

**BIG BEAR AREA REGIONAL WASTEWATER AGENCY**

Regular Board Meeting Agenda  
September 28, 2022 at 5:00 p.m.  
121 Palomino Drive, Big Bear City, California

In accordance with AB 361, which modifies Government Code 54963, members of the public may attend this meeting in-person in the Agency Boardroom located at 121 Palomino Drive, Big Bear City, CA 92314 or by the teleconference Zoom information listed below.

Join Zoom Meeting:

<https://us06web.zoom.us/j/82686807018?pwd=cU0xSUFNaEJqdmNsZ3ZSbEJ3NENPZz09>

Meeting ID: 826 8680 7018

Passcode: 754650

Dial by your location

- +1 669 444 9171 US
- +1 719 359 4580 US
- +1 720 707 2699 US (Denver)
- +1 253 215 8782 US (Tacoma)
- +1 346 248 7799 US (Houston)
- +1 386 347 5053 US
- +1 564 217 2000 US
- +1 646 558 8656 US (New York)
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**1. CALL TO ORDER**

**1.A.** Roll Call

**2. PLEDGE OF ALLEGIANCE**

**3. APPROVAL OF AGENDA**

**4. PUBLIC FORUM**

Public testimony is permitted at this time only on consent calendar items and other matters not listed on the posted agenda that are within the subject matter jurisdiction of the Agency. State law prohibits the Agency from taking action on any items not listed on the posted agenda. Public comment on items listed on the posted agenda will be taken at the time each item is called for discussion.

Please note that the Governing Board is making efforts to follow the spirit and intent of the Brown Act and other applicable laws regulating the conduct of public meetings, in order to maximize transparency and public access. It would be appreciated, although not

mandatory, if communications of public comments related to items on the agenda, or items not on the agenda, are emailed to [bburton@bbarwa.org](mailto:bburton@bbarwa.org) on or before Wednesday, September 28, 2022 at 4:00 p.m. Please include in the email's subject line "Public Comment Item # (insert the number relevant to your comment)" or "Public Comment Non-Agenda Item". If you wish to submit a public comment on more than one agenda item, please send a separate email for each item you are commenting on.

If it is not possible to submit an email by 4:00 p.m., and comments are submitted by email after that time or thru the Zoom chat feature during the meeting, every effort will be made to attempt to review emails and Zoom chats during the course of the meeting. The Chair will endeavor to take a brief pause before Governing Board action is taken on agenda items to allow the Board Secretary time to review the public's electronic communications. Every effort will be made during the meeting to read aloud all electronically submitted comments. Please note, all electronically submitted correspondence relating to this meeting will become part of the meeting record and will be cited within the meeting minutes. Please limit written comments to 300 words or less. In addition, prior to the close of public comment portions of the meeting, the Chair will provide the public an opportunity to verbally state their comment live via Zoom teleconference.

At meetings of the Governing Board, each individual speaker will be limited to five minutes or less of public testimony on each item on the agenda and three minutes or less on each item not on the agenda. In addition, public testimony on non-agenda items shall be limited to thirty minutes for all speakers. Further, the cumulative time which any individual may provide public testimony during a meeting is 15 minutes. The Chair of the Governing Board by majority vote may waive these time limitations. Whenever a group of persons wishes to address the Governing Board on the same item, the Chair or the Governing Board by majority vote may request a spokesperson be chosen for the group or limit the number of such persons addressing the Governing Board. The Chair or the Governing Board by majority vote may rule out of order testimony that is unduly repetitious or irrelevant.

**5. PRESENTATION AND INTRODUCTION**

**5.A.** Replenish Big Bear Project Update to Permitting, Timeline, Pilot Facility, Project Costs, and Funding and Financing

**6. INFORMATION/COMMITTEE REPORTS**

**6.A.** General Manager's Report

**7. CONSENT CALENDAR**

All matters listed on the Consent Calendar will be enacted by one motion at the appropriate time. There will be no separate discussion of these items. If a detailed discussion is necessary, any Governing Board Member may request that an item be removed from the Consent Calendar and considered separately.

**7.A.** Approval of the Meeting Minutes from the August 24, 2022 Regular Meeting

- 7.B. Monthly Disbursements Report for August - Informational
- 7.C. Investment Report Identifying Agency Investments and Reporting Interest Income for August – Informational
- 7.D. Approval of AB 361 Open Meetings: State and Local Agencies: Teleconferences
- 7.E. Resolution No. R. 11-2022, A Resolution of the Governing Board of the Big Bear Area Regional Wastewater Agency Adopting the Annual Statement of Investment Policy
- 7.F. Approval of Carryover Appropriations
- 8. **ITEMS REMOVED FROM CONSENT CALENDAR**
- 9. **OLD BUSINESS**  
None
- 10. **NEW BUSINESS – DISCUSSION/ACTION ITEMS**
  - 10.A. Wastewater-Based Surveillance for Viruses and Other Infectious Diseases
  - 10.B. Amendment No. 4 to the Professional Services Agreements between the Big Bear Area Regional Wastewater Agency and Water Systems Consulting, Inc. for the Replenish Big Bear Project
- 11. **COMMENTS AND ANNOUNCEMENTS**
  - 11.A. General Manager Comments
  - 11.B. Governing Board Member Comments
- 12. **ADJOURNMENT**

In compliance with the Americans with Disabilities Act and Government Code Section 54954.2, if you need special assistance to participate in an Agency meeting or other services offered by the Agency, please contact the Agency at (909) 584-4018. Notification at least 48 hours prior to the meeting or time when services are needed will assist Agency staff in assuring that reasonable arrangements can be made to provide accessibility to the meeting or service.

Copies of staff reports or other written documentation relating to each item of business referred to on this agenda are on file in the office of the Big Bear Area Regional Wastewater Agency and are available for public inspection during normal business hours.

Visit [www.bbarwa.org](http://www.bbarwa.org) to view and/or print the Agenda Package.



Big Bear Area Regional  
Wastewater Agency  
*Rick Herrick – Chair*  
*John Green – Vice-Chair*  
*Jim Miller – Director*  
*Bynette Mote – Director*  
*Larry Walsh – Director*

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## AGENDA ITEM: 6.A.

**MEETING DATE:** September 28, 2022  
**TO:** Governing Board of the Big Bear Area Regional Wastewater Agency  
**FROM:** David Lawrence, P.E., General Manager  
**REVIEWED BY:** Jennifer McCullar, Finance Manager; and John Shimmin, Plant Manager  
**SUBJECT:** General Manager’s Report

**DISCUSSION:**

Administration

*COVID-19*

The Administrative Office remains closed to the public.

*Initiative 21-0042A1: Taxpayer Protection and Government Accountability Act*

On April 27, 2022, staff presented the Governing Board with a recommendation to oppose this Initiative. The Governing Board expressed concern over submitting an oppose position on the Initiative before the deadline for signature submission. Proponents of the Initiative submitted 1,429,529 signatures by the August 2<sup>nd</sup> deadline to qualify the constitutional amendment for voter consideration. Should county elections officials confirm the validity of at least 997,139 signatures, the initiative to limit the ability of voters and state and local governments to raise revenues for government services will be placed on the November 2024 statewide ballot.

*2022 Brown Act Legislation*

Governor Newsom signed Senate Bill 1100 (Cortese), Assembly Bill 2647 (Levine), and Assembly Bill 2449 (Rubio). SB 1100 provides that a member of the public can be removed from a meeting for disruptive behavior, as defined, and provides for the process by which a local agency may affect the removal of that individual. AB 2647 clarifies that the online posting of agenda materials fulfills the Brown Act requirement that they be made “publicly available.” Local agencies relying on the bill’s provisions would still be obliged to make physical copies of the materials available at an agency location designated for that purpose and are also subject to observing other substantive and procedural requirements. AB 2449 establishes another avenue for local agencies to meet remotely under modified Brown Act requirements; provided that an agency abides by the strict substantive and procedural requirements, local agencies may avail themselves of the alternative agenda posting and teleconference requirements, potentially making it easier for local agency board members to participate in a meeting remotely under certain circumstances that would have otherwise precluded

that participation. Under AB 2449, agencies would not be obligated to post agendas at all teleconference locations, identify all teleconference locations in the meeting agendas, or make each teleconference location open to the public. In notable contrast to AB 361, an agency must observe the requirement that at least a quorum of the members of the legislative body participates in person from a singular, physical location clearly identified on the agenda, open to the public and situated within the boundaries of the territory over which the local agency exercises jurisdiction. Lastly, remote participation must be done for specified reason - either because of a “just cause” or as a result of “emergency circumstances.” The two cases have different requirements that must be observed and have their own unique restrictions. This bill will take effect at the start of 2023. The bill contains multiple sunset dates, though perhaps the most relevant is the January 1, 2026 sunset, after which time all the provisions added by AB 2449 lapse and become unavailable to local agencies. Local agencies now have the option to conduct remote meetings under the provisions of AB 2449, AB 361, traditional Brown Act teleconference requirements, or may choose to conduct public meetings entirely in-person under the Brown Act.

Operations

*Headworks Grit System Rehabilitation Project (no update)*

Coordination with the contractor, R.I.C. Construction Co., Inc. is still underway, with submittals being reviewed. Due to procurement delays, the contractor has notified the Agency of an upcoming change order to extend the contract deadline.

*Oxidation Ditch 2 Rotor 4 Shaft Replacement Pre-Bid Report*

Parts are on order from Lakeside Equipment. The bidding process for installation will commence in September 2022.

*Solar Production*

The August 2022 monthly performance report is attached.

*2022 Treatment Plant Data*

There were no reportable violations during August 2022 for the plant. The influent flow (MG) chart is attached to this report.

<b>Flow Percentages</b>			
<b>Member Agency</b>	<b>June</b>	<b>July</b>	<b>August</b>
City of Big Bear Lake	48.15%	49.61%	47.09%
Big Bear City	47.83%	46.22%	48.91%
County of San Bernardino	4.02%	4.17%	4.00%

*Connections*

MONTH								FYE 6/30/2023		
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	CITY-BBL	CSD	CSA-53B
July	3	4	3	7	3	11	2	1	1	0
August	12	6	10	2	12	5	13	5	8	0
September	4	6	3	7	3	7	0	0	0	0
October	9	8	3	5	10	9	0	0	0	0
November	5	11	5	2	2	5	0	0	0	0
December	4	2	3	1	2	3	0	0	0	0
January	0	0	1	1	2	2	0	0	0	0
February	1	0	0	1	0	6	0	0	0	0
March	2	0	3	1	3	9	0	0	0	0
April	3	0	3	7	12	12	0	0	0	0
May	4	0	5	5	6	7	0	0	0	0
June	16	0	6	6	13	11	0	0	0	0
TOTAL	63	37	45	45	68	87	15	6	9	0

Replenish Big Bear

*Permitting*

The Project Team received the formal response from the Regional Board regarding the NPDES permit and are developing a response with Water Systems Consulting, Inc. (WSC) and sub-consultants. More details are included in Item 5.A.

The Project Team provided comments to the Division of Drinking Water (DDW) for the well investigation work plan; WSC is coordinating the next steps.

*Environmental Review*

The target completion date for the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) processes is the summer of 2023. The Project Team is reviewing the Project description and revamping the effort to complete the Environmental Impact Report/Environmental Assessment.

*Agreements and Contracts*

The Agency continues to work with legal counsel and project beneficiaries to develop preliminary terms associated with the distribution of project water and future monetary contributions to the project. The first Replenish Big Bear Funding Letter of Intent between the Agency, City of Big Bear Lake Department of Water and Power, and the Big Bear City Community Services District was approved by the Agency Governing Board in August 2022. Separate Funding Letters of Intent with the City of Big Bear Lake, Big Bear Municipal Water District (BBMWD), and Big Bear Mountain Resort are being developed.

The Benefits MOU is pending signatures from the County of San Bernardino, BBMWD, Visit Big Bear, and the City of Big Bear Lake. The County Board of Supervisors will not consider this item until all other parties have signed.

Agency Counsel has reviewed the 1977 Judgment and concluded that Project Water will not be owned by Mutual if there is excess storage capacity in Big Bear Lake, and a Letter of Intent (LOI) with Bear Valley Mutual is not anticipated.

*Funding*

The Agency continues working with Fieldman Rolapp & Associates, Inc. (FRA) for municipal financial advisory services related to the short and long-term financial needs of the Agency.

The Agency submitted the Letter of Interest for a loan under the Water Infrastructure Finance and Innovation Act (WIFIA) on September 6, 2022. A response from the Environmental Protection Agency (EPA) is expected within 8-weeks. If approved, the Agency will begin the application process (approximately a 1-year turnaround).

*Grant Status*

<b>Grant</b>	<b>Amount</b>	<b>Status</b>
DCI Technical Assistance	\$500,000	Awarded and Fully Funded
IRWM Prop 1, Round 1	\$4,563,338	Awarded, In Process
2021 Title XVI	\$1,600,000	Awarded, Agreement Finalized; \$100K reserved for grant agency administration
2022 EPA STAG	\$960,000	CEQA and NEPA must be completed prior to an Award
2022 Title XVI	\$8,267,112	Recommended for Funding
2023 Community Funding Request	\$1,000,000	Recommended for Funding
<b>Total</b>	<b>\$16,890,450</b>	

The Santa Ana Watershed Project Authority (SAWPA) and the Department of Water Resources (DWR) are in the process of amending their IRWM Prop 1 Round 1 grant agreement, in which the Agency is a sub-grantee.

The Project Team submitted the Financial Capability Assessment and is developing the approach to the Build America Buy America (BABA) waiver, both of which must be completed prior to requesting any funds for the 2021 Title XVI grant.

CEQA guidelines for the 2022 EPA STAG grant are expected in Fall 2022. CEQA/NEPA processes must be completed prior to an award, even though the grant was included in the appropriations bill.

The formal award from the United States Bureau of Reclamation (USBR) for the 2022 Title XVI Water Reclamation and Reuse Program in the amount of \$8,267,112 is pending.

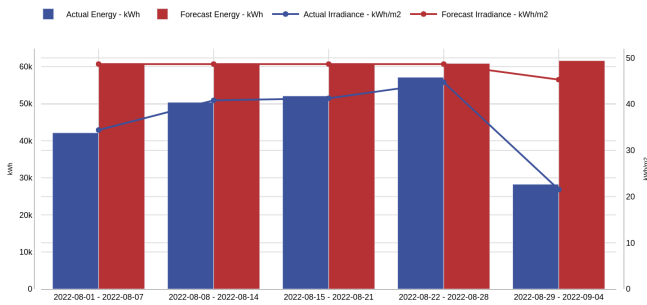
Congressman Obernolte recommended the Project’s \$1 million Community Funding Request for funding, and we expect to receive notification after the federal budget approval process.



Capacity (kW DC)	1660005.0
Resource	Solar
Project Company	Distributed Solar Development, LLC. Mohawk
Utility	Bear Valley Electric Service
Address	121 Palomino Drive - 92314 Big Bear - California/ United States

## Last Months Performance

Energy (kWh)



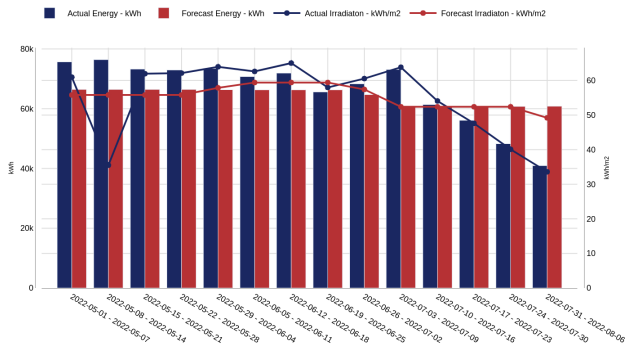
Energy (kWh)

Time	Energy (kWh)	
	Actual	Forecasted
01 Aug 2022	4,570.52	8,691.32
02 Aug 2022	3,696.73	8,691.32
03 Aug 2022	7,168.25	8,691.32
04 Aug 2022	3,694.50	8,691.32
05 Aug 2022	8,248.00	8,691.32
06 Aug 2022	9,388.00	8,691.32
07 Aug 2022	5,370.00	8,691.32
08 Aug 2022	6,140.75	8,691.32
09 Aug 2022	6,091.62	8,691.32
10 Aug 2022	9,024.62	8,691.32
11 Aug 2022	8,314.75	8,691.32
12 Aug 2022	6,429.25	8,691.32
13 Aug 2022	5,505.75	8,691.32
14 Aug 2022	8,860.75	8,691.32
15 Aug 2022	8,075.50	8,691.32
16 Aug 2022	5,313.75	8,691.32
17 Aug 2022	7,387.50	8,691.32
18 Aug 2022	6,524.75	8,691.32
19 Aug 2022	8,310.75	8,691.32
20 Aug 2022	7,467.00	8,691.32
21 Aug 2022	9,000.50	8,691.32
22 Aug 2022	9,658.75	8,691.32
23 Aug 2022	7,589.25	8,691.32
24 Aug 2022	5,494.50	8,691.32
25 Aug 2022	6,990.00	8,691.32
26 Aug 2022	8,924.25	8,691.32
27 Aug 2022	10,383.25	8,691.32
28 Aug 2022	8,065.50	8,691.32
29 Aug 2022	9,863.50	8,691.32
30 Aug 2022	10,345.75	8,691.32
31 Aug 2022	8,049.25	8,691.32
<b>Totals</b>	<b>229,947.25</b>	<b>269,431.00</b>

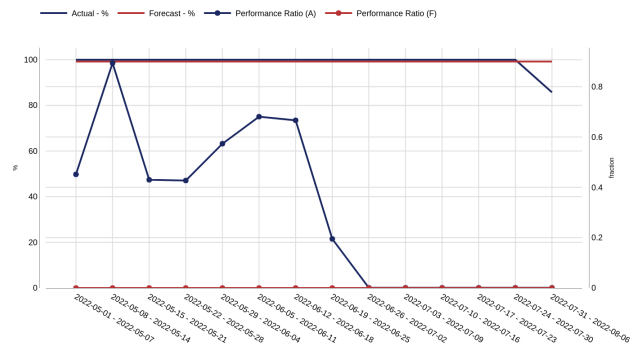
## Last 3 Months Performance



## Energy (kWh)



## Availability and PR

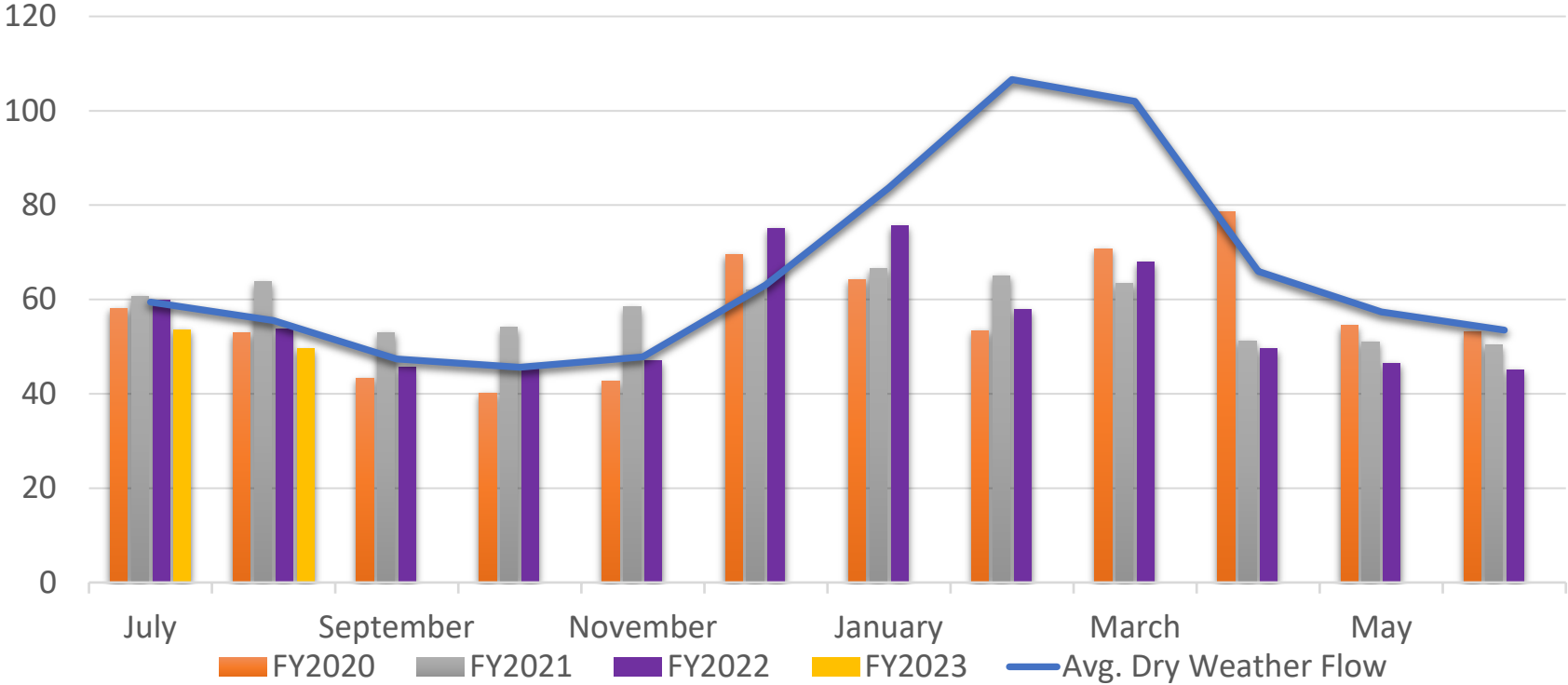


## Closed Events Last 3 Months

Event Date	Event Name	Status
11 Jun 2022 23:28	Plant Outage	Resolved
15 Jun 2022 14:14	INV 11,18,22	Resolved
18 Jul 2022 08:33	Site Outage, Power Logger Fault	Closed

**Energy(kwh):** Radiant light and heat from the Sun  
**Irradiation(kwh):** The power per unit area produced by the Sun in the form of electromagnetic radiation. The solar irradiance integrated over time is called solar irradiation, solar exposure or insolation. The SI unit of irradiance is watt per square meter (W/m2). The solar energy business uses watt-hour per square meter (Wh/m2) divided by the recording time. 1 kW/m2 = 24 kWh/(m2 day).  
**Production (kwh):** Energy generated by your system  
**Weather Adjustment (Δ):** PV systems depends both on the quality of the system and the weather. This adjustment is made to give more consistent results throughout the year as the weather changes.  
**Availability:** the Max theoretical generation capacity  
**PR (Performance Ratio):** the ratio measured output to the expected output for a given reporting period based on the system name-plate rating

### Influent Flow (MG)



**BIG BEAR AREA REGIONAL WASTEWATER AGENCY**

**REGULAR BOARD MEETING MINUTES**

August 24, 2022

**1. CALL TO ORDER**

A Regular Meeting of the Governing Board of the Big Bear Area Regional Wastewater Agency was called to order by Chair Herrick at 5:00 p.m. on August 24, 2022, at 121 Palomino Drive, Big Bear City, California and via Zoom.

**BOARD MEMBERS PRESENT**

Rick Herrick, Chair

John Green, Vice- Chair

Jim Miller, Director

Bynette Mote, Director

Larry Walsh, Director

**BOARD MEMBERS ABSENT**

None

**STAFF MEMBERS PRESENT**

David Lawrence, General Manager

Jennifer McCullar, Finance Manager

John Shimmin, Plant Manager

Sonja Kawa, Human Resources Coordinator/Accounting Technician

Bridgette Burton, Management Analyst

**OTHERS**

Jim Eakin (via Zoom)

Frank Forbes, County of San Bernadino Representative (via Zoom)

Andy Keller (via Zoom)

Greg Mote (via Zoom)

**2. PLEDGE OF ALLEGIANCE**

Director Mote

**3. APPROVAL OF THE AGENDA**

Upon motion by Director Walsh, seconded by Director Miller and carried, the Governing Board approved the agenda as presented.

Ayes: Green, Miller, Mote, Walsh, Herrick

Noes: None

Absent: None

Abstain: None

**4. PUBLIC FORUM**

No comments

5. **PRESENTATIONS AND INTRODUCTIONS**

5.A. Bynette Mote 1 year recognition

The General Manager presented Director Mote with a one-year pin and thanked her for her service. Over the past year Director Mote has been involved in many decisions regarding Replenish Big Bear, and her support for the project is appreciated. Director Mote is always positive and willing to provide feedback to staff.

6. **INFORMATION/COMMITTEE REPORTS**

6.A. General Manager's Report

The General Manager discussed the Replenish Big Bear Project and the status of short- and long-term financing, the WIFIA Letter of Interest, and grants. Federal grants can only account for 25% of the total project cost. Congressman Obernolte included the \$1 million Community Funding request in the next allocation bill. The General Manager explained the process for the NPDES permit.

7. **CONSENT CALENDAR**

7.A. Approval of the Meeting Minutes from the July 27, 2022 Regular Meeting

7.B. Monthly Disbursements Report for July - Informational

7.C. Investment Report Identifying Agency Investments and Reporting Interest Income for July – Informational

7.D. Approval of AB 361 Open Meetings: State and Local Agencies: Teleconferences

Upon motion by Director Walsh, seconded by Director Mote and carried, the Governing Board approved the Consent Calendar as presented.

Ayes: Green, Miller, Mote, Walsh, Herrick  
Noes: None  
Absent: None  
Abstain: None

8. **ITEMS REMOVED FROM THE CONSENT CALENDAR**

None

9. **OLD BUSINESS**

None

**10. NEW BUSINESS**

- 10.A.** Replenish Big Bear Funding Letter of Intent between the Big Bear Area Regional Wastewater Agency, the City of Big Bear Lake Department of Water and Power, and the Big Bear City Community Services District

The General Manager presented the Funding Letter of Intent (LOI) that would allow the Agency to start the process for funding agreements and loans for the Replenish Big Bear Project. Additional LOI's with the Big Bear Municipal Water District, Big Bear Mountain Resort, and the City of Big Bear Lake will be developed. The LOI's will be replaced with funding agreements in the future and funds will be used for ongoing operations and maintenance costs. The General Manager clarified how the groundwater replenishment portion of the Project works and the benefits to the City of Big Bear Lake Department of Water and Power and the Big Bear City Community Services District. Agency Counsel is confirming the 1977 Judgment allows for Project water to enter Big Bear Lake with ownership being retained by Project partners and if there needs to be an LOI with Bear Valley Mutual.

Upon motion by Director Miller, seconded by Director Mote and carried, the Governing Board authorized the General Manager to negotiate and execute the Replenish Big Bear Funding Letter of Intent between the Agency, the City of Big Bear Lake Department of Water and Power, and the Big Bear City Community Services District.

Ayes: Green, Miller, Mote, Walsh, Herrick  
Noes: None  
Absent: None  
Abstain: None

**11. COMMENTS AND ANNOUNCEMENTS**

- 11.A.** General Manager Comments  
None

- 11.B.** Governing Board Member Comments

The Governing Board expressed concern with the detection of COVID-19 and Monkeypox in wastewater, inquired about testing at the Agency, and requested this item to be placed on the next agenda.

12. **ADJOURNMENT**

With no further business to come before the Governing Board, Chair Herrick adjourned the meeting at 5:30 p.m.

ATTEST: \_\_\_\_\_  
Bridgette Burton, Secretary to the Governing Board  
Big Bear Area Regional Wastewater Agency



Big Bear Area Regional  
Wastewater Agency  
*Rick Herrick – Chair*  
*John Green – Vice-Chair*  
*Jim Miller – Director*  
*Bynette Mote – Director*  
*Larry Walsh – Director*

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**AGENDA ITEM: 7.B.**

**MEETING DATE:** September 28, 2022

**TO:** Governing Board of the Big Bear Area Regional Wastewater Agency

**FROM:** David Lawrence, P.E., General Manager

**PREPARED BY:** Jennifer McCullar, Finance Manager

**SUBJECT:** Monthly Disbursements Report for August

**BACKGROUND:**

Attached is the Agency's check register for August which reflects accounts paid during the period.

**FINANCIAL IMPACT:**

There is no financial impact. The funds have previously been appropriated.

**RECOMMENDATION:**

Informational

**Big Bear Area Regional Wastewater Agency**  
**Check Register**  
**For the Period From Aug 1, 2022 to Aug 31, 2022**

Filter Criteria includes: 1) Accounts Payable only. Report order is by Date.

Check #	Date	Payee	Cash Account	Amount
CASH 23543	8/2/22	PAYA	1000-20	19.99
CASH 23544	8/2/22	PRINCIPAL FINANCIAL GROUP	1000-20	3,436.94
CASH 23545	8/2/22	CALPERS HEALTH	1000-20	29,107.90
CASH 23546	8/3/22	VISION SERVICE PLAN	1000-20	306.46
CASH 23547	8/4/22	THE LINCOLN NAT'L LIFE INS CO	1000-20	4,245.99
CASH 23548	8/5/22	EMPLOYMENT DEVELOPMENT DE	1000-20	2,578.02
CASH 23549	8/5/22	INTERNAL REVENUE SERVICE	1000-20	7,477.50
22315V	8/8/22	DIY HOME CENTER-BIG BEAR	1000-20	-7.69
22375	8/8/22	A-PERFORMANCE TOWING INC.	1000-20	200.00
22376	8/8/22	ACCENT COMPUTER SOLUTIONS, I	1000-20	3,533.94
22377	8/8/22	AMAZON CAPITAL SERVICES	1000-20	932.84
22378	8/8/22	ARAMARK UNIFORM SERVICES	1000-20	1,218.76
22379	8/8/22	BIG BEAR CITY COMMUNITY SERVI	1000-20	449.67
22380	8/8/22	ROBIN A. BRADLEY	1000-20	240.00
22381	8/8/22	BUTCHER'S BLOCK & BUILDING	1000-20	12.38
22382	8/8/22	BEAR VALLEY ELECTRIC	1000-20	9,257.46
22383	8/8/22	CAR QUEST OF BIG BEAR	1000-20	579.52
22384	8/8/22	CWEA TCP/MEMBERSHIP	1000-20	384.00
22385	8/8/22	DADDY'S PEST CONTROL	1000-20	150.00
22386	8/8/22	DIY HOME CENTER-BIG BEAR	1000-20	137.85
22387	8/8/22	DISTRIBUTED SOLAR DEVELOPME	1000-20	19,254.18
22388	8/8/22	DIRECT TV	1000-20	44.99
22389	8/8/22	DEPARTMENT OF WATER & POWE	1000-20	48.75
22390	8/8/22	EVANTEC CORPORATION	1000-20	53.25
22391	8/8/22	FLYERS ENERGY	1000-20	1,116.39
22392	8/8/22	FRONTIER COMMUNICATIONS	1000-20	953.81
22393	8/8/22	BEAR VALLEY BASIN GSA	1000-20	70.34
22394	8/8/22	HACH COMPANY	1000-20	125.08
22395	8/8/22	HUGHESNET	1000-20	102.33
22396	8/8/22	INTERNATIONAL INSTITUTE OF MU	1000-20	215.00
22397	8/8/22	M & M MECHANICAL SERVICES, IN	1000-20	6,050.00
22398	8/8/22	MCMaster-CARR SUPPLY COMPA	1000-20	132.39
22399	8/8/22	NATIVESCAPES INC	1000-20	460.00



**Big Bear Area Regional Wastewater Agency**  
**Check Register**  
**For the Period From Aug 1, 2022 to Aug 31, 2022**

Filter Criteria includes: 1) Accounts Payable only. Report order is by Date.

Check #	Date	Payee	Cash Account	Amount
22400	8/8/22	CONSTANCE M. ALVARADO	1000-20	55.00
22401	8/8/22	PHENOVA	1000-20	636.55
22402	8/8/22	PHIL'S AUTOMOTIVE	1000-20	268.00
22403	8/8/22	POLYDYNE INC	1000-20	4,232.36
22404	8/8/22	QUILL	1000-20	96.94
22405	8/8/22	REBEL OIL CO., INC.	1000-20	1,177.11
22406	8/8/22	R.I.C. CONSTRUCTION CO., INC.	1000-20	27,734.30
22407	8/8/22	SAFETY-KLEEN SYSTEMS, INC.	1000-20	393.45
22408	8/8/22	SAN BERNARDINO COUNTY FIRE P	1000-20	1,365.00
22409	8/8/22	SPECTRUM BUSINESS	1000-20	1,023.93
22410	8/8/22	STREAMLINE	1000-20	300.00
22411	8/8/22	SOUTHWEST GAS CORP	1000-20	182.08
22412	8/8/22	STATE WATER RESOURCES CONT	1000-20	3,550.00
22413	8/8/22	UNDERGROUND SERVICE ALERT	1000-20	268.84
22414	8/8/22	USDA FOREST SERVICE	1000-20	2,258.24
22415	8/8/22	VIKING MAINTENANCE SERVICES,	1000-20	1,190.00
22416	8/8/22	BRIDGETTE BURTON	1000-20	50.00
22417	8/8/22	RICHARD T. HERRICK	1000-20	150.00
22418	8/8/22	SONJA KAWA	1000-20	50.00
22419	8/8/22	DAVID LAWRENCE	1000-20	50.00
22420	8/8/22	JENNIFER MCCULLAR	1000-20	50.00
22421	8/8/22	JAMES J. MILLER	1000-20	150.00
22422	8/8/22	JOHN SHIMMIN	1000-20	50.00
CASH 23550	8/8/22	AMERICAN FIDELITY ASSURANCE	1000-20	525.41
CASH 23551	8/8/22	CALPERS RETIREMENT	1000-20	3,361.42
CASH 23552	8/8/22	CA PERS 457 PROGRAM	1000-20	4,585.91
CASH 23553	8/8/22	CALPERS RETIREMENT	1000-20	8,224.55
CASH 23554	8/10/22	JOHN GREEN	1000-20	150.00
CASH 23555	8/10/22	BYNETTE L. MOTE	1000-20	150.00
CASH 23556	8/10/22	LAWRENCE C. WALSH	1000-20	150.00
CASH 23557	8/18/22	THE LINCOLN NAT'L LIFE INS CO	1000-20	4,245.99
CASH 23558	8/19/22	EMPLOYMENT DEVELOPMENT DE	1000-20	2,604.85
CASH 23559	8/19/22	INTERNAL REVENUE SERVICE	1000-20	7,516.22

**Big Bear Area Regional Wastewater Agency**  
**Check Register**  
**For the Period From Aug 1, 2022 to Aug 31, 2022**

Filter Criteria includes: 1) Accounts Payable only. Report order is by Date.

Check #	Date	Payee	Cash Account	Amount
CASH 23560	8/22/22	AMERICAN FIDELITY ASSURANCE	1000-20	525.41
CASH 23561	8/22/22	CALPERS RETIREMENT	1000-20	3,361.42
CASH 23562	8/22/22	CA PERS 457 PROGRAM	1000-20	4,585.91
CASH 23563	8/22/22	CALPERS RETIREMENT	1000-20	8,224.55
22423	8/23/22	ACCENT COMPUTER SOLUTIONS, I	1000-20	1,093.75
22424	8/23/22	ALL PROTECTION ALARM	1000-20	1,129.77
22425	8/23/22	AMAZON CAPITAL SERVICES	1000-20	1,085.78
22426	8/23/22	BEST BEST & KRIEGER LLP	1000-20	3,076.26
22427	8/23/22	BIG BEAR CITY COMMUNITY SERVI	1000-20	540.00
22428	8/23/22	BUSINESS CARD	1000-20	2,006.22
22429	8/23/22	CLINICAL LAB OF SAN BERNARDIN	1000-20	560.00
22430	8/23/22	COUNTY OF SAN BERNARDINO SO	1000-20	341.66
22431	8/23/22	FIELDMAN, ROLAPP & ASSOCIATE	1000-20	1,141.50
22432	8/23/22	GRAINGER	1000-20	204.93
22433	8/23/22	BEAR VALLEY BASIN GSA	1000-20	65.03
22434	8/23/22	BIG BEAR CITY CSD	1000-20	27,432.47
22435	8/23/22	DEPARTMENT OF WATER & POWE	1000-20	27,432.47
22436	8/23/22	BIG BEAR MUNICIPAL WATER DIST	1000-20	108,762.24
22437	8/23/22	J.G. TUCKER & SON, INC.	1000-20	414.25
22438	8/23/22	KAMAN INDUSTRIAL TECHNOLOGI	1000-20	7,739.61
22439	8/23/22	MCMASTER-CARR SUPPLY COMPA	1000-20	679.86
22440	8/23/22	MITEL	1000-20	380.40
22441	8/23/22	RANDY J. SPITZ	1000-20	60.24
22442	8/23/22	NATIVESCAPES INC	1000-20	600.00
22443	8/23/22	NORTHERN TOOL & EQUIPMENT	1000-20	1,954.98
22444	8/23/22	PHOENIX TOWER INTERNATIONAL	1000-20	1,055.48
22445	8/23/22	READY REFRESH	1000-20	278.29
22446	8/23/22	ROI ENGINEERING LLC	1000-20	1,800.00
22447	8/23/22	SOUTHERN CALIFORNIA EDISON	1000-20	54.76
22448	8/23/22	SOUTHWEST GAS CORP	1000-20	399.52
22449	8/23/22	SOUTHWEST GAS	1000-20	190.75
22450	8/23/22	SYNAGRO-WWT, INC.	1000-20	23,608.28
22451	8/23/22	USA BLUEBOOK	1000-20	148.63

**Big Bear Area Regional Wastewater Agency**  
**Check Register**  
**For the Period From Aug 1, 2022 to Aug 31, 2022**

Filter Criteria includes: 1) Accounts Payable only. Report order is by Date.

<b>Check #</b>	<b>Date</b>	<b>Payee</b>	<b>Cash Account</b>	<b>Amount</b>
22452	8/23/22	VERIZON WIRELESS	1000-20	249.73
22453	8/23/22	REGINA A. WEISS	1000-20	200.00
CASH 23564	8/29/22	CALPERS RETIREMENT	1000-20	700.00
CASH 23565	8/30/22	LEGALSHIELD	1000-20	67.80
CASH 23566	8/30/22	TEXAS LIFE INSURANCE COMPAN	1000-20	213.00
CASH 23567	8/30/22	AMERICAN FIDELITY ASSURANCE	1000-20	663.90
CASH 23568	8/30/22	PAYA	1000-20	10,239.57
CASH 23569	8/31/22	PAYA	1000-20	42.26
<b>Total</b>				<b><u>412,994.87</u></b>



Big Bear Area Regional  
Wastewater Agency  
*Rick Herrick – Chair*  
*John Green – Vice-Chair*  
*Jim Miller – Director*  
*Bynette Mote – Director*  
*Larry Walsh – Director*

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**AGENDA ITEM: 7.C.**

**MEETING DATE:** September 28, 2022

**TO:** Governing Board of the Big Bear Area Regional Wastewater Agency

**FROM:** David Lawrence, P.E., General Manager

**PREPARED BY:** Jennifer McCullar, Finance Manager

**SUBJECT:** Investment Report Identifying Agency Investments and Reporting Interest Income

**BACKGROUND:**

Attached is the August Monthly Investment Report pursuant to the Agency's Investment Policy.

**FINANCIAL IMPACT:**

There is no financial impact.

**RECOMMENDATION:**

Informational

BBARWA  
 Monthly Investment Report  
 August 2022

<u>INVESTMENT TYPE</u>	<u>COST</u>	<u>FAIR MARKET VALUE (1)</u>	<u>YEAR TO DATE INTEREST(2)</u>	<u>INTEREST RATE</u>	<u>MATURITY DATE</u>
LOCAL AGENCY INVESTMENT FUND	\$ 6,162,883	\$ 6,083,538	\$ 12,928	1.276%	DAILY
TOTAL	\$ 6,162,883	\$ 6,083,538	\$ 12,928		

The Investment Portfolio of the Big Bear Area Regional Wastewater Agency is in compliance with the investment policy approved in Aug 2021. The Agency will be able to meet its expenditure requirements for the next six months.

(1) LOCAL AGENCY INVESTMENT FUND (LAIF) IS A STATE-RUN INVESTMENT POOL PROVIDED FOR PUBLIC AGENCIES. THE LAIF MARKET VALUE SHOWN ON THIS TREASURER'S REPORT REPRESENTS BBARWA'S SHARE OF THE **LIQUID VALUE** OF LAIF'S PORTFOLIO IF IT WAS LIQUIDATED AS OF THE END OF THE REPORTED MONTH. THIS NUMBER SERVES AS AN INDICATOR OF WHETHER OR NOT THE **MARKET VALUE** OF LAIF'S INVESTMENTS IS ABOVE OR BELOW THE **COST** OF THOSE INVESTMENTS.

(2) Interest paid quarterly on LAIF investment. Amount reflects interest income received at the reporting date during FY 2023 and excludes accrued interest.

Attachment (s): Monthly LAIF Statement

California State Treasurer  
**Fiona Ma, CPA**



Local Agency Investment Fund  
P.O. Box 942809  
Sacramento, CA 94209-0001  
(916) 653-3001

September 16, 2022

[LAIF Home](#)  
[PMIA Average Monthly Yields](#)

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BIG BEAR AREA REGIONAL WASTEWATER AGENCY

FINANCE MANAGER  
P.O. BOX 517  
BIG BEAR CITY, CA 92314

[Tran Type Definitions](#)

//

**Account Number:**

August 2022 Statement

**Account Summary**

Total Deposit:	0.00	Beginning Balance:	6,162,882.60
Total Withdrawal:	0.00	Ending Balance:	6,162,882.60



Big Bear Area Regional  
Wastewater Agency  
*Rick Herrick – Chair*  
*John Green – Vice-Chair*  
*Jim Miller – Director*  
*Bynette Mote – Director*  
*Larry Walsh – Director*

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**AGENDA ITEM: 7.D.**

**MEETING DATE:** September 28, 2022

**TO:** Governing Board of the Big Bear Area Regional Wastewater Agency

**FROM:** David Lawrence, P.E., General Manager

**PREPARED BY:** Bridgette Burton, Management Analyst/Board Secretary

**SUBJECT:** AB 361 Open Meetings: State and Local Agencies: Teleconferences

**BACKGROUND & DISCUSSION:**

On July 27, 2022, the Governing Board adopted Resolution No. R. 10-2022, A Resolution of the Governing Board of the Big Bear Area Regional Wastewater Agency Authorizing Virtual Board and Committee Meetings Pursuant to AB 361. The Governing Board may extend the application of this Resolution by motion and majority vote up to 30 days at a time, provided that it makes all necessary findings consistent with and pursuant to the requirements of Section 54953(e)(3). Government Code 54953(e)(3) authorizes this legislative body to continue to conduct these remote “telephonic” meetings under AB 361 provided that it has timely made the findings specified therein. Findings must include: (a) the state of emergency continues to directly impact the ability of the members of this legislative body to meet safely in person; and/or (b) state or local officials continue to impose or recommend measures to promote social distancing.

AB 361 amended the Brown Act to allow local legislative bodies to continue using teleconferencing and virtual meeting technology as long as there is a “proclaimed state of emergency.” To accommodate individuals during these teleconferences and virtual meetings, a public comment period is offered where the public can address the legislative body directly in real time. Additionally, public comments are allowed up until the public comment period is closed at the meetings. The agenda includes information on the manner in which the public may access the meeting and provide comments remotely. If technical problems arise that result in the public’s access being disrupted, the legislative body does not take any votes or other official action until the technical disruption is corrected, and public access is restored.

In light of AB 361, and in order to promote social distancing and avoid an imminent safety risk to attendees, teleconferencing and virtual meeting options may continue to take place until further notice. AB 361’s sunset date is January 1, 2024.

**FINANCIAL IMPACT:**

There is no financial impact.

**RECOMMENDATION:**

Approve



Big Bear Area Regional  
Wastewater Agency  
*Rick Herrick – Chair*  
*John Green – Vice-Chair*  
*Jim Miller – Director*  
*Bynette Mote – Director*  
*Larry Walsh – Director*

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**AGENDA ITEM: 7.E.**

**MEETING DATE:** September 28, 2022

**TO:** Governing Board of the Big Bear Area Regional Wastewater Agency

**FROM:** David Lawrence, P.E., General Manager

**PREPARED BY:** Jennifer McCullar, Finance Manager

**SUBJECT:** Resolution No. R. 11-2022, A Resolution of the Governing Board of the Big Bear Area Regional Wastewater Agency Adopting the Annual Statement of Investment Policy

**BACKGROUND:**

The Annual Statement of Investment Policy is attached as Exhibit A to Resolution No. R. 11-2022. The state legislature encourages local agencies to review the investment policy annually to ensure that public funds are being invested in safe and liquid vehicles. The investment policy and resolution remain unchanged from the prior year.

**FINANCIAL IMPACT:**

There is no financial impact.

**RECOMMENDATION:**

Approve

**ATTACHMENT:**

Resolution No. R. 11-2022



**RESOLUTION NO. R. 11-2022**

**A RESOLUTION OF THE GOVERNING BOARD OF THE  
BIG BEAR AREA REGIONAL WASTEWATER AGENCY  
ADOPTING THE ANNUAL STATEMENT OF INVESTMENT POLICY**

**WHEREAS**, the Governing Board has heretofore established general funds from which monies may be expended for general operating purposes; and

**WHEREAS**, the Governing Board has, in addition, established designated funds from which monies may be expended for specific purposes only; and

**WHEREAS**, the Big Bear Area Regional Wastewater Agency has on hand in the general and designated funds, from time to time, monies that are not required for immediate expenditure; and

**WHEREAS**, it has been determined to be in the public interest to invest such monies in a manner that seeks to ensure the preservation of capital while meeting the liquidity needs of the Agency;

**NOW, THEREFORE, BE IT RESOLVED**, by the Governing Board of the Big Bear Area Regional Wastewater Agency that the Agency's Annual Statement of Investment Policy, attached hereto as Exhibit "A," is hereby approved and adopted and all prior resolutions or portions thereof that conflict with this resolution are rescinded and all prior resolutions or portions thereof that are repeated by this resolution are replaced.

**ADOPTED** this 28th day of September 2022.

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Rick Herrick, Chair of the Governing Board  
Big Bear Area Regional Wastewater Agency

ATTEST:

I, Bridgette Burton, Secretary to the Governing Board of the Big Bear Area Regional Wastewater Agency, DO HEREBY CERTIFY that the foregoing Resolution of the Governing Board of the Big Bear Area Regional Wastewater Agency, Adopting the Annual Statement of Investment Policy, being Resolution No. R. 11-2022, was adopted at a regular meeting on September 28, 2022, of said Agency by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

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Bridgette Burton, Secretary to the Governing Board  
Big Bear Area Regional Wastewater Agency

## EXHIBIT “A”

### BIG BEAR AREA REGIONAL WASTEWATER AGENCY BOARD POLICY INVESTMENT

#### I. Policy Statement

The Big Bear Area Regional Wastewater Agency (“Agency”) has been entrusted with a special privilege and a unique responsibility to manage and protect public dollars. When managing public funds, the Agency understands that investment success can not be measured in terms of achieving the highest possible return but must be measured in terms of prudent investing that utilizes uncommitted dollars in safe, short-term instruments to earn the Agency reasonable returns with the least amount of risk and to maintain adequate liquidity.

#### II. Scope

This investment policy applies to all financial assets of the Agency which include:

1. Idle short-term operating cash.
2. Deposits held by fiscal agents, in accordance with the provisions of the applicable debt agreements, not necessarily limited to the specific investment types authorized under Section IV, Authorized Investments, set forth in this policy.
3. Restricted designated funds.

#### III. Objective

The primary objectives, in priority order, of the Agency’s investment activities shall be:

1. **Safety:** Safety of principal is the foremost objective of the investment program. Investments of the Agency shall be undertaken in a manner that seeks to ensure the preservation of capital.

2. **Liquidity:** The Agency's investment portfolio will remain sufficiently liquid to meet all operating requirements.
3. **Yield:** The investment portfolio shall be designed with the objective of attaining a rate of return commensurate with the Agency's investment risk constraints and liquidity needs. Return on investment is of least importance compared to the safety and liquidity objectives described above.

#### **IV. Authorized Investments**

The following investments will be permitted by this policy and are authorized pursuant to California Government Code 53600 et seq.:

1. The Local Agency Investment Fund (LAIF) managed by the Treasurer of the State of California.
2. Certificates of Deposit insured by the Federal Deposit Insurance Corporation. Maturities are not to exceed two years from the date of purchase. Purchases may not exceed 30 percent of the Agency's surplus money.
3. United States Treasury Bills, Notes and Bonds for which the full faith and credit of the United States are pledged for the payment of principal and interest. Maturities are not to exceed two years from the date of purchase.
4. Triple-A rated money market mutual funds regulated by the Securities and Exchange Commission and whose portfolios consist only of United States Treasury securities.

**V. Delegation of Authority**

Management responsibility for the investment program is hereby delegated to the Finance Manager and the General Manager of the Agency, who may invest the Agency's funds consistent with this investment policy and who shall establish procedures and a system of controls for the operation of the investment program consistent with this investment policy.

**VI. Reporting**

The Finance Manager shall render an investment report to the General Manager and the Governing Board of the Agency on a monthly basis.

1. The investment report shall include the type of investment, institution, date of maturity, par and dollar amount invested on all securities, interest rate, share of the liquid value, investments and monies held by the Agency, and shall additionally, include a description of any of the Agency's funds, investments or programs, that are under the management of contracted parties, including lending programs. With respect to all securities held by the Agency, and under management of any outside party that is not also a local agency or the State of California Local Agency Investment Fund, the report shall also include a current market value as of the date of the report.
2. The investment report shall include a statement denoting the ability of the local agency to meet its expenditure requirements for the next six months or an explanation as to why sufficient money will not or may not be available.

**VII. Standards of Care**

## 1. Prudence

The Governing Board, General Manager and Finance Manager of the Agency are trustees and therefore fiduciaries subject to the prudent investor standard. When investing, reinvesting, purchasing, acquiring, exchanging, selling and managing public funds, a trustee shall act with care, skill, prudence and diligence under the circumstances then prevailing, that a prudent person acting in a like capacity and familiarity with those matters would use in the conduct of funds of a like character and with like aims, to safeguard the principal and maintain the liquidity needs of the Agency.

## 2. Ethics and Conflicts of Interest

In the manner required by applicable law, Officers and Employees involved in the investment process shall refrain from personal business activity that could conflict with the proper execution and management of the investment program, or that could impair their ability to make impartial decisions.

**VIII. Policy Adoption**

The Governing Board shall adopt the Agency's investment policy on an annual basis at a public meeting. Any modifications to the policy shall also be considered at a public meeting.



Big Bear Area Regional  
Wastewater Agency  
*Rick Herrick – Chair*  
*John Green – Vice-Chair*  
*Jim Miller – Director*  
*Bynette Mote – Director*  
*Larry Walsh – Director*

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**AGENDA ITEM: 7.F.**

**MEETING DATE:** September 28, 2022

**TO:** Governing Board of the Big Bear Area Regional Wastewater Agency

**FROM:** David Lawrence, P.E., General Manager

**PREPARED BY:** Jennifer McCullar, Finance Manager

**SUBJECT:** Carryover Appropriations

**BACKGROUND:**

The Board appropriated funds in FY 2022 for projects and purchases that were not completed at year end and will need to be completed in FY 2023. The following will be carried over and added to the FY 2023 Budget.

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Carryover Appropriations

<u>Capital Expenditures</u>	<u>\$</u>	<u>Acct. No.</u>	<u>Operating Expenses</u>	<u>\$</u>	<u>Acct. No.</u>
Electric Utility Cart (Ladder)	\$8,106.30	9500-00	Pumps Motors and Bearings	\$13,181.26	6500-20
Copier	15,654.00	9500-00	Plumbing Supplies (hotwater unit)	1,850.00	6400-80
Scum and Tank Drain Pump	18,317.70	9500-00	Generators (wiring)	2,000.00	6500-36
LPS Generator and Fuel System	152,212.57	9500-00	Electrical Supplies (exterior recepticals)	2,000.00	6400-60
Grit System Rehab	1,330,724.97	9500-00	Labor (exterior recepticals)	2,500.00	6600-60
	<u>\$1,525,015.54</u>		Equipment Repairs	<u>\$1,648.16</u>	6500-30
				<u>\$23,179.42</u>	

**FINANCIAL IMPACT:**

There is no financial impact since the funds have previously been appropriated. The FY 2023 Budget will be revised to increase the respective line items by the amounts noted above.

**RECOMMENDATION:**

Approve carryover appropriations for the FY 2023 Budget.



Big Bear Area Regional  
Wastewater Agency  
*Rick Herrick – Chair*  
*John Green – Vice-Chair*  
*Jim Miller – Director*  
*Bynette Mote – Director*  
*Larry Walsh – Director*

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## AGENDA ITEM: 10.A.

**MEETING DATE:** September 28, 2022

**TO:** Governing Board of the Big Bear Area Regional Wastewater Agency

**FROM:** David Lawrence, P.E., General Manager

**PREPARED BY:** Bridgette Burton, Management Analyst/Board Secretary

**REVIEWED BY:** John Shimmin, Plant Manager

**SUBJECT:** Wastewater-Based Surveillance for Viruses and Other Infectious Diseases

### **BACKGROUND & DISCUSSION:**

Wastewater-based surveillance (WBS) captures the presence of viruses and other infectious diseases, such as COVID-19 and monkeypox, shed by people with and without symptoms by measuring the viral genetic material, or DNA, in wastewater. By measuring virus levels in untreated wastewater over time, public health officials can determine if infections are increasing or decreasing in a sewershed, understand the community spread of these viruses and enable more effective mitigation and treatment.

As of February 2022, health departments in 43 jurisdictions, representing about 16 percent of the U.S. population, were using funds distributed by the Centers for Disease Control and Prevention to support WBS efforts in detecting COVID-19. The research project WastewaterSCAN detected monkeypox DNA in more than 22 locations from 38 treatment plants in eight states in the U.S. since June 19, 2022.

Although WBS can serve many purposes, there is no standardized approach. It may raise privacy and ethical concerns as wastewater not only contains virus DNA, but additionally contains human genetic data that could potentially be misused. Similarly, there is concern of a community being stigmatized if WBS indicates virus spread.

If the Governing Board would like to allow for WBS, staff recommends the following requirements:

- The requesting organization will provide a wastewater sampling plan and schedule to be approved by the General Manager and Plant Manager.
- The requesting organization will provide the Agency with materials for sampling and shipping, and if applicable, a stipend for Agency employees to conduct the sampling.
- The requesting organization will provide current insurance certificates if it will be on-site with the limits specified in the Agency's Terms and Conditions.
- The samples are tested within 48 hours of sampling and are conducted by a certified lab.
- The sampling cannot interfere with plant operations.



**FINANCIAL IMPACT:**

There is no financial impact.

**RECOMMENDATION:**

Options for the Governing Board to consider:

- Authorize the Agency to allow for wastewater-based surveillance for viruses and other infectious diseases when the above requirements are met.
- Do not authorize the Agency to allow for wastewater-based surveillance for viruses and other infectious diseases unless there is a state or federal order required to be complied with.



Big Bear Area Regional  
Wastewater Agency  
*Rick Herrick – Chair*  
*John Green – Vice-Chair*  
*Jim Miller – Director*  
*Bynette Mote – Director*  
*Larry Walsh – Director*

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## AGENDA ITEM: 10.B.

**MEETING DATE:** September 28, 2022

**TO:** Governing Board of the Big Bear Area Regional Wastewater Agency

**FROM:** David Lawrence, P.E., General Manager

**PREPARED BY:** Bridgette Burton, Management Analyst/Board Secretary

**REVIEWED BY:** Jennifer McCullar, Finance Manager

**SUBJECT:** Amendment No. 4 to the Professional Services Agreements between the Big Bear Area Regional Wastewater Agency and Water Systems Consulting, Inc. for the Replenish Big Bear Project

### BACKGROUND & DISCUSSION:

The Agency entered into two Professional Services Agreements with Water Systems Consulting, Inc. (WSC) for the Replenish Big Bear Project (the Project): 1) *“Bear Valley Water Sustainability Project”* dated June 27, 2018, and 2) *“Replenish Big Bear Project Phase II”* dated September 1, 2019. Three additional amendments have been executed:

- Amendment No. 1 was entered into on October 26, 2021 and included additional support to refine regulatory strategies, analysis and coordination, treatment process evaluation, grant support, and program management coordination.
- Amendment No. 2 was entered into on January 10, 2022 and included additional funding and financing support for grant agreements, Department of Drinking Water (DDW) regulatory analysis and coordination, preparation of the preliminary Title 22 Engineering Report, and the preliminary well investigation analysis.
- Amendment No. 3 was entered into on August 2, 2022 and included preparation of the Replenish Big Bear Letter of Interest for the Water Infrastructure Finance and Innovation (WIFIA) Program.

Amendment No. 4 is needed to advance funding and financing, environmental clearance, regulatory permitting, preliminary engineering, and pilot planning through October 2023.

### FINANCIAL IMPACT:

The Agency’s FY 2023 Budget (the Budget) includes approximately \$2.5 million in expenditures related to the Project. WSC services have been included in this amount. The Budget also includes short-term financing to cover the Project expenses including the WSC services. At this time, the Agency is utilizing cash-on-hand (reserved for future capital expenditures) to fund these expenditures in advance of receiving debt proceeds through a future short-term debt issuance (likely within the next 3 to 6 months upon Board approval). The short-term financing plan includes being

reimbursed through such debt issuance for Project expenses and restoring the capital and replacement reserve fund for future planned capital expenditures.

Amendment No. 4 provides an additional commitment of \$1,018,909 for WSC services through October 2023. If at any time and for any reason, the Agency decides to terminate or delay such services (for financial reasons or otherwise), the underlying Professional Services Agreements provide for this.

**RECOMMENDATION:**

Approve Amendment No. 4 to the Professional Services Agreements between the Big Bear Area Regional Wastewater Agency and Water Systems Consulting, Inc.

**ATTACHMENT:**

Amendment No. 4 to the Professional Services Agreements between the Big Bear Area Regional Wastewater Agency and Water Systems Consulting, Inc.

**AMENDMENT NO. 4  
TO THE PROFESSIONAL SERVICES AGREEMENTS  
BETWEEN  
BIG BEAR AREA REGIONAL WASTEWATER AGENCY  
AND  
WATER SYSTEMS CONSULTING, INC.**

**1. Parties and Date.**

This Amendment No. 4 to the Professional Services Agreements is made and entered into as of this **28th day of September 2022**, by and between the Big Bear Area Regional Wastewater Agency (“BBARWA”) and Water Systems Consulting, Inc. (“Consultant”). BBARWA and Consultant are sometimes individually referred to as “Party” and collectively as “Parties.”

**2. Recitals.**

2.1 Consultant. BBARWA and Consultant have entered into two agreements entitled “Professional Services Agreement” dated June 27, 2018 (Bear Valley Water Sustainability Project) and September 1, 2019 (Replenish Big Bear Project Phase II), (“Agreements”), along with Amendments No. 1, No. 2, and No. 3, for the purpose of retaining the services of Consultant to provide for program management and engineering services for the Replenish Big Bear Project.

2.2 Amendment Purpose. BBARWA and Consultant desire to amend the Agreements to incorporate scope and fee changes to Exhibit “A” of the Agreements. The services are more particularly described in the scope attachment to this Amendment.

2.2.1 Scope Change No. 9 – scope change to advance funding and financing, environmental clearance, regulatory permitting, preliminary engineering, and pilot planning, and increase total compensation by \$1,018,908.68.

2.3 Amendment Authority. This Amendment No. 4 is authorized pursuant to Section 3.5.14 of the Agreements.

**3. Terms.**

3.1 Continuing Effect of Agreements. Except as amended by this Amendment No. 4, all other provisions of the Agreements remain in full force and effect and shall govern the actions of the Parties under this Amendment No. 4. From and after the date of this Amendment No. 4, whenever the term “Agreement” appears in the Agreements, it shall mean the Agreements as amended by this Amendment No. 4.

3.2 Adequate Consideration. The Parties hereto irrevocably stipulate and agree that they have each received adequate and independent consideration for the performance of the obligations they have undertaken pursuant to this Amendment No. 4.

3.3 Severability. If any portion of this Amendment No. 4 is declared invalid, illegal, or

otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

3.4 Counterparts. This Amendment No. 4 may be signed in counterparts, each of which shall constitute an original agreement.

**[Signatures on Next Page]**

**SIGNATURE PAGE  
FOR AMENDMENT NO. 4  
TO THE PROFESSIONAL SERVICES AGREEMENTS  
BETWEEN  
BIG BEAR AREA REGIONAL WASTEWATER AGENCY  
AND  
WATER SYSTEMS CONSULTING, INC.**

**BIG BEAR AREA REGIONAL  
WASTEWATER AGENCY**

**WATER SYSTEMS CONSULTING, INC.**

By: \_\_\_\_\_

David Lawrence, P.E.  
General Manager

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name

Date: \_\_\_\_\_

*Attest:*

\_\_\_\_\_  
Title

\_\_\_\_\_  
Bridgette Burton  
Management Analyst/Board Secretary

\_\_\_\_\_  
Date

## **ATTACHMENT**

- Replenish Big Bear Proposal for Continued Program Management and Preliminary Design Services (Amendment No. 4) dated September 16, 2022



September 16, 2022

David Lawrence  
General Manager  
Big Bear Area Regional Wastewater Agency  
Delivered via Email

**SUBJECT: REPLENISH BIG BEAR PROPOSAL FOR CONTINUED PROGRAM MANAGEMENT AND PRELIMINARY DESIGN SERVICES (AMENDMENT #4)**

Dear David,

On behalf of the WSC Team, we appreciate the opportunity to continue partnering with BBARWA and the entire Agency Team to advance Replenish Big Bear and the valuable benefits it will bring to the community. To continue moving the project forward, WSC has prepared the attached scope of work (**Attachment 1**) and cost proposal (**Attachment 2**) to support the Replenish Big Bear Program through October 2023 and advance funding and financing, environmental clearance, regulatory permitting, preliminary engineering, and pilot planning.

As of August 31, 2022, WSC's existing contract with BBARWA's has \$60,041.32 remaining. The budget for this Amendment #4 is \$1,078,950; therefore, the additional budget request is \$1,018,908.68.

We value the opportunity to discuss the proposed scope with you in more detail, answer any questions you may have, or make any requested modifications. Contact Laine Carlson at (661) 904-1870 or Antonia Estevez-Olea at (760) 207-5691. You can also email us at [lcarlson@wsc-inc.com](mailto:lcarlson@wsc-inc.com) or [aestevezolea@wsc-inc.com](mailto:aestevezolea@wsc-inc.com). Thank you for the opportunity to continue to partner with your team to bring this vital project to reality.

Sincerely,

Water Systems Consulting, Inc.

A handwritten signature in black ink, appearing to read 'Laine Carlson'.

Laine Carlson, PE  
Program Manager

A handwritten signature in black ink, appearing to read 'Antonia Estevez-Olea'.

Antonia Estevez-Olea, PE, MS  
Deputy Program Manager

**Attachments**

1. Scope of Work
2. Cost Proposal
3. Engineering Report Outline



## TASK 1.0 PROJECT MANAGEMENT AND ADMINISTRATION

The following Project Management and Administration subtasks are needed to continue managing the Project from September 2022 through October 2023.

### 1.1 Program Administration

- Continue project oversight, manage communication, assign resources, and coordinate work efforts of the Consultant Team.
- Prepare monthly invoices and progress reports and administer prime contract and subcontracts.

### 1.2 Program Controls

- Maintain schedule, update program budget (if needed), and cash flow model on a quarterly basis (assumed 4 updates).
- Monitor scope and track approved out of scope work.
- Prepare two short-term (six-months) project spending forecasts to assist Agency Team with yearly budgets.
- Develop and maintain a program risk register to assist Project Team with proactively managing risk and mitigation activities.

### 1.3 Agency Team Coordination

- Plan, organize, and conduct bi-weekly Project Team meetings.
- Facilitate and/or participate in impromptu meetings, phone/conference calls, and site visits.

### 1.4 Programming for Subsequent Phases

- Coordinate and collaborate with the Project Team to plan work necessary to complete the subsequent phases of the Project. This budget is based on providing up to 80 hours of support.

## TASK 2.0 FUNDING AND FINANCING

The following tasks are needed to support ongoing and anticipated funding and financing efforts. If additional grants or loans are pursued or selected to move to the next phase, additional scope and budget may be needed to secure such funding.

### 2.1 Funding and Financing Strategy

- Provide as-needed information to support BBARWA's near and long-term financial planning.
- Participate in as-needed meetings with BBARWA and financial consultant to answer any questions.
- Review any financial deliverables for consistency with the program.

### 2.2 Santa Ana Region Prop 1 Integrated Regional Water Management (IRWM) Grant

- Prepare and submit up to five (5) Prop 1 IRWM quarterly progress reports and invoices (July 2022- July 2023).
- As-needed coordination with BBARWA, Santa Ana Watershed Project Authority (SAWPA), and Department of Water Resources (DWR) to complete the required reporting and amendment of the grant agreement to reflect the latest program schedule and budget.

### 2.3 U.S. Bureau of Reclamation Title XVI Grants

The following tasks are anticipated to complete the Title XVI FY21 grant agreement execution, amend the agreement to incorporate FY22 funds, and pursue future program funding.

- Prepare a Build America, Buy America Act (BABAA) waiver to secure the FY21 agreement. The effort required to complete this waiver is uncertain as United States Bureau of Reclamation (USBR) has not yet developed guidelines or examples of approved waivers. If USBR adopts a programmatic waiver similar to other federal agencies, this may not be needed. The budget is based on providing up to 36 hours of support.
- USBR may request additional Financial Capability documentation from Project Partners during their review. The budget is based on providing up to 32 hours of support and coordination.
- Complete three performance and federal financial reports (SF425) due to USBR by April 30<sup>th</sup> and October 30<sup>th</sup> of each year.
- Provide information to support two (2) reimbursement requests by BBARWA.
- Coordinate with USBR to amend the FY21 agreement to incorporate the FY22 funding award.
- Prepare an application for FY23 funding (if Reclamation issues a NOFO for FY23). The budget is based on providing up to 144 hours of support.

## **2.4 EPA WIFIA Loan**

BBARWA submitted the Water Infrastructure Finance and Innovation (WIFIA) letter of interest (LOI) on September 6, 2022. If BBARWA is invited to apply, WSC will work with BBARWA's financial, legal, and environmental consultants to complete the following tasks to prepare the WIFIA Loan Application:

- Establish contact with the United States Environmental Protection Agency (EPA) Underwriter and Transaction Team responsible for managing the WIFIA Application process.
- Conduct biweekly 30-minute check-in conference call with EPA, BBARWA, and Fieldman | Rolapp to complete the WIFIA Application and loan agreement negotiations.
- Conduct internal team coordination to facilitate document preparation and review process.
- Complete Application Section A – Key Applicant and Loan Information.
- Complete Application Section B – Applicant Background.
- Support financial consultant in Completing Section C – Financing Plan
- Support environmental consultant in Completing Application Section D – Federal Requirements Compliance.
- Complete Application Section E – Contract Information.

## **2.5 As-Needed Funding Coordination**

- Continue to identify additional potential funding sources, contact relevant program staff to discuss the funding opportunities, investigate the availability and timing of grant and loan funds, and recommend any next steps. The budget is based on providing up to 120 hours of support.

## **TASK 3.0 COMMUNICATION AND OUTREACH SUPPORT**

### **3.1 Community Outreach and Education**

- Website and Communication Materials Maintenance
  - Conduct as-needed updates of website to reflect the latest project status and add new Q&A responses.
  - Upon request, update and create printed and digital communication materials such as project pamphlets, talking points, mailers, campaign materials and video.
- Outreach Support:
  - Conduct as needed coordination with the project team to discuss potential challenges, opportunities, messaging, and engagement needs.

- Develop as needed outreach strategy and outreach materials to educate and engage stakeholders about the project..
- Prepare up to three press releases to communicate key milestones, such as grant awards or regulatory/environmental milestones.

### **3.2 Media Relations Support (Optional)**

- Collaborate with BBARWA to prepare a media strategy that includes goals, timelines/roadmap for outreach tied to project milestones, target publications and journalists, etc.
- As-needed media support, including drafting responses, providing talking points, and research
- Virtual Press Kit, including fact sheets, press releases, staff bios, photos, logos, updates, and other relevant information

## **TASK 4.0 STAKEHOLDER COORDINATION AND PROGRAM GOVERNANCE**

### **4.1 Stakeholder Coordination**

- Prepare for and facilitate two (2) in-person meetings and one remote meeting with downstream stakeholders to provide information about the Project, share comments from regulators, and discuss potential coordination needs for the Project. Assumed two (2) WSC staff will attend each meeting.
- Prepare for and facilitate one remote meeting with Total Maximum Daily Loads (TMDL) stakeholders to share comments from regulators, discuss the Alum Application program and Lake Analysis results to discuss potential partnerships. Assumed two (2) WSC staff, one (1) Larry Walker Associates (LWA) staff, and Dr. Anderson will attend the meeting.

### **4.2 Program Benefits Sharing and Governance**

- Compare model results, characterize the lake benefits and establish consistent messaging for the public, stakeholders, and regulators. Assumed results will be discussed during a routine meeting.
- Support the Project Team in the development of draft agreement terms for Replenish Big Bear.

### **4.3 Water Rights Support**

- Collaborate with Project Team to establish a formal strategy and timeline to initiate discussions with the Big Bear Watermaster stakeholders.
- Participate in up to two meetings with Watermaster stakeholders to present the program, discuss potential accounting structures, and define next steps and timeline to incorporate the program operation into the Watermaster process (legal and operational). Assumed two (2) WSC staff will attend the meeting.

### **4.4 Board of Directors Updates**

- Support Project Team in preparing for two Board of Directors meetings by updating presentations and answering questions related to the Project. It is assumed WSC will not attend the meetings.

## **TASK 5.0 ENVIRONMENTAL REVIEW SUPPORT**

### **5.1 Environmental Impact Report/Environmental Assessment (EIR/EA) Preparation Support and Coordination**

- WSC will coordinate and monitor the work of BBARWA's Environmental Consultant, Tom Dodson & Associates (TDA).
- Manage the review of all deliverables and review TDA's progress against the project schedule.
- Arrange for the distribution of interim deliverables to reviewers. Schedule and manage review meetings to discuss review comments.
- Conduct up to twelve (12) 1-hour conference calls to check on status.

- Review and provide comments on submittals including Project Description, supplemental technical reports; Notice of Preparation; two drafts of the Administrative Draft EIR; two drafts of the Final EIR; two drafts of the Draft Mitigation, Monitoring, and Reporting Program; and the Findings, Statement of Overriding Considerations, and Notice of Determination. Review and provide input on TDA's responses to public comments.
- Attend regular EIR progress and status meetings with TDA. The budget is based on three (3) virtual meetings and one (1) 2-hour in-person meetings in Big Bear to review deliverables with the Agency Team.
- Additional budget may be needed to refine special studies needed for EIR/EA.

### **5.2 Public Meetings and Outreach Support**

- Assist with preparation and facilitation of up to three (3) public meetings. It is assumed that TDA will be responsible for scheduling, coordinating, and leading these meetings.
- Create a web landing page to house all notices, presentations, and feedback information.
- Write and post all required public notices on the website.
- Provide support for public meeting presentation content, design, and messaging.

### **5.3 Federal Lead Agency Coordination**

- Facilitate coordination between the Federal Lead Agency (assumed to be USBR), the cooperating agencies, Project Team, and Agency Team to confirm the environmental document scope will satisfy National Environmental Policy Act (NEPA) requirements.
- Coordinate through development, review and issuance of the FONSI or Record of Decision.
- Coordinate with funding agencies to facilitate compliance with federal funding program requirements.

### **5.4 Stickleback Survival Study**

- To support the National Pollutant Discharge Elimination System (NPDES) permit application and California Environmental Quality Act (CEQA)/NEPA process, a special study on sensitive species and coordination with the California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Services (USFW) are needed. Under its current contract with BBARWA, TDA procured GEI's services to evaluate potential impacts to Unarmored Threespine Stickleback (UTS) from the substitution of source water at Shay Pond from potable groundwater to purified water. GEI will compile existing information, conduct agency coordination, and the development of the first phase of adaptive management and monitoring plan. To support this effort, WSC anticipates completing the following:
  - Prepare a regulatory strategy to address resource agency requirements.
  - Review TDA/GEI deliverables to ensure program consistency and guide discussion.
  - Prepare for and facilitate up to four (4) internal and 4 external remote meetings to discuss monitoring requirements for Shay Pond with regulatory agencies. An additional budget will be needed to complete the final adaptive management plan.
  - Document key decision items and coordinate next steps to support the NPDES permit application and CEQA/NEPA process.

## **TASK 6.0 REGULATORY ANALYSIS AND COORDINATION**

### **Task 6.1 BBARWA NPDES Permit**

This scope of work documents the works that need to be completed starting in September 2022. This is an estimate based on the available information. Studies required to respond to the Santa Ana Regional Water Quality Control Board (Regional Board) comments have not yet been determined and will be determined in coordination with Regional Board staff.

### Regulatory Coordination and Strategy

To secure the NPDES permit to discharge into Shay Pond and Stanfield Marsh/Lake, coordination with the Santa Ana Regional Board and State Water Resources Control Board Division of Drinking Water (DDW) is needed. To support this effort, WSC anticipates completing the tasks described below.

- Conduct coordination with Project Team and regulators to advance the NPDES permit process.
- Address Regional Board comments on the Report of Waste Discharge (ROWD) by preparing two (2) response letters.
- Coordinate, prepare for, and facilitate up to two (2) in-person Regional Board meetings to discuss the ROWD comments and responses, and the tentative NPDES order, once issued
- Coordinate, prepare for, and facilitate up to three (3) in-person meetings with DDW to present Domestic Wells Investigation Workplan and preliminary Engineering Report and discuss DDW comments.
- Prepare meeting materials and meeting notes to document key discussion items.

### Technical Studies

- Conduct research to address regulatory concerns/precedence related to the NPDES permit.
- Conduct additional Lake modeling to address Regional Board or DDW-specific questions regarding the water quality or lake level impacts.
- Address comments from DDW on the Domestic Wells Workplan. Implementation of the workplan will be scoped in a future amendment once approved by DDW.
- Continue preparing a preliminary draft of the Engineering Report (ER) for the Lake discharge, addressing the Lake as a nonrestricted recreational impoundment and subsequent landscape irrigation, snowmaking, and groundwater recharge. The preliminary ER draft will evaluate the regulatory requirements applicable to the project and compliance with key provisions to demonstrate how the project will meet the regulations. **Attachment 3** shows the anticipated ER outline and the sections that are anticipated to be completed as part of the preliminary ER draft. The following sections are anticipated to be completed by WSC and subconsultants in this scope:
  - Prepare the Project Overview and Project Facilities to provide background information for the regulators to inform their review (portions of ER Sections 1 and 3) – partially completed.
  - Prepare the Project Participants and Regulations section to establish the regulatory requirements that are applicable to the project (ER Section 2) – Completed.
  - Prepare an analysis to demonstrate how the project will meet the Pathogenic Microorganism Control regulations (ER Section 5).
  - Prepare an analysis to estimate the response retention times for recycled water in Big Bear Lake and groundwater basin (ER Section 6).
  - Describe the hydrogeologic settings and production and monitoring wells to provide information to DDW to assess current conditions and understand potential impacts (portions of ER Sections 9, 10 and 11).
  - Provide a summary of expected recycled water quality and supporting information to support a request for a Recycled Water Contribution (RWC) of 1.0 so blending water is not required (portions of ER Sections 7 and 10).
- An Updated Draft, Draft Final, and Final ER will be prepared in subsequent phases of work to incorporate DDW feedback and additional detail as the design is advanced.

### **Task 6.2 BBARWA Water Discharge Requirements (WDR) Permit Modification**

To support BBARWA's WDR modifications, it is anticipated that coordination with the Colorado River Regional Board is needed. To support this effort, WSC anticipates completing the tasks described below.

- Prepare a regulatory strategy to present the Project to the Colorado River RB.
- Prepare for and facilitate up to two (2) internal and two (2) external meetings to discuss BBARWA's proposed treatment upgrades and discharge changes; and
- Document key decision items and coordinate the next steps to support the WDR permit application.

### **Task 6.3 Resource Agency Coordination**

Several construction permits will be needed to upgrade the WWTP and construct the Lake and Shay Pond discharge pipelines. To commence discussions with resource agencies (i.e., United States Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), and Regional Board) to secure these permits before construction starts, WSC anticipates completing the tasks described below.

- Prepare a regulatory strategy to present the Project to these resource agencies
- Prepare for and facilitate up to one (1) internal and one (1) external meeting to discuss the Project, pipeline alignments, and next step.
- Document key decision items and coordinate the next steps to support the 401 & 404 permit application.

## **TASK 7.0 PRELIMINARY ENGINEERING**

### **7.1 Update Facilities Plan Chapters**

Several chapters of the Facilities Plan were prepared for the prior scope of work, most of which were already reviewed by the Project Team in 2020. These chapters will be updated to reflect changes in site conditions, influent wastewater characteristics, and the treatment process since the draft chapters were reviewed. Chapters that were not yet prepared will be prepared in draft form for the Project's Team review, prior to finalizing the Draft Facilities Plan.

- Site Planning Chapter
  - The Draft Site Planning Chapter was prepared and reviewed by the Agency Team in 2020. The chapter will be updated to reflect any site modifications or future considerations for the site that have changed since the draft chapter was prepared and reviewed by the Agency Team.
- Existing Condition Assessment Chapter
  - The Draft Existing Condition Assessment Chapter was prepared and reviewed by the Agency Team in 2020. The chapter will be updated to reflect any changes since the draft chapter was prepared and reviewed by the Agency Team.
- Wastewater Characterization Chapter
  - This Draft Wastewater Characterization Chapter was prepared using 2010-2019 flows and reviewed by the Agency Team in 2020. The chapter will be updated with 2020-2021 flow and load information.
- Capacity Analysis Chapter
  - The Draft Capacity Analysis Chapter was prepared and reviewed by the Agency Team in 2020. The chapter will be updated to reflect recent WWTP upgrades, modifications to pumps, and other process changes that have occurred since the chapter was prepared and reviewed by the Agency Team.

- Brine Management Strategy
  - A preliminary brine management strategy has been defined and included in the program cost estimate but the chapter for the Brine Management Strategy has not yet been prepared. A draft Brine Management Strategy chapter will be prepared to summarize the concepts and technologies considered for brine management, as well as the final brine management strategy that was developed for the preferred treatment process.
  - The chapter will include an evaluation of design requirements, costs, and expected performance (e.g., effluent TDS and total system recovery) for multi-stage RO system as an alternative to the IDE-Tech MaxH<sub>2</sub>O Desalter process that is currently planned for the brine minimization process.

## 7.2 Pilot Study Planning

- Solicit pilot plans from treatment technology vendors to identify scope of supply, time and material requirements, cost, schedule, coordination needs, and integration with other technologies piloted concurrently.
- Develop an overall pilot plan schedule, cost estimate and a summary of roles and responsibilities between vendors, WSC and BBARWA staff.
- Prepare a draft Piloting Plan for Agency Team review.
- Incorporate the Agency Team comments and develop a Final Piloting Plan.
- Once the scope of the Piloting Plan is determined it is assumed that the implementation of the Pilot Plan will be authorized under a future amendment.

## 7.3 WWTP Plant Mass Balance Model

- Prepare a calibrated steady state mass balance model to reflect the facility's current configuration and operation, using the flows and loads quantified in Task 7.4. Process loading and operational parameters will be calculated for each major unit process. The result of this analysis will provide an estimate of unit process treatment capacity for major unit processes under average dry weather conditions.
- Prepare a GPS-X dynamic mass balance model that focuses on the biological processes for the preferred alternatives selected in Task 7.10. The outputs from the dynamic mass balance model will provide preliminary validation of the treatment capacities and expected performance for the preferred alternatives.

## 7.4 Distribution Infrastructure Preliminary Design

WSC will perform preliminary design of the following facilities.

- Work with the Agency Team to finalize selection of the Lake discharge pipeline alignment (currently 3 alternatives identified).
- Evaluate the existing BBARWA effluent pump station to determine whether it could be upgraded to accommodate the new discharge points or whether a new separate effluent pump station is preferred; determine design criteria for the new or modified effluent pump station.

## 7.5 Prepare Procurement Strategies and Management Plan

The Procurement Strategies and Management Plan is intended to provide the Agency Team information and considerations for the most viable and advantageous contract procurement strategies for delivering a successful program.

- Define contract procurement options, preferences, and constraints, and develop strategies for cost-effectively delivering the Program.
- Conduct a Procurement Strategies workshop with the Agency Team. Expected topics of discussion include: major Program elements; procurement options (including progressive design-build and design-bid-build); agency procurement policies, requirements and constraints; procurement preferences; procurement strategies; and compliance with state and federal funding requirements.
- Prepare Draft Procurement Strategies and Management Plan and distribute to Agency Team for review.
- Incorporate comments to develop Final Procurement Strategies and Management Plan.

### **7.6 Implementation Plan**

- Develop an implementation plan for the preferred treatment process alternative, brine management strategy, and distribution infrastructure, to include the following:
  - Construction plan indicating sequencing, construction activities, required equipment, traffic requirements and permitting requirements to support the impact analysis in the EIR/EA.
  - Refined schedule through completion of construction and commissioning;
  - Updated Opinion of Probable Construction Cost

### **7.7 Facilities Plan**

- Prepare a Draft and Final Facilities Plan that describes the preliminary engineering work performed and the regulatory coordination with the Regional Board and DDW. The Facilities Plan will provide the information necessary to perform subsequent preliminary and detailed engineering tasks in the next phase of work.
- The Facilities Plan will include the following chapters:
  - Introduction – Replenish Big Bear background and purpose and objectives of Facilities Plan
  - BBARWA WWTP Existing Facility Assessment
  - Basis of Planning
    - Regulatory Analysis
    - BBARWA WWTP Site planning
    - Wastewater characterization
    - BBARWA WWTP Capacity Analysis
    - Brine Management Strategy
    - Treatment Process Screening and Alternatives Analysis
  - Recommended Project
    - WWTP upgrades to achieve anticipated regulatory requirements
    - Brine management strategy
    - Piloting Plan
    - Distribution Infrastructure Preliminary Design
    - Description of the approach and results of the mass balance model for the preferred alternative
  - Implementation
    - Opinion of Probable Construction Cost (AACE Class 3 estimate)
    - Schedule
    - Procurement Strategies and Management Plan
    - Construction Plan



Task No. Task Description	WSC														LWA	TH&Co	Michael A.	ALL FIRMS			
	Project Manager	Deputy Project Manager	Principal in Charge	Funding Lead	Lead Designer	Associate Engineer	Staff Engineer	Design QA/QC	Design QA/QC	Lead Outreach Coordinator	Lead Outreach Coordinator	Communications	Administration	WSC Labor Hours	WSC Labor Fee	Expenses	WSC Fee	Labor Fee	Labor Fee	Labor Fee	Total Fee
	Laine Carlson	Antonia Estevez-Olea	Jeffery Szytel	Justin Sutton	Matthew Rodrigues	Heather Freed	Elizabeth Wiley	Christopher Deiter	Dylan Wade	Amy Stevens	Halli Matsukawa	Nina Thoming	Kay Merrill								
<i>Billing rates, \$/hr</i>	\$320	\$195	\$365	\$195	\$230	\$195	\$155	\$240	\$320	\$240	\$280	\$170	\$160								
<b>1 Program Management and Administration</b>																					
1.1 Program Administration	28	112			14								18	172	\$ 36,900	\$ -	\$ 36,900				\$ 36,900
1.2 Program Controls	26	52	6		40									124	\$ 29,850	\$ -	\$ 29,850				\$ 29,850
1.3 Agency Team Coordination	56	112	21		14									203	\$ 50,645	\$ -	\$ 50,645				\$ 50,645
1.4 Programming for Subsequent Phases	16	30	4		30									80	\$ 19,330	\$ -	\$ 19,330				\$ 19,330
<b>SUBTOTAL</b>	<b>126</b>	<b>306</b>	<b>31</b>	<b>0</b>	<b>98</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>18</b>	<b>579</b>	<b>\$ 136,725</b>	<b>\$ -</b>	<b>\$ 136,725</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 136,725</b>
<b>2 Funding and Financing</b>																					
2.1 Funding and Financing Strategy	12	24	2		24									62	\$ 14,770	\$ -	\$ 14,770				\$ 14,770
2.2 Santa Ana Region Prop 1 IRWM Grant	7	36												43	\$ 9,260	\$ -	\$ 9,260				\$ 9,260
2.3 U.S. Bureau of Reclamation Title XVI Grants	48	116		158	52									374	\$ 80,750	\$ -	\$ 80,750				\$ 80,750
2.4 EPA WIFIA Loan	48	134	4	22	22									230	\$ 52,300	\$ -	\$ 52,300				\$ 52,300
2.5 As-Needed Funding Coordination	24	48		48										120	\$ 26,400	\$ -	\$ 26,400				\$ 26,400
<b>SUBTOTAL</b>	<b>139</b>	<b>358</b>	<b>6</b>	<b>228</b>	<b>98</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>829</b>	<b>\$ 183,480</b>	<b>\$ -</b>	<b>\$ 183,480</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 183,480</b>
<b>3 Outreach Support</b>																					
3.1 Community Outreach and Education	14	30								54	10	48		156	\$ 34,250	\$ 1,000	\$ 35,250				\$ 35,250
3.2 Media Relations Support (Optional)	4	10								30				44	\$ 10,430	\$ -	\$ 10,430				\$ 10,430
<b>SUBTOTAL</b>	<b>18</b>	<b>40</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>84</b>	<b>10</b>	<b>48</b>	<b>0</b>	<b>200</b>	<b>\$ 44,680</b>	<b>\$ 1,000</b>	<b>\$ 45,680</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 45,680</b>
<b>4 Stakeholder Coordination and Program Governance</b>																					
4.1 Stakeholder Coordination	48	56	8									8		120	\$ 30,560	\$ 2,000	\$ 32,560	\$ 3,080		\$ 2,750	\$ 38,390
4.2 Program Benefits Sharing and Governance	16	24	4											44	\$ 11,260	\$ -	\$ 11,260		\$ 3,410		\$ 14,670
4.3 Water Rights Support	24	32	4									4		64	\$ 16,060	\$ 500	\$ 16,560				\$ 16,560
4.4 Board of Directors Updates	16	24			12					16	8	4		80	\$ 19,320	\$ -	\$ 19,320				\$ 19,320
<b>SUBTOTAL</b>	<b>104</b>	<b>136</b>	<b>16</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16</b>	<b>8</b>	<b>16</b>	<b>0</b>	<b>308</b>	<b>\$ 77,200</b>	<b>\$ 2,500</b>	<b>\$ 79,700</b>	<b>\$ 3,080</b>	<b>\$ -</b>	<b>\$ 6,160</b>	<b>\$ 88,940</b>
<b>5 Environmental Review Support</b>																					
5.1 EIR/EA Preparation Support and Coordination	70	118	10		40									238	\$ 58,260	\$ 500	\$ 58,760				\$ 58,760
5.2 Public Meetings and Outreach Support	28	32	4							40		21		125	\$ 29,830	\$ 2,000	\$ 31,830				\$ 31,830
5.3 Federal Lead Agency Coordination	12	40		24										76	\$ 16,320	\$ -	\$ 16,320				\$ 16,320
5.4 Stickleback Survival Study	26	52	2											80	\$ 19,190	\$ -	\$ 19,190				\$ 19,190
<b>SUBTOTAL</b>	<b>136</b>	<b>242</b>	<b>16</b>	<b>24</b>	<b>40</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>40</b>	<b>0</b>	<b>21</b>	<b>0</b>	<b>519</b>	<b>\$ 123,600</b>	<b>\$ 2,500</b>	<b>\$ 126,100</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 126,100</b>
<b>6 Regulatory Analysis and Coordination</b>																					
6.1 BBARWA NPDES Permit	165	332	58		84									639	\$ 158,030	\$ 3,200	\$ 161,230	\$ 32,318	\$ 27,531	\$ 20,328	\$ 241,407
6.2 BBARWA WDR Permit Modification	46	64	8		8							2		128	\$ 32,300	\$ 800	\$ 33,100	\$ 3,828			\$ 36,928
6.3 Resource Agency Coordination	24	34	2									2		62	\$ 15,380	\$ 1,000	\$ 16,380				\$ 16,380
<b>SUBTOTAL</b>	<b>235</b>	<b>430</b>	<b>68</b>	<b>0</b>	<b>92</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>829</b>	<b>\$ 205,710</b>	<b>\$ 5,000</b>	<b>\$ 210,710</b>	<b>\$ 36,146</b>	<b>\$ 27,531</b>	<b>\$ 20,328</b>	<b>\$ 294,715</b>
<b>7 Preliminary Engineering</b>																					
7.1 Update Facilities Plan Chapters	10	6	5		58	5	30							114	\$ 25,160	\$ -	\$ 25,160				\$ 25,160
7.2 Pilot Study Planning	16	12	8		60		60							156	\$ 33,480	\$ 2,000	\$ 35,480				\$ 35,480
7.3 WWTP Plant Mass Balance Model	2	2	8		96		52							160	\$ 34,090	\$ -	\$ 34,090				\$ 34,090
7.4 Distribution Infrastructure Preliminary Design	12	4					48	24						88	\$ 17,820	\$ -	\$ 17,820				\$ 17,820
7.5 Prepare Procurement Strategies and Management Plan	16	18	4	6	24				14			2		84	\$ 21,600	\$ -	\$ 21,600				\$ 21,600
7.6 Implementation Plan	6	4	2		10		16							38	\$ 8,210	\$ -	\$ 8,210				\$ 8,210
7.7 Facilities Plan	24	40	6		88	32	36	10	18			18		272	\$ 60,950	\$ -	\$ 60,950				\$ 60,950
<b>SUBTOTAL</b>	<b>86</b>	<b>86</b>	<b>33</b>	<b>6</b>	<b>336</b>	<b>37</b>	<b>242</b>	<b>34</b>	<b>32</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>0</b>	<b>912</b>	<b>\$ 201,310</b>	<b>\$ 2,000</b>	<b>\$ 203,310</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 203,310</b>
<b>COLUMN TOTALS</b>	<b>844</b>	<b>1598</b>	<b>170</b>	<b>258</b>	<b>676</b>	<b>37</b>	<b>242</b>	<b>34</b>	<b>32</b>	<b>140</b>	<b>18</b>	<b>109</b>	<b>18</b>	<b>4176</b>	<b>\$ 972,705</b>	<b>\$ 13,000</b>	<b>\$ 985,705</b>	<b>\$ 39,226</b>	<b>\$ 27,531</b>	<b>\$ 26,488</b>	<b>\$ 1,078,950</b>

10% mark-up on direct expenses; 10% mark-up for sub-contracted services  
 Standard mileage rate \$0.56 per mile (or current Federal Mileage Reimbursement Rate)  
 Rates are subject to revision as of January 1 each year.

**Table 1. ER Outline and Sections to be completed as part of the Preliminary Draft**

Section #	Section Name	Preliminary Draft	Updated Draft	Draft Final	Final
<b>1.0</b>	<b>Project Overview</b>	X	X	X	X
1.1	Public and Outreach and Coordination		X	X	X
1.2	Background	X		X	X
1.3	Environmental Compliance	X		X	X
1.4	Groundwater Recharge Project Goals	X		X	X
1.5	Managerial and Technical Capabilities		X	X	X
1.6	Purpose of this Report	X		X	X
<b>2.0</b>	<b>Project Participants and Regulations</b>	X	X	X	X
2.1	Project Participants	X	X	X	X
2.1.1	Division of Drinking Water: Groundwater Replenishment-Surface Application (Article 5.1)	X		X	X
2.1.2	Division of Drinking Water: Disinfected Tertiary Recycled Water Uses (Article 3)	X		X	X
2.1.3	Regional Water Quality Control Requirements	X		X	X
2.2	State Water Resources Control Board Requirements	X		X	X
<b>3.0</b>	<b>Project Facilities</b>	X		X	X
3.1	BBARWA Wastewater Treatment Plant (WWTP)	X		X	X
3.2	Advanced WWTP Treatment	X		X	X
3.3	Preventative Maintenance Program for Treatment Facilities		X	X	X
3.4	Recycled Water Transmission Facilities	X		X	X
3.5	Surface Application Groundwater Replenishment Facilities	X		X	X
<b>4.0</b>	<b>Source Wastewater</b>		X	X	X
4.1	Industrial Pretreatment and Source Control Program		X	X	X
4.2	Raw Water Characterization	X		X	X
<b>5.0</b>	<b>Pathogenic Microorganism Control</b>	X		X	X
5.1	Primary and Secondary Treatment	X		X	X
5.2	Tertiary and Disinfection Treatment	X		X	X
5.3	TOC and Soil-Aquifer Treatment (SAT)	X		X	X
5.4	Pathogenic Microorganism Control Summary	X		X	X
<b>6.0</b>	<b>Response Retention Time</b>	X		X	X
6.1	Response Retention Time Components	X		X	X
6.2	Response Retention Time	X		X	X
6.3	Underground Retention Time Analysis	X		X	X
<b>7.0</b>	<b>Advanced Facility Recycled Water Quality</b>		X	X	X
7.1	Total Nitrogen		X	X	X
7.2	Total Organic Content	X	X	X	X
7.3	Regulated Constituents		X	X	X
7.4	Basin Plan Objectives		X	X	X
7.5	Other Relevant Constituents		X	X	X
7.6	Constituents Monitored For Disinfected Tertiary Recycled Water Production		X	X	X

Section #	Section Name	Preliminary Draft	Updated Draft	Draft Final	Final
<b>8.0</b>	<b>Groundwater Recharge Surface Area Facilities Operations and Maintenance</b>	X		X	X
8.1	Delivery/Conveyance of Product Water to Sand Canyon (Big Bear Valley Basin)	X		X	X
8.2	Maximum Delivery for Recharge	X		X	X
8.3	Surface Application Operations	X		X	X
8.4	Operations Plans		X	X	X
<b>9.0</b>	<b>Hydrogeologic Setting</b>	X		X	X
9.1	Big Bear Groundwater Basin and Regional Hydrogeology	X		X	X
9.2	Project Area Hydrogeology	X		X	X
9.3	Groundwater Budget	X		X	X
9.4	Groundwater Quality	X		X	X
<b>10.0</b>	<b>Production and Monitoring Wells</b>		X	X	X
10.1	Groundwater Production	X		X	X
10.2	Closest Drinking Water Supply Well	X		X	X
10.3	Production Wells Within a Two Year Travel Time	X		X	X
10.4	Control Zone		X	X	X
10.5	Secondary Control Zone Boundary		X	X	X
<b>11.0</b>	<b>Groundwater Recharge Impacts</b>		X	X	X
11.1	Potential Impacts to Groundwater Quality	X		X	X
11.2	Recycled Water Contribution (RWC)	X		X	X
11.3	Antidegradation Assessment		X	X	X
11.4	Impacts to Existing Groundwater Contamination		X	X	X
11.5	Dissolution of Existing Contaminants		X	X	X
11.6	Conclusion of the Project Impacts Assessment		X	X	X
<b>12.0</b>	<b>Monitoring and Reporting Program</b>		X	X	X
12.1	General Monitoring Provisions		X	X	X
12.2	WWTP Influent Quality Monitoring		X	X	X
12.3	RO Performance Monitoring		X	X	X
12.4	Disinfection Performance Monitoring		X	X	X
12.5	Pathogenic Microorganism Reduction Monitoring		X	X	X
12.6	Recycled Water Policy Advanced Treatment Requirements		X	X	X
12.7	Product Water - Water Quality Compliance		X	X	X
12.8	Groundwater Monitoring		X	X	X
12.9	Project Reports		X	X	X
12.10	Tracer Test Planning		X	X	X
<b>13.0</b>	<b>General Operations Plan</b>		X	X	X
13.1	RTP and AWP Facility System Control and Reliability		X	X	X
13.2	Training		X	X	X
13.3	Operational Strategies and Contingency Plans		X	X	X