9-17) and the San Diego Formation for over one hundred and thirty-two years, and

WHEREAS, the Governing Board of Sweetwater Authority, by approval of Budget Project Number 99-21A approved funding of the preparation of a Groundwater Management Plan, and

WHEREAS, Sweetwater has plans to contract with an engineering consultant to work with staff to prepare a formal Groundwater Management Plan pursuant to Water Code Section 10750 et seq. (AB 3030), and

WHEREAS, the Governing Board wishes to memorialize its existing groundwater management activities as an Interim Groundwater Management Plan,

NOW, THEREFORE, BE IT RESOLVED by the Governing Board of Sweetwater Authority that, the attached Interim Groundwater Management Plan is adopted to guide the groundwater management activities of Sweetwater Authority until such time as it is replaced by a subsequent Groundwater Management Plan under Water Code Section 10750 et Seq. (AB3030) or other statutes.

PASSED AND ADOPTED at a regular meeting of the Governing Board of Sweetwater Authority held on this 9th day of November, 2001 by the following vote, to wit:

AYES: Directors Doud, Jarrett, Pocklington, Waters, Welsh, Wolniewicz, and Wright
NOES: None
ABSENT: None
ABSTAIN: None

[Signatures]
Margaret Cook Welsh, Chair

Attest:
Marisa Farpón-Friedman, Secretary
Sweetwater Authority Draft Interim Groundwater Management Plan

A. Interim Plan

This interim groundwater management plan shall govern the groundwater management activities of the Sweetwater Authority until a subsequent Groundwater Management Plan is adopted by the Sweetwater Authority Governing Board.

B. Groundwater Management Area Boundaries

Sweetwater Authority shall engage in groundwater management in the area of the Sweetwater Valley basin. This basin is as described in the State of California Department of Water Resources Bulletin Number 118 as the Sweetwater Valley Basin Number 9-17. Also included in the groundwater management activities are the watershed of the Sweetwater River and the underlying San Diego Formation within the Service area of the Sweetwater Authority.

C. Groundwater Management Strategies

1. Maintain static groundwater levels

It shall be the policy and goal of Sweetwater Authority groundwater management to extract from the San Diego Formation so as to not cause a decline in the long-term static water levels. In the Sweetwater Valley basin alluvial areas, the policy and goal of Sweetwater Authority groundwater management shall be to extract groundwater to not increase seawater intrusion or cause environmental impacts or damage other producers in the alluvial portion of the basin through the operations of Sweetwater Authority's groundwater projects.

2. Protect groundwater from pollution by manmade activities

Sweetwater Authority shall work with the San Diego Regional Water Quality Control Board (Region 9) to ensure that the groundwater quality within the Sweetwater Valley Basin and the San Diego Formation is protected from contamination.

3. Monitor seawater intrusion

Sweetwater Authority shall monitor groundwater levels, quality and seawater intrusion to ensure that activities of Sweetwater Authority are not causing seawater intrusion.
4. Monitor groundwater quality and quantity

Sweetwater Authority shall periodically monitor the levels and quality of groundwater in the monitoring wells shown in Appendix A. The Authority shall maintain a database of this periodic information for display on the Sweetwater Authority web page located at www.sweetwater.org.

5. Sweetwater Authority Groundwater Projects

Current Sweetwater Authority groundwater projects include the following:

a. Existing National City Wells.

b. Existing Richard A. Reynolds Brackish Groundwater Demineralization Facility and its nine groundwater extraction wells

c. Monitoring of existing groundwater monitoring wells and maintenance of a groundwater level and groundwater quality database.

d. Proposed National City Aquifer Storage and Recovery (ASR) Project.

6. Develop New or Expanded Groundwater Supplies

Staff shall perform activities to develop new groundwater supplies and expand existing groundwater supplies and provide Budget Requests for the Governing Board’s approval for these activities, as follows:

a. Investigate the development of new wells to extract potable or brackish groundwater to facilitate expansion of existing groundwater projects as in paragraph C.5. above.

b. Investigate new technologies and their application to existing groundwater sources.

c. Explore conjunctive use activities to augment or expand existing groundwater supplies.

D. Implementation

Sweetwater Authority shall work within the watershed of the Sweetwater River, the Sweetwater Valley Basin (Number 9-17) and the San Diego Formation within the service area of the Sweetwater Authority to manage groundwater levels and
protect groundwater quality. By adoption of this document, the Sweetwater Authority Governing Board hereby authorizes staff to maintain databases and perform groundwater management activities as described in this interim groundwater management plan.

E. Data Collection and Management

Sweetwater Authority shall maintain a database of groundwater levels and water quality for the existing monitoring wells shown in Appendix A. Staff shall, to the best of its abilities, carry out groundwater management activities using the strategies in Section C of this interim groundwater management plan.

F. Education

The Sweetwater Authority Stakeholder Survey identifies issues important to stakeholders in the watershed of the Sweetwater River, the Sweetwater Valley basin and the San Diego Formation within the Sweetwater Authority service area. As a part of the groundwater management activities to be carried out under the auspices of this interim groundwater management plan, Sweetwater Authority staff is directed to meet with other public entities and the public interested in the groundwater activities of the Sweetwater Authority. The purpose of these meetings shall be to coordinate information about Sweetwater Authority groundwater management activities and projects, receive input and responses from the public and public entities. Also these meetings shall strive to develop a base of support and a forum for constructive criticism and input to Sweetwater Authority for the groundwater management activities of the Authority.

G. Resolutions of the Governing board, Sweetwater Authority Policy and Legal Authority

1. Resolutions of the Governing Board

Adoption of the attached Resolution 01-19 establishes governing board adoption of this interim groundwater management plan and provides authorization for Sweetwater Authority staff to proceed with the activities described within.

2. Sweetwater Authority Policy concerning groundwater management

Sweetwater Authority's policies regarding groundwater management activities are described within this plan and any subsequent amendments to this interim groundwater management plan authorized by the Governing Board.
3. Legal Authority

Sweetwater Authority operates under the legal authority contained in Irrigation District Law as included in water code section 20500 et seq. Under this authorization the Sweetwater Authority may control, distribute, store, spread, sink, treat, purify, recapture and salvage any water for the beneficial use of the district. Further Sweetwater Authority according to water code 22078 may do any act to put to any beneficial use any water under its control.

Also under water code section 22076 Sweetwater Authority has, though its groundwater management practices have not been previously memorialized in an AB 3030 plan (water code section 10750 et seq.) programs that relate to the following:

a. the control of saline water intrusion
b. identification of and management of wellhead protection areas and recharge areas
c. replenishment of groundwater
d. monitoring of groundwater levels and storage
e. construction and operation of a brackish groundwater demineralization facility
f. development of state and federal partnerships in the funding of groundwater management activities
g. review and coordination of land use permitting with the County of San Diego to access development activities and their impact on groundwater
h. management of its groundwater resources by Sweetwater Authority as a local agency thereby making state-controlled groundwater management unnecessary

H. Program Coordination

The General Manager and the Operations Manager of Sweetwater Authority shall be responsible to the Governing Board for the performance of the groundwater management activities described in this interim groundwater management plan.
Appendix D

Fire Flow Assessment
There is insufficient capacity to meet the required demands for development of site 1. In order to adequately serve the proposed site, it would be required resize approximately 400 LF of existing 12" main to 16".
There is insufficient capacity to meet the required demands for development of site 3. In order to adequately serve the proposed site, it would be required to install approximately 1,500 LF of 16" main along the proposed road realignment and resizing approximately 1,700 LF of existing 12" main to 16".
TO: Governing Board (Operations Committee)  
FROM: Management  
DATE: August 16, 2019  
SUBJECT: Consideration of the Request for Qualifications for Professional Services to Prepare a Feasibility Study on Maximizing Reservoir Assets and Expand Local Water Supply  

SUMMARY  
The Governing Board included in the FY 2019-20 Strategic Plan Detailed Work Plan the task to conduct a Feasibility Study (Study) to explore developing new local water resources and maximizing reservoir assets. The first step in conducting the Study is to enlist the services of a water resources consultant to perform the work. Management recommends the following approach to performing the Study:  

1. Issue a Request for Qualifications (RFQ) to select a consultant  
2. Negotiate scope of work and fee for services with the selected consultant  
3. Conduct the Study  

This approach allows the Governing Board the maximum amount of flexibility with regard to developing a scope of work that encompasses the full breadth of items to be considered, and negotiate a fee for services with the selected consultant that is within the allocated budget amount of $300,000.  

Management seeks a recommendation from the Operations Committee to the Governing Board on the RFQ. A draft RFQ is attached for consideration.  

PAST BOARD ACTION  
August 14, 2019 The Governing Board directed staff to engage the Operations Committee to review the draft RFQ for Consultant to perform a Feasibility Study prior to consideration by the Governing Board.  
June 12, 2019 The Governing Board approved the FY 2019-20 Strategic Plan Detailed Work Plan.  

FISCAL IMPACT  
The FY 2019-20 Budget includes $300,000 for a Feasibility Study.
Memo to: Governing Board (Operations Committee)
Subject: Consideration of the Request for Qualifications for Professional Services to Prepare a Feasibility Study on Maximizing Reservoir Assets and Expand Local Water Supply
August 16, 2019
Page 2 of 2

POLICY
Strategic Plan Goal 2: System and Water Supply Reliability – Achieve an uninterrupted, long-term water supply through investment, maintenance, innovation and developing local water resources.

- Objective SR11: Explore options for new water sources including but not limited to: conservation, recycled water, potable reuse, stormwater retention, groundwater/desalination, and Urban Runoff Diversion Systems.
  - Task 003.00: Conduct a Feasibility Study including cost/benefit analyses and an evaluation of environmental impacts, for developing new water resources such as recycled water and potable reuse.

Strategic Plan Goal 3: Financial Viability – Ensure long-term financial viability of the agency through best practices, operational efficiency, and maximizing assets.

- Objective FV5: Explore innovative opportunities for leveraging Authority assets (e.g., reservoirs, property) to reduce financial burden on Authority ratepayers.
  - Task 001.00: Conduct a Feasibility Study including cost/benefit analyses and an evaluation of environmental impacts, for maximizing the Loveland and Sweetwater Reservoirs including but not limited to consideration of a pipeline between the two reservoirs and reducing the emergency storage requirement at Loveland Reservoir.

ALTERNATIVES
1. Approve the RFQ as is and direct staff to convene the Operations Committee to review qualifications and make a recommendation to the Governing Board.

2. Provide comment on the RFQ and convene the Operations Committee to review qualifications and make a recommendation to the Governing Board.

3. Other direction as determined by the Governing Board.

STAFF RECOMMENDATION
Staff seeks the direction of the Governing Board.

ATTACHMENT
Draft RFQ – Feasibility Study to Maximize Reservoir Assets and Expand Local Water Supply
Subject: REQUEST FOR QUALIFICATIONS FOR PREPARATION OF FEASIBILITY STUDY TO MAXIMIZE RESERVOIR ASSETS AND EXPAND LOCAL WATER SUPPLY

SWEETWATER AUTHORITY
505 GARRETT AVENUE
POST OFFICE BOX 2328
CHULA VISTA, CALIFORNIA 91912-2328
(619) 420-1413
FAX (619) 425-7469
http://www.sweetwater.org

August XX, 2019

To Whom It May Concern:

Sweetwater Authority (Authority) is seeking a water resources consultant to prepare a Feasibility Study that meets the following two objectives:

1) Conduct a Feasibility Study, including cost/benefit analyses and an evaluation of environmental impacts, for maximizing the Loveland and Sweetwater Reservoirs including but not limited to consideration of a pipeline between the two reservoirs and reducing the emergency storage requirement at Loveland Reservoir; and

2) Conduct a Feasibility Study including cost/benefit analyses and an evaluation of environmental impacts, for developing new water resources such as recycled water and potable reuse.

The two objectives indicated above are part of the Authority's Strategic Plan Fiscal Year (FY) 2019-20 Detailed Work Plan. Meeting these two objectives will help the Authority accomplish the following strategic plan goals: 1) Ensure long-term financial viability of the agency through best practices, operational efficiency, and maximizing assets; and 2) Achieve an uninterrupted, long-term water supply through investment, maintenance, innovation and developing local water resources.

The Authority has allocated $300,000 in its FY 2019-20 Budget for the preparation of this Feasibility Study.
A. BACKGROUND INFORMATION ON THE AUTHORITY'S WATER SOURCES

The Authority serves potable water to a population of approximately 190,000 in the City of National City, the unincorporated area of Bonita, and the western portion of the City of Chula Vista. Water is sourced from Sweetwater Reservoir, water wells (fresh and brackish) located in numerous locations within the Authority's service area, and imported water purchased from the San Diego County Water Authority (SDCWA). In addition, the Authority has interconnections with neighboring water agencies to supply water during emergency periods. Below is a summary of the Authority’s water supply sources.

Surface Water

The Authority owns and operates two surface water reservoirs, Sweetwater Reservoir located near Spring Valley, CA and Loveland Reservoir located near Alpine, CA. Both reservoirs are located in the Sweetwater River Watershed with Loveland Reservoir located approximately 17 miles upstream of Sweetwater Reservoir. Surface water from Sweetwater Reservoir is treated at the adjacent Robert A. Perdue Water Treatment Plant (Water Treatment Plant) located in Spring Valley, CA, which has the ability to produce a maximum of 30 million gallons per day (MGD).

Water in Loveland Reservoir cannot be used by the Authority at will since Loveland Reservoir is not directly connected to the Authority’s water treatment and distribution system. The Feasibility Study should address how to maximize the use of water in Loveland Reservoir. To make use of water in Loveland Reservoir, water has to be released through Loveland Dam’s 30-inch Bunger valve so water can travel downstream through the Sweetwater River into Sweetwater Reservoir, where it can then be pumped into Perdue for treatment. However, the Authority can usually only release water from Loveland Reservoir during December – March, when river and environmental conditions are ideal, meaning that it has rained sufficiently so the riverbed is saturated and the river is flowing to minimize water losses to the riverbed during a planned water transfer. Also, the river has to be completely absent of the Arroyo Toad during a water transfer, a federally endangered species and state species of special concern.

The Authority’s last two water transfers from Loveland Reservoir to Sweetwater Reservoir were done in February-March 2019 and February-March 2017, after periods of heavy rains. During years when the Authority does not complete a water transfer from Loveland Reservoir to Sweetwater Reservoir due to drier conditions in Sweetwater River, the Authority’s dependence on purchased imported water from SDCWA increases.

Brackish Groundwater

The Authority owns and operates the Richard A. Reynolds Groundwater Desalination Facility (Desal Facility) in Chula Vista, CA that treats brackish groundwater from eleven wells. The Desal Facility began operation in 1999 with five wells and a sixth well was later added for a maximum production capacity of 4 MGD. The Desal Facility was later expanded in 2017 to accommodate five new wells for a maximum production capacity of 10 MGD. These eleven wells extract the brackish groundwater from the San Diego Formation in the Coastal Plain of San Diego Basin (Department of Water Resources Basin No. 9-33). The Authority does not operate all eleven wells at the same time but rotates the wells being operated based on production target goals and environmental constraints. Since the expansion of the Desal
Facility, the Authority expects that production from this facility will be up to 8,800 acre-feet (AF) per Desal Water Year (April - March).

In addition to the eleven wells that extract brackish groundwater from the San Diego Formation, the Authority also owns four alluvial wells along the Sweetwater River that also tie into the Desal Facility. However, the Authority no longer operates these wells due to environmental constraints. Water that would be pumped from these wells can affect surface water levels in the river and impact its water quality.

**Fresh Groundwater**

The Authority owns and operates three fresh groundwater wells in National City. Two of them are operated on a daily basis unless they are taken offline for maintenance or repairs, and the third well serves as a backup. No treatment is provided to water produced from these wells. Only a disinfectant is added to the clearwell that serves these wells before the water is sent through the distribution system. Production from these wells has averaged 2,387 AF per year since FY ending in 1993.

**Imported Water**

Imported water purchased from SDCWA originates either in the Colorado River or the State Water Project. The Authority has the ability to take SDCWA deliveries of untreated imported water directly into the Water Treatment Plant or into Sweetwater Reservoir, and deliveries of treated imported water into the clearwell. Costs for imported untreated and treated water are approximately $1,341 per AF and $1,641 per AF, respectively, taking into account all transportation and fixed charges. For calendar year 2020, costs per AF for imported untreated and treated water are expected to increase by 4.8% and 4.3%, respectively. Since 1955, local water sources have met approximately 45% of the water demands in the Authority’s service area, while the 55% balance has been met with imported water supplies. During dry periods with low seasonal rainfall and runoff into Sweetwater Reservoir, the Authority can rely on 45 – 50% of local drought-proof groundwater supplies, with the balance from imported water supplies. The Authority seeks to reduce its dependence on imported water supplies by maximizing reservoir assets and expanding the local water supply portfolio.

**Interagency Emergency Interconnections**

The Authority has thirteen interconnections with neighboring water agencies to supply water during emergency situations, such as meeting fire flow demands when there isn’t sufficient pressure in the water distribution system. Out of the thirteen interconnections, one of them is with California American Water at the southwestern end of the Authority’s service area and it is the only interconnection where water can flow to and from either water agency. On the other twelve interconnections, water only flows to the Authority’s distribution system due to the hydraulics in the interconnection areas. Out of these twelve interconnections, five are with the City of San Diego and seven with Otay Water District.

**B. ANTICIPATED SCOPE OF WORK**
At a minimum, the Feasibility Study should evaluate the following alternatives, including a cost/benefit analysis and an evaluation of environmental impacts for each alternative. Evaluated alternatives do not need to be limited by the list below and the selected consultant is encouraged to provide new and innovative ideas that could result in other evaluated alternatives in the Feasibility Study.

- **Recycled water.** The Authority prepared a Recycled Water Master Plan in 2005. Implementing a recycled water system in the Authority’s service area was found to be unfeasible at the time, but re-evaluating the implementation of a recycled water system could be warranted.

- **Potable reuse.** Both direct and indirect potable reuse of reclaimed wastewater is gaining traction in California. There are no recent studies for potable reuse performed by the Authority, but neighboring water agencies have evaluated its potential in the region.

- **Pipeline connecting the two Authority Reservoirs.** Past studies have evaluated the feasibility of constructing a pipeline connecting both reservoirs and also connecting Loveland Reservoir to the Water Treatment Plant, to have the ability to transfer water from Loveland Reservoir to Sweetwater Reservoir and/or to the Water Treatment Plant any time of the year. However, these studies are outdated and the Authority would like to re-evaluate this option to see if it is feasible.

- **Reduction of minimum storage in reservoirs.** It is the Authority’s current policy to have at least three summer months’ worth of supply in Loveland Reservoir and one summer months’ worth of supply in Sweetwater Reservoir above the dead pool level, to use in emergency situations such as a major earthquake interrupting service to SDCWA’s aqueduct transporting imported water. By reducing the emergency storage amounts above the dead pool level in one or both reservoirs, the Authority would have more water available for treatment at the Water Treatment Plant. The basis for the emergency storage amounts in Sweetwater and Loveland Reservoirs is derived from a past 1982 study referenced in Item No. 32 of Section F below.

- **Supply water from Loveland Reservoir to regional water system.** Since Loveland Reservoir is isolated and not connected to the Authority’s water distribution system and water within the reservoir cannot be used by the Authority at will, the Authority might be able to sell untreated water from Loveland Reservoir to nearby water agencies or other interested entities by building infrastructure that connects Loveland Reservoir to other water agencies or entities. The option on whether water treatment at Loveland Reservoir would be necessary to connect to a regional water system should be explored.

- **Reduction of evaporation losses in reservoirs.** Since July 1992, evaporation losses at Sweetwater and Loveland Reservoirs have averaged 221 AF per month and 109 AF per month, respectively. Implementing measures to reduce evaporation losses at the reservoirs would increase the water available for treatment at the Water Treatment Plant. To the knowledge of current Authority staff, this alternative has not been evaluated by any past studies.
- **Improving Water Quality at Sweetwater Reservoir:** Water originating from Sweetwater Reservoir and produced from the Water Treatment Plant sometimes experiences taste and odor problems, especially during the hotter summer months due to algae blooms. Algae blooms could potentially be reduced by implementing one or more of the following: a powdered activated carbon system, dredging at one or both reservoirs, relocation of the pipeline from the Water Treatment Plant to Sweetwater Reservoir that conveys sludge from the treatment process, mixing and aeration, ultrasonic buoys, etc.

There have been numerous past studies that have evaluated some of the alternatives listed above, whether for the Authority's service area or the San Diego Region. These studies are referenced in Section F below and will be provided in Portable Document Format (PDF) to the selected consultant, to be used as background information in preparation of the Feasibility Study.

**C. REQUIREMENTS FOR STATEMENT OF QUALIFICATIONS**

Statements of Qualifications (SOQ) submitted by potential consultants shall be concise, well organized and demonstrate the responder's experience applicable to the requirements of this Request for Qualifications (RFQ). An SOQ submitted in response to this RFQ shall be in the following order and shall include:

1. **Introductory Letter:** Describe the firm's basic understanding of the Authority's proposed Feasibility Study. This letter should also contain an expression of the firm's interest in the Feasibility Study, a statement regarding the qualifications of the firm to do the Feasibility Study, and any summary information that may be useful or informative to the Authority.

2. **Identification of Responder:**
   a. Provide legal name and address of company.
   b. Provide legal form of company (partnership, corporation, joint venture, etc.).
   c. Identify any parent companies.
   d. Provide addresses of office(s) and number of employees.
   e. Provide name, title, address, telephone number, and email of a person to contact concerning the SOQ.

3. **Financial Relationships Disclosure(s):**
   a. Identify all existing and past financial relationships between consultant's firm and current members of the Authority's Governing Board and staff and entities for which said members are employed or have an interest, both past and present. If there are none, clearly state this.
b. Identify all existing and past financial relationships between consultant's proposed sub-consultants and current members of the Authority's Governing Board and staff and entities for which said members are employed or have an interest, both past and present. If there are none, clearly state this.

c. For a list of the Authority's Governing Board members, see the following link: http://www.sweetwater.org/35/Governing-Board

4. Required Qualifications: The following are the minimum required qualifications for proposers. Interested parties should not submit an SOQ if they do not meet these required qualifications:

a. The consultant's primary business or the primary business of a department within the consultant's firm shall be water resources related, and shall have been in the business of water resources for at least 5 years.

b. The consultant shall provide a single Project Manager as the primary point of contact with the Authority. This Project Manager must have at least 5 years (total, with current firm or other employers) of experience in the water resources industry.

c. Preference will be given to consultants experienced with water resources in California and the western United States, demonstrated by the consultant's list of qualifying projects of a similar nature to the proposed Feasibility Study.

d. Provide a list of past and on-going qualifying projects for which the consultant's services were or are similar to those described in this RFQ. Limit the list to no more than 10 projects the consultant feels are most relevant to the RFQ. For each project, include the following:

• A brief description of the project, date initiated, date completed (if applicable).

• Name of owner and owner's project manager with contact information (e-mail and/or phone).

• Identify role of the key personnel proposed for the Authority's Feasibility Study.

e. Present the experience of any sub-consultants in the same manner.

f. Provide evidence of the experience and competence of the consultant's team proposed to work on the Feasibility Study.

5. Consultant's Organization and Key Personnel: Provide an organizational chart showing the relationship and titles of key personnel. Describe proposed consultant's organization, including identification and responsibilities of key personnel and sub-consultants. For each of the key personnel, identify their main work location. Identify the Project Manager who will be responsible for the direct supervision and coordination of all work activities.
6. **Costs:** Attach a separate, sealed envelope marked “Confidential – Billing Rates” to the SOQ. Include a list of all individuals who are expected to work on the feasibility study with name, position, and hourly billing rate.

7. **Exceptions to the RFQ:** The proposer shall certify that it takes no exceptions to this RFQ, including but not limited to the Authority’s Professional Services Agreement (Agreement), as attached in Exhibit A. If the respondent does take exception(s) to any portion of the RFQ or Agreement, the specific portion of the RFQ or Agreement to which exception(s) is taken shall be identified and proposed alternative language shall be provided and explained in the SOQ.

8. **SOQ Authorization:** The SOQ shall be signed by an individual authorized to bind the consultant and shall contain a statement to the effect that the submittal is in effect for ninety (90) days.

9. **SOQ Submittal:** Provide one electronic copy of the SOQ in PDF in a compact disc or Universal Serial Bus (USB) flash drive. In addition, provide six (6) hard copies of the SOQ.

SOQs must be received by the Authority’s Engineering Department NO LATER THAN 5:00 P.M. on [INSERT DATE]. SOQs shall be delivered to the Authority’s Administration Office located at the following address:

Sweetwater Authority  
Attention: Erick Del Bosque, Engineering Manager  
505 Garrett Avenue  
Chula Vista, CA 91910

**D. CONSULTANT SELECTION PROCESS**

The Authority will evaluate all SOQs based on the evaluation criteria presented in this section, as well as other information obtained through background information and references.

The Authority’s Governing Board might convene a Committee for this RFQ. The Committee is made of three Governing Board Members assisted by Authority staff key to management of water resources. Using the established evaluation criteria, the Governing Board or Committee will evaluate the SOQs based on the firms’ personnel and organization, experience, and other information included in the SOQ, except for the cost data provided. To determine the firm(s) deemed most qualified to perform the requested service, the Governing Board or Committee will evaluate responses to ensure the consultant meets all required qualifications. Responses that do not meet all required qualifications may be rejected and not reviewed further. Those SOQs that clearly show the firm meets all required qualifications will be evaluated further and scored based on the criteria listed below.

The Governing Board or Committee may choose to select a shortlist from the SOQs received based on SOQ evaluation, and conduct interviews of the short-listed firms. After the interviews, short-listed firms may be re-evaluated and ranked based upon the combined SOQ/interview
process. The Authority reserves the right to eliminate the interview step of the procurement process and reserves the right to cancel the RFQ process.

The evaluation criteria that will be used by the Governing Board or Consultant Selection Committee are as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Maximum Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualifying Projects by Consultant’s Team</td>
<td>35</td>
</tr>
<tr>
<td>Experience of Personnel Assigned by Consultant to Work on Feasibility Study</td>
<td>55</td>
</tr>
<tr>
<td>Consultant’s Innovation on Qualifying Projects</td>
<td>10</td>
</tr>
</tbody>
</table>

After final selection by the Governing Board, the Authority will enter negotiations with the selected firm, which will include the development of a scope of work and fee. If negotiations fail, the Authority may enter negotiations with the second-ranked firm. After negotiating an agreement that is fair and reasonable, the contract award will be considered by the Authority’s Governing Board. The Authority’s Governing Board has the final authority to award the contract.

E. AGREEMENT EXECUTION

Following award, an Agreement between the Authority and the selected consultant will be executed. The selected consultant will be expected to execute the Authority’s standard Agreement without modification. A copy of the Agreement is provided in Exhibit A. If the selected consultant does take exception(s) to any portion of the Agreement, the specific portion of the Agreement to which exception(s) is taken shall have been identified and proposed alternative language shall have been provided and explained in the SOQ.

All services shall be performed on a time and materials basis in accordance with the standard hourly rates as submitted by the consultant and the terms of the Agreement. The Agreement will be in effect for one year and renewed if necessary at the Authority’s discretion. Once the Agreement is executed by both parties, the consultant’s work will be authorized via a Notice to Proceed (NTP) letter.

The Authority’s Engineering Department will serve as the administrative lead on the proposed Agreement, and the consultant’s work shall be coordinated with the Engineering Department’s Project Manager.
F. AUTHORITY PROVIDED ITEMS TO SELECTED CONSULTANT

Relevant past studies listed below will be provided to the selected consultant, as applicable, prior to commencing work. There might be additional relevant past studies, but not available in the Authority’s files.

1. Technical Note – Feasibility of IPR/DPR – RWCWRF Purification Plant to Sweetwater Reservoir, by Atkins (June 28, 2016)
2. Site Facilities Master Plan – Perdue Water Treatment Master Plan, by Carollo Engineers (August 2016)
4. Final 2013 Regional Water Facilities Optimization and Master Plan Update, by CH2MILL, San Diego County Water Authority, and Black and Veatch (March 2014)
6. Otay Water District's Summary of Project Status: Middle Sweetwater River Pilot Project, by AECOM (February 28, 2011)
7. Otay Water District North/South Intertie Pipeline and Emergency Connection to Sweetwater Authority, by MWH (April 2010)
8. San Diego County Water Authority's San Diego Regional Concentrate Conveyance System Feasibility Study Final Report, by CDM (October 2009)
12. Sweetwater Authority Membrane Bioreactor Feasibility Study, by RMC (October 18, 2007)
14. Sweetwater Authority Recycled Water Master Plan, by Carollo Engineers (June 2005)


18. San Diego County Water Authority’s Feasibility Study of Seawater Desalination Development Opportunities for the San Diego/Tijuana Region, by San Diego County Water Authority, et. al. (February 2005)


27. Middle Sweetwater River Basin Conjunctive Use Alternatives, by Michael R. Welch, Ph.D., P.E., Consulting Engineer (September 1994)


29. Lower Sweetwater River Basin Groundwater Studies, by Boyle Engineering (June 1993)

G. CONSULTANT PROVIDED ITEMS

The items listed below are to be provided by the selected consultant after negotiations:

1. Insurance documentation before Agreement is executed. Refer to the sample Agreement in Exhibit A for insurance requirements.

2. Once work on the Feasibility Study begins, the selected consultant is required to provide progress reports detailing activity since last progress report and upcoming activity. Progress reports are to be provided at the same time that invoices are submitted.

H. DISCLAIMER

This RFQ does not commit the Authority to enter into an agreement for services, to pay any costs incurred in the preparation of an SOQ, or to procure or contract for services or supplies. The Authority reserves the right to accept or reject any or all SOQs received as a result of this request, to negotiate with any qualified source, or to cancel in part or its entirety this RFQ if it is in the best interest of the Authority to do so. The Authority shall not be obligated to contract any or all of the requested services to the selected consultant. Further, even upon execution of the Agreement, the selected consultant will not be guaranteed any work under the Agreement until an NTP letter is issued by the Authority.

Thank you for your interest in this important Feasibility Study that will help guide future projects at Sweetwater Authority.

If you have any questions regarding this RFQ, please contact Erick Del Bosque, Engineering Manager, at (619) 409-6752 or edelbosque@sweetwater.org.

Sincerely,

SWEETWATER AUTHORITY

Tish Berge, P.E.
General Manager

Enclosure: Exhibit A – Agreement for Services
Exhibit A

AGREEMENT FOR SERVICES
BETWEEN SWEETWATER AUTHORITY
[**CLICK & TYPE CONSULTANT NAME**]

This Agreement is made and entered into this day of_______ 20__ by and between SWEETWATER AUTHORITY (hereinafter referred to as the “Authority”), a joint powers agency operating under the Irrigation District Law, Water Code § 20500 et seq., and[**CLICK & TYPE CONSULTANT NAME**] (hereinafter referred to as “Consultant”).

RECITALS

A. The Authority is a public agency of the State of California and is in need of professional services for the following project: [**CLICK & TYPE PROJECT NAME**] (hereinafter referred to as “the Project”).

B. Consultant is duly licensed and has the necessary qualifications to provide such services.

C. The parties desire by this Agreement to establish the terms for the Authority to retain Consultant to provide the services described herein.

AGREEMENT

NOW, THEREFORE, IT IS AGREED AS FOLLOWS:

1. Services

1.1 Consultant shall provide the Authority with the services described in the Scope of Services attached hereto as Exhibit “A” and by this reference incorporated herein (“Services”). Consultant warrants that it will perform the Services as set forth herein in a competent, professional and satisfactory manner.

1.2 At any time during the term of this Agreement, the Authority may request changes in the Scope of Services, and any such change shall be processed by the Authority in the following manner: a letter outlining the changes shall be forwarded to the Authority by Consultant with a statement of estimated changes in fee or time schedule. An amendment to the Agreement shall be prepared by the Authority and executed by both parties before performance of such services or the Authority will not be required to pay for the changes in the scope of work. Such amendment shall not render ineffective or invalidate unaffected portions of this Agreement.

2. Compensation

2.1 Subject to paragraph 2.2 below, the Authority shall pay for such Services in accordance with the Schedule of Charges set forth in Exhibit “B” and by this reference incorporated herein.

2.2 Unless otherwise provide herein, Consultant will perform services on a time and material basis. In no event shall the total amount paid for services rendered by Consultant
AGREEMENT FOR SERVICES
BETWEEN SWEETWATER AUTHORITY
AND
[**CLICK AND TYPE CONSULTANT NAME**]

pursuant to Exhibit “A” exceed the sum of $[**CLICK & TYPE AMOUNT**]. Periodic payments shall be made within thirty (30) days of receipt of an undisputed statement for services rendered. Payments to Consultant for work performed will be made on a monthly billing basis.

2.3 Payment shall not constitute acceptance of any work completed by Consultant.

3. Time of Performance

3.1 Consultant shall perform its services hereunder in a prompt and timely manner, in accordance with the Activity Schedule shown in Exhibit “C,” and shall commence performance upon receipt of the written Notice to Proceed from the Authority. The Notice to Proceed shall set forth the date of commencement of work. Consultant shall confer as requested with Authority representatives to review progress of work elements, adherence to work schedule, coordination of work, scheduling of review and resolution of problems which may develop.

3.2 Neither the Authority nor Consultant shall be considered in default of this Agreement for delays in performance caused by circumstances beyond the reasonable control of the non-performing party. For purposes of this Agreement, such circumstances include, but are not limited to, abnormal weather conditions, floods, earthquakes, fire, epidemics, war, riots, and other civil disturbances; strikes, lockouts, work slowdowns, and other labor disturbances, sabotage, or judicial restraint.

3.3 Should such circumstances occur, the non-performing party shall, within a reasonable time of being prevented from performing, give written notice to the other party describing the circumstances preventing continued performance and the efforts being made to resume performance of this Agreement.

4. California Labor Code Requirements

4.1 Consultant is aware of the requirements of California Labor Code Sections 1720 et seq and 1770 et seq., which require the payment of prevailing wage rates and the performance of other requirements on certain “public works” and “maintenance” projects. If the services are being performed as part of an applicable “public works” or “maintenance” project, as defined by the Prevailing Wage Laws, and if the total compensation is $1,000 or more, Consultant agrees to fully comply with such Prevailing Wage Laws, if applicable. Consultant shall defend, indemnify and hold the Authority, its elected officials, officers, employees and agents free and harmless from any claims, liabilities, costs, penalties or interest arising out of any failure or alleged failure to comply with the Prevailing Wage Laws. It shall be mandatory upon Consultant and all subconsultants to comply with all California Labor Code provisions, which include but are not limited to prevailing wages, employment of apprentices, hours of labor and debarment of contractors and subcontractors.

4.2 If the services are being performed as part of an applicable “public works” or “maintenance” project, in addition to the foregoing, then pursuant to Labor Code sections 1725.5 and 1771.1, Consultant and all subconsultants must be registered with the Department of Industrial Relations (“DIR”). Consultant shall maintain registration for the duration of the Project and require the same of any subconsultants. This Project may also be subject to
compliance monitoring and enforcement by the DIR. It shall be Consultant’s sole responsibility to comply with all applicable registration and labor compliance requirements, including the submission of payroll records directly to the DIR.

5. **Standard of Care**

Consultant’s services will be performed in accordance with generally accepted professional practices and principles and in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions.

6. **Insurance**

[**SWA RISK MANAGER TO REVIEW INSURANCE LIMITS PROJECT BY PROJECT BASIS**]

[**ESPECIALLY THE REQUIREMENT THROUGHOUT TO MAINTAIN THE INSURANCE FOR “24 months following the effective date of the project completion”**]

6.1 **Commercial General Liability and Automobile Liability Insurance** - Consultant shall provide and maintain the following commercial general liability and automobile liability insurance during the performance of all work under this Agreement, and for a minimum of twenty-four (24) months following the date of the Project completion and acceptance by the Authority, in amounts not less than specified herein, Commercial General Liability Insurance, in a form and with insurance companies acceptable to the Authority:

6.1.1 **Coverage** - Coverage for commercial general liability and automobile liability insurance shall be at least as broad as the following:

(a) Insurance Services Office (ISO) Commercial General Liability Coverage (Occurrence Form CG 0001)

(b) Insurance Services Office (ISO) Business Auto Coverage (Form CA 0001), covering Symbol 1 (any auto)

(c) Insurance Service Office (ISO) Excess Liability (if necessary)

6.1.2 **Required Provisions** - The general liability, auto liability and excess liability policies are to contain, or be endorsed to contain, the following provisions:

(a) The Authority its Board and each member of the Board, its officers, employees, agents, and the Authority’s designated volunteers are to be given insured status at least as broad as ISO endorsement CG 2010 11 85; or both CG 20 10 10 01 and CG 20 37 04 13 (or the CG 20 10 04 13 (or earlier edition date) specifically naming all of the Authority’s parties required in this agreement, or using language that states “as required by contract”).

(b) All Sub-consultants hired by Consultant must also have the same forms or coverage at least as broad; as respects (via CG 20 38 04 13): liability arising out of activities performed by or on behalf of Consultant; products and completed operations of Consultant; premises owned, occupied or used by Consultant; and automobiles owned, leased,
AGREEMENT FOR SERVICES
BETWEEN SWEETWATER AUTHORITY
AND
[**CLICK AND TYPE CONSULTANT NAME**]

hired or borrowed by Consultant. The coverage shall contain no special limitations on the scope of protection afforded to the Authority its Board and each member of the Board, its officers, employees, agents, and the Authority’s designated volunteers.

(c) It is understood and agreed to by the parties hereto and the insurance company(s), that the Certificate(s) of Insurance and policies shall so covenant and shall be construed as primary, and the Authority insurance and/or deductibles and/or self-insured retentions or self-insured programs shall not be construed as contributory using the ISO endorsement CG 20 01 04 13 or coverage at least as broad.

(d) Any failure to comply with reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to the Authority its Board and each member of the Board, its officers, employees, agents, and the Authority’s designated volunteers.

(e) Consultant’s insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer’s liability.

(f) Policy limits shall not be less than the minimum limits described below. The limits of insurance required by this Contract may be satisfied by a combination of primary, and umbrella or excess insurance. Each umbrella or excess policy shall follow the same provisions as the primary policy.

(g) Each insurance policy required above shall provide that coverage shall not be canceled, except with notice to the Authority.

(h) Such liability insurance shall indemnify Consultant and his/her sub-consultants against loss from liability imposed by law upon, or assumed under contract by, Consultant or his/her sub-consultants for damages on account of such bodily injury (including death), property damage, personal injury, completed operations, and products liability.

(i) The general liability policy shall cover bodily injury and property damage liability, owned and non-owned equipment, blanket contractual liability, completed operations liability, explosion, collapse, underground excavation, and removal of lateral support.

(j) The automobile liability policy shall cover all owned, non-owned, and hired automobiles.

(k) All of the insurance shall be provided on policy forms and through companies satisfactory to the Authority.

6.2 Workers’ Compensation and Employer’s Liability Insurance – By his/her signature hereunder, Consultant certifies that he/she is aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for workers’ compensation or to undertake self-insurance in accordance with the provisions of that code, and he/she will comply with such provisions before commencing the performance of the work of this agreement.
AGREEMENT FOR SERVICES
BETWEEN SWEETWATER AUTHORITY
AND
[**CLICK AND TYPE CONSULTANT NAME**]

6.2.1 Coverage and Required Provisions - Coverage for Workers' Compensation and Employer's Liability Insurance shall be at least as broad and/or be endorsed to include the following:

(a) Consultant shall provide, during the life of this Agreement, and for a minimum of twenty-four (24) months following the date of the Project completion, workers' compensation insurance for all of the employees engaged in Work under this Agreement, on or at the Project site, and, in case of any sublet work, Consultant shall require each sub-consultant similarly to provide workers' compensation insurance for all the latter's employees as prescribed by State law. Any class of employee or employees not covered by a sub-consultant's insurance shall be covered by Consultant's insurance.

(b) In case any class of employees engaged in work under this Agreement, on or at the Project site, is not protected under the Workers' Compensation Statutes, Consultant shall provide or shall cause a sub-consultant to provide, adequate insurance coverage for the protection of such employees not otherwise protected.

(c) Consultant is required to secure payment of compensation to his employees in accordance with the provisions of Section 3700 of the Labor Code. Consultant shall file with the Authority certificates of its insurance protecting workers and shall provide certificates at any time upon request. Company or companies providing insurance coverage shall be acceptable to the Authority, if in the form and coverage as set forth in the Contract Documents.

(d) Consultant shall assume the immediate defense of and indemnify and save harmless the Authority, the Board, and each member of the Board, its officers, employees, agents, and consultants from all claims, loss, damage, injury, and liability of every kind, nature, and description brought by any person employed or used by Consultant, or any sub-consultant, to perform the Work under this Agreement regardless of responsibility or negligence. Consultant hereby agrees to waive rights of subrogation which any insurer of Consultant may acquire from Consultant by virtue of the payment of any loss. Consultant agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation. The Workers' Compensation Policy shall be endorsed with a waiver of subrogation in the favor of the Authority for all Work performed by Consultant, its employees, agents and sub-consultants.

6.3 Professional Liability (Errors and Omissions) - Consultant will file with the Authority, before beginning professional services, a certificate of insurance satisfactory to the Authority evidencing professional liability coverage.

6.3.1 Consultant shall maintain such coverage continuously for a period of at least five (5) years after the completion of contracted work.

6.3.2 The retroactive date (if any) is to be no later than the effective date of this agreement. Consultant shall purchase a five-year extended reporting period i) if the retroactive date is advanced past the effective date of this Agreement; ii) if the policy is canceled or not renewed; or iii) if the policy is replaced by another claims-made policy with a retroactive date subsequent to the effective date of this Agreement.
6.4 Deductibles and Self-Insured Retentions - Insurance deductibles or self-insured retentions must be declared by Consultant, and such deductibles and retentions shall have the prior written consent from the Authority.

6.4.1 At the election of the Authority, Consultant shall either 1) reduce or eliminate such deductibles or self-insured retentions, or 2) procure a bond which guarantees payment of losses and related investigations, claims administration, and defense costs and expenses.

6.4.2 Policies containing any self-insured retention (SIR) provision shall provide or be endorsed to provide that the SIR may be satisfied by either the named or additional insureds, co-insurers, and/or insureds other than the First Named Insured.

6.5 Minimum Policy Limits Required - Consultant shall maintain limits no less than the following:

6.5.1 General Liability - Two million dollars ($2,000,000) per occurrence / Four million dollars ($4,000,000) aggregate or the full per occurrence limits of the policies available, whichever is greater for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit or products-completed operations aggregate limit is used, either the general aggregate limit shall apply separately to the project/location (with the ISO CG 2503, or ISO CG 2504, or insurer's equivalent endorsement provided to the Authority) or the general aggregate limit and products-completed operations aggregate limit shall be twice the required occurrence limit.

6.5.2 Automobile Liability - One million dollars ($1,000,000) for bodily injury and property damage each accident limit.

6.5.3 Excess Liability (if necessary) - The limits of Insurance required in this agreement may be satisfied by a combination of primary and umbrella or excess Insurance. Any umbrella or excess Insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of the Authority (if agreed to in a written contract or agreement) before the Authority's own primary or self Insurance shall be called upon to protect it as a named insured.

6.5.4 Workers Compensation and Employers Liability - One million dollars ($1,000,000) per occurrence.

6.5.5 Professional Liability - One million dollars ($1,000,000) per claim and $2,000,000 annual aggregate.

6.6 Acceptability of Insurers - Any insurance carrier providing insurance coverage required by the Contract Documents shall be admitted to and authorized to do business in the State of California and maintain an agent for process within the state, unless waived, in writing, by the Authority Risk Manager. Carrier(s) shall have an A.M. Best rating of not less than an A-: VII or better.
6.7 Evidence Required - Prior to execution of the agreement, Consultant shall file with the Authority a certificate of insurance (Acord Form 25 or equivalent) signed by the insurer’s representative evidencing the coverage required by this agreement.

6.7.1 Such evidence shall also include the following:

(a) Attached additional insured endorsements with primary & non-contributory wording for each policy

(b) Workers' Compensation waiver of subrogation

(c) A copy of the Commercial General Liability declarations or endorsement page listing all policy endorsements, and confirmation that coverage includes or has been modified to include Required Provisions above. The Authority reserves the right to obtain complete, certified copies of all required insurance policies, at any time.

6.8 Continuation of Coverage - Consultant shall, upon demand of the Authority deliver evidence of coverage showing continuation of coverage for not less than (5) years following the termination or completion of this Agreement. Consultant further waives all rights of subrogation under this agreement. When any of the required coverages expire during the term of this agreement, Consultant shall deliver the renewal certificate(s) including the general liability additional insured endorsement and evidence of waiver of rights of subrogation against the Authority to the Authority at least ten (10) days prior to the expiration date. Failure to continually satisfy the Insurance requirements is a material breach of contract.

6.9 Sub-Consultants - In the event that Consultant employs other consultants (sub-consultants) as part of the work covered by this agreement, it shall be Consultant’s responsibility to require and confirm that each sub-consultant meets the minimum insurance requirements specified above. Consultant shall, upon demand of the Authority, deliver to the Authority copies such policy or policies of insurance and the receipts for payment of premiums thereon.

6.10 The Authority reserves the right to modify these insurance requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage or other circumstances.

7. Indemnification

7.1 To the fullest extent permitted by law, Consultant shall defend (with counsel of the Authority’s choosing), indemnify and hold the Authority, its officials, officers, employees, volunteers, and agents free and harmless from any and all claims, demands, causes of action, costs, expenses, liability, loss, damage or injury of any kind, in law or equity, to property or persons, including wrongful death, in any manner arising out of, pertaining to, or incident to any acts, errors or omissions, or willful misconduct of Consultant, its officials, officers, employees, subcontractors, consultants or agents in connection with the performance of Consultant’s Services, the Project or this Agreement, including without limitation the payment of all damages, expert witness fees and attorneys' fees and other related costs and expenses. Consultant's
obligation to indemnify shall not be restricted to insurance proceeds, if any, received by Consultant, the Authority, its officials, officers, employees, agents, or volunteers.

7.2 To the extent required by Civil Code section 2782.8, which is fully incorporated herein, Consultant's obligations under the above indemnity shall be limited to claims that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of Consultant, but shall not otherwise be reduced. If Consultant's obligations to defend, indemnify, and/or hold harmless arise out of Consultant's performance as a "design professional" (as that term is defined under Civil Code section 2782.8), then upon Consultant obtaining a final adjudication that liability under a claim is caused by the comparative active negligence or willful misconduct of the Authority, Consultant's obligations shall be reduced in proportion to the established comparative liability of the Authority and shall not exceed Consultant's proportionate percentage of fault.

8. **Termination or Abandonment**

8.1 The Authority has the right to terminate or abandon any portion or all of the work under this Agreement by giving ten (10) calendar days written notice to Consultant. In such event, the Authority shall be immediately given title and possession to all original field notes, drawings and specifications, written reports, and other documents produced or developed for that portion of the work completed, and/or being abandoned. The Authority shall pay Consultant the reasonable value of services rendered for any portion of the work completed prior to termination. If said termination occurs prior to completion of any task for the Project for which a payment request has not been received, the charge for services performed during such task shall be the reasonable value of such services, based on an amount mutually agreed to by the Authority and Consultant of the portion of such task completed but not paid prior to said termination. The Authority shall not be liable for any costs other than the charges or portions thereof, which are specified herein. Consultant shall not be entitled to payment for unperformed services, and shall not be entitled to damages or compensation for termination of work.

8.2 Consultant may terminate its obligation to provide further services under this Agreement upon thirty (30) calendar days' written notice to the Authority only in the event of substantial failure by Authority to perform in accordance with the terms of this Agreement through no fault of Consultant.

9. **Compliance With All Laws.**

9.1 Consultant shall comply with all applicable laws, ordinances, codes, and regulations of the federal, state, and local government.

9.2 Consultant shall assist the Authority in obtaining and maintaining all permits required by federal, state, and local regulatory agencies.

9.3 Consultant is responsible for all costs of clean up and/or removal of hazardous and toxic substances spilled as a result of its services or operations performed under this Agreement.
10. **Organization**

Consultant shall assign ______________ as the Project Manager. The Project Manager shall not be removed from the Project or reassigned without the prior written consent of the Authority.

11. **Maintenance of Records**

Books, documents, papers, accounting records, and other evidence pertaining to costs incurred shall be maintained by Consultant and made available at all reasonable times during the Agreement period and for four (4) years from the date of final payment under the Agreement for inspection by the Authority.

12. **Job Site Responsibility.**

If the services covered by this Agreement involve a construction phase of the Project, the Authority agrees that in accordance with generally accepted construction practices, the construction contractor will be required to assume sole and complete responsibility for job site conditions during the course of construction of the Project, including safety of all persons and property, and that this requirement shall be made to apply continuously and not be limited to normal working hours. Consultant shall not have control over or charge of, and shall not be responsible for, construction means, methods, techniques, sequences, or procedures, as these are solely the responsibility of the construction contractor.

13. **Assignment and Subconsultants**

Consultant shall not assign, sublet, or transfer this Agreement or any rights under or interest in this Agreement without the written consent of the Authority, which may be withheld for any reason. Nothing contained herein shall prevent Consultant from employing independent associates, and subconsultants as Consultant may deem appropriate to assist in the performance of services hereunder.

14. **Conflicts of Interest**

Identify all existing and past financial relationships (including consulting agreements) between [**CLICK & TYPE CONSULTANT NAME**] and members of the Authority's Governing Board, and entities for which said members are employed, or have an interest, both past and present.

15. **General Provisions**

15.1 **Independent Consultant.** Consultant is retained as an independent consultant and is not an employee of Authority. No employee or agent of Consultant shall become an employee of the Authority. The work to be performed shall be in accordance with the work described in Exhibit "A," subject to such directions and amendments from the Authority as herein provided.
AGREEMENT FOR SERVICES
BETWEEN SWEETWATER AUTHORITY
AND
[**CLICK AND TYPE CONSULTANT NAME**]

15.2 Notice. All notices permitted or required under this Contract shall be given at the following address, or at such other address as the parties may provide in writing for this purpose:

Authority:
SWEETWATER AUTHORITY
P.O. Box 2328
Chula Vista, CA 91912-2328
Attn: [**CLICK & TYPE MANAGER**]

Consultant:
[**CLICK & TYPE ADDRESS**]
[**CLICK & TYPE COMPANY**]
Attn: [**CLICK & TYPE CONTACT**]

The parties may designate, in writing, other individuals to whom notice is to be given. Notices shall be deemed to be received upon personal delivery to the addresses above; if sent by overnight delivery, upon delivery as shown by delivery service records; if sent by facsimile, upon receipt as confirmed by the sending facsimile equipment; if by United States Postal Service, five days after deposit in the mail.

15.3 Severability. The unenforceability, invalidity or illegality of any provision(s) of this Agreement shall not render other provisions of this Agreement unenforceable, invalid or illegal.

15.4 Integration. This Agreement represents the entire understanding of the Authority and the Consultant as to those matters contained herein, and supersedes and cancels any prior oral or written understanding, promises, or representations with respect to those matters covered hereunder. This Agreement may not be modified or altered except in writing, signed by both parties hereto. This is an integrated Agreement.

15.5 Survival. All rights and obligations hereunder that by their nature are to continue after any expiration or termination of this Agreement, including, but not limited to, the indemnification obligations, shall survive any such expiration or termination.

15.6 Time is of the Essence. Time shall be of the essence as to all dates and times of performance contained in this Agreement.

15.7 Third Party Rights. Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than the Authority and Consultant.

15.8 Disputes. If any disputes should arise between the Parties concerning the work to be done under this Agreement, the payments to be made, or the manner of accomplishment of the work, Consultant shall nevertheless proceed to perform the work as directed by the Authority pending settlement of the dispute.

15.9 Laws, Venue, and Attorneys' Fees. This Agreement shall be interpreted in accordance with the laws of the State of California. If any action is brought to interpret or enforce any term of this Agreement, the action shall be brought in a state or federal court situated in the County of San Diego, State of California. In the event of any such litigation between the parties, the prevailing party shall be entitled to recover all reasonable costs incurred, including reasonable attorney's fees, as determined by the court.
AGREEMENT FOR SERVICES
BETWEEN SWEETWATER AUTHORITY
AND
[**CLICK AND TYPE CONSULTANT NAME**]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

SWEETWATER AUTHORITY

By: ______________________________

Name: Patricia "Tish" Berge

Title: General Manager

Dated: ____________________________

Approved as to form:

_______________________________

Paula C. P. de Sousa Mills
Legal Counsel
SWEETWATER AUTHORITY

[**CLICK & TYPE NAME**]

By: ______________________________

(Authorized Representative of Consultant)

Name: [**CLICK & TYPE NAME**]

Title: [**CLICK & TYPE TITLE**]

Dated: ____________________________
AGREEMENT FOR SERVICES
BETWEEN SWEETWATER AUTHORITY
AND
[**CLICK AND TYPE CONSULTANT NAME**]

EXHIBIT "A"
SCOPE OF WORK

[**CLICK & INSERT PROPOSED SCOPE OF WORK**]
AGREEMENT FOR SERVICES
BETWEEN SWEETWATER AUTHORITY
AND
[**CLICK AND TYPE CONSULTANT NAME**]

EXHIBIT "B"
SCHEDULE OF CHARGES
EXHIBIT “C”
ACTIVITY SCHEDULE
AGENDA

DATE: Wednesday, August 21, 2019     TIME: 10:00 a.m.

1. CALL MEETING TO ORDER AND ROLL CALL. (00:09)

2. ITEMS TO BE ADDED, WITHDRAWN, OR REORDERED IN THE AGENDA. (00:48)

3. PUBLIC COMMENT. (00:55)
Opportunity for members of the public to address the Committee. (Government Code Section 54954.3).

4. ACTION AGENDA.
The following items on the Action Agenda call for discussion and action by the Committee. All items are placed on the Agenda so that the Committee may discuss and take action on the item if the Committee is so inclined, including items listed for information.


B. Consideration to Approve the Water Supply Assessment for the National City Bayfront Projects (03:48)

C. Overview of Water Treatment Management and Update of City of San Diego Transfer Facility (No Enclosure) (17:11)

D. Consideration of the Request for Qualifications for Professional Services to Prepare a Feasibility Study on Maximizing Reservoir Assets and Expand Local Water Supply (36:44)

5. CLOSED SESSION. (01:01:50)
At any time during the regular session, the Committee may adjourn to closed session to discuss real property matters within the attorney-client privilege, subject to the appropriate disclosures. (Government Code Section 54956.8).

6. NEXT MEETING DATE: Wednesday, September 4, 2019 at 10:00 a.m. (01:01:53)

7. ADJOURNMENT. (01:01:59)

This agenda was posted at least seventy-two (72) hours before the meeting in a location freely accessible to the Public on the exterior bulletin board at the main entrance to the Authority’s office and it is also posted on the Authority’s website at www.sweetwater.org. No action may be taken on any item not appearing on the posted agenda, except as provided by California Government Code Section 54954.2. Any writings or documents provided to a majority of the members of the Sweetwater Authority Governing Board regarding any item on this agenda will be made available for public inspection at the Authority Administration Office, located at 505 Garrett Avenue, Chula Vista, CA 91910, during normal business hours. Upon request, this agenda will be made available in appropriate alternative formats to persons with disabilities, as required by Section 202 of the Americans with Disabilities Act of 1990. Any person with a disability who requires a modification or accommodation in order to participate in a meeting should direct such request to the Board Secretary at (619) 409-6703 at least forty-eight (48) hours before the meeting, if possible.
To e-subscribe to receive meeting agendas and other pertinent information, please visit www.sweetwater.org.