

# CHINO BASIN WATERMASTER



## NOTICE OF MEETING

**Thursday, October 21, 2021**

9:00 a.m. – Advisory Committee Meeting

***MEETING AVAILABLE BY REMOTE ACCESS ONLY  
(SEE AGENDA FOR DETAILS)***

*Watermaster's function is to administer and enforce provisions of the Judgment and subsequent orders of the Court,  
and to develop and implement an Optimum Basin Management Program*

# **CHINO BASIN WATERMASTER**

**Thursday, October 21, 2021**

9:00 a.m. – Advisory Committee Meeting

***AGENDA***

**CHINO BASIN WATERMASTER  
ADVISORY COMMITTEE MEETING**

9:00 a.m. – October 21, 2021

*Mr. Jeff Pierson, Chair*

*Mr. Chris Diggs, Vice-Chair*

**Meeting Available by Remote Access Only\***

Click on this [link](#) to access by PC/Smart Device

OR

Conference Call: (253) 215-8782

Meeting ID: 854 2982 0193

Passcode: 488494

**AGENDA**

**CALL TO ORDER**

**ROLL CALL**

**AGENDA – ADDITIONS/REORDER**

**I. CONSENT CALENDAR**

**Note:** All matters listed under the Consent Calendar are considered to be routine and non-controversial and will be acted upon by one motion in the form listed below. There will be no separate discussion on these items prior to voting unless any members, staff, or the public requests specific items be discussed and/or removed from the Consent Calendar for separate action.

**A. MINUTES**

Approve as presented:

1. Minutes of the Advisory Committee Meeting held on September 16, 2021 (*Page 1*)

**B. FINANCIAL REPORTS**

Receive and file as presented:

1. Cash Disbursements for the month of August 2021 (*Page 7*)
2. Watermaster VISA Check Detail for the month of August 2021 (*Page 21*)
3. Combining Schedule for the Period July 1, 2021 through August 31, 2021 (*Page 24*)
4. Treasurer's Report of Financial Affairs for the Period August 1, 2021 through August 31, 2021 (*Page 27*)
5. Budget vs. Actual Report for the Period July 1, 2021 through August 31, 2021 (*Page 31*)
6. Cash Disbursements for the month of September 2021 (*Page 52*)

**C. APPLICATION: WATER TRANSACTION (*Page 64*)**

Provide advice and assistance to the Watermaster Board on the proposed transaction:

The purchase of 140 acre-feet of water from City of Upland by Golden State Water Company. This purchase is made from City of Upland's Annual Production Right.

**D. APPLICATION: WATER TRANSACTION (*Page 72*)**

Provide advice and assistance to the Watermaster Board on the proposed transaction:

The purchase of 66.4 acre-feet of water from West End Consolidated Water Company by Golden State Water Company. This purchase is made from West End Consolidated Water Company's Annual Production Right. Golden State Water Company is utilizing this transaction to produce its West End Consolidated Water Company shares.

**E. APPLICATION: WATER TRANSACTION (Page 80)**

Provide advice and assistance to the Watermaster Board on the proposed transaction:

The purchase of 708.3 acre-feet of water from West End Consolidated Water Company by City of Upland. This purchase is made from West End Consolidated Water Company's Excess Carry Over Storage Account. City of Upland is utilizing this transaction to produce its West End Consolidated Water Company shares.

**II. BUSINESS ITEMS**

**A. TASK ORDER NO. 6 UNDER MASTER AGREEMENT FOR COLLABORATIVE PROJECTS: LOSS OF HYDRAULIC CONTROL MITIGATION PLAN UPDATE (Page 88)**

Approve the Task Order No. 6 as presented.

**B. FISCAL YEAR 2021/22 BUDGET AMENDMENT (FORM A-21-10-01) (Page 106)**

Approve the Fiscal Year 2021/22 Budget Amendment (Form A-21-10-01).

**III. REPORTS/UPDATES**

**A. LEGAL COUNSEL**

1. San Bernardino County Superior Court Emergency Order
2. October 8, 2021 Hearing
3. Rules & Regulations Update
4. Evergreen Storage Agreements
5. Kaiser Permanente Lawsuit

**B. ENGINEER**

1. Ground-Level Monitoring Committee Update
2. Annual Streamflow Monitoring Report
3. Safe Yield Reset Methodology Workshop

**C. CHIEF FINANCIAL OFFICER**

None

**D. GENERAL MANAGER**

1. Chino Basin Management – Board Discussion (Workshop)
2. Storage Q&A
3. Drinking Water Well Principles and Strategies
4. November Meeting Schedule
5. Other

**E. INLAND EMPIRE UTILITIES AGENCY (Page 110)**

1. MWD Update (Written)
2. State and Federal Legislative Reports (Written)
3. Community Outreach/Public Relations Report (Written)
4. Groundwater Recharge Update (Oral Report)

**F. METROPOLITAN MEMBER AGENCY REPORTS**

**IV. INFORMATION**

1. Recharge Investigations and Projects Committee (Page 112)
2. Plumes Status Reports (Page 128)
3. Ground-Level Monitoring Status Report (Page 191)

**V. COMMITTEE MEMBER COMMENTS**

**VI. OTHER BUSINESS**

**VII. CONFIDENTIAL SESSION - POSSIBLE ACTION**

A Confidential Session may be held during the Advisory Committee meeting for the purpose of discussion and possible action.

**VIII. FUTURE MEETINGS AT WATERMASTER\***

10/19/21	Tue	10:00 a.m.	2021/22 Assessment Package Workshop #1
10/21/21	Thu	9:00 a.m.	Advisory Committee Meeting
10/21/21	Thu	9:30 a.m.	Recharge Investigations and Projects Committee
10/21/21	Thu	1:30 p.m.	Ground-Level Monitoring Committee
10/26/21	Tue	1:30 p.m.	Update of the Safe Yield Methodology (Peer Review)
10/28/21	Thu	11:00 a.m.	Watermaster Board
11/02/21	Tue	10:00 a.m.	2021/22 Assessment Package Workshop #2

\* Watermaster meetings are being held remotely at this time. We are continuing to assess pandemic conditions and will hold in-person meetings when practical.

**ADJOURNMENT**

# CHINO BASIN WATERMASTER

## I. CONSENT CALENDAR

### A. MINUTES

1. Advisory Committee Meeting held on September 16, 2021

**DRAFT MINUTES**  
**CHINO BASIN WATERMASTER**  
**ADVISORY COMMITTEE MEETING**

September 16, 2021

The Advisory Committee meeting was held via Zoom (conference call and web meeting) on September 16, 2021.

**ADVISORY COMMITTEE MEMBERS PRESENT ON CALL**

**AGRICULTURAL POOL COMMITTEE**

Jeff Pierson, Chair  
Pete Hall

Agricultural Pool – Crops  
Agricultural Pool – State of California – CIM

**APPROPRIATIVE POOL COMMITTEE**

Chris Diggs, Vice-Chair  
Dave Crosley  
Ron Craig  
Courtney Jones for Scott Burton  
Braden Yu  
Eduardo Espinoza for John Bosler  
Josh Swift  
Cris Fealy  
Chris Berch  
Justin Scott-Coe  
Justin Scott-Coe  
Brian Lee

City of Pomona  
City of Chino  
City of Chino Hills  
City of Ontario  
City of Upland  
Cucamonga Valley Water District  
Fontana Union Water Company  
Fontana Water Company  
Jurupa Community Services District  
Monte Vista Irrigation Company  
Monte Vista Water District  
San Antonio Water Company

**NON-AGRICULTURAL POOL COMMITTEE**

Brian Geye, 2<sup>nd</sup> Vice-Chair

California Speedway Corporation

**WATERMASTER BOARD MEMBERS PRESENT ON CALL**

Bob Kuhn  
Mike Gardner

Three Valleys Municipal Water District  
Western Municipal Water District

**WATERMASTER STAFF PRESENT ON CALL**

Peter Kavounas  
Joseph Joswiak  
Edgar Tellez Foster  
Anna Nelson  
Justin Nakano  
Frank Yoo  
Janine Wilson  
Vanessa Aldaz

General Manager  
Chief Financial Officer  
Water Resources Mgmt. and Planning Dir.  
Executive Services Director  
Water Resources Technical Manager  
Data Services and Judgment Reporting Mgr.  
Senior Accountant  
Administrative Assistant

**WATERMASTER CONSULTANTS PRESENT ON CALL**

Brad Herrema  
Andy Malone  
Garrett Rapp

Brownstein Hyatt Farber Schreck, LLP  
West Yost  
West Yost

**OTHERS PRESENT ON CALL**

Gino Filippi  
Kevin Sage  
Kevin Sage  
Amanda Coker  
Nicole deMoet

Agricultural Pool – Crops  
BlueTriton Brands, Inc.  
CalMat Co.  
City of Chino  
City of Upland

Jiwon Seung  
Tarren Torres  
Ben Lewis  
Joshua Aguilar  
Andy Campbell  
Shivaji Deshmukh  
Jeff Davis  
John Lopez  
Todd Minten  
David De Jesus  
Matthew Litchfield  
Richard Rees

Cucamonga Valley Water District  
Egoscue Law Group, Inc.  
Golden State Water Company  
Inland Empire Utilities Agency  
Inland Empire Utilities Agency  
Inland Empire Utilities Agency  
Provost & Pritchard Consulting Group  
Santa Ana River Water Company  
Santa Ana River Water Company  
Three Valleys Municipal Water District  
Three Valleys Municipal Water District  
Wood plc

### **CALL TO ORDER**

Chair Pierson called the Advisory Committee meeting to order at 9:00 a.m.

### **ROLL CALL**

(0:00:44) Ms. Aldaz conducted the roll call and announced that a quorum was present.

### **AGENDA – ADDITIONS/REORDER**

#### **I. CONSENT CALENDAR**

**Note: All matters listed under the Consent Calendar are considered to be routine and non-controversial and will be acted upon by one motion in the form listed below. There will be no separate discussion on these items prior to voting unless any members, staff, or the public requests specific items be discussed and/or removed from the Consent Calendar for separate action.**

#### **A. MINUTES**

Approve as presented:

1. Minutes of the Advisory Committee Meeting held on July 15, 2021
2. Minutes of the Advisory Committee Special Meeting held on August 19, 2021

#### **B. FINANCIAL REPORTS**

Receive and file as presented:

1. Cash Disbursements for the month of June 2021
2. Watermaster VISA Check Detail for the month of June 2021
3. Combining Schedule for the Period July 1, 2020 through June 30, 2021
4. Treasurer's Report of Financial Affairs for the Period June 1, 2021 through June 30, 2021
5. Budget vs. Actual Report for the Period July 1, 2020 through June 30, 2021
6. Cash Disbursements for the month of July 2021
7. Watermaster VISA Check Detail for the month of July 2021
8. Combining Schedule for the Period July 1, 2021 through July 31, 2021
9. Treasurer's Report of Financial Affairs for the Period July 1, 2021 through July 31, 2021
10. Budget vs. Actual Report for the Period July 1, 2021 through July 31, 2021
11. Cash Disbursements for August 2021 (Information Only)

#### **C. APPLICATION: RECHARGE – FONTANA WATER COMPANY (MAR)**

Recommend to the Watermaster Board to approve Fontana Water Company's Application for Recharge in the Managed Aquifer Recharge (MAR) pilot project and direct Watermaster staff to account for this supplemental water recharged in Fontana Water Company's existing Local Supplemental Storage account.



**D. APPLICATION: RECHARGE – FONTANA WATER COMPANY (VULCAN)**

Recommend to the Watermaster Board to approve Fontana Water Company's Application for Recharge at the Vulcan Basin and direct Watermaster staff to account for this supplemental water recharged in Fontana Water Company's existing Local Supplemental Storage account.

**E. APPLICATION: LOCAL STORAGE AGREEMENTS – APPROPRIATIVE POOL**

Recommend to the Watermaster Board to approve the Application for Local Storage Agreements as presented.

**F. OBMP SEMI-ANNUAL STATUS REPORT 2021-1**

Recommend to the Watermaster Board to adopt the Semi-Annual OBMP Status Report 2021-1, along with filing a copy with the Court, subject to any necessary non-substantive changes.

(0:04:41) A voice vote was taken, and the results are attached to these minutes.

*Motion by Vice-Chair Chris Diggs, seconded by Mr. Justin Scott-Coe, and passed unanimously.*

***Moved to approve the Consent Calendar as presented.***

**II. BUSINESS ITEMS**

None

**III. REPORTS/UPDATES**

**A. LEGAL COUNSEL**

1. San Bernardino County Superior Court Emergency Order
2. October 8, 2021 Hearing
3. Rules & Regulations Update
4. Evergreen Storage Agreements
5. Kaiser Permanente Lawsuit

(0:06:22) Mr. Herrema offered the same report that was given last week at the Pool Committee meetings. The committee declined.

**B. ENGINEER**

1. Model Update and Required Demonstrations Report
2. Schedule: Safe Yield Court Order Implementation
3. Schedule: Ground-Level Monitoring Committee

(0:09:09) Mr. Malone introduced Mr. Rapp, who gave presentations on Items 1 and 2, and gave an update on Item 3, the Ground-Level Monitoring Committee schedule.

**C. CHIEF FINANCIAL OFFICER**

None

**D. GENERAL MANAGER**

1. Water Activity Reports
2. Storage Management Q&A
3. Other

(0:32:50) Mr. Kavounas stated that his report remained unchanged from what was given at the Pool Committee meetings and reminded Pool members of the deadline for submitting Water Activity Reports (WARs). He showed the location on Watermaster's website where they can see the current status of the WARs received and reminded parties to submit their WARs if they had not done so already.

**E. INLAND EMPIRE UTILITIES AGENCY**

1. MWD Update (Written)
2. State and Federal Legislative Reports (Written)
3. Community Outreach/Public Relations Report (Written)
4. Groundwater Recharge Update (Oral Report)

(0:35:00) Mr. Campbell gave a presentation on Item 4.

**F. METROPOLITAN MEMBER AGENCY REPORTS**

(0:49:27) Mr. Litchfield of Three Valleys Municipal Water District reported that their Board had approved a resolution encouraging a 15% voluntary conservation within its service area. This is consistent with a resolution that was adopted by the Metropolitan Water District (MWD) Board in August as well as the Governor's call for a 15% voluntary conservation back in July.

(0:49:58) Mr. Litchfield also reported on the supply situation with the State Water Project allocations. MWD has been working with member agencies to find ways to shift off the state water project and connect onto Colorado River supplies. On September 1<sup>st</sup>, Three Valley Municipal Water District began a 5 CFS shift off the Miramar treatment plant and over to the Mammoth treatment plant, which is currently treating 100% Colorado River water. If the shift continues successfully into next year, it should help conserve approximately 5,000 AF on State Water Project demands through next year.

(0:50:40) He also reported that the DWR is indicating that the initial allocation that is going to come out in December is going to be 0% which is unprecedented.

**IV. COMMITTEE MEMBER COMMENTS**

None

**V. OTHER BUSINESS**

None

**VI. CONFIDENTIAL SESSION - POSSIBLE ACTION**

A Confidential Session may be held during the Advisory Committee meeting for the purpose of discussion and possible action.

None

**ADJOURNMENT**

Chair Pierson adjourned the Advisory Committee meeting at 9:54 a.m.

Secretary: \_\_\_\_\_

Approved: \_\_\_\_\_

Attachments:

1. 20210916 Advisory Committee Vote Outcome for Consent Calendar

# Attachment 1 to 20210916 Advisory Committee Meeting Minutes

September 16, 2021 Advisory Committee Meeting Roll Call Vote Outcome

Agency	Member	Alternate	Consent Calendar
City of Chino	Crosley, Dave		yes
		Coker, Amanda	
		Jakher, Amer	
City of Chino Hills		Castro, Vivian	
	Craig, Ron		yes
		Wiley, Mark	
Cucamonga Valley Water District	Bosler, John		
		Espinoza, Eduardo	yes
		Krishnan, Praseetha	
Fontana Union Water Company	Swift, Josh		yes
		Tarango, Eric	
		Zielke, Seth	
Fontana Water Company	Fealy, Cris		yes
		Tarango, Eric	
Jurupa Community Services District	Berch, Chris		yes
		Letulle, Chander	
		Popelar, Steven	
Monte Vista Water District	Scott-Coe, Justin		yes
		Reimer, Stephanie	
City of Ontario	Burton, Scott		
		Jones, Courtney	yes
City of Pomona	Diggs, Chris, Vice-Chair		yes
City of Upland	Yu, Braden		yes
		Ledbetter, Steven	
		deMoet, Nicole	
Agricultural Pool	deBoom, Nathan		
	DeHaan, Henry		
	Feenstra, Robert		
	Huitsing, John		
	LaBrucherie, Jr., Ron		
	Pierson, Jeff, Chair		yes
	Pietersma, Ron		
	Vanden Heuvel, Geoffrey		
		Filippi, Gino	
		Hofer, Paul	
		Llamas, Ruben	
	Boyd, Carol		
	Hall, Pete		
		Ahmed, Tamer	
		Bettencourt, Miles Terry	
	Cain, Larry		
	Golden-Krasner, Noah		
	Larabee, Gregor		
	Levin, Marilyn		
Non- Agricultural Pool	Geye, Brian, Second Vice-Chair		yes
		Bowcock, Bob	
	Brundage, Kathleen		
		Heustis, Alma	
	Quach, Christopher		
Minor 1 - Monte Vista Irrigation Company		Jones, Courtney	
	Scott-Coe, Justin		yes
Minor 2 - San Antonio Water Company		Reimer, Stephanie	
	Lee, Brian		yes
	Layton, Teri		
<b>OUTCOME:</b>			<b>Passed Unanimously</b>

# CHINO BASIN WATERMASTER

## I. CONSENT CALENDAR

### B. FINANCIAL REPORTS

1. Cash Disbursements for the month of August 2021
2. Watermaster VISA Check Detail for the month of August 2021
3. Combining Schedule for the Period July 1, 2021 through August 31, 2021
4. Treasurer's Report of Financial Affairs for the Period August 1, 2021 through August 31, 2021
5. Budget vs. Actual Report for the Period July 1, 2021 through August 31, 2021
6. Cash Disbursements for the month of September 2021



# CHINO BASIN WATERMASTER

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PETER KAVOUNAS, P.E.  
General Manager

## STAFF REPORT

DATE: October 21, 2021  
TO: Advisory Committee Members  
SUBJECT: Cash Disbursement Report - Financial Report B1 (August 31, 2021)  
(Consent Calendar Item I.B.1.)

### SUMMARY

Issue: Record of Cash Disbursements for the month of August 2021.

Recommendation: Receive and file Cash Disbursements for August 2021 as presented.

Financial Impact: Funds disbursed were included in the FY 2021/22 "Amended" Watermaster Budget.

### Future Consideration

**Advisory Committee – October 21, 2021:** Receive and File

**Watermaster Board – October 28, 2021:** Receive and File (Normal Course of Business)

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### ACTIONS:

**Appropriative Pool – October 14, 2021:** Received and filed

**Non-Agricultural Pool – October 14, 2021:** Moved unanimously to receive and file, without approval

**Agricultural Pool – October 14, 2021:** Pulled from Consent to allow the Watermaster CFO (who was absent) to answer Mr. Raughley's questions regarding certain balances within the B-5 report and bring the item back to the November OAP meeting.

**Advisory Committee – October 21, 2021:**

**Watermaster Board – October 28, 2021:**

*Watermaster's function is to administer and enforce provisions of the Judgment and subsequent orders of the Court,  
and to develop and implement an Optimum Basin Management Program*

## BACKGROUND

A monthly cash disbursement report is provided to keep all members apprised of Watermaster expenditures.

## DISCUSSION

Total cash disbursements during the month of August 2021 were \$406,019.49.

The most significant expenditures during the month were to Brownstein Hyatt Farber Schreck in the amounts of \$62,559.28 and \$51,439.72 (check number 22970 dated August 3, 2021 and check number 23017 dated August 25, 2021).

## ATTACHMENTS

1. Financial Report – B1

**CHINO BASIN WATERMASTER**  
**Cash Disbursements For The Month of**  
**August 2021**

Type	Date	Num	Name	Memo	Account	Paid Amount
<b>Bill Pmt -Check</b>	<b>08/03/2021</b>	<b>22966</b>	<b>ACCENT COMPUTER SOLUTIONS, INC.</b>	<b>145590</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/01/2021	145590		Monthly Services - August 2021	6052.4 · IT Managed Services	4,018.28
				Overwatch - August 2021	6052.5 · IT Data Backup/Storage	699.00
				OmniCloud - August 2021	6052.5 · IT Data Backup/Storage	170.00
				Office 365 Subscriptions/Business - August 2021	6052.4 · IT Managed Services	204.75
				Image office storage (per GB, per month)	6052.5 · IT Data Backup/Storage	546.00
<b>TOTAL</b>						<b>5,638.03</b>
<b>Bill Pmt -Check</b>	<b>08/03/2021</b>	<b>22967</b>	<b>ACWA JOINT POWERS INSURANCE AUTHORITY</b>	<b>0671881</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/01/2021	0671881		Prepayment - September 2021	1409 · Prepaid Life, BAD&D & LTD	246.83
				August 2021	60191 · Life & Disab.Ins Benefits	246.83
<b>TOTAL</b>						<b>493.66</b>
<b>Bill Pmt -Check</b>	<b>08/03/2021</b>	<b>22968</b>	<b>APPLEONE</b>	<b>01-5986759</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	07/21/2021	01-5986759		Brian Summers	6017.2 · Office Specialist Services	1,260.80
<b>TOTAL</b>						<b>1,260.80</b>
<b>Bill Pmt -Check</b>	<b>08/03/2021</b>	<b>22969</b>	<b>APPLIED COMPUTER TECHNOLOGIES</b>	<b>3417</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	07/29/2021	3417		Database Consulting - July 2021	6052.2 · Applied Computer Technol	3,850.00
<b>TOTAL</b>						<b>3,850.00</b>
<b>Bill Pmt -Check</b>	<b>08/03/2021</b>	<b>22970</b>	<b>BROWNSTEIN HYATT FARBER SCHRECK</b>		<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	06/30/2021	852867		852867	6078 · BHFS Legal - Miscellaneous	23,772.15
Bill	06/30/2021	852868		GM Evaluation, Contracts, COVID Work	6073 · BHFS Legal - Personnel Matters	11,479.50
Bill	06/30/2021	852869		852869	6907.34 · Santa Ana River Water Rights	89.10
Bill	06/30/2021	852870		852870	6907.36 · Santa Ana River Habitat	89.10
Bill	06/30/2021	852871		852871	6275 · BHFS Legal - Advisory Committee	757.35
Bill	06/30/2021	852872		852872	6375 · BHFS Legal - Board Meeting	4,220.10
Bill	06/30/2021	852873		852873	8375 · BHFS Legal - Appropriative Pool	1,559.25
Bill	06/30/2021	852874		852874	8475 · BHFS Legal - Agricultural Pool	1,470.15
Bill	06/30/2021	852875		852875	8575 · BHFS Legal - Non-Ag Pool	1,470.15
Bill	06/30/2021	852876		852876	6071 · BHFS Legal - Court Coordination	11,639.70
				06/21/21 Mileage/Parking Expense	6071 · BHFS Legal - Court Coordination	27.00
				06/21/21 Mileage/Parking Expense	6071 · BHFS Legal - Court Coordination	17.00
				06/23/21 CourtCall-De Jesus	6071 · BHFS Legal - Court Coordination	94.00
				06/23/21 CourtCall-Bowcock	6071 · BHFS Legal - Court Coordination	94.00
				06/23/21 CourtCall-Wilson	6071 · BHFS Legal - Court Coordination	94.00
				06/23/21 CourtCall-Pierson	6071 · BHFS Legal - Court Coordination	94.00
				06/23/21 CourtCall-Gardner	6071 · BHFS Legal - Court Coordination	94.00
				06/23/21 CourtCall-Curatalo	6071 · BHFS Legal - Court Coordination	94.00

**CHINO BASIN WATERMASTER**  
**Cash Disbursements For The Month of**  
**August 2021**

Type	Date	Num	Name	Memo	Account	Paid Amount
				06/23/21 CourtCall-Rogers	6071 · BHFS Legal - Court Coordination	94.00
				06/25/21 Mileage/Parking Expense	6071 · BHFS Legal - Court Coordination	86.23
Bill	06/30/2021	852877		852877	6077 · BHFS Legal - Party Status Maint	356.40
Bill	06/30/2021	852878		852878	6907.38 · Reg. Water Quality Cntrl Board	222.75
Bill	06/30/2021	852879		852879	6907.45 · OBMP Update	2,871.45
Bill	06/30/2021	852880		852880	6907.47 · 2020 Safe Yield Reset	89.10
Bill	06/30/2021	852881		852881	6078.25 · Ely 3 Basin Investigation	1,684.80
TOTAL						<u>62,559.28</u>
<b>Bill Pmt -Check</b>	<b>08/03/2021</b>	<b>22971</b>	<b>BURRTEC WASTE INDUSTRIES, INC.</b>	<b>N2112132194</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	07/30/2021	N2112132194		August 2021	6024 · Building Repair & Maintenance	142.50
TOTAL						<u>142.50</u>
<b>Bill Pmt -Check</b>	<b>08/03/2021</b>	<b>22972</b>	<b>DE HAAN, HENRY</b>	<b>Ag Pool Member Compensation</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	06/10/2021	6/10 Ag Pool Mtg		6/10/21 Ag Pool Meeting	8411 · Ag Pool Member Compensation	25.00
				6/10/21 Ag Pool Meeting	8470 · Ag Meeting Attend -Special	100.00
TOTAL						<u>125.00</u>
<b>Bill Pmt -Check</b>	<b>08/03/2021</b>	<b>22973</b>	<b>EMPOWER LAB</b>	<b>1931</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	07/31/2021	1931		Empower Lab - July 2021	6193 · Employee Training	1,075.00
TOTAL						<u>1,075.00</u>
<b>Bill Pmt -Check</b>	<b>08/03/2021</b>	<b>22974</b>	<b>ESRI</b>	<b>94077205</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	07/21/2021	94077205		ESRI maintenance 8/19/2021-8/18/2022	6054 · Computer Software	1,000.00
TOTAL						<u>1,000.00</u>
<b>Bill Pmt -Check</b>	<b>08/03/2021</b>	<b>22975</b>	<b>FEDAK &amp; BROWN LLP</b>	<b>Progress Billing</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	07/30/2021			July 2020	6062 · Audit Services	1,490.00
TOTAL						<u>1,490.00</u>
<b>Bill Pmt -Check</b>	<b>08/03/2021</b>	<b>22976</b>	<b>FLOOR COVERINGS INTERNATIONAL</b>	<b>25% Deposit</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	07/21/2021	25% deposit		25% deposit on total invoice of \$30,003.53	1840 · Capital Assets	7,500.88
TOTAL						<u>7,500.88</u>
<b>Bill Pmt -Check</b>	<b>08/03/2021</b>	<b>22977</b>	<b>EASTVALE DEVELOPMENT COMPANY-PIERS</b>	<b>Ag and Board Member Compensation</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	06/02/2021	6/02 Mtg w/Ag Chair		6/02/21 Conference call w/Ag Pool Chair	8470 · Ag Meeting Attend -Special	125.00
Bill	06/02/2021	6/02 Mtg w/Ag Pool		6/02/21 Conference call w/Ag Pool Members	8470 · Ag Meeting Attend -Special	125.00
Bill	06/03/2021	6/03 Mtg w/Ag Chair		6/03/21 Conference call w/Ag Pool Chair	8470 · Ag Meeting Attend -Special	125.00
Bill	06/07/2021	6/07 Mtg w/Ag Chair		6/07/21 Conference call w/Ag Pool Chair	8470 · Ag Meeting Attend -Special	125.00
Bill	06/08/2021	6/08 Board Officers		6/08/21 Board Officers Check In	6311 · Board Member Compensation	125.00



**CHINO BASIN WATERMASTER**  
**Cash Disbursements For The Month of**  
**August 2021**

Type	Date	Num	Name	Memo	Account	Paid Amount
Bill	06/10/2021	6/10 Mtg w/Ag Chair		6/10/21 Conference call w/Ag Pool Chair	8470 · Ag Meeting Attend -Special	125.00
Bill	06/10/2021	6/10 Ag Pool Mtg		6/10/21 Ag Pool Meeting	8470 · Ag Meeting Attend -Special	125.00
Bill	06/11/2021	6/11 Mtg w/WM		6/11/21 Mtg. with PK, WY, Vanden Heuvel	6311 · Board Member Compensation	125.00
Bill	06/11/2021	6/11 Mtg w/Ag Chair		6/11/21 Conference call w/Ag Pool Chair	8470 · Ag Meeting Attend -Special	125.00
Bill	06/15/2021	6/15 Mtg w/Ag Pool		6/15/21 Conference call w/Ag Pool Members	8470 · Ag Meeting Attend -Special	125.00
Bill	06/15/2021	6/15 Mtg w/Ag Chair		6/15/21 Conference call w/Ag Pool Chair	8470 · Ag Meeting Attend -Special	125.00
Bill	06/17/2021	6/17 Board Officers		6/17/21 Board Officers Meeting	6311 · Board Member Compensation	125.00
Bill	06/17/2021	6/17 Advisory Comm		6/17/21 Advisory Committee Meeting	8470 · Ag Meeting Attend -Special	125.00
Bill	06/17/2021	6/17 Mtg w/Ag Chair		6/17/21 Conference call w/Ag Pool Chair	8470 · Ag Meeting Attend -Special	125.00
Bill	06/18/2021	6/18 Mtg w/Ag Pool		6/18/21 Conference call w/Ag Pool Members	8470 · Ag Meeting Attend -Special	125.00
Bill	06/22/2021	6/22 Board Officers		6/22/21 Board Officers Meeting	6311 · Board Member Compensation	125.00
Bill	06/24/2021	6/24 Board Mtg		6/24/21 Board Meeting	6311 · Board Member Compensation	125.00
Bill	06/24/2021	6/24 Mtg w/Ag Chair		6/24/21 Conference call w/Ag Pool Chair	8470 · Ag Meeting Attend -Special	125.00
Bill	06/24/2021	6/24 Mtg w/Ag Pool		6/24/21 Conference call w/Ag Pool Members	8470 · Ag Meeting Attend -Special	125.00
Bill	06/25/2021	6/25 Court Hearing		6/25/21 Court Hearing	6311 · Board Member Compensation	125.00
Bill	06/25/2021	6/25 Mtg w/Ag Chair		6/25/21 Conference call w/Ag Pool Chair	8470 · Ag Meeting Attend -Special	125.00
Bill	06/29/2021	6/29 Mtg w/Ag Chair		6/29/21 Conference call w/Ag Pool Chair	8470 · Ag Meeting Attend -Special	125.00
<b>TOTAL</b>						<b>2,750.00</b>
<b>Bill Pmt -Check</b>	<b>08/03/2021</b>	<b>22978</b>	<b>PREMIERE GLOBAL SERVICES</b>	<b>30682410</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	07/26/2021	30682410		Fee - General	6022 · Telephone	39.00
				Fee - Confidential	6022 · Telephone	39.00
				Service fee	6022 · Telephone	8.50
				Shortfall	6022 · Telephone	78.00
<b>TOTAL</b>						<b>164.50</b>
<b>Bill Pmt -Check</b>	<b>08/03/2021</b>	<b>22979</b>	<b>PURCHASE POWER</b>	<b>8000-9090-0016-8851</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	06/30/2021	8000909000168851		Postage refill - 6/25/21	6042 · Postage - General	500.00
<b>TOTAL</b>						<b>500.00</b>
<b>Bill Pmt -Check</b>	<b>08/03/2021</b>	<b>22980</b>	<b>RR FRANCHISING, INC.</b>	<b>101918</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/01/2021	101918		Monthly service - August 2021	6024 · Building Repair & Maintenance	915.00
<b>TOTAL</b>						<b>915.00</b>
<b>Bill Pmt -Check</b>	<b>08/03/2021</b>	<b>22981</b>	<b>SANTA ANA WATERSHED PROJECT AUTHORI'</b>	<b>BMPTF 2022-02</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	07/21/2021	BMPTF 2022-02		FY 2021-22 Basin Mon. Prg. Task Force	6903 · OBMP SAWPA Group	20,158.00
<b>TOTAL</b>						<b>20,158.00</b>
<b>Bill Pmt -Check</b>	<b>08/03/2021</b>	<b>22982</b>	<b>SPECTRUM BUSINESS</b>	<b>2031978072321</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	07/30/2021	2031978072321		7/23/21-8/22/21	6053 · Internet Expense	804.52

**CHINO BASIN WATERMASTER**  
**Cash Disbursements For The Month of**  
**August 2021**

Type	Date	Num	Name	Memo	Account	Paid Amount
TOTAL						804.52
Bill Pmt -Check	08/03/2021	22983	STATE COMPENSATION INSURANCE FUND	1970970	1012 · Bank of America Gen'l Ckg	
Bill	08/01/2021	1000293041		Premium charge 7/26/21-8/26/21	60183 · Worker's Comp Insurance	702.33
TOTAL						702.33
Bill Pmt -Check	08/03/2021	22984	TOM DODSON & ASSOCIATES	CB271 21-4	1012 · Bank of America Gen'l Ckg	
Bill	06/30/2021	CBW271 21-4		June 2021	6908.1 · 2020 OBMP Update-Dodson & Assoc	8,361.25
TOTAL						8,361.25
Bill Pmt -Check	08/03/2021	22985	UNION 76	7076-2245-3035-5049	1012 · Bank of America Gen'l Ckg	
Bill	07/29/2021	7076224530355049		July 2021	6175 · Vehicle Fuel	215.15
TOTAL						215.15
Bill Pmt -Check	08/03/2021	22986	VISION SERVICE PLAN	00-101789-0001	1012 · Bank of America Gen'l Ckg	
Bill	07/19/2021	00101789		Vision Insurance Premium - August 2021	60182.2 · Dental & Vision Ins	93.83
TOTAL						93.83
Bill Pmt -Check	08/03/2021	ACH 080321	CALPERS	1394905143	1012 · Bank of America Gen'l Ckg	
Bill	08/01/2021	1394905143		Medical Insurance Premiums - August 2021	60182.1 · Medical Insurance	11,327.95
TOTAL						11,327.95
General Journal	08/03/2021	08/03/2021	HEALTH EQUITY	Health Equity Invoice 2953123	1012 · Bank of America Gen'l Ckg	
			HEALTH EQUITY	Health Equity Invoice 2953123	1012 · Bank of America Gen'l Ckg	55.86
TOTAL						55.86
Bill Pmt -Check	08/04/2021	22987	APPLEONE	01-5993321	1012 · Bank of America Gen'l Ckg	
Bill	07/28/2021	01-5993321		Brian Summers	6017.2 · Office Specialist Services	1,260.80
TOTAL						1,260.80
Bill Pmt -Check	08/04/2021	22988	DE BOOM, NATHAN	Ag Pool Member Compensation	1012 · Bank of America Gen'l Ckg	
Bill	07/08/2021	7/08 Ag Pool Mtg		7/08/21 Ag Pool Meeting	8470 · Ag Meeting Attend -Special	125.00
Bill	07/22/2021	7/22 Board Mtg		7/22/21 Board Meeting	8470 · Ag Meeting Attend -Special	125.00
TOTAL						250.00
Bill Pmt -Check	08/04/2021	22989	EGOSCUE LAW GROUP, INC.	VOID: July 2021	1012 · Bank of America Gen'l Ckg	
TOTAL						0.00
Bill Pmt -Check	08/04/2021	22990	ELIE, STEVEN	Board Member Compensation	1012 · Bank of America Gen'l Ckg	
Bill	07/22/2021	7/22 Board Mtg		7/22/21 Board Meeting	6311 · Board Member Compensation	125.00

**CHINO BASIN WATERMASTER**  
**Cash Disbursements For The Month of**  
**August 2021**

Type	Date	Num	Name	Memo	Account	Paid Amount
Bill	07/24/2021	7/24 Admin Mtg		7/24/21 Administrative Meeting	6311 · Board Member Compensation	125.00
TOTAL						250.00
<b>Bill Pmt -Check</b>	<b>08/04/2021</b>	<b>22991</b>	<b>FILIPPI, GINO</b>	<b>Ag Pool Member Compensation</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	07/08/2021	7/08 Ag Pool Mtg		7/08/21 Ag Pool Meeting	8470 · Ag Meeting Attend -Special	125.00
Bill	07/15/2021	7/15 Advisory Comm		7/15/21 Advisory Committee Meeting	8470 · Ag Meeting Attend -Special	125.00
Bill	07/22/2021	7/22 Board Mtg		7/22/21 Board Meeting	8470 · Ag Meeting Attend -Special	125.00
TOTAL						375.00
<b>Bill Pmt -Check</b>	<b>08/04/2021</b>	<b>22992</b>	<b>FOLSOM, BETTY</b>	<b>Board Member Compensation</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	07/20/2021	7/20 Call w/Bd Chair		7/20/21 call with Board Chair	6311 · Board Member Compensation	125.00
Bill	07/22/2021	7/22 Board Mtg		7/22/21 Board Meeting	6311 · Board Member Compensation	125.00
TOTAL						250.00
<b>Bill Pmt -Check</b>	<b>08/04/2021</b>	<b>22993</b>	<b>GEYE, BRIAN</b>	<b>Non-Ag Pool Member Compensation</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	07/08/2021	7/08 Non Ag Mtg		7/08/21 Non-Ag Pool Meeting	8511 · Non-Ag Pool Member Compensation	125.00
Bill	07/15/2021	7/15 Advisory Comm		7/15/21 Advisory Committee Meeting	8511 · Non-Ag Pool Member Compensation	125.00
Bill	07/15/2021	7/15 Bd/Pool Chair		7/15/21 Board Officers/Pool Chairs Meeting	8511 · Non-Ag Pool Member Compensation	125.00
Bill	07/22/2021	7/22 Board Mtg		7/22/21 Board Meeting	8511 · Non-Ag Pool Member Compensation	125.00
TOTAL						500.00
<b>Bill Pmt -Check</b>	<b>08/04/2021</b>	<b>22994</b>	<b>KUHN, BOB</b>	<b>Board Member Compensation</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	07/06/2021	7/06 Exec Committee		7/06/21 Executive Committee Meeting	6311 · Board Member Compensation	125.00
Bill	07/09/2021	7/09 Admin Mtg		7/09/21 Administrative Meeting	6311 · Board Member Compensation	125.00
Bill	07/13/2021	7/13 WM 101		7/13/21 Introduction WM 101 w/Mr. Gardner	6311 · Board Member Compensation	125.00
Bill	07/15/2021	7/15 Advisory Comm		7/15/21 Advisory Committee Meeting	6311 · Board Member Compensation	125.00
Bill	07/20/2021	7/20 Exec Committee		7/20/21 Executive Committee Meeting	6311 · Board Member Compensation	125.00
Bill	07/22/2021	7/22 Board Mtg		7/22/21 Board Meeting	6311 · Board Member Compensation	125.00
TOTAL						750.00
<b>Bill Pmt -Check</b>	<b>08/04/2021</b>	<b>22995</b>	<b>ROGERS, PETER</b>	<b>Board Member Compensation</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	07/20/2021	7/20 Mtg w/Bd Chair		7/20/21 Mtg. w/Approp. Chair & Board Chair	6311 · Board Member Compensation	125.00
Bill	07/22/2021	7/22 Board Mtg		7/22/21 Board Meeting	6311 · Board Member Compensation	125.00
TOTAL						250.00
<b>Bill Pmt -Check</b>	<b>08/04/2021</b>	<b>22996</b>	<b>STATE COMPENSATION INSURANCE FUND</b>	<b>1970970-20</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	06/30/2021	1970970-20		Final premium statement -2020	60183 · Worker's Comp Insurance	1,070.62
TOTAL						1,070.62
<b>Bill Pmt -Check</b>	<b>08/04/2021</b>	<b>22997</b>	<b>WESTERN MUNICIPAL WATER DISTRICT</b>	<b>Board Member Compensation</b>	<b>1012 · Bank of America Gen'l Ckg</b>	

**CHINO BASIN WATERMASTER**  
**Cash Disbursements For The Month of**  
**August 2021**

Type	Date	Num	Name	Memo	Account	Paid Amount
Bill	07/08/2021	7/08 Appro Pool Mtg		7/08/21 AP Pool meeting - Gardner	6311 · Board Member Compensation	125.00
Bill	07/13/2021	7/13 WM Orientation		7/13/21 WM Orientation meeting - Gardner	6311 · Board Member Compensation	125.00
Bill	07/15/2021	7/15 Advisory Comm		7/15/21 Advisory Comm. meeting - Gardner	6311 · Board Member Compensation	125.00
Bill	07/22/2021	7/22 Board Mtg		7/22/21 Board meeting - Gardner	6311 · Board Member Compensation	125.00
TOTAL						500.00
<b>General Journal</b>	<b>08/07/2021</b>	<b>08/07/2021</b>	<b>Payroll and Taxes for 07/25/21-08/07/21</b>	<b>Payroll and Taxes for 07/25/21-08/07/21</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
			ADP, LLC	Direct Deposits for 07/25/21-08/07/21	1012 · Bank of America Gen'l Ckg	31,781.38
			ADP, LLC	Payroll and Taxes for 07/25/21-08/07/21	1012 · Bank of America Gen'l Ckg	12,270.52
			MISSIONSQUARE RETIREMENT	457(b) EE Deductions for 07/25/21-08/07/21	1012 · Bank of America Gen'l Ckg	5,255.39
			MISSIONSQUARE RETIREMENT	401(a) EE Deductions for 07/25/21-08/07/21	1012 · Bank of America Gen'l Ckg	1,694.48
TOTAL						51,001.77
<b>General Journal</b>	<b>08/10/2021</b>	<b>08/10/2021</b>	<b>HEALTH EQUITY</b>	<b>Health Equity Invoice 2965434</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
			HEALTH EQUITY	Health Equity Invoice 2965434	1012 · Bank of America Gen'l Ckg	186.23
TOTAL						186.23
<b>Bill Pmt -Check</b>	<b>08/11/2021</b>	<b>22998</b>	<b>ACCENT COMPUTER SOLUTIONS, INC.</b>	<b>145837</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	07/31/2021	145837		Adobe Acrobat Pro DC licensing subscription	6054 · Computer Software	152.91
TOTAL						152.91
<b>Bill Pmt -Check</b>	<b>08/11/2021</b>	<b>22999</b>	<b>APPLEONE</b>	<b>01-6000739</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/06/2021	01-6000739		Brian Summers	6017.2 · Office Specialist Services	1,245.04
TOTAL						1,245.04
<b>Bill Pmt -Check</b>	<b>08/11/2021</b>	<b>23000</b>	<b>PETTY CASH</b>	<b>2884-2891</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/06/2021	2884-2891		Miscellaneous office supplies	6031.7 · Other Office Supplies	105.04
				Stamps for self addressed envelopes	6042 · Postage - General	65.00
				Supplies for staff meetings	6141.3 · Admin Meetings	19.08
				Lunch for 8/03 SY Recalculation mtg	6909.1 · OBMP Meetings	93.75
TOTAL						282.87
<b>Bill Pmt -Check</b>	<b>08/11/2021</b>	<b>ACH 081121</b>	<b>PUBLIC EMPLOYEES' RETIREMENT SYSTEM</b>	<b>Payor #3493</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
General Journal	08/07/2021	08/07/2021	PUBLIC EMPLOYEES' RETIREMENT SYSTEM	C alPERS Retirement 07/25/21-08/07/21	2000 · Accounts Payable	9,186.50
TOTAL						9,186.50
<b>General Journal</b>	<b>08/13/2021</b>	<b>08/13/2021</b>	<b>ADP Tax Service for 07/10/21</b>	<b>ADP Tax Service for 07/10/21</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
			ADP, LLC	ADP Tax Service for 07/10/21-585891743	1012 · Bank of America Gen'l Ckg	155.50
			ADP, LLC	ADP Tax Service for 07/24/21-585891743	1012 · Bank of America Gen'l Ckg	155.50
TOTAL						311.00

**CHINO BASIN WATERMASTER**  
**Cash Disbursements For The Month of**  
**August 2021**

Type	Date	Num	Name	Memo	Account	Paid Amount
General Journal	08/16/2021	08/16/2021	HEALTH EQUITY	Health Equity Invoice 2967071	1012 · Bank of America Gen'l Ckg	
			HEALTH EQUITY	Health Equity Invoice 2967071	1012 · Bank of America Gen'l Ckg	444.80
TOTAL						444.80
Check	08/16/2021	08/16/2021	SERVICE CHARGE	Service Charge	1012 · Bank of America Gen'l Ckg	
				Service Charge	6039.1 · Banking Service Charges	1,243.26
TOTAL						1,243.26
General Journal	08/17/2021	08/17/2021	HEALTH EQUITY	Health Equity Invoice 2978078	1012 · Bank of America Gen'l Ckg	
			HEALTH EQUITY	Health Equity Invoice 2978078	1012 · Bank of America Gen'l Ckg	37.13
TOTAL						37.13
Bill Pmt -Check	08/20/2021	23001	APPLEONE	01-60007958	1012 · Bank of America Gen'l Ckg	
Bill	08/07/2021	01-6007958		Brian Summers	6017.2 · Office Specialist Services	1,245.04
TOTAL						1,245.04
Bill Pmt -Check	08/20/2021	23002	BANK OF AMERICA	XXXX-XXXX-XXXX-4026	1012 · Bank of America Gen'l Ckg	
Bill	07/31/2021	XXXX-XXXX-XXXX-4026		Misc. office supplies	6031.7 · Other Office Supplies	20.06
				Misc. office supplies	6031.7 · Other Office Supplies	82.98
				Shipping charge for Blomquist book	6042 · Postage - General	8.38
				Webcams for laptops, misc. office supplies	6055 · Computer Hardware	231.28
				Lunch for 7/13/21 onboarding meeting	6312 · Meeting Expenses	138.84
				Replacement keyboard, mouse, misc.supplies	6031.7 · Other Office Supplies	63.34
				Misc. office supplies	6031.7 · Other Office Supplies	55.97
				Misc. office supplies	6031.7 · Other Office Supplies	67.60
				Replacement keyboard, misc. office supplies	6031.7 · Other Office Supplies	137.30
				Monthly fee for Zoom service	6022 · Telephone	39.21
				Glass subway tile	1840 · Capital Assets	404.43
				Replacement laptop-CFO	6055 · Computer Hardware	1,065.60
				Misc. office supplies	6031.7 · Other Office Supplies	38.97
				Misc. office supplies	6031.7 · Other Office Supplies	45.46
				Misc. office supplies	6031.7 · Other Office Supplies	46.00
				Misc. office supplies	6031.7 · Other Office Supplies	16.03
				Webinar registration	6193 · Employee Training	155.86
				Supplies for 7/22/21 staff meeting	6141.3 · Admin Meetings	27.44
				Supplies for PK mtg w/Chino Hills - R. Craig	8312 · Meeting Expenses	22.92
				Toner, misc. office supplies	6031.7 · Other Office Supplies	298.94
				Replacement desk calculator-CFO	6031.7 · Other Office Supplies	76.76
				Floor & Decor - supplies	1840 · Capital Assets	16.41

**CHINO BASIN WATERMASTER**  
**Cash Disbursements For The Month of**  
**August 2021**

Type	Date	Num	Name	Memo	Account	Paid Amount
				Power adapter-ETF	6031.7 · Other Office Supplies	30.51
				Rental boxes to pack for office remodel	6031.7 · Other Office Supplies	71.36
				Toner, misc. office supplies	6031.7 · Other Office Supplies	125.69
				Misc. office supplies	6031.7 · Other Office Supplies	360.06
				Plant/card for Board Chair	6312 · Meeting Expenses	137.30
				Dinner for staff working on office remodel	6141.3 · Admin Meetings	22.67
				Faucet and dishwasher for kitchen remodel	1840 · Capital Assets	999.74
				Faucet and dishwasher for kitchen remodel	1840 · Capital Assets	1,525.55
				Rental boxes to pack for office remodel	6031.7 · Other Office Supplies	71.36
				Garbage disposal for kitchen remodel	1840 · Capital Assets	182.71
				Renewal of Notary for A. Nelson	6193 · Employee Training	558.91
TOTAL						<u>7,145.64</u>
<b>Bill Pmt -Check</b>	<b>08/20/2021</b>	<b>23003</b>	<b>CORELOGIC INFORMATION SOLUTIONS</b>	<b>82093237</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	07/31/2021	82093237		July 2021	7103.7 · Grdwtr Qual-Computer Svc	62.50
				82093237	7101.4 · Prod Monitor-Computer	62.50
TOTAL						<u>125.00</u>
<b>Bill Pmt -Check</b>	<b>08/20/2021</b>	<b>23004</b>	<b>CUCAMONGA VALLEY WATER DISTRICT</b>	<b>Office Lease</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/16/2021			Lease due on September 1, 2021	1422 · Prepaid Rent	7,213.72
TOTAL						<u>7,213.72</u>
<b>Bill Pmt -Check</b>	<b>08/20/2021</b>	<b>23005</b>	<b>FIRST LEGAL NETWORK LLC</b>	<b>40051396</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	07/28/2021	40051396		Court filings for July 2021	6061.5 · Court Filing Services	747.16
TOTAL						<u>747.16</u>
<b>Bill Pmt -Check</b>	<b>08/20/2021</b>	<b>23006</b>	<b>FONTANA UNION WATER COMPANY'</b>	<b>Board Member Compensation</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	07/06/2021	7/06 Board Officers		7/06/21 Board Officers check in - Curatalo	6311 · Board Member Compensation	125.00
Bill	07/08/2021	7/08 Appro Pool Mtg		7/08/21 Appropriative Pool Meeting - Curatalo	6311 · Board Member Compensation	125.00
Bill	07/12/2021	7/12 Legal Counsel		7/12/21 Meeting with Legal Counsel - Curatalo	6311 · Board Member Compensation	125.00
Bill	07/13/2021	7/13 New Rep Mtg		7/13/21 Onboarding of new rep/alternate - Curatalo	6311 · Board Member Compensation	125.00
Bill	07/14/2021	7/14 Call w/Legal		7/14/21 Call with Legal Counsel & GM - Curatalo	6311 · Board Member Compensation	125.00
Bill	07/15/2021	7/15 Board Officers		7/15/21 Board Officers/Pool Chairs - Curatalo	6311 · Board Member Compensation	125.00
Bill	07/16/2021	7/16 Call w/Legal		7/16/21 Call with AP Legal Counsel - Curatalo	6311 · Board Member Compensation	125.00
Bill	07/20/2021	7/20 Board Agenda		7/20/21 Board Agenda preview - Curatalo	6311 · Board Member Compensation	125.00
Bill	07/22/2021	7/22 Board Mtg		7/22/21 Board Meeting - Curatalo	6311 · Board Member Compensation	125.00
TOTAL						<u>1,125.00</u>
<b>Bill Pmt -Check</b>	<b>08/20/2021</b>	<b>23007</b>	<b>GREAT AMERICA LEASING CORP.</b>	<b>29900035</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/17/2021	29900035		Invoice for August 2021 - standard payment	6043.1 · Ricoh Lease Fee	1,481.41

**CHINO BASIN WATERMASTER**  
**Cash Disbursements For The Month of**  
**August 2021**

Type	Date	Num	Name	Memo	Account	Paid Amount
				Supply freight fee	6043.2 · Ricoh Usage & Maintenance Fee	8.57
				Usage for color images	6043.2 · Ricoh Usage & Maintenance Fee	39.46
TOTAL						1,529.44
<b>Bill Pmt -Check</b>	<b>08/20/2021</b>	<b>23008</b>	<b>LEGAL SHIELD</b>	<b>111802</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/12/2021	111802		Employee deductions - August 2021	60194 · Other Employee Insurance	161.40
TOTAL						161.40
<b>Bill Pmt -Check</b>	<b>08/20/2021</b>	<b>23009</b>	<b>LOEB &amp; LOEB LLP</b>	<b>1964470</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	07/31/2021	1964470		Non-Ag Pool Legal Services - July 2021	8567 · Non-Ag Legal Service	2,077.65
TOTAL						2,077.65
<b>Bill Pmt -Check</b>	<b>08/20/2021</b>	<b>23010</b>	<b>ORANGE COUNTY WATER DISTRICT</b>	<b>319872</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/04/2021	319872		2021 Aerial Imagery Prado Basin	7108.6 · Hydraulic Control-Outside Pro	4,500.00
TOTAL						4,500.00
<b>Bill Pmt -Check</b>	<b>08/20/2021</b>	<b>23011</b>	<b>EASTVALE DEVELOPMENT COMPANY-PIERSC</b>	<b>Ag and Board Member Compensation</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	07/06/2021	7/06 Call w/Chair		7/06/21 Conference call w/Ag Pool Chair	8470 · Ag Meeting Attend -Special	125.00
Bill	07/06/2021	7/06 Board Officers		7/06/21 Board Officers check in	6311 · Board Member Compensation	125.00
Bill	07/08/2021	7/08 Call w/Chair		7/08/21 Conference call w/Ag Pool Chair	8470 · Ag Meeting Attend -Special	125.00
Bill	07/08/2021	7/08 Ag Pool Mtg		7/08/21 Ag Pool Mtg	8470 · Ag Meeting Attend -Special	125.00
Bill	07/13/2021	7/13 Call w/Chair		7/13/21 Conference call w/Ag Pool Chair	8470 · Ag Meeting Attend -Special	125.00
Bill	07/13/2021	7/13 Board Officers		7/13/21 Mtg. w/GM, Board Officers, Gardner	6311 · Board Member Compensation	125.00
Bill	07/15/2021	7/15 Call w/Chair		7/15/21 Conference call w/Ag Pool Chair	8470 · Ag Meeting Attend -Special	125.00
Bill	07/15/2021	7/15 Advisory Comm		7/15/21 Advisory Committee Meeting	8470 · Ag Meeting Attend -Special	125.00
Bill	07/15/2021	7/15 RIPCom Mtg		7/15/21 RIPComm Meeting	8470 · Ag Meeting Attend -Special	125.00
Bill	07/15/2021	7/15 Call re Well		7/15/21 Conference call re well head tax	8470 · Ag Meeting Attend -Special	125.00
Bill	07/15/2021	7/15 Board Officers		7/15/21 Board Officers and Pool Chairs Mtg	6311 · Board Member Compensation	125.00
Bill	07/16/2021	7/16 Call w/Bd Chair		7/16/21 Conference call w/Board Chair	6311 · Board Member Compensation	125.00
Bill	07/19/2021	7/19 Call w/Chair		7/19/21 Conference call w/Ag Pool Chair	8470 · Ag Meeting Attend -Special	125.00
Bill	07/20/2021	7/20 Board Officers		7/20/21 Board Agenda preview	6311 · Board Member Compensation	125.00
Bill	07/22/2021	7/22 Call w/Chair		7/22/21 Conference call w/Ag Pool Chair	8470 · Ag Meeting Attend -Special	125.00
Bill	07/22/2021	7/22 Board Mtg		7/22/21 Board meeting	6311 · Board Member Compensation	125.00
TOTAL						2,000.00
<b>Bill Pmt -Check</b>	<b>08/20/2021</b>	<b>23012</b>	<b>STAULA, MARY L</b>	<b>Retiree Medical</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/31/2021			Retiree Medical	60182.4 · Retiree Medical	19.24
TOTAL						19.24
<b>Bill Pmt -Check</b>	<b>08/20/2021</b>	<b>23013</b>	<b>TELLEZ-FOSTER, EDGAR</b>	<b>Employee Reimbursement</b>	<b>1012 · Bank of America Gen'l Ckg</b>	

**CHINO BASIN WATERMASTER**  
**Cash Disbursements For The Month of**  
**August 2021**

Type	Date	Num	Name	Memo	Account	Paid Amount
Bill	07/28/2021			Ops staff meeting on 7/28/21	6141.3 · Admin Meetings	99.57
TOTAL						99.57
<b>Bill Pmt -Check</b>	<b>08/20/2021</b>	<b>23014</b>	<b>VERIZON WIRELESS</b>	<b>9885537496</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	07/31/2021	9885537496		Acct #470810953-00002	6022 · Telephone	385.34
TOTAL						385.34
<b>Bill Pmt -Check</b>	<b>08/20/2021</b>	<b>23015</b>	<b>WAXIE SANITARY SUPPLY</b>		<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/11/2021	80207641		Paper towel dispenser	6038 · Other Office Equipment	720.01
Bill	08/11/2021	80210897		Replacement carbon filters for air purifiers	6038 · Other Office Equipment	157.72
TOTAL						877.73
<b>General Journal</b>	<b>08/23/2021</b>	<b>08/23/2021</b>	<b>HEALTH EQUITY</b>	<b>Health Equity Invoice 2926395</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
			HEALTH EQUITY	Health Equity Invoice 2926395	1012 · Bank of America Gen'l Ckg	62.92
TOTAL						62.92
<b>General Journal</b>	<b>08/24/2021</b>	<b>08/24/2021</b>	<b>HEALTH EQUITY</b>	<b>Health Equity Invoice 2992772</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
			HEALTH EQUITY	Health Equity Invoice 2992772	1012 · Bank of America Gen'l Ckg	53.51
TOTAL						53.51
<b>Bill Pmt -Check</b>	<b>08/25/2021</b>	<b>23016</b>	<b>APPLEONE</b>	<b>01-6013573</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/18/2021	01-6013573		Brian Summers	6017.2 · Office Specialist Services	1,260.80
TOTAL						1,260.80
<b>Bill Pmt -Check</b>	<b>08/25/2021</b>	<b>23017</b>	<b>BROWNSTEIN HYATT FARBER SCHRECK</b>		<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	07/31/2021	856017		856017	6078 · BHFS Legal - Miscellaneous	20,893.05
Bill	07/31/2021	856018		856018	6073 · BHFS Legal - Personnel Matters	2,103.75
Bill	07/31/2021	856019		856019	6907.36 · Santa Ana River Habitat	792.00
Bill	07/31/2021	856020		856020	6275 · BHFS Legal - Advisory Committee	1,237.50
Bill	07/31/2021	856021		856021	6375 · BHFS Legal - Board Meeting	8,506.80
Bill	07/31/2021	856022		856022	8375 · BHFS Legal - Appropriative Pool	796.50
Bill	07/31/2021	856023		856023	8475 · BHFS Legal - Agricultural Pool	796.50
Bill	07/31/2021	856024		856024	8575 · BHFS Legal - Non-Ag Pool	796.50
Bill	07/31/2021	856025		856025	6071 · BHFS Legal - Court Coordination	5,007.60
Bill	07/31/2021	856026		856026	6072 · BHFS Legal - Rules & Regs	310.50
Bill	07/31/2021	856027		856027	6077 · BHFS Legal - Party Status Maint	472.50
Bill	07/31/2021	856028		856028	6907.39 · Recharge Master Plan	580.50
Bill	07/31/2021	856029		856029	6907.47 · 2020 Safe Yield Reset	7,500.60
Bill	07/31/2021	856030		856030	6078.25 · Ely 3 Basin Investigation	1,555.20
				Research-Westlaw	6078.25 · Ely 3 Basin Investigation	90.22



**CHINO BASIN WATERMASTER**  
**Cash Disbursements For The Month of**  
**August 2021**

TOTAL	Type	Date	Num	Name	Memo	Account	Paid Amount
							51,439.72
	Bill Pmt -Check	08/25/2021	23018	EGOSCUE LAW GROUP, INC.	July 2021	1012 · Bank of America Gen'l Ckg	
	Bill	07/31/2021			Ag Pool Legal Services - July 2021	8467 · Ag Legal & Technical Services	29,987.50
TOTAL							29,987.50
	Bill Pmt -Check	08/25/2021	23019	EUROFINS EATON ANALYTICAL		1012 · Bank of America Gen'l Ckg	
	Bill	08/23/2021	L0587208		L0587208	7103.5 · Grdwtr Qual-Lab Svcs	1,476.00
	Bill	08/23/2021	L0587209		L0587209	7103.5 · Grdwtr Qual-Lab Svcs	1,476.00
TOTAL							2,952.00
	Bill Pmt -Check	08/25/2021	23020	FRONTIER COMMUNICATIONS		1012 · Bank of America Gen'l Ckg	
	Bill	07/10/2021	90948438900509145		Office fax	6022 · Telephone	167.94
	Bill	08/24/2021	90948438900509145		Office fax	6022 · Telephone	176.69
TOTAL							344.63
	Bill Pmt -Check	08/25/2021	23021	JOHN J. SCHATZ	VOID:	1012 · Bank of America Gen'l Ckg	0.00
TOTAL							0.00
	Bill Pmt -Check	08/25/2021	23022	KESSLER ALAIR INSURANCE SERVICES, INC. 889551		1012 · Bank of America Gen'l Ckg	
	Bill	08/24/2021	889551		Environ. Pollution Liability 08/30/21-06/30/22	6085 · Business Insurance Package	8,853.24
					Environ. Pollution Liability 07/01/22-08/30/22	1401 · Prepaid Insurance-Pkg	1,776.48
TOTAL							10,629.72
	Bill Pmt -Check	08/25/2021	23023	NELSON, ANNA	Employee Reimbursement	1012 · Bank of America Gen'l Ckg	
	Bill	08/24/2021			Tuition reimbursement-AN	6193 · Employee Training	299.00
					Kitchen supplies - dishes, silverware, misc.	6031.7 · Other Office Supplies	298.38
TOTAL							597.38
	Bill Pmt -Check	08/25/2021	23024	PUBLIC EMPLOYEES' RETIREMENT SYSTEM	VOID: Payor #3493	1012 · Bank of America Gen'l Ckg	0.00
TOTAL							0.00
	Bill Pmt -Check	08/25/2021	23025	READY REFRESH	0023230253	1012 · Bank of America Gen'l Ckg	
	Bill	08/24/2021	0023230253		Office Water Bottle - August 2021	6031.7 · Other Office Supplies	21.53
TOTAL							21.53
	Bill Pmt -Check	08/25/2021	23026	RR FRANCHISING, INC.	102682	1012 · Bank of America Gen'l Ckg	
	Bill	08/07/2021	102682		Electrostatic spraying of office and annex	6024 · Building Repair & Maintenance	355.00
TOTAL							355.00

**CHINO BASIN WATERMASTER**  
**Cash Disbursements For The Month of**  
**August 2021**

Type	Date	Num	Name	Memo	Account	Paid Amount
Bill Pmt -Check	08/25/2021	23027	VERIZON WIRELESS	9886154626	1012 · Bank of America Gen'l Ckg	
Bill	08/24/2021	9886154626		Acct #642073270-00002	7103.7 · Grdwtr Qual-Computer Svc	58.03
TOTAL						58.03
Bill Pmt -Check	08/25/2021	ACH 082521	PUBLIC EMPLOYEES' RETIREMENT SYSTEM	Payor #3493	1012 · Bank of America Gen'l Ckg	
Bill	08/01/2021	16507137		Annual Unfunded Accrued Liability-Plan 3299	60180 · Employers PERS Expense	8,989.42
TOTAL						8,989.42
Bill Pmt -Check	08/25/2021	ACH 082521	PUBLIC EMPLOYEES' RETIREMENT SYSTEM	Payor #3493	1012 · Bank of America Gen'l Ckg	
General Journal	08/21/2021	08/21/2021	PUBLIC EMPLOYEES' RETIREMENT SYSTEM	CalPERS Retirement for 08/08/21-08/21/21	2000 · Accounts Payable	9,186.50
TOTAL						9,186.50
General Journal	08/26/2021	08/26/2021	Payroll and Taxes for 08/08/21-08/21/21	Payroll and Taxes for 08/08/21-08/21/21	1012 · Bank of America Gen'l Ckg	
			ADP, LLC	Direct Deposits for 08/08/21-08/21/21	1012 · Bank of America Gen'l Ckg	37,429.54
			ADP, LLC	Payroll Taxes for 08/08/21-08/21/21	1012 · Bank of America Gen'l Ckg	14,059.64
			MISSIONSQUARE RETIREMENT	457(b) EE Deductions for 08/08/21-08/21/21	1012 · Bank of America Gen'l Ckg	5,765.46
			MISSIONSQUARE RETIREMENT	401(a) EE Deductions for 08/08/21-08/21/21	1012 · Bank of America Gen'l Ckg	1,997.56
TOTAL						59,252.20
Bill Pmt -Check	08/30/2021	ACH 083021	PUBLIC EMPLOYEES' RETIREMENT SYSTEM	Payor #3493	1012 · Bank of America Gen'l Ckg	
Bill	08/06/2021	10000001651224		Fees for GASB-68 Reports & Schedules	60180 · Employers PERS Expense	700.00
TOTAL						700.00
General Journal	08/31/2021	08/31/2021	HEALTH EQUITY	Health Equity Invoice 3014759	1012 · Bank of America Gen'l Ckg	
			HEALTH EQUITY	Health Equity Invoice 3014759	1012 · Bank of America Gen'l Ckg	145.23
TOTAL						145.23
<b>Total Disbursements:</b>						<b>406,019.49</b>



# CHINO BASIN WATERMASTER

9641 San Bernardino Road, Rancho Cucamonga, CA 91730  
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PETER KAVOUNAS, P.E.  
General Manager

## STAFF REPORT

DATE: October 21, 2021  
TO: Advisory Committee Members  
SUBJECT: VISA Check Detail Report - Financial Report B2 (August 31, 2021)  
(Consent Calendar Item I.B.2.)

### SUMMARY

Issue: Record of VISA credit card payment disbursed for the month of August 2021.

Recommendation: Receive and file VISA Check Detail Report for August 2021 as presented.

Financial Impact: Funds disbursed were included in the FY 2021/22 "Amended" Watermaster Budget.

### Future Consideration

**Advisory Committee – October 21, 2021:** Receive and File

**Watermaster Board – October 28, 2021:** Receive and File (Normal Course of Business)

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### ACTIONS:

**Appropriative Pool – October 14, 2021:** Received and filed

**Non-Agricultural Pool – October 14, 2021:** Moved unanimously to receive and file, without approval

**Agricultural Pool – October 14, 2021:** Pulled from Consent to allow the Watermaster CFO (who was absent) to answer Mr. Raughley's questions regarding certain balances within the B-5 report and bring the item back to the November OAP meeting.

**Advisory Committee – October 21, 2021:**

**Watermaster Board – October 28, 2021:**

*Watermaster's function is to administer and enforce provisions of the Judgment and subsequent orders of the Court, and to develop and implement an Optimum Basin Management Program*

## BACKGROUND

A monthly VISA Check Detail report is provided to keep all members apprised of Watermaster expenditures charged against the General Manager and Chief Financial Officer's Bank of America VISA card.

## DISCUSSION

The total cash disbursements during the month of August 2021 was \$7,145.64. The payment was processed in the amount of \$7,145.64 (by check number 23002 dated August 20, 2021). The monthly charges for August 2021 of \$7,145.64 were for routine and customary expenditures and properly documented with receipts.

## ATTACHMENTS

1. Financial Report – B2

**CHINO BASIN WATERMASTER**  
**VISA Check Detail Report**  
**August 2021**

Type	Num	Date	Name	Memo	Account	Paid Amount
Bill Pmt -Check	08/20/2021	23002	BANK OF AMERICA	XXXX-XXXX-XXXX-4026	1012 · Bank of America Gen'l Ckg	
Bill	07/31/2021	XXXX-XXXX-XXXX-4026		Misc. office supplies	6031.7 · Other Office Supplies	20.06
				Misc. office supplies	6031.7 · Other Office Supplies	82.98
				Shipping charge for Blomquist book	6042 · Postage - General	8.38
				Webcams for laptops, misc. office supplies	6055 · Computer Hardware	231.28
				Lunch for 7/13/21 onboarding meeting	6312 · Meeting Expenses	138.84
				Replacement keyboard, mouse, misc.supplies	6031.7 · Other Office Supplies	63.34
				Misc. office supplies	6031.7 · Other Office Supplies	55.97
				Misc. office supplies	6031.7 · Other Office Supplies	67.60
				Replacement keyboard, misc. office supplies	6031.7 · Other Office Supplies	137.30
				Monthly fee for Zoom service	6022 · Telephone	39.21
				Glass subway tile	1840 · Capital Assets	404.43
				Replacement laptop-CFO	6055 · Computer Hardware	1,065.60
				Misc. office supplies	6031.7 · Other Office Supplies	38.97
				Misc. office supplies	6031.7 · Other Office Supplies	45.46
				Misc. office supplies	6031.7 · Other Office Supplies	46.00
				Misc. office supplies	6031.7 · Other Office Supplies	16.03
				Webinar registration	6193 · Employee Training	155.86
				Supplies for 7/22/21 staff meeting	6141.3 · Admin Meetings	27.44
				Supplies for PK mtg w/Chino Hills - R. Craig	8312 · Meeting Expenses	22.92
				Toner, misc. office supplies	6031.7 · Other Office Supplies	298.94
				Replacement desk calculator-CFO	6031.7 · Other Office Supplies	76.76
				Floor & Decor - supplies	1840 · Capital Assets	16.41
				Power adapter-ETF	6031.7 · Other Office Supplies	30.51
				Rental boxes to pack for office remodel	6031.7 · Other Office Supplies	71.36
				Toner, misc. office supplies	6031.7 · Other Office Supplies	125.69
				Misc. office supplies	6031.7 · Other Office Supplies	360.06
				Plant/card for Board Chair	6312 · Meeting Expenses	137.30
				Dinner for staff working on office remodel	6141.3 · Admin Meetings	22.67
				Faucet and dishwasher for kitchen remodel	1840 · Capital Assets	999.74
				Faucet and dishwasher for kitchen remodel	1840 · Capital Assets	1,525.55
				Rental boxes to pack for office remodel	6031.7 · Other Office Supplies	71.36
				Garbage disposal for kitchen remodel	1840 · Capital Assets	182.71
				Renewal of Notary for A. Nelson	6193 · Employee Training	558.91
					<b>Total Disbursements:</b>	<b><u>\$7,145.64</u></b>

TOTAL



# CHINO BASIN WATERMASTER

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PETER KAVOUNAS, P.E.  
General Manager

## STAFF REPORT

DATE: October 21, 2021  
TO: Advisory Committee Members  
SUBJECT: Combining Schedule of Revenue, Expenses and Changes in Net Assets for the Period July 1, 2021 through August 31, 2021 - Financial Report B3 (August 31, 2021) (Consent Calendar Item I.B.3.)

### SUMMARY

Issue: Record of Revenue, Expenses and Changes in Net Assets for the Period July 1, 2021 through August 31, 2021.

Recommendation: Receive and file Combining Schedule of Revenue, Expenses and Changes in Net Assets for the Period July 1, 2021 through August 31, 2021 as presented.

Financial Impact: Funds disbursed were included in the FY 2021/22 "Amended" Watermaster Budget.

### Future Consideration

**Advisory Committee – October 21, 2021:** Receive and File

**Watermaster Board – October 28, 2021:** Receive and File (Normal Course of Business)

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### ACTIONS:

**Appropriative Pool – October 14, 2021:** Received and filed

**Non-Agricultural Pool – October 14, 2021:** Moved unanimously to receive and file, without approval

**Agricultural Pool – October 14, 2021:** Pulled from Consent to allow the Watermaster CFO (who was absent) to answer Mr. Raughley's questions regarding certain balances within the B-5 report and bring the item back to the November OAP meeting.

**Advisory Committee – October 21, 2021:**

**Watermaster Board – October 28, 2021:**

*Watermaster's function is to administer and enforce provisions of the Judgment and subsequent orders of the Court, and to develop and implement an Optimum Basin Management Program*

## BACKGROUND

A Combining Schedule of Revenue, Expenses and Changes in Net Assets for the period July 1, 2021 through August 31, 2021 is provided to keep all members apprised of the FY 2021/22 cumulative Watermaster revenues, expenditures and changes in net assets for the period listed.

## DISCUSSION

The Combining Schedule of Revenue, Expenses and Changes in Net Assets has been created from various financial reports and statements created from Intuit QuickBooks Enterprise Solutions 21.0, the Watermaster accounting system. The Combining Schedule provided balances to the supporting documentation in the Watermaster accounting system as presented.

## ATTACHMENTS:

1. Financial Report – B3

CHINO BASIN WATERMASTER  
COMBINING SCHEDULE OF REVENUE, EXPENSES AND CHANGES IN NET ASSETS  
FOR THE PERIOD JULY 1, 2021 THROUGH AUGUST 31, 2021

Financial Report - B3

	WATERMASTER ADMINISTRATION	OPTIMUM BASIN MANAGEMENT	POOL ADMINISTRATION & SPECIAL PROJECTS			AP ESCROW ACCOUNT	GROUNDWATER REPLENISHMENT	LAIF VALUE ADJ.	GASB 75 BEG. NET POSITION	GRAND TOTALS	AMENDED BUDGET 2021-2022
			APPROPRIATIVE POOL	AG POOL	NON-AG POOL						
<b>Administrative Revenues:</b>											
Administrative Assessments			-		-					-	7,424,877
Interest Revenue			-	-	-					-	106,125
Mutual Agency Project Revenue	177,430									177,430	177,430
Miscellaneous Income	6									6	0
<b>Total Revenues</b>	<b>177,436</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>177,436</b>	<b>7,708,432</b>
<b>Administrative &amp; Project Expenditures:</b>											
Watermaster Administration	377,090									377,090	1,846,194
Watermaster Board-Advisory Committee	25,246									25,246	245,485
Ag Pool Legal Services - Ag Fund <sup>1</sup>				37,663						37,663	-
Pool Administration			37,243	8,151	7,189					52,583	411,698
Optimum Basin Mgmt Administration		167,588								167,588	1,480,696
OBMP Project Costs		372,134								372,134	4,445,867
Debt Service		529,029								529,029	529,029
Basin Recharge Improvements		-								-	1,693,292
<b>Total Administrative/OBMP Expenses</b>	<b>402,336</b>	<b>1,068,751</b>	<b>37,243</b>	<b>8,151</b>	<b>7,189</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,561,333</b>	<b>10,652,261</b>
<b>Net Administrative/OBMP Expenses</b>	<b>(224,899)</b>	<b>(1,068,751)</b>									
Allocate Net Admin Expenses To Pools	<u>224,899</u>		164,919	51,518	8,463					-	
Allocate Net OBMP Expenses To Pools		539,722	395,778	123,634	20,310					-	
Allocate Debt Service to App Pool		529,029	529,029							-	
Allocate Basin Recharge to App Pool		-	-							-	
Agricultural Expense Transfer*			183,303	(183,303)						-	
<b>Total Expenses</b>			<b>1,310,272</b>	<b>37,663</b>	<b>35,962</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,561,333</b>	<b>10,652,261</b>
<b>Net Administrative Income</b>			<b>(1,310,272)</b>	<b>(37,663)</b>	<b>(35,962)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(1,383,896)</b>	<b>(2,943,829)</b>
<b>Other Income/(Expense)</b>											
Replenishment Water Assessments							-			-	0
Desalter Replenishment Obligation							-			-	0
Exhibit "G" Non-Ag Pool Water			-							-	0
RTS Charges from IEUA							-			-	0
Interest Revenue			-	-	-		-			-	0
MWD Water Purchases										-	0
Non-Ag Stored Water Purchases										-	0
Exhibit "G" Non-Ag Pool Water			-							-	0
Groundwater Replenishment							-			-	0
LAIF - Fair Market Value Adjustment								-		-	0
Gain on Sale of Assets								-		-	0
Other Post-Employment Benefits (OPEB)									-	-	0
Prior Year Adjustment - Ag Pool Expense										-	0
AP Special Assessment - Ag Pool Exp.										-	0
AP Escrow Account - Interest Earned							49			49	0
Refund-Basin O&M Expenses										-	0
Refund-Recharge Debt Service										-	0
Funding To/(From) Reserves										-	0
<b>Net Other Income/(Expense)</b>			<b>-</b>	<b>-</b>	<b>-</b>	<b>49</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>49</b>	<b>0</b>
<b>Net Transfers To/(From) Reserves</b>		<b>(1,383,847)</b>	<b>(1,310,272)</b>	<b>(37,663)</b>	<b>(35,962)</b>	<b>49</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(1,383,847)</b>	<b>(2,943,829)</b>
<b>Net Assets, July 1, 2021</b>			<b>8,846,588</b>	<b>127,547</b>	<b>131,995</b>	<b>161,296</b>	<b>(19,272)</b>	<b>829</b>	<b>(443,445)</b>	<b>8,805,539</b>	
<b>Net Assets, End of Period</b>			<b>7,536,316</b>	<b>89,884</b>	<b>96,033</b>	<b>161,345</b>	<b>(19,272)</b>	<b>829</b>	<b>(443,445)</b>	<b>7,421,692</b>	<b>7,421,692</b>
<b>19/20 Assessable Production</b>			<b>69,918.990</b>	<b>21,841.407</b>	<b>3,588.067</b>					<b>95,348.464</b>	
<b>19/20 Production Percentages</b>			<b>73.330%</b>	<b>22.907%</b>	<b>3.763%</b>					<b>100.000%</b>	

\*Fund balance transfer as agreed to in the Peace Agreement.

Note <sup>1</sup> - Agricultural Pool Legal Services for Jul. 2021 through Aug. 2021

N:\Administration\Meetings - Agendas & Minutes\2021\Staff Reports\10 - October\pools\20211014 - B3 Combining Schedule\_August 2021.xlsx\Jul2021-Aug2021





# CHINO BASIN WATERMASTER

9641 San Bernardino Road, Rancho Cucamonga, CA 91730  
Tel: 909.484.3888 Fax: 909.484.3890 www.cbwm.org

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PETER KAVOUNAS, P.E.  
General Manager

## STAFF REPORT

DATE: October 21, 2021

TO: Advisory Committee Members

SUBJECT: Treasurer's Report of Financial Affairs for the Period August 1, 2021 through August 31, 2021 - Financial Report B4 (August 31, 2021) (Consent Calendar Item I.B.4.)

### SUMMARY

Issue: Record of increases or decreases in the cash position, assets and liabilities of Watermaster for the Period of August 1, 2021 through August 31, 2021.

Recommendation: Receive and file Treasurer's Report of Financial Affairs for the Period August 1, 2021 through August 31, 2021 as presented.

Financial Impact: Funds disbursed were included in the FY 2021/22 "Amended" Watermaster Budget.

### Future Consideration

**Advisory Committee – October 21, 2021:** Receive and File

**Watermaster Board – October 28, 2021:** Receive and File (Normal Course of Business)

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### ACTIONS:

**Appropriative Pool – October 14, 2021:** Received and filed

**Non-Agricultural Pool – October 14, 2021:** Moved unanimously to receive and file, without approval

**Agricultural Pool – October 14, 2021:** Pulled from Consent to allow the Watermaster CFO (who was absent) to answer Mr. Raughley's questions regarding certain balances within the B-5 report and bring the item back to the November OAP meeting.

**Advisory Committee – October 21, 2021:**

**Watermaster Board – October 28, 2021:**

*Watermaster's function is to administer and enforce provisions of the Judgment and subsequent orders of the Court, and to develop and implement an Optimum Basin Management Program*

## BACKGROUND

A Treasurer's Report of Financial Affairs for the Period August 1, 2021 through August 31, 2021 is provided to keep all members apprised of the total cash in banks (Bank of America, LAIF, and CalTRUST); cash on deposit in trust with the County of San Bernardino as a result of the Cooperation and Reimbursement Agreement between Chino Basin Watermaster and County of San Bernardino dated May 25, 2017; and cash on hand at the Watermaster office (petty cash) at the end of the period stated. The Treasurer's Report details the change (increase or decrease) in the overall cash position of Watermaster, as well as the changes (increase or decrease) to the assets and liabilities section of the balance sheet. The report also provides a detailed listing of all deposits and/or withdrawals in the California State Treasurer's Local Agency Investment Fund (LAIF) and/or CalTRUST, the most current effective yield as of the last quarter, and the ending balance in LAIF as of the reporting date.

## DISCUSSION

The Treasurer's Report of Financial Affairs has been created from various financial reports and statements created from Intuit QuickBooks Enterprise Solutions 21.0, the Watermaster accounting system. The Treasurer's Report provided, balances to the supporting documentation in the Watermaster accounting system, as well as the supporting bank statements.

## ATTACHMENTS

1. Financial Report – B4

**CHINO BASIN WATERMASTER  
TREASURER'S REPORT OF FINANCIAL AFFAIRS FOR THE PERIOD  
AUGUST 1, 2021 THROUGH AUGUST 31, 2021**

Financial Report - B4

**DEPOSITORIES:**

Cash on Hand - Petty Cash			\$	500
Bank of America				
Governmental Checking-Demand Deposits	\$	431,501		
Zero Balance Account - Payroll		-		431,501
Restricted Funds - AP Escrow				161,345
Trust Account - County of San Bernardino				845
Local Agency Investment Fund - Sacramento				8,720,898
<b>TOTAL CASH IN BANKS AND ON HAND</b>		<b>8/31/2021</b>	<b>\$</b>	<b>9,315,090</b>
TOTAL CASH IN BANKS AND ON HAND		7/31/2021		9,534,415
<b>PERIOD INCREASE (DECREASE)</b>			<b>\$</b>	<b>(219,325)</b>

**CHANGE IN CASH POSITION DUE TO:**

Decrease/(Increase) in Assets: Accounts Receivable			\$	146,341
Assessments Receivable				-
Prepaid Expenses, Deposits & Other Current Assets				(34,057)
(Decrease)/Increase in Liabilities: Accounts Payable				198,292
Accrued Payroll, Payroll Taxes & Other Current Liabilities				12,088
Long Term Liabilities				2,455
Transfer to/(from) Reserves				(544,444)
<b>PERIOD INCREASE (DECREASE)</b>			<b>\$</b>	<b>(219,325)</b>

**SUMMARY OF FINANCIAL TRANSACTIONS:**

		Petty Cash		Gov't Checking Demand		Zero Balance Account Payroll		Restricted Funds AP Escrow		Trust Account County of San Bernardino		Local Agency Investment Funds		Totals
Balances as of 7/31/2021	\$	500	\$	92,851	\$	-	\$	161,321	\$	845	\$	9,278,898	\$	9,534,415
Deposits		-		744,669		-		25		-		-		744,694
Transfers		-		(152,184)		(95,852)		-		-		(558,000)		(806,036)
Withdrawals/Checks		-		(253,835)		95,852		-		-		-		(157,983)
Balances as of 8/31/2021	\$	500	\$	431,501	\$	-	\$	161,345	\$	845	\$	8,720,898	\$	9,315,090
<b>PERIOD INCREASE OR (DECREASE)</b>	<b>\$</b>	<b>-</b>	<b>\$</b>	<b>338,650</b>	<b>\$</b>	<b>-</b>	<b>\$</b>	<b>25</b>	<b>\$</b>	<b>-</b>	<b>\$</b>	<b>(558,000)</b>	<b>\$</b>	<b>(219,325)</b>

**CHINO BASIN WATERMASTER  
TREASURER'S REPORT OF FINANCIAL AFFAIRS FOR THE PERIOD  
AUGUST 1, 2021 THROUGH AUGUST 31, 2021**

Financial Report - B4

**INVESTMENT TRANSACTIONS**

Effective Date	Transaction	Depository	Activity	Redeemed	Days to Maturity	Interest Rate(*)	Maturity Yield
8/5/2021	Withdrawal		(558,000)				
<b>TOTAL INVESTMENT TRANSACTIONS</b>			<b>\$ (558,000)</b>	<b>\$0</b>			

\* The earnings rate for L.A.I.F. is a daily variable rate; 0.33% was the effective yield rate at the Quarter ended June 30, 2021.

**INVESTMENT STATUS  
August 31, 2021**

<u>Financial Institution</u>	<u>Principal Amount</u>	<u>Number of Days</u>	<u>Interest Rate</u>	<u>Maturity Date</u>
Local Agency Investment Fund	\$ 8,720,898			
<b>TOTAL INVESTMENTS</b>	<b>\$ 8,720,898</b>			

Funds on hand are sufficient to meet all foreseen and planned Administrative and project expenditures during the next six months.

All investment transactions have been executed in accordance with the criteria stated in Chino Basin Watermaster's Investment Policy.

Respectfully submitted,



Joseph S. Joswiak  
Chief Financial Officer  
Chino Basin Watermaster



# CHINO BASIN WATERMASTER

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PETER KAVOUNAS, P.E.  
General Manager

## STAFF REPORT

DATE: October 21, 2021

TO: Advisory Committee Members

SUBJECT: Budget vs. Actual Report for the Period July 1, 2021 through August 31, 2021 -  
Financial Report B5 (August 31, 2021) (Consent Calendar Item I.B.5.)

### SUMMARY

Issue: Record of revenues and expenses of Watermaster for the Period of July 1, 2021 through August 31, 2021.

Recommendation: Receive and file Budget vs. Actual Report for the Period July 1, 2021 through August 31, 2021 as presented.

Financial Impact: Funds disbursed were included in the FY 2021/22 "Amended" Watermaster Budget.

### Future Consideration

**Advisory Committee – October 21, 2021:** Receive and File

**Watermaster Board – October 28, 2021:** Receive and File (Normal Course of Business)

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### ACTIONS:

**Appropriative Pool – October 14, 2021:** Received and filed

**Non-Agricultural Pool – October 14, 2021:** Moved unanimously to receive and file, without approval

**Agricultural Pool – October 14, 2021:** Pulled from Consent to allow the Watermaster CFO (who was absent) to answer Mr. Raughley's questions regarding certain balances within the B-5 report and bring the item back to the November OAP meeting.

**Advisory Committee – October 21, 2021:**

**Watermaster Board – October 28, 2021:**

*Watermaster's function is to administer and enforce provisions of the Judgment and subsequent orders of the Court,  
and to develop and implement an Optimum Basin Management Program*

## BACKGROUND

A Budget vs. Actual Report for the period July 1, 2021 through August 31, 2021 is provided to keep all members apprised of the total revenues and expenses for the current fiscal year. The expense section is categorized into four distinct sections. Those sections are: General and Administrative Expenses; Optimum Basin Management Program Expenses; Project Expenses; and Other Income/Expenses. The Budget vs. Actual report has been created from Intuit QuickBooks Enterprise Solutions 21.0, the Watermaster accounting system. The Budget vs. Actual report provided, balances to the supporting documentation in the Watermaster accounting system, as well as the supporting bank statements.

## DISCUSSION

### CURRENT MONTH – AUGUST 2021

Year-To-Date (YTD) for the two months ending August 31, 2021, all but one category was above the projected budget.

Watermaster Legal Services (6070s) were over budget by \$7,943 or 14.4% as a result of increased activities in the areas of Rules and Regulations; the unbudgeted expenses for the Ely 3 Basin Investigation; and miscellaneous legal expenses during the last two months. Please note that the overage is only in the administrative section, not the entire consolidated BHFS budget.

Overall, the Watermaster (YTD) Actual Expenses were \$3,334,075 or 68.1% below the (YTD) Budgeted Expenses of \$4,895,408.

### PREVIOUSLY REPORTED ACTIONS (Descending Order)

#### July 2021:

The “Original” Approved budget for FY 2021/22 of \$7,276,213 was adopted by the Watermaster Board on May 27, 2021. Budget Amendment A-21-07-01 in the amount of \$147,031 and Budget Amendment A-21-07-02 in the amount of \$276,761 was adopted by the Watermaster Board on July 22, 2021. Budget Amendment A-21-08-01 in the amount of \$8,427 was approved by the Advisory Committee on August 19, 2021. The accounts increased with the Budget Amendments were the OBMP-Northwest MZ-1 Area Project (7402.1) increased by \$147,031; and the Safe Yield Reset Methodology Evaluation (7614) increased by \$285,188.

During the month of July 2021, the “Carry Over” funding was calculated. The Total “Carry Over” funding amount of \$2,943,828.87 has been posted to the general ledger accounts. The total amount of \$2,943,828.87 consisted of \$1,693,292.20 from Capital Improvement Projects, \$573,765.00 from Engineering Services, \$374,114.56 from OBMP Activities, \$207,566.95 from Pool Funding Accounts, and \$95,090.16 from Administration Services. More detailed information is provided regarding this issue under the “Carry Over” Funding section.

The “Amended” Budget for FY 2021/22 is \$10,652,260.87 which includes \$2,943,828.87 for the prior years “Carry Over” funding.

## SALARIES EXPENSE

### CURRENT MONTH – AUGUST 2021

As of August 31, 2021, the total (YTD) Watermaster salary expenses were \$32,436 or 7.9% below the (YTD) budgeted amount of \$411,287. The overall staffing budget was developed with a staffing level of ten Full-Time Equivalents (FTE’s), and staffing is currently at ten Full-Time Equivalents (FTE’s).

Watermaster utilizes an in-house database time and attendance system to track and record staff's actual hours worked and records those hours to a specific project or activity. This time and attendance database of captured staff hours and activities is the basis for the bi-weekly payrolls which are processed using an external payroll processing service. Watermaster staff can record time to a large number of activities but the five most used categories are as follows (1) General Administrative activities; (2) Paid Leaves of vacation, sick or holiday; (3) Pools, Advisory or Board Meeting attendance; (4) OBMP activities; and (5) OBMP Implementation Program Elements 1 through 9 activities.

When the FY 2021/22 budget was developed, basic assumptions were used in allocating how staff's time would be spent and on which of the projects or activities. The staffing dollars were then allocated into those specific areas and budgeted on a 1/12 monthly budget. When actual staffing activities vary from the budgeted assumptions, a positive or negative variance can be created.

Currently the following actual allocations are tracking above the projected allocations due to Watermaster staff spending more time in these activities as follows: WM Staff Salaries for Administration (account 6011) above budget by \$26,394 or 13.5%; Watermaster Staff Overtime (account 6011.1) above budget by \$2,217 or 110.8%; and PE 6&7 (account 7501) above budget by \$2,352 or 206.9%.

The table summarizes the Year-To-Date (YTD) Actual Watermaster salary costs compared to the Year-To-Date (YTD) Budget as of August 31, 2021. Please be advised that the "\$ Over Budget" and the "% of Budget" columns are a comparison of the (YTD) Actual to the (YTD) Budget, not the 12-month Annual Budget. The 12-month Annual Budget column is presented only to provide the data in a full and complete format. The following details are provided:

	Jul '21 - Aug '21 Actual	Jul '21 - Aug '21 Budget	\$ Over Budget	% of Budget	FY 2021/22 Annual Budget
<b>WM Salary Expense</b>					
6011 · WM Staff Salaries	221,702.21	195,308.00	26,394.21	113.51%	1,128,445.00
6011.1 · WM Staff Salaries - Overtime	4,216.77	2,000.00	2,216.77	210.84%	12,000.00
6011.4 · 457(f) NQDC Plan	4,902.29	5,885.00	-982.71	83.3%	35,312.00
6017 · Temporary Services	7,517.52	27,000.00	-19,482.48	27.84%	42,000.00
6201 · Advisory Committee - WM Staff Salaries	5,125.33	5,303.00	-177.67	96.65%	30,636.00
6301 · Watermaster Board - WM Staff Salaries	4,692.22	8,439.00	-3,746.78	55.6%	48,754.00
8301 · Appropriative Pool - WM Staff Salaries	6,469.08	7,817.00	-1,347.92	82.76%	45,164.00
8401 · Agricultural Pool - WM Staff Salaries	3,206.30	6,657.00	-3,450.70	48.16%	38,461.00
8501 · Non-Agricultural Pool - WM Staff Salaries	2,357.80	4,603.00	-2,245.20	51.22%	26,596.00
6901 · OBMP - WM Staff Salaries	34,852.18	38,454.00	-3,601.82	90.63%	222,176.00
7101.1 · Production Monitor - WM Staff Salaries	8,570.98	17,647.00	-9,076.02	48.57%	101,960.00
7102.1 · In-line Meter - WM Staff Salaries	0.00	2,106.00	-2,106.00	0.0%	12,167.00
7103.1 · Grdwater Quality - WM Staff Salaries	11,718.77	11,809.00	-90.23	99.24%	68,225.00
7104.1 · Grdwater Level - WM Staff Salaries	11,477.41	12,325.00	-847.59	93.12%	71,210.00
7107.1 · GrdLevel Monitoring - WM Staff Salaries	0.00	1,269.00	-1,269.00	0.0%	7,332.00
7108.1 · Hydraulic Control - WM Staff Salaries	0.00	809.00	-809.00	0.0%	4,671.00
7108.11 · Prado Basin - WM Staff Salaries	719.88	1,204.00	-484.12	59.79%	6,954.00
7201 · Comp Recharge - WM Staff Salaries	9,540.97	9,700.00	-159.03	98.36%	56,041.00
7301 · PE3&5 - WM Staff Salaries	0.00	3,204.00	-3,204.00	0.0%	18,509.00
7401 · PE4 - WM Staff Salaries	0.00	1,956.00	-1,956.00	0.0%	11,306.00
7501 · PE6&7 - WM Staff Salaries	3,489.19	1,137.00	2,352.19	306.88%	6,575.00
7501.1 · PE 6&7 - WM Staff Salaries (Plume)	0.00	1,124.00	-1,124.00	0.0%	6,493.00
7601 · PE8&9 - WM Staff Salaries	786.29	4,276.00	-3,489.71	18.39%	24,705.00
<b>Subtotal WM Staff Costs</b>	<b>341,345.19</b>	<b>370,032.00</b>	<b>-28,686.81</b>	<b>92.25%</b>	<b>2,025,692.00</b>
60185 · Vacation	28,483.78	25,655.00	2,828.78	111.03%	93,925.00
60186 · Sick Leave	4,402.78	10,400.00	-5,997.22	42.33%	62,400.00
60187 · Holidays	4,618.84	5,200.00	-581.16	88.82%	78,000.00
<b>Subtotal WM Paid Leaves</b>	<b>37,505.40</b>	<b>41,255.00</b>	<b>-3,749.60</b>	<b>90.91%</b>	<b>234,327.00</b>
<b>Total WM Salary Costs</b>	<b>378,850.59</b>	<b>411,287.00</b>	<b>-32,436.41</b>	<b>92.11%</b>	<b>2,260,019.00</b>

PREVIOUSLY REPORTED ACTIONS (Descending Order)

July 2021:

*Watermaster's function is to administer and enforce provisions of the Judgment and subsequent orders of the Court, and to develop and implement an Optimum Basin Management Program*

For FY 2021/22 the amount of \$21,000 was “Carried-Over” from the previous fiscal year’s budget under the category of Temporary Services (6017). This expense is currently being used to fund one temporary employee who is scanning documents into the SharePoint system for the ongoing records management project.

LEGAL SERVICES  
BROWNSTEIN HYATT FARBER SCHRECK EXPENSES

CURRENT MONTH – AUGUST 2021

As of August 31, 2021, the total (YTD) Watermaster Legal Services expenses (consolidating the three categories of Watermaster Administrative Legal Services, Pool/Advisory/Board Meeting legal expenses, and OBMP legal expenses) were \$76,367 or 73.6% below the (YTD) budgeted amount of \$163,776.

The Watermaster Legal Services budget was developed jointly by the Watermaster staff and Brownstein Hyatt Farber Schreck staff with specific assumptions regarding the tasks and legal activities that would occur during FY 2021/22. The total legal services budget was developed by multiplying the number of hours that would be required to complete the specific tasks by the hourly rate. The “Approved” budget was adopted for the original amount of \$972,845.

WATERMASTER ADMINISTRATIVE LEGAL SERVICES:

Overall, the Watermaster Administrative Legal Services expense (6070s) as of August 31, 2021 was \$7,943 or 14.4% above the budgeted amount of \$55,341. The specific items within the Administrative Legal Services expenses (6070s) which were over budget were the Rules & Regulations expenses (6072) over budget by \$2,088 or 105.2%; Miscellaneous (6078) which were over budget by \$11,556 or 32.7%; and the Ely Basin Investigation (6078.25) which were over budget by \$3,102 or 100%. Please see Note 1 on the following page for a more detailed explanation of the miscellaneous types of expenses (6078).

The specific items within the Administrative Legal Services expenses (6070s) which were under budget were the expenses for Court Coordination (6071) under budget by \$1,235 or 18.1%; Personnel Matters (6073) which were under budget by \$248 or 9.9%; Interagency Issues (6074) under budget by \$6,600 or 100.0%; and Party Status Maintenance expenses (6077) under budget by \$720 or 34.5%.

WATERMASTER POOLS, ADVISORY AND BOARD LEGAL SERVICES:

The Pools, Advisory Committee and the Board meeting legal expenses from BHFS are captured by month within the accounts (6275, 6375, 6375.1, 8375, 8475 and 8575). The legal service costs associated with the Board Workshop(s) are also included as part of this group. Overall, this category of legal expenses as of August 31, 2021 was \$22,014 or 63.0% below the budgeted amount of \$34,940. Normal Brownstein Hyatt Farber Schreck meeting attendance during any given month includes attendance at all three pool meetings, one Advisory Committee meeting and one Board meeting.

There were no meetings held during the month of August 2021. The legal services budget was developed with the assumption of having eleven months of meetings, intentionally excluding the month of December 2021.

OBMP LEGAL SERVICES:

The OBMP legal expenses (accounts 6907.31 through 6907.90) were below the budget for the month. As of August 31, 2021, the category of OBMP legal expenses were \$62,295 or 84.8% below the budgeted amount of \$73,495. The majority of expenses within this OBMP category were under budget (YTD), however, the 2020 Safe Yield Reset expenses (6907.47) were over budget by \$1,939 or 28.9%.

The table listed below summarizes the Brownstein Hyatt Farber Schreck (BHFS) expenses as of August 31, 2021 compared to the Year-To-Date (YTD) budget. Please be advised that the “\$ Over Budget” and the “% of Budget” columns are a comparison of the (YTD) Actual to the (YTD) Budget, not the 12-month

*Watermaster’s function is to administer and enforce provisions of the Judgment and subsequent orders of the Court, and to develop and implement an Optimum Basin Management Program*



Annual Budget. The 12-month Annual Budget column is presented only to provide the data in a full and complete format. The following details are provided:

	Jul '21 - Aug '21 Actual	Jul '21 - Aug '21 Budget	\$ Over Budget	% of Budget	FY 2021/22 Annual Budget
<b>6070 · Watermaster Legal Services</b>					
6071 · BHFS Legal - Court Coordination	5,604.75	6,840.00	-1,235.25	81.94%	41,050.00
6072 · BHFS Legal - Rules & Regulations	4,072.50	1,985.00	2,087.50	205.16%	11,925.00
6073 · BHFS Legal - Personnel Matters	2,252.25	2,500.00	-247.75	90.09%	9,900.00
6074 · BHFS Legal - Interagency Issues	0.00	6,600.00	-6,600.00	0.0%	39,600.00
6076 · BHFS Legal - Storage Issues	0.00	0.00	0.00	0.0%	0.00
6077 · BHFS Legal - Party Status Maintenance	1,363.50	2,083.00	-719.50	65.46%	12,500.00
6078 · BHFS Legal - Miscellaneous (Note 1)	46,888.65	35,333.00	11,555.65	132.71%	212,000.00
6078.25 · BHFS - Ely # Basin Investigation	3,102.36	0.00	3,102.36	100.0%	0.00
<b>Total 6070 · Watermaster Legal Services</b>	<b>63,284.01</b>	<b>55,341.00</b>	<b>7,943.01</b>	<b>114.35%</b>	<b>326,975.00</b>
<b>6275 · BHFS Legal - Advisory Committee</b>	<b>1,633.50</b>	<b>4,400.00</b>	<b>-2,766.50</b>	<b>37.13%</b>	<b>24,200.00</b>
6375 · BHFS Legal - Board Meeting	8,506.80	14,040.00	-5,533.20	60.59%	77,220.00
6375.1 · BHFS Legal - Board Workshop(s)	0.00	0.00	0.00	0.0%	12,725.00
8375 · BHFS Legal - Appropriate Pool	895.50	5,500.00	-4,604.50	16.28%	30,250.00
8475 · BHFS Legal - Agricultural Pool	945.00	5,500.00	-4,555.00	17.18%	30,250.00
8575 · BHFS Legal - Non-Ag Pool	945.00	5,500.00	-4,555.00	17.18%	30,250.00
<b>Total BHFS Legal Services</b>	<b>12,925.80</b>	<b>34,940.00</b>	<b>-22,014.20</b>	<b>36.99%</b>	<b>204,895.00</b>
<b>6907.3 · WM Legal Counsel</b>					
6907.31 · Archibald South Plume	0.00	1,830.00	-1,830.00	0.0%	10,975.00
6907.32 · Chino Airport Plume	0.00	1,830.00	-1,830.00	0.0%	10,975.00
6907.33 · Desalter/Hydraulic Control	0.00	5,617.00	-5,617.00	0.0%	33,700.00
6907.34 · Santa Ana River Water Rights	0.00	3,125.00	-3,125.00	0.0%	18,750.00
6907.36 · Santa Ana River Habitat	1,980.00	4,559.00	-2,579.00	43.43%	27,350.00
6907.38 · Reg. Water Quality Cntrl Board	0.00	8,141.00	-8,141.00	0.0%	48,850.00
6907.39 · Recharge Master Plan	580.50	2,083.00	-1,502.50	27.87%	12,500.00
6907.40 · Storage Agreements	0.00	8,591.00	-8,591.00	0.0%	51,550.00
6907.41 · Prado Basin Habitat Sustainability	0.00	2,083.00	-2,083.00	0.0%	12,500.00
6907.42 · Safe Yield Recalculation	0.00	0.00	0.00	0.0%	0.00
6907.44 · SGMA Compliance	0.00	1,500.00	-1,500.00	0.0% #	9,000.00
6907.45 · OBMP Update	0.00	13,650.00	-13,650.00	0.0% #	81,900.00
6907.46 · Upper SAR Integrated Model	0.00	0.00	0.00	0.0% #	0.00
6907.47 · 2020 Safe Yield Reset	8,639.10	6,700.00	1,939.10	128.94% #	40,200.00
6907.48 · Ely Basin Investigation	0.00	8,141.00	-8,141.00	0.0% #	48,850.00
6907.90 · WM Legal Counsel - Unanticipated	0.00	5,645.00	-5,645.00	0.0%	33,875.00
<b>Total 6907 · WM Legal Counsel</b>	<b>11,199.60</b>	<b>73,495.00</b>	<b>-62,295.40</b>	<b>15.24%</b>	<b>440,975.00</b>
<b>Total Brownstein, Hyatt, Farber, Schreck Costs</b>	<b>87,409.41</b>	<b>163,776.00</b>	<b>-76,366.59</b>	<b>53.37%</b>	<b>972,845.00</b>

Note 1: The types of legal activities that have been charged against the "Miscellaneous" legal category account 6078 are as follows: (1) Correspondence and discussions with Watermaster staff regarding current issues/topics; (2) Correspondence with Watermaster staff regarding special projects (assessment package, replenishment obligations, annual report, audit report, business plan, etc.); (3) Brownstein's status review of ongoing Watermaster projects and issues; (4) Brownstein's update of the outstanding issues list; (5) Coordination of ongoing Watermaster projects; (6) Review of draft documents and contracts; (7) Review transfer documents; (8) Ground-Level Monitoring Committee reports/meetings; (9) Review process and criteria for SGMA reporting; (10) MVWD SCADA Agreement and installation; (11) Angelica Corporation Bankruptcy matter; (12) NRG/GENON Bankruptcy matter; (13) Pomona extensometer project, CEQA review and compliance; (14) Desalter Replenishment obligations, assessment methodologies, and ongoing issues; (15) Master Cost Sharing Agreement with IEUA; (16) Estimation and adoption of an evaporative loss policy for Recharge; (17) CalMat intervention; (18) Angelica's water rights transfer; (19) Exhibit "G" rate issues; (20) Right of Entry Agreements for various locations; (21) Assessment Packages-Updates and Review; (22) Ag Pool Contest; (23) Payment of Ag Legal Fees; (24) Ag Invoices; and (25) Miscellaneous legal research on current and pending issues.

**PREVIOUSLY REPORTED ACTIONS (Descending Order)**

None

**OBMP ENGINEERING SERVICES AND LEGAL COSTS**

**CURRENT MONTH – AUGUST 2021**

*Watermaster's function is to administer and enforce provisions of the Judgment and subsequent orders of the Court, and to develop and implement an Optimum Basin Management Program*

Reviewing in total the OBMP Engineering Services and Legal Costs (consolidating the five categories of OBMP Watermaster Staff and SAWPA, OBMP Engineering Services, OBMP Legal Costs, OBMP Update Costs, and OBMP Other Expenses) for the two months ending August 31, 2021, the actual expenses of \$157,094 were below the budgeted amount of \$266,741 by \$109,646 or 41.1%. For a detailed discussion, the following is provided.

For August 31, 2021, the accounts 6901-6903 (Optimum Basin Mgmt. Program) section was above the Year-To-Date (YTD) budget by \$1,524 or 2.8%. Watermaster utilizes an in-house database time and attendance system to record and document staff's actual hours worked and also allocates those hours to a specific project or activity. Watermaster staff time could be charged to Administrative, OBMP, or Implementation Project categories. Recently, Watermaster staff spent less time on specific OBMP related areas as budgeted. As a result, Watermaster staff allocated less actual time to the OBMP project as budgeted, which resulted in an under-budget variance of \$3,602 or 9.4%. The remaining expense was the Santa Ana Watershed Project Authority (SAWPA) FY 2020/21 Basin Monitoring Program Task Force Contribution which was budgeted at \$15,032 and actual expenses were \$20,158 or \$5,126 or 34.1% above budget as of August 31, 2021.

For August 31, 2021, the accounts 6906 (Optimum Basin Mgmt. Program Engineering Services) section was below the Year-To-Date (YTD) budget by \$30,400 or 25.1%. The majority of expenses within this OBMP category were under budget (YTD), however, the accounts over budget were the OBMP-Watermaster Model Update (6906.1) which were over budget by \$1,485 or 14.8%; Water Rights Compliance Reporting expenses (6906.22) which were over budget by \$7,755 or 258.8%; OBMP-Other General Meetings expenses (6906.32) which were over budget by \$6,530 or 50.8%; and the OBMP-Engineering Services-Other expenses (6906) which were over budget by \$1,102 or 15.8%. Within the 6906 categories, two accounts had funding "Carried-Over" from the previous fiscal year. The OBMP-Watermaster Model Update expenses (6906.1) had \$9,000 brought forward from the previous year and the Integrated Model Meetings-IEUA Costs expenses (6906.15) had \$14,594 brought forward from the previous year. These two amounts are included in the FY 2021/22 budget.

Within the category 6907 (Optimum Basin Mgmt. Program Legal Fees) are the remaining Brownstein Hyatt Farber Schreck (BHFS) Watermaster's legal expenses. Within the legal expense category, some individual line item activities were above the budget by \$1,939 while some other line item activities were below the budget by \$64,234. Above the budget line item were the 2020 Safe Yield Reset expenses (6907.47) over budget by \$1,939 or 289.4%. The individual legal projects/activities that were below budget for the Year-To-Date (YTD) period were the Archibald South Plume of \$1,830; the Chino Airport Plume of \$1,830; the Desalter/Hydraulic Control of \$5,617; Santa Ana River Habitat of \$3,125; the Santa Ana River Habitat of \$2,579; the Regional Water Quality Control Board of \$8,141; the Recharge Master Plan expenses of \$1,502; Storage Agreements of \$8,591; the Prado Basin Habitat Sustainability of \$2,083; SGMA Compliance of \$1,500; the OBMP Update of \$13,650; the Ely Basin Investigation expenses of \$8,141; and the WM Unanticipated legal expenses of \$5,645. For the two months ended August 31, 2021, the overall cumulative (YTD) budget was \$73,495 and the actual (BHFS) legal expenses totaled \$11,200 which resulted in an under-budget variance of \$62,295 or 84.8%.

The OBMP Update Costs (6908.1) were below the budget for the month. These expenses relate to the OBMP Update costs for the contract between Tom Dodson and Associates and CBWM to procure environmental review services for the 2020 OBMP Update. The contract had a remaining amount available of \$17,065 as of the year-ended June 30, 2021 and that amount was "Carried-Over" into the FY 2021/22 budget. The budget has a remaining balance as of August 31, 2021 of \$17,065.

The OBMP Other Expenses (6909's) were below the budget for the month. These expenses are typically conference calls, meeting expenses, supplies, annual inspection fees, and other miscellaneous type expenses. As of August 31, 2021, this category of expenses was \$1,410 or 91.7% below the budgeted amount of \$1,537.

Overall, the Optimum Basin Management Program (OBMP) category was \$157,094 actual (YTD) compared to a budget (YTD) of \$266,741 for an under budget of \$109,646 or 41.1% as of August 31, 2021.

The table listed below summarizes the Optimum Basin Management Program (OBMP) expenses as of August 31, 2021 compared to the Year-To-Date (YTD) budget. Please be advised that the "\$ Over Budget" and the "% of Budget" columns are a comparison of the (YTD) Actual to the (YTD) Budget, not the 12-month Annual Budget. The 12-month Annual Budget column is presented only to provide the data in a full and complete format. The following details are provided:

	Jul '21 - Aug '21 Actual	Jul '21 - Aug '21 Budget	\$ Over Budget	% of Budget	FY 2021/22 Annual Budget
<b>6900 · Optimum Basin Mgmt Plan</b>					
6901 · WM Staff Salaries	34,852.18	38,454.00	-3,601.82	90.63%	222,176.00
6903 · OBMP SAWPA Group	20,158.00	15,032.00	5,126.00	134.1%	15,032.00
<b>Total 6901-6903 · OBMP WM Staff/SAWPA</b>	<b>55,010.18</b>	<b>53,486.00</b>	<b>1,524.18</b>	<b>102.85%</b>	<b>237,208.00</b>
<b>6906 · OBMP Engineering Services</b>					
6906.1 · OBMP - Watermaster Model Update	11,506.75	10,022.00	1,484.75	114.82%	15,112.00
6906.15 · Integrated Model Mtgs. - IEUA Costs	8,085.37	19,804.00	-11,718.63	40.83%	45,874.00
6906.21 · State of the Basin Report	0.00	0.00	0.00	0.0%	0.00
6906.22 · Water Rights Compliance Reporting	10,752.25	2,997.00	7,755.25	358.77%	17,984.00
6906.23 · SGMA Reporting Requirements	0.00	2,599.00	-2,599.00	0.0%	15,598.00
6906.24 · Compliance - SB88 and SWRCB	0.00	2,034.00	-2,034.00	0.0%	12,204.00
6906.26 · 2020 OBMP Update	0.00	0.00	0.00	0.0%	0.00
6906.31 · OBMP - Pool, Advisory, Board Mtgs.	6,597.00	18,000.00	-11,403.00	36.65%	108,000.00
6906.32 · OBMP - Other General Meetings	19,384.00	12,854.00	6,530.00	150.8%	77,134.00
6906.71 · OBMP - Data Requests - CBWM Staff	21,613.50	22,178.00	-564.50	97.46%	133,068.00
6906.72 · OBMP - Data Requests - Non CBWM	2,179.50	8,348.00	-6,168.50	26.11%	50,088.00
6906.73 · OBMP - Safe Yield Recalculation	0.00	0.00	0.00	0.0%	0.00
6906.74 · OBMP - Mat'l Phy. Injury Requests	156.00	12,899.00	-12,743.00	1.21%	77,398.00
6906.81 · Prepare Annual Reports	2,396.00	2,437.00	-41.00	98.32%	14,626.00
6906 · OBMP Engineering Services - Other	8,087.50	6,986.00	1,101.50	115.77%	41,896.00
<b>Total 6906 · OBMP Engineering Services</b>	<b>90,757.87</b>	<b>121,158.00</b>	<b>-30,400.13</b>	<b>74.91%</b>	<b>608,982.00</b>
<b>6907 · OBMP Legal Fees</b>					
6907.3 · WM Legal Counsel					
6907.31 · Archibald South Plume	0.00	1,830.00	-1,830.00	0.0%	10,975.00
6907.32 · Chino Airport Plume	0.00	1,830.00	-1,830.00	0.0%	10,975.00
6907.33 · Desalter/Hydraulic Control	0.00	5,617.00	-5,617.00	0.0%	33,700.00
6907.34 · Santa Ana River Water Rights	0.00	3,125.00	-3,125.00	0.0%	18,750.00
6907.36 · Santa Ana River Habitat	1,980.00	4,559.00	-2,579.00	43.43%	27,350.00
6907.38 · Reg. Water Quality Cntrl Board	0.00	8,141.00	-8,141.00	0.0%	48,850.00
6907.39 · Recharge Master Plan	580.50	2,083.00	-1,502.50	27.87%	12,500.00
6907.40 · Storage Agreements	0.00	8,591.00	-8,591.00	0.0%	51,550.00
6907.41 · Prado Basin Habitat Sustainability	0.00	2,083.00	-2,083.00	0.0%	12,500.00
6907.44 · SGMA Compliance	0.00	1,500.00	-1,500.00	0.0%	9,000.00
6907.45 · OBMP Update	0.00	13,650.00	-13,650.00	0.0%	81,900.00
6907.46 · Upper SAR Integrated Model	0.00	0.00	0.00	0.0%	0.00
6907.47 · 2020 Safe Yield Reset	8,639.10	6,700.00	1,939.10	128.94%	40,200.00
6907.48 · Ely Basin Investigation	0.00	8,141.00	-8,141.00	0.0%	48,850.00
6907.90 · WM Legal Counsel - Unanticipated	0.00	5,645.00	-5,645.00	0.0%	33,875.00
<b>Total 6907 · WM Legal Counsel</b>	<b>11,199.60</b>	<b>73,495.00</b>	<b>-62,295.40</b>	<b>15.24%</b>	<b>440,975.00</b>
<b>Total 6907 · OBMP Legal Fees</b>	<b>11,199.60</b>	<b>73,495.00</b>	<b>-62,295.40</b>	<b>15.24%</b>	<b>440,975.00</b>
<b>6908 · OBMP Updates</b>					
6908.1 · 2020 OBMP Update-Dodson & Assoc.	0.00	17,064.56	-17,064.56	0.0%	17,064.56
<b>Total 6908 · OBMP Updates</b>	<b>0.00</b>	<b>17,064.56</b>	<b>-17,064.56</b>	<b>0.0%</b>	<b>17,064.56</b>
<b>6909 · OBMP Other Expenses</b>					
6909.1 · OBMP Meetings	126.81	250.00	-123.19	50.72%	1,500.00
6909.3 · Other OBMP Expenses	0.00	454.00	-454.00	0.0%	2,724.00
6909.6 · OBMP Expenses - Miscellaneous	0.00	833.00	-833.00	0.0%	5,000.00
6909 · OBMP Other Expenses - Other	0.00	0.00	0.00	0.0%	0.00
<b>Total 6909 · OBMP Other Expenses</b>	<b>126.81</b>	<b>1,537.00</b>	<b>-1,410.19</b>	<b>8.25%</b>	<b>9,224.00</b>
<b>Total 6900 · Optimum Basin Mgmt Plan</b>	<b>157,094.46</b>	<b>266,740.56</b>	<b>-109,646.10</b>	<b>58.89%</b>	<b>1,313,453.56</b>

PREVIOUSLY REPORTED ACTIONS (Descending Order)

None

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ENGINEERING SERVICES - OBMP IMPLEMENTATION PROJECTS COSTS  
WEST YOST ASSOCIATES (formerly Wildermuth Environmental, Inc.)

CURRENT MONTH – AUGUST 2021

As of August 31, 2021, the total (YTD) Engineering Services expenses were \$595,079 or 60.7% below the (YTD) budget amount of \$979,745. The OBMP Implementation Projects (consolidated accounts 7100s – 7700s) were all under budget as of August 31, 2021 except for the Groundwater Quality-Engineering Services expenses (7103.3) which were over budget by \$757 or 1.2%; the Groundwater Level-Engineering expenses (7107.2) which were over budget by \$1,501 or 13.7%; the Hydraulic Control-Lab Services expenses (7108.4) which were over budget by \$440 or 100%; and the PE4-Engineering expenses (7402) which were over budget by \$3,086 or 13.2%.

West Yost Associates provides Watermaster a Progress and Estimated Cost at Completion (ECAC) report each quarter. The purpose of this (ECAC) report is to update Watermaster on whether or not the Engineering Services budget will be above or below budget at the end of the fiscal year. If the Engineering Services budget is expected to be above budget at fiscal year-end, a Budget Amendment or Budget Transfer Form would need to be approved to ensure funding. The first quarter ECAC report for the period July 1, 2021 through September 30, 2021 will be submitted in early November 2021.

The table listed below summarized the Year-To-Date (YTD) Actual West Yost Associates and other Engineering costs compared to the Year-To-Date (YTD) Budget as of August 31, 2021. Please be advised that the "\$ Over Budget" and the "% of Budget" columns are a comparison of the (YTD) Actual to the (YTD) Budget, not the 12-month Annual Budget. The 12-month Annual Budget column is presented only to provide the data in a full and complete format. The following details are provided:

	Jul '21 - Aug '21 Actual	Jul '21 - Aug '21 Budget	\$ Over Budget	% of Budget	FY 2021/22 Annual Budget
6906 · OBMP Engineering Services - Other	8,087.50	6,986.00	1,101.50	115.77%	41,896.00
6906.1 · OBMP - Watermaster Model Update	11,506.75	10,022.00	1,484.75	114.82%	15,112.00
6906.15 · Integrated Model Mtgs-IEUA Cost	8,085.37	19,804.00	-11,718.63	40.83%	45,874.00
6906.21 · State of the Basin Report	0.00	0.00	0.00	0.0%	0.00
6906.22 · Water Rights Compliance Reporting	10,752.25	2,997.00	7,755.25	358.77%	17,984.00
6906.23 · SGMA Reporting Requirements	0.00	2,599.00	-2,599.00	0.0%	15,598.00
6906.24 · Compliance - SB88 and SWRCB	0.00	2,034.00	-2,034.00	0.0%	12,204.00
6906.26 · 2019 OBMP Update	0.00	0.00	0.00	0.0%	0.00
6906.31 · OBMP - Pool, Advisory, Board Mtgs.	6,597.00	18,000.00	-11,403.00	36.65%	108,000.00
6906.32 · OBMP - Other General Meetings	19,384.00	12,854.00	6,530.00	150.8%	77,135.00
6906.71 · OBMP - Data Requests - CBWM Staff	21,613.50	22,178.00	-564.50	97.46%	133,068.00
6906.72 · OBMP - Data Requests - Non CBWM	2,179.50	8,348.00	-6,168.50	26.11%	50,088.00
6906.73 · OBMP - Safe Yield Recalculation	0.00	0.00	0.00	0.0%	0.00
6906.74 · OBMP - Mat'l Physical Injury Requests	156.00	12,899.00	-12,743.00	1.21%	77,398.00
6906.81 · Prepare Annual Reports	2,396.00	2,437.00	-41.00	98.32%	14,626.00
7103.3 · Grdwtr Qual-Engineering	62,106.27	61,349.00	757.27	101.23%	206,089.00
7103.5 · Grdwtr Qual-Lab Svcs	5,172.00	10,544.00	-5,372.00	49.05%	63,261.00
7104.3 · Grdwtr Level-Engineering	21,828.61	33,799.00	-11,970.39	64.58%	202,793.00
7104.8 · Grdwtr Level-Contracted Services	0.00	1,667.00	-1,667.00	0.0%	10,000.00
7104.9 · Grdwtr Level-Capital Equipment	0.00	1,333.00	-1,333.00	0.0%	8,000.00
7107.2 · Grd Level-Engineering	12,423.98	10,923.00	1,500.98	113.74%	65,542.00
7107.3 · Grd Level-SAR Imagery	79,817.50	99,167.00	-19,349.50	80.49%	170,000.00
7107.6 · Grd Level-Contract Svcs	0.00	14,375.00	-14,375.00	0.0%	86,254.00
7107.8 · Grd Level-Capital Equipment	0.00	5,825.00	-5,825.00	0.0%	16,086.00
7108.3 · Hydraulic Control-Engineering	0.00	0.00	0.00	0.0%	0.00
7108.31 · Hydraulic Control-PBHSP	0.00	11,209.00	-11,209.00	0.0%	67,254.00
7108.4 · Hydraulic Control-Lab Svcs	440.00	0.00	440.00	100.0%	0.00
7108.41 · Hydraulic Control-PBHSP	0.00	0.00	0.00	0.0%	0.00
7108.6 · Hydraulic Control-Outside Professionals	4,500.00	4,500.00	0.00	100.0%	4,500.00
7109.3 · Recharge & Well - Engineering	1,706.25	5,535.00	-3,828.75	0.0%	33,208.00
7110.3 · Ag Production & Estimation - Eng. Serv.	2,545.50	45,053.00	-42,507.50	0.0%	56,910.00
7111.3 · Data Collection & Mgmt. - Eng. Services	1,157.25	3,359.00	-2,201.75	0.0%	20,158.00
7202.2 · Comp Recharge-Engineering Services	16,784.25	129,127.00	-112,342.75	13.0%	174,764.00
7206.1 · SB88 Specs-Compliance-50% IEUA	681.62	54,694.00	-54,012.38	1.25%	54,694.00
7210 · OBMP - 2023 RMPU	0.00	37,732.00	-37,732.00	0.0%	37,732.00
7303 · PE3&5-Engineering - Other	712.00	3,714.00	-3,002.00	19.17%	22,284.00
7402 · PE4-Engineering	26,387.25	23,301.00	3,086.25	113.25%	139,806.00
7402.10 · PE4-MZ1 Pomona Project	19,929.75	113,601.00	-93,671.25	17.54%	236,127.00
7502 · PE6&7-Engineering	14,213.00	18,653.00	-4,440.00	76.2%	111,916.00
7510 · PE6&7-IEUA Salinity Mgmt. Plan	14,749.39	73,975.00	-59,225.61	19.94%	73,975.00
7511 · PE6&7-SAWBMP Task Force-50% IEUA	0.00	4,401.00	-4,401.00	0.0%	26,405.00
7602 · PE8&9-Engineering	0.00	0.00	0.00	0.0%	0.00
7610 · PE8&9-Support 2020 Mgmt. Plan	0.00	43,220.00	-43,220.00	0.0%	43,220.00
7614 · OBMP-Support Imp. Safe Yield Court Order	8,753.25	47,531.00	-38,777.75	18.42%	285,188.00
<b>Total Engineering Services Costs</b>	<b>384,665.74</b>	<b>979,745.00</b>	<b>-595,079.26</b>	<b>39.26%</b>	<b>2,825,149.00</b> *

\* West Yost and Subcontractor Engineering Budget of \$2,251,384 plus Carryover Funds from FY 2020/21 of \$573,765.00  
Carryover Funds from FY 2020/21 of \$573,765.00 = \$9,000 (6906.1); \$14,594 (6906.15); \$85,000 (7107.3); \$3,772 (7107.8); \$42,682 (7110.3); \$120,000 (7202.2); \$54,694 (7206.1); \$37,732 (7210); \$89,096 (7402.10); \$73,975 (7510); and \$43,220 (7610)

PREVIOUSLY REPORTED ACTIONS (Descending Order)

July 2021:

The "Original" Approved budget for FY 2021/22 for Engineering Services was \$1,819,165. Budget Amendment A-21-07-01 in the amount of \$147,031 and Budget Amendment A-21-07-02 in the amount of \$276,761 were adopted by the Watermaster Board on July 22, 2021. Budget Amendment A-21-08-01 in the amount of \$8,427 was approved by the Advisory Committee on August 19, 2021. The accounts increased with the Budget Amendments were the OBMP-Northwest MZ-1 Area Project (7402.1) increased by \$147,031 and the Safe Yield Reset Methodology Evaluation (7614) increased by \$285,188. The "Amended" Engineering Services Budget after inclusion of the Budget Amendments was \$2,251,384. The

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Engineering Services budget was Amended with the addition of "Carry-Over" funding totaling \$573,765 which brought the Amended Budget amount to \$2,825,149.

The explanations regarding the Carry-Over amount of \$573,765 from FY 2020/21 to the FY 2021/22 budget is provided as follows:

1. Watermaster Model Update and Required Demonstrations (Account 6906.1): \$9,000. The requested Carry-Over is necessary to finalize the report on Model Update and Required Demonstrations, which was scheduled for completion in FY 2020/21.
2. IEUA - Integrated Model Meetings and Technical Review (Account 6906.15): \$29,188 (Watermaster's portion is \$14,594). The requested Carry-Over is necessary because this effort was planned for completion in FY 2020/21 but is now scheduled to be completed by December 2021.
3. Ground Level – SAR Imagery (Account 7107.3): \$85,000. The requested Carry-Over is necessary for the purchase and processing of satellite data by a subconsultant to estimate vertical ground motion. The work was completed in FY 2020/21, but the invoice has not yet been received from the subcontractor.
4. Ground Level – Capital Equipment (Account 7107.8): \$3,772. The requested Carry-Over is necessary for the of purchase materials and equipment for the Pomona Extensometer Facility. The work was started in FY 2020/21 but wasn't completed until August 2021.
5. Agriculture Production and Estimation (Account 7110.3): \$42,682. The requested Carry-Over is necessary to complete the Agriculture Production and Estimation work that was originally scheduled to be performed in FY 2019/20 and FY 2020/21 but was delayed to FY 2021/22.
6. PE2: Engineering Services for Other Recharge Improvement Projects (Account 7202.2): \$120,000. The requested Carry-Over is necessary to finalize this work in FY 2021/22. The work includes conducting a life-cycle analysis at the San Sevaine 1 and Etiwanda Debris conservation berms, and finalizing a technical memorandum describing the analysis and conclusions. The scope and schedule for this work was fine-tuned with input from IEUA and Watermaster Staff in FY 2020/21. The work is to be completed in FY 2021/22.
7. 2023 RMPU Recharge Master Plan Scoping (Account 7210): \$37,732. The requested Carry-Over is necessary to complete the scope, budget and report outline the 2023 RMPU. In June, the Parties determined that they were not interested in pursuing capital improvement projects was part of the 2023 RMPU. A scope, budget and report outline the 2023 RMPU still needs to be developed based on the input from the Parties.
8. Management Zone Strategies – Northwest MZ-1 (Account 7402.10): \$89,096. The requested Carry-Over is necessary because this is a multi-year project to develop a subsidence management plan for the Northwest MZ-1, and not all tasks planned/budgeted in FY 2020/21 were completed in FY 2020/21.
9. IEUA – Update Recycled Water Permit – Salinity (Account 7510): \$189,341 (Watermaster's portion is \$73,975). The requested Carry-Over is necessary to complete the technical and regulatory compliance supportwork to update the Chino Basin Maximum Benefit Salt and Nutrient Management Plan. This multiyear project began FY 2017/18 and is scheduled to be completed by June 2022.
10. PE 8/9: Support Implementation of the 2020 Storage Management Plan (Account 7610): \$43,220. The requested Carry-Over is for as-requested technical support to Watermaster staff, updating the information required for a complete Storage and Recovery Program application, updating the Storage and Recovery Program application forms, and updating the process to evaluate an application. No implementation activities occurred in FY 2020/21. The entire budget is requested to be brought forward into FY 2021/22.

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11. SB88 Specification to Ensure Compliance with Regulations (Account 7206.1) - GRCC and 50% IEUA Cost Share: \$54,694. The requested Carry-Over is necessary to (1) complete the technical memorandum evaluating the existing methodology to estimate stormwater diversions in the Chino Basin, and (2) provide as needed support to IEUA and Watermaster in implementing the recommendations describes in the technical memorandum. The administrative draft technical memorandum was completed in June 2021 and comments were received on August 11, 2021.

## PRADO BASIN HABITAT SUSTAINABILITY PROGRAM

### Ongoing Costs

Program costs that are ongoing (Ongoing Costs) will be cost-shared between Watermaster and IEUA, split on a 50/50 basis, subject to the following limitation: in each fiscal year, neither Watermaster nor IEUA shall be obligated to reimburse the other for Ongoing Costs that exceed the amount that the reimbursing party has budgeted for Ongoing Costs in that fiscal year, except as agreed upon by both parties in writing or as amended during the fiscal year. The first year expenses (FY 2016/17) to be cost shared were approximately \$300,000, with projected future years (FY 2017/18 and forward) estimated at approximately \$150,000. For the purposes of the agreement, Ongoing Costs are defined as the costs associated with the following Program activities:

1. A Riparian Habitat Monitoring Program, including, but not limited to, the following sub-tasks:
  - a. Design and implement a site-specific vegetation monitoring program with the United States Bureau of Reclamation (USBR) and Orange County Water District, pursuant to which USBR will perform site-specific vegetation surveys.
  - b. Manage and perform custom flight to collect a high resolution air photo of the Prado Basin Region.
  - c. Collect, check, and upload historical air photos and vegetation survey data in the Prado Basin region.
  - d. Collect, check, and upload historical Landsat data in the Prado Basin region.
2. A Climate Monitoring Program, including, but not limited to, the following sub-task:
  - a. Collect, check, and upload climatic data on an annual basis
3. Preparation of the AMP Annual Report (Annual Report), including, but not limited to, the following sub-tasks:
  - a. Water level monitoring, vegetation survey, photo monitoring, landsat data, climate data and analysis of the components.
  - b. Analyze data and prepare an administrative draft of the Annual Report for Watermaster/IEUA.
  - c. Incorporate the Watermaster and IEUA comments and prepare a draft Annual Report for review by the PBHSC.
  - d. Meet with PBHSC to review draft Annual Report.
  - e. Incorporate PBHSC comments and finalize the Annual Report.
4. Annual license fees for monitoring wells.
5. Project management and administration activities associated with the Program undertaken by a Party's consultant, including, but not limited to, the following sub-tasks:
  - a. Ad-Hoc Meetings
  - b. Preparation of scope and budget for the Program
  - c. Project administration and financial reporting
6. Other costs required to fulfill the requirements of Peace II Subsequent EIR mitigation measure 4.4-3. Watermaster shall be responsible for the costs associated with the Groundwater Level Monitoring Program, Groundwater Quality Monitoring Program, and Surface Water Monitoring Program.

Watermaster and IEUA shall each have responsibility for its own administrative costs, excluding the tasks and expenses included under Set-Up Costs and Ongoing Costs. Watermaster and IEUA will meet to review the cost-sharing structure under this agreement and negotiate necessary adjustments in good faith on at least an annual basis.

The Peace II SEIR does not explicitly state a duration for the monitoring and mitigation program. It is logical to assume that the program will last until the drawdown impacts, if any, on the riparian habitat from Peace II activities are fully manifested and not predicated to worsen, and that mitigation measures, if any are required, are fully implemented. This is not a perpetual agreement. Upon termination of the monitoring and any necessary mitigation obligations, the parties may elect to terminate the cost share agreement.

	West Yost Associates	50% Billing "TO" IEUA	50% Billing "FROM" IEUA	Costs For Watermaster
Jul. 2021 - Aug. 2021	\$ -	\$ -	\$ -	\$ -
<b>Totals</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
	7108.31	7108.31	7108.31	
<b>Maximum Costs</b>	<b>\$ 143,508.00</b>	<b>\$ 71,754.00</b>	<b>\$ 71,754.00</b>	<b>\$ 71,754.00</b>

PREVIOUSLY REPORTED ACTIONS (Descending Order)  
 None

OTHER INCOME AND EXPENSE

There were no other significant items to report within the category of Other Income and Expenses for the month ending August 31, 2021.

PREVIOUSLY REPORTED ACTIONS (Descending Order)

July 2021:

Per section VI.D.3 of the Groundwater Storage Program Funding Agreement No. 49960 in the Chino Basin with The Metropolitan Water District of Southern California, the FY 2021/22 annual administrative fee invoice was issued on July 6, 2021 in the amount of \$177,430.03 under invoice number 2021-07-CUP. Payment in the amount of \$177,430.03 was received and deposited on August 10, 2021.

The FY 2021/22 annual debt service expense (account 7690.1) of \$529,029 was paid directly to IEUA on July 8, 2021.

POOL LEGAL SERVICES FUND ACCOUNTING

Each Pool has a Fund Account created to pay their own legal service invoices. The legal services invoices are funded and paid using the Fund accounts (8467 for the OAP, 8567 for the ONAP, and 8367 for the AP). These Fund Accounts are replenished at the direction of each Pool, and the legal service invoices are approved by the Pool leadership and when paid by Watermaster, are deducted from the existing Fund Account balances. If the Fund Account for any Pool reaches zero, no further payments can be paid from the Fund and a replenishment action must be initiated by the Pool.

Along with the legal services Fund account for the OAP (8467), the OAP also has two other Fund accounts for Ag Pool Meeting Attendance expenses (8470), and Special Projects expenses (8471). These Fund accounts are also shown in the charts listed below.

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Normally, the Watermaster Admin Reserve would not be used to fund any of the Pool's legal services invoices. However, for the Agricultural Pool, the amount of \$102,557.12 was used from the Watermaster Admin Reserve to fund the shortfall created when the November 19, 2020 Assessment invoices totaling \$500,000 were not paid in full. In fact, \$115,263.88 was paid, leaving a balance due of \$384,736.12 (\$115,263.88 + \$384,736.12 = \$500,000) which still remains unpaid. Through November 2020, invoices totaling \$217,821.00 had been paid for the Agricultural Pool. Please note the invoices issued on November 19, 2020 were due on December 21, 2020. The available cash of \$115,263.88 and payments issued of \$217,821.00 left a Fund balance shortfall of \$102,557.12 which was temporarily funded through Admin Reserves (\$217,821.00 - \$115,263.88 = \$102,557.12). The Admin Reserve amount of \$102,557.12 will need to be refunded back to Watermaster.

<b>Fund Balance for Agricultural Pool</b>		<b>Agricultural Pool Reserve Funds</b>	
<b>Account 8467 - Legal Services</b>		<b>As shown the B-3 Financial Report</b>	
Beginning Balance July 1, 2020:	\$ -	Agricultural Pool Reserve Funds Balance as of June 30, 2020:	\$ 515,498.06
Additions:		Additions:	
Assessment issued November 19, 2020 for \$500,000 with outstanding balance of \$384,736.12	\$ 115,263.88	AP payments w/o Escrow instructions (\$165,694.75 - \$161,070.09)	\$ 4,624.66
Admin Reserve used to cover shortfall *	\$ 102,557.12	Y-T-D Interest earned on Ag Pool Funds FY 2020/21	\$ 1,933.80
Subtotal Additions:	\$ 217,821.00	Subtotal Additions:	\$ 6,558.46
From Agricultural Pool Reserve Funds	\$ 258,027.50	Reductions:	
Total Additions:	\$ 475,848.50	Actual vs. Budget Shortfall from FY 2019/20	\$ (165,694.75)
Reductions:		Mediation invoice paid	\$ (8,450.00)
Invoices paid July 2020 - November 2020	\$ (217,821.00)	Subtotal Reductions:	\$ (174,144.75)
Invoices paid December 2020 - June 2021	\$ (220,365.00)	Invoices paid December 2020 - June 2021	\$ (220,365.00)
Invoices paid July 2021 - August 2021	\$ (37,662.50)	Invoices paid July 2021 - August 2021	\$ (37,662.50)
Subtotal Reductions:	\$ (475,848.50)	Total Reductions	\$ (432,172.25)
<b>Ending Fund Balance as of August 31, 2021</b>	<b>\$ -</b>	<b>Agricultural Pool Reserve Funds Balance as of August 31, 2021:</b>	<b>\$ 89,884.27</b>

\* The Admin Reserve amount of \$102,557.12 will need to be refunded back to Watermaster.

Note: Balance of \$89,884.27 as shown on B-3 Financial Report

<b>Fund Balance For Agricultural Pool</b>		<b>Fund Balance For Agricultural Pool</b>	
<b>Account 8470 - Meeting Compensation</b>		<b>Account 8471 - Special Projects</b>	
Beginning Balance July 1, 2021:	\$ 19,525.00	Beginning Balance July 1, 2021:	\$ 31,516.00
Additions:		Additions:	
Assessment issued and paid	\$ -	Assessment issued and paid	\$ -
Budget Transfers	\$ -	Subtotal Additions:	\$ -
Subtotal Additions:	\$ -	Reductions:	
Reductions:		Invoices paid July 2021 - August 2021	\$ -
Compensation paid July 2021 - August 2021	\$ (4,000.00)	Budget Transfers	\$ -
Subtotal Reductions:	\$ (4,000.00)	Subtotal Reductions:	\$ -
<b>Ending Fund Balance as of August 31, 2021</b>	<b>\$ 15,525.00</b>	<b>Ending Fund Balance as of August 31, 2021</b>	<b>\$ 31,516.00</b>

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<b>Fund Balance For Non-Agricultural Pool</b>	
<b>Account 8567 - Legal Services</b>	
Beginning Balance July 1, 2021:	\$ 32,320.70
Additions:	
Assessment issued and paid	\$ -
Reductions:	
Invoices paid July 2021 - August 2021	\$ (3,385.80)
<b>Ending Fund Balance as of August 31, 2021</b>	<b><u>\$ 28,934.90</u></b>

<b>Fund Balance For Appropriative Pool</b>	
<b>Account 8367 - Legal Services</b>	
Beginning Balance July 1, 2021:	\$ 62,391.25
Additions:	
Assessment issued and paid	\$ -
Subtotal Additions:	<u>\$ -</u>
Reductions:	
Invoices paid July 2021 - August 2021	\$ (29,826.00)
Accrued (not paid)	\$ -
Subtotal Reductions:	<u>\$ (29,826.00)</u>
<b>Ending Fund Balance as of August 31, 2021</b>	<b><u>\$ 32,565.25</u></b>

PREVIOUSLY REPORTED ACTIONS (Descending Order)  
 None

“CARRY OVER” FUNDING  
 BACKGROUND OF “CARRY OVER” FUNDING

CURRENT MONTH – AUGUST 2021

As of August 31, 2021, the total (YTD) amount remaining of the “Carried Over” funding is \$2,708,370.59 (\$2,943,828.87 - \$235,458.28 = \$2,708,370.59).

The following details are provided:

"Carried Over" Expenses At June 30, 2021

Human Resources Services	\$ 6,000.00	A	6013	FY 2020/21	ADMIN
Temporary Services	\$ 21,000.00	B	6017	FY 2020/21	ADMIN
Other Office Equipment - Boardroom Upgrades	\$ 26,794.71	C	6038	FY 2019/20	ADMIN
Other Office Equipment - Boardroom Upgrades	\$ 41,295.45	C	6038	FY 2020/21	ADMIN
2020 OBMP Update - Tom Dodson & Associates	\$ 17,064.56	D	6908.1	FY 2020/21	OBMP
Meter Installation - New Meter Installation	\$ 175,400.00	E	7102.65	FY 2018/19	OBMP
Meter Installation - Calibration and Testing	\$ 181,650.00	F	7102.8	FY 2018/19	OBMP
OBMP - Watermaster Model Update	\$ 9,000.00	G	6906.1	FY 2020/21	ENG
Integrated Model - Meetings - 50% IEUA Costs	\$ 14,594.00	H	6906.15	FY 2020/21	ENG
Ground Level Monitoring - SAR Imagery	\$ 85,000.00	I	7107.3	FY 2020/21	ENG
Ground Level Monitoring - Capital Equipment	\$ 3,772.00	J	7107.8	FY 2020/21	ENG
Agriculture Production and Estimation	\$ 42,682.00	K	7110.3	FY 2020/21	ENG
PE2 - Comprehensive Recharge - Eng. Services	\$ 120,000.00	L	7202.2	FY 2020/21	ENG
SB88-Specs-Ensure Compliance-50% IEUA	\$ 54,694.00	M	7206.1	FY 2020/21	ENG
OBMP - 2023 RMPU	\$ 37,732.00	N	7210	FY 2020/21	ENG
PE4 - Northwest MZ-1 Area Project	\$ 89,096.00	O	7402.1	FY 2020/21	ENG
IEUA - Update Recycle Water Permit - Salinity	\$ 73,975.00	P	7510	FY 2020/21	ENG
PE8&9 - Support Imp. 2020 Storage Mgmt. Plan	\$ 43,220.00	Q	7610	FY 2020/21	ENG
Upper Santa Ana River HCP (TO #7)	\$ 15,062.88	R	7690.7	FY 2014/15	PROJ
Upper Santa Ana River HCP (TO #7)	\$ 5,000.00	R	7690.7	FY 2015/16	PROJ
Lower Day Basin RMPU (TO #2)	\$ 238,646.90	S	7690.8	FY 2016/17	PROJ
Funds on Hold for Projects/Refund	\$ 1,434,582.42	T	7690.9	FY 2017/18	PROJ
Appropriative Pool - Legal Services	\$ 62,391.25	U	8367	FY 2020/21	AP
Agricultural Pool - Legal & Technical Services	\$ 61,814.00	V	8467	FY 2020/21	OAP
Agricultural Pool - Mtg. Attendance Compensation	\$ 19,525.00	W	8470	FY 2020/21	OAP
Agricultural Pool - Special Project Funding	\$ 31,516.00	X	8471	FY 2020/21	OAP
Non-Agricultural Pool - Legal Services	\$ 32,320.70	Y	8567	FY 2020/21	ONAP
<b>Total Balance, July 1, 2021</b>	<b>\$ 2,943,828.87</b>				

"Carried Over" Balance, July 1, 2021	\$	2,943,828.87				
Less: (Invoices Received To Date FY 2021/22)						
Human Resources Services	\$	-	A	6013	FY 2020/21	ADMIN
Temporary Services	\$	(7,517.52)	B	6017	FY 2020/21	ADMIN
Other Office Equipment - Boardroom Upgrades	\$	(1,473.08)	C	6038	FY 2019/20	ADMIN
Other Office Equipment - Boardroom Upgrades	\$	-	C	6038	FY 2020/21	ADMIN
2020 OBMP Update - Tom Dodson & Associates	\$	-	D	6908.1	FY 2020/21	OBMP
Meter Installation - New Meter Installation	\$	-	E	7102.65	FY 2018/19	OBMP
Meter Installation - Calibration and Testing	\$	-	F	7102.8	FY 2018/19	OBMP
OBMP - Watermaster Model Update	\$	(9,000.00)	G	6906.1	FY 2020/21	ENG
Integrated Model - Meetings - 50% IEUA Costs	\$	(8,085.37)	H	6906.15	FY 2020/21	ENG
Ground Level Monitoring - SAR Imagery	\$	(79,817.50)	I	7107.3	FY 2020/21	ENG
Ground Level Monitoring - Capital Equipment	\$	-	J	7107.8	FY 2020/21	ENG
Agriculture Production and Estimation	\$	(2,545.50)	K	7110.3	FY 2020/21	ENG
PE2 - Comprehensive Recharge - Eng. Services	\$	(16,784.25)	L	7202.2	FY 2020/21	ENG
SB88-Specs-Ensure Compliance-50% IEUA	\$	(681.62)	M	7206.1	FY 2020/21	ENG
OBMP - 2023 RMPU	\$	-	N	7210	FY 2020/21	ENG
PE4 - Northwest MZ-1 Area Project	\$	(19,929.75)	O	7402.1	FY 2020/21	ENG
IEUA - Update Recycle Water Permit - Salinity	\$	(14,749.39)	P	7510	FY 2020/21	ENG
PE8&9 - Support Imp. 2020 Storage Mgmt. Plan	\$	-	Q	7610	FY 2020/21	ENG
Upper Santa Ana River HCP (TO #7)	\$	-	R	7690.7	FY 2014/15	PROJ
Upper Santa Ana River HCP (TO #7)	\$	-	R	7690.7	FY 2015/16	PROJ
Lower Day Basin RMPU (TO #2)	\$	-	S	7690.8	FY 2016/17	PROJ
Funds on Hold for Projects/Refund	\$	-	T	7690.9	FY 2017/18	PROJ
Appropriative Pool - Legal Services	\$	(29,826.00)	U	8367	FY 2020/21	AP
Agricultural Pool - Legal & Technical Services	\$	(37,662.50)	V	8467	FY 2020/21	OAP
Agricultural Pool - Mtg. Attendance Compensation	\$	(4,000.00)	W	8470	FY 2020/21	OAP
Agricultural Pool - Special Project Funding	\$	-	X	8471	FY 2020/21	OAP
Non-Agricultural Pool - Legal Services	\$	(3,385.80)	Y	8567	FY 2020/21	ONAP
<b>Updated Balance as of August 31, 2021</b>	<b>\$</b>	<b>2,708,370.59</b>				

Updated Balance as of August 31, 2021

Human Resources Services	\$ 6,000.00	A	6013	FY 2020/21	ADMIN
Temporary Services	\$ 13,482.48	B	6017	FY 2020/21	ADMIN
Other Office Equipment - Boardroom Upgrades	\$ 25,321.63	C	6038	FY 2019/20	ADMIN
Other Office Equipment - Boardroom Upgrades	\$ 41,295.45	C	6038	FY 2020/21	ADMIN
2020 OBMP Update - Tom Dodson & Associates	\$ 17,064.56	D	6908.1	FY 2020/21	OBMP
Meter Installation - New Meter Installation	\$ 175,400.00	E	7102.65	FY 2018/19	OBMP
Meter Installation - Calibration and Testing	\$ 181,650.00	F	7102.8	FY 2018/19	OBMP
OBMP - Watermaster Model Update	\$ -	G	6906.1	FY 2020/21	ENG
Integrated Model - Meetings - 50% IEUA Costs	\$ 6,508.63	H	6906.15	FY 2020/21	ENG
Ground Level Monitoring - SAR Imagery	\$ 5,182.50	I	7107.3	FY 2020/21	ENG
Ground Level Monitoring - Capital Equipment	\$ 3,772.00	J	7107.8	FY 2020/21	ENG
Agriculture Production and Estimation	\$ 40,136.50	K	7110.3	FY 2020/21	ENG
PE2 - Comprehensive Recharge - Eng. Services	\$ 103,215.75	L	7202.2	FY 2020/21	ENG
SB88-Specs-Ensure Compliance-50% IEUA	\$ 54,012.38	M	7206.1	FY 2020/21	ENG
OBMP - 2023 RMPU	\$ 37,732.00	N	7210	FY 2020/21	ENG
PE4 - Northwest MZ-1 Area Project	\$ 69,166.25	O	7402.1	FY 2020/21	ENG
IEUA - Update Recycle Water Permit - Salinity	\$ 59,225.61	P	7510	FY 2020/21	ENG
PE8&9 - Support Imp. 2020 Storage Mgmt. Plan	\$ 43,220.00	Q	7610	FY 2020/21	ENG
Upper Santa Ana River HCP (TO #7)	\$ 15,062.88	R	7690.7	FY 2014/15	PROJ
Upper Santa Ana River HCP (TO #7)	\$ 5,000.00	R	7690.7	FY 2015/16	PROJ
Lower Day Basin RMPU (TO #2)	\$ 238,646.90	S	7690.8	FY 2016/17	PROJ
Funds on Hold for Projects/Refund	\$ 1,434,582.42	T	7690.9	FY 2017/18	PROJ
Appropriative Pool - Legal Services	\$ 32,565.25	U	8367	FY 2020/21	AP
Agricultural Pool - Legal & Technical Services	\$ 24,151.50	V	8467	FY 2020/21	OAP
Agricultural Pool - Mtg. Attendance Compensation	\$ 15,525.00	W	8470	FY 2020/21	OAP
Agricultural Pool - Special Project Funding	\$ 31,516.00	X	8471	FY 2020/21	OAP
Non-Agricultural Pool - Legal Services	\$ 28,934.90	Y	8567	FY 2020/21	ONAP
<b>Updated Balance as of August 31, 2021</b>	<b>\$ 2,708,370.59</b>				

ADMINISTRATION SERVICES:

Unspent funds related to ongoing projects and associated activities from the Administration Services budget from FY 2020/21 totaling \$95,090.16 were "Carried Over" into the current FY 2021/22 budget. These funds were from the Human Resources Services [A] in the amount of \$6,000 in account (6013); Temporary Services [B] in the amount of \$21,000 in account (6017); and Other Office Equipment-Boardroom Upgrades [C] in the amount of \$68,090.16 in account (6038). The total funds available are \$95,090.16.

OBMP ACTIVITIES:

The OBMP Update costs relate to the contract between Tom Dodson and Associates and CBWM to procure environmental review services for the 2020 OBMP Update. The original budget was \$225,500 and was approved during FY 2019/20. At the end of June 30, 2021 a remaining balance in the fund of \$17,064.56 was "Carried Over" into the current FY 2021/22 budget. The 2020 OBMP Update - Tom Dodson & Associates [D] in the amount of \$17,064.56 in account (6908.1).

Unspent funds related to ongoing projects and associated activities from the Agricultural area metering installation efforts budget from FY 2018/19 in several accounts totaling \$357,050 were "Carried Over" into the current FY 2021/22 budget. These funds were from the Meter Installation - New Meter Installation [E] in the amount of \$175,400 in account (7102.65); and Meter Installation - Calibration and Testing [F] in the amount of \$181,650 in account (7102.8). The total funds available are \$374,114.56.

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**ENGINEERING SERVICES:**

Unspent funds related to ongoing projects and associated activities from the Engineering Services budget from FY 2020/21 in several accounts totaling \$573,765 were "Carried Over" into the current FY 2021/22 budget. These funds were from the OBMP - Watermaster Model Update [G] in the amount of \$9,000 in account (6906.1); Integrated Model-Meetings-50% IEUA Costs [H] in the amount of \$14,594 in account (6906.15); Ground Level Monitoring-SAR Imagery [I] in the amount of \$85,000 in account (7107.3); Ground Level Monitoring-Capital Equipment [J] in the amount of \$3,772 in account (7107.8); Agriculture Production and Estimation [K] in the amount of \$42,682 in account (7110.3); PE2 - Comprehensive Recharge-Engineering Services [L] in the amount of \$120,000 in account (7202.2); SB88 Specs-Ensure Compliance-50% IEUA [M] in the amount of \$54,694 in account (7206.1); OBMP-2023 RMPU [N] in the amount of \$37,732 in account (7210); PE4 - Northwest MZ-1 Area Project [O] in the amount of \$89,096 in account (7402.1); PE6&7 - IEUA Salinity Management Plan [P] in the amount of \$73,975 in account (7510); and PE8&9 - Support Implementation 2020 Storage Management Plan [Q] in the amount of \$43,220 in account (7610). The total funds available are \$573,765.

**ONGOING RECHARGE IMPROVEMENT PROJECTS:**

The Upper Santa Ana River HCP-Task Order #7 [R] has a remaining funded balance of \$20,062.88 in account (7690.7); and the Lower Day Basin RMPU-Task Order #2 [S] has a remaining funded budget balance of \$238,646.90 in account (7690.8). The total funds available are \$258,709.78.

**FUNDS ON HOLD FOR PROJECTS/REFUND:**

The "Funds on Hold for Projects/Refund" [T] has a remaining budget from FY 2017/18 of \$1,434,582.42 in account (7690.9). By unanimous action of the Watermaster Board on June 24, 2021 the amount of \$1,234,582.42 is to be refunded to the Appropriative Pool with the upcoming November 2021 Assessment Package. The amount of \$200,000 will be kept on hold until the warranty period for the San Sevaine Project has expired, and no warranty issues are noted.

**POOL RELATED FUNDING;**

The remaining funding items are strictly Pool related and are added to the FY 2021/22 budget to ensure proper funding is recorded and tracked. The Appropriative Pool Legal Services [U] in the amount of \$62,391.25 in account (8367); the Agricultural Pool Legal and Technical Services [V] in the amount of \$61,814 in account (8467); the Agricultural Pool Meeting Attendance Compensation [W] in the amount of \$19,525 in account (8470); the Agricultural Pool Special Project Funding [X] in the amount of \$31,516 in account (8471); and the Non-Agricultural Pool Legal Services [Y] in the amount of \$32,320.70 in account (8567). The total funds available are \$207,566.95.

As invoices are received from the vendors and booked against these items listed above, the "Carried Over" balance will be reduced throughout the current fiscal year. At June 30, 2022, any remaining balances of the FY 2020/21 and prior years funding (if any), along with any new FY 2021/22 expenses, will then be "Carried Over" into the FY 2022/23 budget.

**PREVIOUSLY REPORTED ACTIONS (Descending Order)**

None

**AUDIT FIELD WORK**

**CURRENT MONTH – AUGUST 2021**

The Annual Financial and Audit Reports are tentatively scheduled for presentation to the Watermaster Board by Fedak & Brown LLP at the October 28, 2021 Board meeting. The Annual Financial and Audit Reports for FY 2020/21 are tentatively scheduled for posting to the Watermaster website no later than October 31, 2021.

**PREVIOUSLY REPORTED ACTIONS (Descending Order)**

*Watermaster's function is to administer and enforce provisions of the Judgment and subsequent orders of the Court, and to develop and implement an Optimum Basin Management Program*

July 2021:

The auditors from the audit firm of Fedak & Brown LLP started the interim field work on June 8, 2021 through June 9, 2021. The plan was for the auditors not to be onsite at the Watermaster office for the interim field audit. Instead, all of the audit schedules, accounts payable selections, accounts receivable selections, bank reconciliations, payroll and timesheet selections, and any other reports and information were provided to the auditors electronically via Dropbox software. This was the start of the interim field work for the period of July 1, 2020 through March 31, 2021.

The final field work for the period of April 1, 2021 through June 30, 2021 was started on September 1, 2021 and continued through September 3, 2021.

FY 2021/22 EXHIBIT "G" NON-AGRICULTURAL POOL SALE OF WATER

CURRENT MONTH – AUGUST 2021

No Exhibit "G" activity for the month to report.

PREVIOUSLY REPORTED ACTIONS (Descending Order)  
None

ASSESSMENTS AND OTHER INVOICING

CURRENT MONTH – AUGUST 2021

FY 2021/22 Assessment Package

No new current activity to report.

PREVIOUSLY REPORTED ACTIONS (Descending Order)  
None

ATTACHMENTS

1. Financial Report – B5

	1/12th (8.33%) of the Total Budget				2/12th (16.67%) of the Total Budget				100% of the Total Budget			
	For The Month of August 2021				Year-To-Date as of August 31, 2021				Fiscal Year End as of June 30, 2022			
	Actual	Budget	\$ Over(Under)	% of Budget	Actual	Budget	\$ Over(Under)	% of Budget	Projected	Budget	\$ Over(Under)	% of Budget
<b>Income</b>												
4010 - Local Agency Subsidies	0.00	0.00	0.00	0.0%	177,430.03	177,430.00	0.03	100.0%	177,430.03	177,430.00	0.03	100.0%
4110 - Admin Asmnts-Approp Pool	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	7,175,034.00	7,175,034.00	0.00	100.0%
4120 - Admin Asmnts-Non-Agri Pool	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	249,843.00	249,843.00	0.00	100.0%
4130 - Admin Asmnts-Agricultural Pool	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	200,000.00	0.00	200,000.00	100.0%
4700 - Non Operating Revenues	3.07	0.00	3.07	100.0%	6.33	0.00	6.33	100.0%	106,125.00	106,125.00	0.00	100.0%
4900 - Miscellaneous Income	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
<b>Total Income</b>	<b>3.07</b>	<b>0.00</b>	<b>3.07</b>	<b>100.0%</b>	<b>177,436.36</b>	<b>177,430.00</b>	<b>6.36</b>	<b>100.0%</b>	<b>7,908,432.03</b>	<b>7,708,432.00</b>	<b>200,000.03</b>	<b>102.6%</b>
<b>Gross Profit</b>	<b>3.07</b>	<b>0.00</b>	<b>3.07</b>	<b>100.0%</b>	<b>177,436.36</b>	<b>177,430.00</b>	<b>6.36</b>	<b>100.0%</b>	<b>7,908,432.03</b>	<b>7,708,432.00</b>	<b>200,000.03</b>	<b>102.6%</b>
<b>Expense</b>												
6010 - Admin. Salary/Benefit Costs	126,236.93	114,667.00	11,569.93	110.09%	232,668.87	246,993.00	-14,324.13	94.2%	1,235,557.00	1,235,557.00	0.00	100.0%
6020 - Office Building Expense	11,205.75	25,319.00	-14,113.25	44.26%	21,241.57	51,263.00	-30,021.43	41.44%	223,929.00	223,929.00	0.00	100.0%
6030 - Office Supplies & Equip.	3,890.50	2,300.00	1,590.50	169.15%	6,760.60	73,065.16	-66,304.56	9.25%	99,690.16	99,690.16	0.00	100.0%
6040 - Postage & Printing Costs	2,168.48	2,593.00	-424.52	83.63%	4,529.09	5,595.00	-1,065.91	80.95%	37,460.00	37,460.00	0.00	100.0%
6050 - Information Services	10,472.43	15,539.00	-5,066.57	67.39%	23,201.88	30,310.00	-7,108.12	76.55%	173,398.00	173,398.00	0.00	100.0%
6060 - Contract Services	1,095.00	8,100.00	-7,005.00	13.52%	4,682.16	18,200.00	-13,517.84	25.73%	56,545.00	56,545.00	0.00	100.0%
6070 - Watermaster Legal Services	32,851.19	26,424.00	6,427.19	124.32%	63,284.01	55,341.00	7,943.01	114.35%	326,975.00	326,975.00	0.00	100.0%
6080 - Insurance	8,853.24	10,256.00	-1,402.76	86.32%	40,581.57	44,470.00	-3,888.43	91.26%	46,797.00	46,797.00	0.00	100.0%
6110 - Dues and Subscriptions	-162.92	950.00	-1,112.92	-17.15%	16,123.94	17,320.00	-1,196.06	93.09%	38,815.00	38,815.00	0.00	100.0%
6140 - WM Admin Expenses	98.57	337.00	-238.43	29.25%	249.26	675.00	-425.74	36.93%	4,750.00	4,750.00	0.00	100.0%
6150 - Field Supplies	0.00	200.00	-200.00	0.0%	0.00	313.00	-313.00	0.0%	2,750.00	2,750.00	0.00	100.0%
6170 - Travel & Transportation	1,719.29	2,550.00	-830.71	67.42%	2,984.44	4,255.00	-1,270.56	70.14%	24,170.00	24,170.00	0.00	100.0%
6190 - Training, Conferences, Seminars	1,679.00	3,400.00	-1,721.00	49.38%	3,483.16	6,800.00	-3,316.84	51.22%	40,800.00	40,800.00	0.00	100.0%
6200 - Advisory Committee Expenses	967.73	4,952.00	-3,984.27	19.54%	6,758.83	9,787.00	-3,028.17	69.06%	55,336.00	55,336.00	0.00	100.0%
6300 - Watermaster Board Expenses	1,415.60	14,453.00	-13,037.40	9.8%	18,487.32	28,724.00	-10,236.68	64.36%	190,149.00	190,149.00	0.00	100.0%
8300 - Appr PI-WM & Pool Admin	18,013.94	6,875.00	11,138.94	262.02%	37,242.97	75,968.25	-38,725.28	49.02%	139,365.25	139,365.25	0.00	100.0%
8400 - Agri Pool-WM & Pool Admin	555.14	6,177.00	-5,621.86	8.99%	4,151.30	12,207.00	-8,055.70	34.01%	69,011.00	69,011.00	0.00	100.0%
8467 - Ag Legal & Technical Services	7,675.00	0.00	7,675.00	100.0%	37,662.50	61,814.00	-24,151.50	60.93%	61,814.00	61,814.00	0.00	100.0%
8470 - Ag Meeting Attend -Special	2,000.00	0.00	2,000.00	100.0%	4,000.00	19,525.00	-15,525.00	20.49%	19,525.00	19,525.00	0.00	100.0%
8471 - Ag Pool Expense	0.00	0.00	0.00	0.0%	0.00	31,516.00	-31,516.00	0.0%	31,516.00	31,516.00	0.00	100.0%
8485 - Ag Pool - Misc. Exp. - Ag Fund	0.00	0.00	0.00	0.0%	0.00	100.00	-100.00	0.0%	400.00	400.00	0.00	100.0%
8500 - Non-Ag PI-WM & Pool Admin	1,863.29	5,178.00	-3,314.71	35.99%	7,188.60	42,573.70	-35,385.10	16.89%	90,066.70	90,066.70	0.00	100.0%
9400 - Depreciation Expense	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
9500 - Allocated G&A Expenditures	-21,017.86	-38,787.00	17,769.14	54.19%	-42,700.90	-77,572.00	34,871.10	55.05%	-465,442.00	-465,442.00	0.00	100.0%
6900 - Optimum Basin Mgmt Plan	85,532.79	105,954.00	-20,421.21	80.73%	157,094.46	266,740.56	-109,646.10	58.89%	1,313,453.56	1,313,453.56	0.00	100.0%
9501 - G&A Expenses Allocated-OBMP	5,886.61	13,937.00	-8,050.39	42.24%	10,493.80	27,872.00	-17,378.20	37.65%	167,242.00	167,242.00	0.00	100.0%
7101 - Production Monitoring	1,475.38	9,085.00	-7,609.62	16.24%	8,695.98	17,777.00	-9,081.02	48.92%	102,740.00	102,740.00	0.00	100.0%
7102 - In-line Meter Installation	0.00	1,443.00	-1,443.00	0.0%	0.00	359,889.00	-359,889.00	0.0%	373,617.00	373,617.00	0.00	100.0%
7103 - Grdwtr Quality Monitoring	50,454.39	56,686.00	-6,231.61	89.01%	79,307.67	86,112.00	-6,804.33	92.1%	352,035.00	352,035.00	0.00	100.0%
7104 - Gdwtr Level Monitoring	14,170.06	25,678.00	-11,507.94	55.18%	33,306.02	51,082.00	-17,775.98	65.2%	303,753.00	303,753.00	0.00	100.0%
7105 - Sur Wtr Qual Monitoring	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
7106 - Wtr Level Sensors Installation	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%



	1/12th (8.33%) of the Total Budget				2/12th (16.67%) of the Total Budget				100% of the Total Budget			
	For The Month of August 2021				Year-To-Date as of August 31, 2021				Fiscal Year End as of June 30, 2022			
	Actual	Budget	\$ Over(Under)	% of Budget	Actual	Budget	\$ Over(Under)	% of Budget	Projected	Budget	\$ Over(Under)	% of Budget
7107 · Ground Level Monitoring	84,830.61	21,541.00	63,289.61	393.81%	92,241.48	131,825.00	-39,583.52	69.97%	346,810.00	346,810.00	0.00	100.0%
7108 · Hydraulic Control Monitoring	4,940.00	6,632.00	-1,692.00	74.49%	4,940.00	17,722.00	-12,782.00	27.88%	83,379.00	83,379.00	0.00	100.0%
7109 · Recharge & Well Monitoring Prog	1,706.25	2,767.00	-1,060.75	61.66%	1,706.25	5,535.00	-3,828.75	30.83%	33,208.00	33,208.00	0.00	100.0%
7110 · Ag Production & Estimation	926.25	1,186.00	-259.75	78.1%	2,545.50	45,053.00	-42,507.50	5.65%	56,910.00	56,910.00	0.00	100.0%
7111 · Improved Data Collection & Mgmt	1,157.25	1,680.00	-522.75	68.88%	1,157.25	3,359.00	-2,201.75	34.45%	20,158.00	20,158.00	0.00	100.0%
7200 · PE2- Comp Recharge Pgm	10,845.56	15,161.00	-4,315.44	71.54%	27,006.84	509,355.00	-482,348.16	5.3%	1,458,198.00	1,458,198.00	0.00	100.0%
7300 · PE3&5-Water Supply/Desalte	0.00	4,077.00	-4,077.00	0.0%	712.00	8,088.00	-7,376.00	8.8%	47,793.00	47,793.00	0.00	100.0%
7400 · PE4- Mgmt Plan	28,973.75	25,111.00	3,862.75	115.38%	46,317.00	139,275.00	-92,958.00	33.26%	389,739.00	389,739.00	0.00	100.0%
7500 · PE6&7-CoopEfforts/SaltMgmt	17,616.66	12,683.00	4,933.66	138.9%	32,451.58	99,290.00	-66,838.42	32.68%	225,364.00	225,364.00	0.00	100.0%
7600 · PE8&9-StorageMgmt/Conj Use	9,244.68	25,980.00	-16,735.32	35.58%	9,539.54	95,086.00	-85,546.46	10.03%	353,463.00	353,463.00	0.00	100.0%
7690 · Recharge Improvements	0.00	0.00	0.00	0.0%	529,029.00	2,222,321.20	-1,693,292.20	23.81%	2,222,321.20	2,222,321.20	0.00	100.0%
7700 · Inactive Well Protection Prgm	0.00	42.00	-42.00	0.0%	0.00	83.00	-83.00	0.0%	500.00	500.00	0.00	100.0%
9502 · G&A Expenses Allocated-Projects	15,131.25	24,850.00	-9,718.75	60.89%	32,207.10	49,700.00	-17,492.90	64.8%	298,200.00	298,200.00	0.00	100.0%
<b>Total Expense</b>	<b>544,471.79</b>	<b>565,976.00</b>	<b>-21,504.21</b>	<b>96.2%</b>	<b>1,561,332.64</b>	<b>4,895,407.87</b>	<b>-3,334,075.23</b>	<b>31.89%</b>	<b>10,652,260.87</b>	<b>10,652,260.87</b>	<b>0.00</b>	<b>100.0%</b>
<b>Net Ordinary Income</b>	<b>-544,468.72</b>	<b>-565,976.00</b>	<b>21,507.28</b>	<b>96.2%</b>	<b>-1,383,896.28</b>	<b>-4,717,977.87</b>	<b>3,334,081.59</b>	<b>29.33%</b>	<b>-2,743,828.84</b>	<b>-2,943,828.87</b>	<b>200,000.03</b>	<b>93.21%</b>
<b>Other Income</b>												
4210 · Approp Pool-Replenishment	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
4220 · Non-Ag Pool-Replenishment	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
4225 · Interest Income	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
4226 · LAIF Fair Market Value	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
4227 · AP Escrow Interest	24.67	0.00	24.67	100.0%	49.32	0.00	49.32	100.0%	0.00	0.00	0.00	0.0%
4600 · Groundwater Sales	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
4715 · Gain on Sale of Assets	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
<b>Total Other Income</b>	<b>24.67</b>	<b>0.00</b>	<b>24.67</b>	<b>100.0%</b>	<b>49.32</b>	<b>0.00</b>	<b>49.32</b>	<b>100.0%</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.0%</b>
<b>Other Expense</b>												
5010 · Groundwater Replenishment	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
5100 · Other Water Purchases	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
9200 · Interest Expense	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
9251 · Other Post Employment Benefits	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
9996 · Refund-Excess Reserves-Approp.	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
9996.5 · Refund-Basin O&M-Approp.	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
9997 · Refund-Excess Reserves-NonAg	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
9997.5 · Refund-Basin O&M-NonAg	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
9998 · Refund-Recharge Debt-Approp.	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
9999 · To/(From) Reserves	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
<b>Total Other Expense</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.0%</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.0%</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.0%</b>
<b>Net Other Income</b>	<b>24.67</b>	<b>0.00</b>	<b>24.67</b>	<b>100.0%</b>	<b>49.32</b>	<b>0.00</b>	<b>49.32</b>	<b>100.0%</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.0%</b>
<b>Net Income</b>	<b>-544,444.05</b>	<b>-565,976.00</b>	<b>21,531.95</b>	<b>96.2%</b>	<b>-1,383,846.96</b>	<b>-4,717,977.87</b>	<b>3,334,130.91</b>	<b>29.33%</b>	<b>-2,743,828.84</b>	<b>-2,943,828.87</b>	<b>200,000.03</b>	<b>93.21%</b>

Note: Please see the staff report (Financial Report-B10) for additional detailed information on the account categories.

**CHINO BASIN WATERMASTER**  
**Cash Disbursements For The Month of**  
**September 2021**

Financial Report - B6  
For Informational Purposes Only

Type	Date	Num	Name	Memo	Account	Paid Amount
<b>Bill Pmt -Check</b>	<b>09/02/2021</b>	<b>23028</b>	<b>ACCENT COMPUTER SOLUTIONS, INC.</b>	<b>146289</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	09/01/2021	146289		Monthly Services - September 2021	6052.4 · IT Managed Services	3,969.21
				Overwatch - September 2021	6052.5 · IT Data Backup/Storage	699.00
				OmniCloud - September 2021	6052.5 · IT Data Backup/Storage	170.00
				Office 365 Subscriptions/Business Premier - Septe	6052.4 · IT Managed Services	204.75
				Image office storage (per GB, per month)	6052.5 · IT Data Backup/Storage	546.00
<b>TOTAL</b>						<b>5,588.96</b>
<b>Bill Pmt -Check</b>	<b>09/02/2021</b>	<b>23029</b>	<b>APPLEONE</b>	<b>01-6021045</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/27/2021	01-6021045		Temporary Services - Brian Summers	6017.2 · Office Specialist Services	1,245.04
<b>TOTAL</b>						<b>1,245.04</b>
<b>Bill Pmt -Check</b>	<b>09/02/2021</b>	<b>23030</b>	<b>JOHN J. SCHATZ</b>	<b>Appropriative Pool Legal Services</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	07/31/2021			July 2021	8367 · Legal Service	14,035.00
<b>TOTAL</b>						<b>14,035.00</b>
<b>Bill Pmt -Check</b>	<b>09/02/2021</b>	<b>23031</b>	<b>EASTVALE DEVELOPMENT COMPANY-PIERSC</b>	<b>Ag Pool and Board Member Compensation</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	02/05/2021	2/05 Call w/Chair		2/05/21 Call w/Ag Pool Chair	8411 · Ag Pool Member Compensation	25.00
				2/05/21 Call w/Ag Pool Chair	8470 · Ag Meeting Attend -Special	100.00
Bill	02/09/2021	2/09 call w/Bd Offcr		2/09/21 Call w/Board Officers	6311 · Board Member Compensation	125.00
Bill	02/11/2021	2/11 Call w/Chair		2/11/21 Call w/Ag Pool Chair	8411 · Ag Pool Member Compensation	25.00
				2/11/21 Call w/Ag Pool Chair	8470 · Ag Meeting Attend -Special	100.00
Bill	02/11/2021	2/11 Ag Pool Mtg		2/11/21 Ag Pool Meeting	8470 · Ag Meeting Attend -Special	125.00
Bill	02/16/2021	2/16 Call w/Chair		2/16/21 Call w/Ag Pool Chair	8470 · Ag Meeting Attend -Special	125.00
Bill	02/16/2021	2/16 Call w/Bd Sec		2/16/21 Call w/Board Secretary	6311 · Board Member Compensation	125.00
Bill	02/18/2021	2/18 Call w/Chair		2/18/21 Call w/Ag Pool Chair	8470 · Ag Meeting Attend -Special	125.00
Bill	02/18/2021	2/18 Advisory Comm		2/18/21 Advisory Committee Meeting	8470 · Ag Meeting Attend -Special	125.00
Bill	02/18/2021	2/18 Call w/Bd Offcr		2/18/21 Call w/Board Officers and Pool Chairs	6311 · Board Member Compensation	125.00
Bill	02/23/2021	2/23 Call w/Chair		2/23/21 Call w/Ag Pool Chair	8470 · Ag Meeting Attend -Special	125.00
Bill	02/23/2021	2/23 Bd Offcrs Coord		2/23/21 Board Officers Coordination w/GM	6311 · Board Member Compensation	125.00
Bill	02/25/2021	2/25 Board Mtg		2/25/21 Board Meeting	6311 · Board Member Compensation	125.00
Bill	02/26/2021	2/26 Call w/Chair		2/26/21Call w/Ag Pool Chair	8470 · Ag Meeting Attend -Special	125.00
<b>TOTAL</b>						<b>1,625.00</b>
<b>Bill Pmt -Check</b>	<b>09/02/2021</b>	<b>23032</b>	<b>PIETERSMA, RONALD</b>	<b>Ag Pool Member Compensation</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/12/2021	8/12 Ag Pool Mtg		8/12/21 Ag Pool Meeting	8470 · Ag Meeting Attend -Special	125.00
<b>TOTAL</b>						<b>125.00</b>
<b>Bill Pmt -Check</b>	<b>09/02/2021</b>	<b>23033</b>	<b>STANDARD INSURANCE CO.</b>	<b>Policy # 00-649299-0009</b>	<b>1012 · Bank of America Gen'l Ckg</b>	

**CHINO BASIN WATERMASTER**  
**Cash Disbursements For The Month of**  
**September 2021**

Financial Report - B6  
For Informational Purposes Only

Type	Date	Num	Name	Memo	Account	Paid Amount
Bill	08/26/2021	006492990009		Policy # 00-649299-0009	60191 · Life & Disab.Ins Benefits	942.71
TOTAL						942.71
<b>Bill Pmt -Check</b>	<b>09/02/2021</b>	<b>23034</b>	<b>UNITED HEALTHCARE</b>	<b>052586388611</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/26/2021	052586388611		Dental Insurance Premium - September 2021	60182.2 · Dental & Vision Ins	732.28
TOTAL						732.28
<b>Bill Pmt -Check</b>	<b>09/02/2021</b>	<b>23035</b>	<b>VISION SERVICE PLAN</b>	<b>00-101789-0001</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/26/2021	00101789		Vision Insurance Premium - September 2021	60182.2 · Dental & Vision Ins	93.83
TOTAL						93.83
<b>Bill Pmt -Check</b>	<b>09/02/2021</b>	<b>23036</b>	<b>WEST YOST</b>		<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	07/31/2021	2046081		2046081	6906.31 · OBMP-Pool, Adv. Board Mtgs	5,058.75
Bill	07/31/2021	2046082		2046082	6906.32 · OBMP-Other General Meetings	7,394.75
Bill	07/31/2021	2046083		2046083	6906.74 · OBMP-Mat'l Phy. Injury Requests	156.00
Bill	07/31/2021	2046084		2046084	6906.71 · OBMP-Data Req.-CBWM Staff	6,842.75
Bill	07/31/2021	2046085		2046085	6906.72 · OBMP-Data Req.-Non CBWM Staff	1,019.75
Bill	07/31/2021	2046086		2046086	6906 · OBMP Engineering Services	2,386.25
Bill	07/31/2021	2046087		2046087	6906.81 · Prepare Annual Reports	1,475.50
Bill	07/31/2021	2046088		2046088	6906.15 · Integrated Model Mtgs-IEUA Cost	7,352.25
Bill	07/31/2021	2046089		2046089	7103.3 · Grdwtr Qual-Engineering	22,525.24
Bill	07/31/2021	2046090		2046090	7104.3 · Grdwtr Level-Engineering	13,352.72
Bill	07/31/2021	2046091		2046091	7107.2 · Grd Level-Engineering	2,277.32
Bill	07/31/2021	2046092		2046092	7107.2 · Grd Level-Engineering	2,939.05
Bill	07/31/2021	2046093		2046093	7107.3 · Grd Level-SAR Imagery	2,194.50
Bill	07/31/2021	2046094		2046094	7110.3 · Ag Prod. & Estimation-Eng. Serv	1,619.25
Bill	07/31/2021	2046095		2046095	7202.2 · Engineering Svc	12,232.25
Bill	07/31/2021	2046096		2046096	7303 · PE3&5-Engineering	712.00
Bill	07/31/2021	2046097		2046097	7402 · PE4-Engineering	14,417.75
Bill	07/31/2021	2046098		2046098	7402 · PE4-Engineering	2,925.50
Bill	07/31/2021	2046099		2046099	7502 · PE6&7-Engineering	3,656.00
Bill	07/31/2021	2046100		2046100	7510 · PE6&7-IEUA Salinity Mgmt. Plan	31,468.50
Bill	07/31/2021	2046101		2046101	6906.14 · Modeling for WSIP-100% IEUA	41,186.75
TOTAL						183,192.83
<b>Bill Pmt -Check</b>	<b>09/02/2021</b>	<b>23037</b>	<b>APPLIED COMPUTER TECHNOLOGIES</b>	<b>3430</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/31/2021	3430		Database Consulting Services - August 2021	6052.2 · Applied Computer Technol	3,850.00
TOTAL						3,850.00
<b>Bill Pmt -Check</b>	<b>09/02/2021</b>	<b>23038</b>	<b>DE HAAN, HENRY</b>	<b>Ag Pool Member Compensation</b>	<b>1012 · Bank of America Gen'l Ckg</b>	

**CHINO BASIN WATERMASTER**  
**Cash Disbursements For The Month of**  
**September 2021**

Financial Report - B6  
For Informational Purposes Only

Type	Date	Num	Name	Memo	Account	Paid Amount
Bill	07/08/2021	7/08 Ag Pool Mtg		7/08/21 Ag Pool Meeting	8470 · Ag Meeting Attend -Special	125.00
TOTAL						125.00
<b>Bill Pmt -Check</b>	<b>09/02/2021</b>	<b>23039</b>	<b>EMPOWER LAB</b>	<b>1965</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/31/2021	1965		Empower Lab - August 2021	6193 · Employee Training	1,075.00
TOTAL						1,075.00
<b>Bill Pmt -Check</b>	<b>09/02/2021</b>	<b>23040</b>	<b>EUROFINS EATON ANALYTICAL</b>		<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/12/2021	L0585374		L0585374	7108.4 · Hydraulic Control-Lab Svcs	440.00
Bill	08/17/2021	L0586058		L0586058	7103.5 · Grdwtr Qual-Lab Svcs	1,592.00
Bill	08/31/2021	L0588685		L0588685	7103.5 · Grdwtr Qual-Lab Svcs	628.00
TOTAL						2,660.00
<b>Bill Pmt -Check</b>	<b>09/02/2021</b>	<b>23041</b>	<b>FEDAK &amp; BROWN LLP</b>	<b>Ongoing Audit Services</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/31/2021			August 2021	6062 · Audit Services	1,095.00
TOTAL						1,095.00
<b>Bill Pmt -Check</b>	<b>09/02/2021</b>	<b>23042</b>	<b>FLOOR COVERINGS INTERNATIONAL</b>	<b>Flooring and carpeting installation</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/27/2021			Balance due at job completion	1840 · Capital Assets	23,435.65
TOTAL						23,435.65
<b>Bill Pmt -Check</b>	<b>09/02/2021</b>	<b>23043</b>	<b>PETTY CASH</b>	<b>2892-2899</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/31/2021	2892-2899		Tile, grout and outlet covers for kitchen remodel	6031.7 · Other Office Supplies	126.41
				8/20 and 8/26 staff mtg supplies	6141.3 · Admin Meetings	79.49
				Miscellaneous office supplies	6031.7 · Other Office Supplies	183.36
TOTAL						389.26
<b>Bill Pmt -Check</b>	<b>09/02/2021</b>	<b>23044</b>	<b>PREMIERE GLOBAL SERVICES</b>	<b>30703390</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/26/2021	30703390		Service fee	6022 · Telephone	4.25
				Fee - General	6022 · Telephone	39.00
				Fee - Confidential	6022 · Telephone	39.00
				Service fee	6022 · Telephone	4.25
				Shortfall	6022 · Telephone	78.00
TOTAL						164.50
<b>Bill Pmt -Check</b>	<b>09/02/2021</b>	<b>23045</b>	<b>RR FRANCHISING, INC.</b>	<b>102905</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	09/02/2021	102905		Monthly service for office & annex - Sep. 2021	6024 · Building Repair & Maintenance	915.00
TOTAL						915.00
<b>Bill Pmt -Check</b>	<b>09/02/2021</b>	<b>23046</b>	<b>SPECTRUM BUSINESS</b>	<b>2031978082321</b>	<b>1012 · Bank of America Gen'l Ckg</b>	

**CHINO BASIN WATERMASTER**  
**Cash Disbursements For The Month of**  
**September 2021**

Financial Report - B6  
For Informational Purposes Only

Type	Date	Num	Name	Memo	Account	Paid Amount
Bill	08/26/2021	2031978082321		8/23/21-9/22/21	6053 · Internet Expense	804.52
TOTAL						804.52
<b>Bill Pmt -Check</b>	<b>09/02/2021</b>	<b>23047</b>	<b>STATE COMPENSATION INSURANCE FUND</b>	<b>1000293042</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	09/01/2021	100029342		Policy # 1970970 - Premium charge 8/26/21-9/26/21	60183 · Worker's Comp Insurance	702.33
TOTAL						702.33
<b>Bill Pmt -Check</b>	<b>09/02/2021</b>	<b>23048</b>	<b>THE KITCHEN POST</b>	<b>Kitchen Remodel &amp; Renovation</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/27/2021			Balance due on kitchen remodel	1840 · Capital Assets	7,304.89
TOTAL						7,304.89
<b>Bill Pmt -Check</b>	<b>09/02/2021</b>	<b>ACH 090221</b>	<b>CALPERS</b>	<b>1394905143</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	09/01/2021	1394905143		Medical Insurance Premiums - September 2021	60182.1 · Medical Insurance	11,327.95
TOTAL						11,327.95
<b>Bill Pmt -Check</b>	<b>09/02/2021</b>	<b>23049</b>	<b>UNION 76</b>	<b>7076-2245-3035-5049</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/31/2021	7076224530355049		August 2021	6175 · Vehicle Fuel	179.29
TOTAL						179.29
<b>Bill Pmt -Check</b>	<b>09/03/2021</b>	<b>23050</b>	<b>INLAND EMPIRE UTILITIES AGENCY</b>	<b>90029796</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	09/03/2021	90029796		O&M Cost reimbursement - FY 2021/2022 1st qtr.	7206 · Comp Recharge-O&M	110,564.75
TOTAL						110,564.75
<b>Bill Pmt -Check</b>	<b>09/03/2021</b>	<b>23051</b>	<b>JOHN DIAZ PAINTING</b>	<b>Office Painting Project</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	09/03/2021	10% deposit		First payment - 10% deposit	1840 · Capital Assets	1,500.00
TOTAL						1,500.00
<b>Bill Pmt -Check</b>	<b>09/03/2021</b>	<b>23052</b>	<b>JOHN DIAZ PAINTING</b>	<b>Office Painting Project</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	09/03/2021	2nd payment		2nd payment	1840 · Capital Assets	1,500.00
TOTAL						1,500.00
<b>Bill Pmt -Check</b>	<b>09/03/2021</b>	<b>23053</b>	<b>LOPEZ, NICHOLAS</b>	<b>VOID:</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
TOTAL						0.00
<b>Bill Pmt -Check</b>	<b>09/03/2021</b>	<b>23054</b>	<b>LOPEZ, NICHOLAS</b>	<b>Handman Services - Door installtion</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	09/03/2021			Cost to replace doors in office	1840 · Capital Assets	1,100.00
TOTAL						1,100.00
<b>Bill Pmt -Check</b>	<b>09/08/2021</b>	<b>ACH 090821</b>	<b>PUBLIC EMPLOYEES' RETIREMENT SYSTEM</b>	<b>Payor #3493</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
General Journal	09/04/2021	09/04/2021	PUBLIC EMPLOYEES' RETIREMENT SYSTEM	CalPERS Retirement for 08/22/21-09/04/21	2000 · Accounts Payable	9,186.50

**CHINO BASIN WATERMASTER**  
**Cash Disbursements For The Month of**  
**September 2021**

Financial Report - B6  
For Informational Purposes Only

Type	Date	Num	Name	Memo	Account	Paid Amount
TOTAL						9,186.50
General Journal	09/08/2021	09/08/2021	HEALTH EQUITY	Health Equity Invoice 3025143	1012 · Bank of America Gen'l Ckg	
			HEALTH EQUITY	Health Equity Invoice 3025143	1012 · Bank of America Gen'l Ckg	15.00
TOTAL						15.00
General Journal	09/09/2021	09/09/2021	Payroll and Taxes for 08/22/21-09/04/21	Payroll and Taxes for 08/22/21-09/04/21	1012 · Bank of America Gen'l Ckg	
			ADP, LLC	Direct Deposits for 08/22/21-09/04/21	1012 · Bank of America Gen'l Ckg	31,475.56
			ADP, LLC	Payroll and Taxes for 08/22/21-09/04/21	1012 · Bank of America Gen'l Ckg	12,138.62
			MISSIONSQUARE RETIREMENT	457(b) EE Deductions for 08/22/21-09/04/21	1012 · Bank of America Gen'l Ckg	5,765.46
			MISSIONSQUARE RETIREMENT	401(a) EE Deductions for 08/22/21-09/04/21	1012 · Bank of America Gen'l Ckg	1,694.48
TOTAL						51,074.12
Bill Pmt -Check	09/09/2021	23055	ACWA JOINT POWERS INSURANCE AUTHORITY		1012 · Bank of America Gen'l Ckg	
Bill	09/08/2021	0673492		Prepayment - October 2021	1409 · Prepaid Life, BAD&D & LTD	271.60
				September 2021	60191 · Life & Disab.Ins Benefits	254.74
TOTAL						526.34
Bill Pmt -Check	09/09/2021	23056	APPLEONE	01-6028453	1012 · Bank of America Gen'l Ckg	
Bill	09/01/2021	01-6028453		Temporary Services - Brian Summers	6017.2 · Office Specialist Services	1,260.80
TOTAL						1,260.80
Bill Pmt -Check	09/09/2021	23057	DE BOOM, NATHAN	Ag Pool Member Compensation	1012 · Bank of America Gen'l Ckg	
Bill	08/12/2021	8/12 Special Ag Mtg		8/12/21 Special Ag Pool Mtg	8470 · Ag Meeting Attend -Special	125.00
TOTAL						125.00
Bill Pmt -Check	09/09/2021	23058	FILIPPI, GINO	Ag Pool Member Compensation	1012 · Bank of America Gen'l Ckg	
Bill	08/12/2021	8/12 Special Ag		8/12/21 Special Ag Pool mtg	8470 · Ag Meeting Attend -Special	125.00
Bill	08/19/2021	8/19 Special Advis		8/19/21 Special Advisory Committee mtg	8470 · Ag Meeting Attend -Special	125.00
TOTAL						250.00
Bill Pmt -Check	09/09/2021	23059	INLAND VALLEY DAILY BULLETIN	900421820	1012 · Bank of America Gen'l Ckg	
Bill	09/08/2021	900421820		26 weeks renewal	6112 · Subscriptions/Publications	605.87
TOTAL						605.87
Bill Pmt -Check	09/09/2021	23060	JOHN DIAZ PAINTING	Office Painting Project	1012 · Bank of America Gen'l Ckg	
Bill	09/08/2021	3rd payment due		3rd payment due at end of fifth business day	1840 · Capital Assets	6,000.00
TOTAL						6,000.00
Bill Pmt -Check	09/09/2021	23061	R&D PEST SERVICES	0277858	1012 · Bank of America Gen'l Ckg	

**CHINO BASIN WATERMASTER**  
**Cash Disbursements For The Month of**  
**September 2021**

Financial Report - B6  
For Informational Purposes Only

Type	Date	Num	Name	Memo	Account	Paid Amount
Bill	09/08/2021	0277858		Treat office and annex for pest control	6024 · Building Repair & Maintenance	100.00
TOTAL						100.00
<b>Bill Pmt -Check</b>	<b>09/09/2021</b>	<b>23062</b>	<b>TELLEZ-FOSTER, EDGAR</b>	<b>Employee Reimbursement</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	09/06/2021			Ops staff meeting on 9/21/21	6141.3 · Admin Meetings	101.41
				Courthouse parking	6173 · Airfare/Mileage	6.50
TOTAL						107.91
<b>Bill Pmt -Check</b>	<b>09/09/2021</b>	<b>23063</b>	<b>ULINE</b>	<b>55585495</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/20/2021	55585495		Chair mat - PK	6031.7 · Other Office Supplies	199.52
TOTAL						199.52
<b>Bill Pmt -Check</b>	<b>09/09/2021</b>	<b>23064</b>	<b>WESTERN MUNICIPAL WATER DISTRICT</b>	<b>Board Member Compensation</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/19/2021	8/19 Special Advis		8/19/21 Special Advisory Comm. Mtg. - Gardner	6311 · Board Member Compensation	125.00
Bill	08/24/2021	8/24 GRCC Mtg		8/24/21 GRCC meeting - Gardner	6311 · Board Member Compensation	125.00
TOTAL						250.00
<b>Bill Pmt -Check</b>	<b>09/10/2021</b>	<b>23065</b>	<b>CORELOGIC INFORMATION SOLUTIONS</b>	<b>82097745</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/31/2021	82097745		August 2021	7103.7 · Grdwtr Qual-Computer Svc	62.50
				82097745	7101.4 · Prod Monitor-Computer	62.50
TOTAL						125.00
<b>Bill Pmt -Check</b>	<b>09/10/2021</b>	<b>23066</b>	<b>EUROFINS EATON ANALYTICAL</b>	<b>L0589035</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	09/01/2021	L0589035		L0589035	7103.5 · Grdwtr Qual-Lab Svcs	1,386.00
TOTAL						1,386.00
<b>Bill Pmt -Check</b>	<b>09/10/2021</b>	<b>23067</b>	<b>INLAND EMPIRE UTILITIES AGENCY</b>	<b>1800004716</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	09/10/2021	1800004716		RTS charges for FY 2021/2022	5018 · RTS Charges - IEUA	35,030.19
TOTAL						35,030.19
<b>Bill Pmt -Check</b>	<b>09/10/2021</b>	<b>23068</b>	<b>EASTVALE DEVELOPMENT COMPANY-PIERSC</b>	<b>Ag Pool and Board Member Compensation</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/08/2021	8/08 call w/Chair		8/08/21 call with Ag Pool Chair	8470 · Ag Meeting Attend -Special	125.00
Bill	08/09/2021	8/09 Call w/Chair		8/09/21 call with Ag Pool Chair	8470 · Ag Meeting Attend -Special	125.00
Bill	08/12/2021	8/12 Special Ag Mtg		8/12/21 Special Ag Pool Meeting	8470 · Ag Meeting Attend -Special	125.00
Bill	08/12/2021	8/12 call w/Chair		8/12/21 call w/Ag Pool Chair	8470 · Ag Meeting Attend -Special	125.00
Bill	08/17/2021	8/17 Admin Mtg		8/17/21 Administrative Mtg w/GM	8470 · Ag Meeting Attend -Special	125.00
Bill	08/19/2021	8/19 Special Advis		8/19/21 Special Advisory Committee meeting	8470 · Ag Meeting Attend -Special	125.00
Bill	08/19/2021	8/19 call w/Chair		8/19/21 call w/Ag Pool Chair	8470 · Ag Meeting Attend -Special	125.00
Bill	08/20/2021	8/20 call w/Chair		8/20/21 call w/Ag Pool Chair	8470 · Ag Meeting Attend -Special	125.00
Bill	08/24/2021	8/24 GRCC Mtg		8/24/21 GRCC Meeting	8470 · Ag Meeting Attend -Special	125.00

**CHINO BASIN WATERMASTER**  
**Cash Disbursements For The Month of**  
**September 2021**

Financial Report - B6  
For Informational Purposes Only

Type	Date	Num	Name	Memo	Account	Paid Amount
Bill	08/27/2021	8/27 call w/Chair		8/27/21 call w/Ag Pool Chair	8470 · Ag Meeting Attend -Special	125.00
Bill	08/30/2021	8/30 call w/Chair		8/30/21 call w/Ag Pool Chair	8470 · Ag Meeting Attend -Special	125.00
Bill	08/31/2021	8/31 call w/Chair		8/31/21 call w/Ag Pool Chair	8470 · Ag Meeting Attend -Special	125.00
TOTAL						1,500.00
<b>Bill Pmt -Check</b>	<b>09/16/2021</b>	<b>23069</b>	<b>APPLEONE</b>	<b>01-6034463</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	09/08/2021	01-6034463		Temporary Services - Brian Summers	6017.2 · Office Specialist Services	1,245.04
TOTAL						1,245.04
<b>Bill Pmt -Check</b>	<b>09/16/2021</b>	<b>23070</b>	<b>BANK OF AMERICA</b>	<b>XXXX-XXXX-XXXX-4026</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/31/2021	XXXX-XXXX-XXXX-4026		Reg.-PK-4th Annual Western Groundwater Congre	6193.2 · Conference - Registration Fee	305.00
				Wireless mouse	6031.7 · Other Office Supplies	35.55
				Subscription for Adobe Acrobat Pro DC-JJ	6054 · Computer Software	179.88
				Monthly cost for Zoom	6022 · Telephone	40.00
				Miscellaneous office supplies	6031.7 · Other Office Supplies	7.53
				Miscellaneous office supplies	6031.7 · Other Office Supplies	11.84
				Miscellaneous office supplies	6031.7 · Other Office Supplies	28.40
				Subscription for Doodle online scheduling tool	6111 · Membership Dues	86.50
				Miscellaneous office supplies	6031.7 · Other Office Supplies	43.09
				Plexiglass sheets-San Sevaine Mtg room	6025 · Building Interior Renovations	1,360.57
				Miscellaneous office supplies	6031.7 · Other Office Supplies	20.14
				Cost to extend rental of packing totes for office	6038 · Other Office Equipment	205.03
				Cost to extend rental of packing totes for office	6038 · Other Office Equipment	244.72
				Miscellaneous office supplies	6031.7 · Other Office Supplies	131.40
				(5) new doors for office	1840 · Capital Assets	1,498.81
				Cost to print miscellaneous printing jobs	6045 · Printing	310.04
				Miscellaneous office supplies	6031.7 · Other Office Supplies	7.75
				Miscellaneous office supplies	6031.7 · Other Office Supplies	19.38
				Transcript for 5/28/21 court hearing	6046 · Legal Publications/Services	50.00
				Transcript for 6/25/21 court hearing	6046 · Legal Publications/Services	214.00
				PK mtg w/M. Gardner, C. Miller	6312 · Meeting Expenses	58.18
				PK mtg w/C. Berch	8312 · Meeting Expenses	29.01
				PK mtg w/Jeff Mosher	6909.1 · OBMP Meetings	33.06
				PK mtg w/J. Curatalo, B. Kuhn	6312 · Meeting Expenses	73.42
TOTAL						4,993.30
<b>Bill Pmt -Check</b>	<b>09/16/2021</b>	<b>23071</b>	<b>BROWNSTEIN HYATT FARBER SCHRECK</b>		<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/31/2021	858245		858245	6078 · BHFS Legal - Miscellaneous	25,890.30
Bill	08/31/2021	858246		Remote Work Memo	6073 · BHFS Legal - Personnel Matters	148.50
Bill	08/31/2021	858247		858247	6078 · BHFS Legal - Miscellaneous	105.30



**CHINO BASIN WATERMASTER**  
**Cash Disbursements For The Month of**  
**September 2021**

Financial Report - B6  
For Informational Purposes Only

Type	Date	Num	Name	Memo	Account	Paid Amount
Bill	08/31/2021	858248			6907.36 · Santa Ana River Habitat	1,188.00
Bill	08/31/2021	858249			6275 · BHFS Legal - Advisory Committee	396.00
Bill	08/31/2021	858250			8375 · BHFS Legal - Appropriative Pool	99.00
Bill	08/31/2021	858251			8475 · BHFS Legal - Agricultural Pool	148.50
Bill	08/31/2021	858252			8575 · BHFS Legal - Non-Ag Pool	148.50
Bill	08/31/2021	858253			6071 · BHFS Legal - Court Coordination	597.15
Bill	08/31/2021	858254			6072 · BHFS Legal - Rules & Regs	3,762.00
Bill	08/31/2021	858255			6077 · BHFS Legal - Party Status Maint	891.00
Bill	08/31/2021	858256			6907.47 · 2020 Safe Yield Reset	1,138.50
Bill	08/31/2021	858257			6078.25 · Ely 3 Basin Investigation	1,366.20
				Filing Fee	6078.25 · Ely 3 Basin Investigation	90.74
TOTAL						<u>35,969.69</u>
<b>Bill Pmt -Check</b>	<b>09/16/2021</b>	<b>23072</b>	<b>BURRTEC WASTE INDUSTRIES, INC.</b>	<b>N2112209650</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	09/14/2021	N2112209650		September 2021	6024 · Building Repair & Maintenance	142.50
TOTAL						<u>142.50</u>
<b>Bill Pmt -Check</b>	<b>09/16/2021</b>	<b>23073</b>	<b>CUCAMONGA VALLEY WATER DISTRICT</b>	<b>Office Lease</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	09/15/2021			Lease due on October 1, 2021	1422 · Prepaid Rent	7,588.83
TOTAL						<u>7,588.83</u>
<b>Bill Pmt -Check</b>	<b>09/16/2021</b>	<b>23074</b>	<b>EGOSCUE LAW GROUP, INC.</b>	<b>August 2021</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/31/2021			Ag Pool Legal Services - August 2021	8467 · Ag Legal & Technical Services	7,675.00
TOTAL						<u>7,675.00</u>
<b>Bill Pmt -Check</b>	<b>09/16/2021</b>	<b>23075</b>	<b>GRAINGER</b>	<b>9094040791</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/25/2021	9034040791		Miscellaneous water quality monitoring supplies	7103.6 · Grdwtr Qual-Supplies	127.60
TOTAL						<u>127.60</u>
<b>Bill Pmt -Check</b>	<b>09/16/2021</b>	<b>23076</b>	<b>JOHN DIAZ PAINTING</b>	<b>Office Painting Project</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	09/15/2021			Final payment due at job completion	1840 · Capital Assets	6,595.00
TOTAL						<u>6,595.00</u>
<b>Bill Pmt -Check</b>	<b>09/16/2021</b>	<b>23077</b>	<b>LEGAL SHIELD</b>	<b>111802</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	09/14/2021	111802		Employee deductions - September 2021	60194 · Other Employee Insurance	161.40
TOTAL						<u>161.40</u>
<b>Bill Pmt -Check</b>	<b>09/16/2021</b>	<b>23078</b>	<b>LOEB &amp; LOEB LLP</b>	<b>1968190</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/31/2021	1968190		Non-Ag Pool Legal Services - August 2021	8567 · Non-Ag Legal Service	1,308.15
TOTAL						<u>1,308.15</u>

**CHINO BASIN WATERMASTER**  
**Cash Disbursements For The Month of**  
**September 2021**

Financial Report - B6  
For Informational Purposes Only

Type	Date	Num	Name	Memo	Account	Paid Amount
Bill Pmt -Check	09/16/2021	23079	STAULA, MARY L	Retiree Medical Reimbursement	1012 · Bank of America Gen'l Ckg	
Bill	09/30/2021			Retiree Medical Reimbursement	60182.4 · Retiree Medical	19.24
TOTAL						19.24
Bill Pmt -Check	09/16/2021	23080	VERIZON WIRELESS	9887708998	1012 · Bank of America Gen'l Ckg	
Bill	08/31/2021	9887708998		Acct #470810953-00002	6022 · Telephone	375.77
TOTAL						375.77
Bill Pmt -Check	09/17/2021	23081	OFFICE & ERGONOMIC SOLUTIONS, INC.	32894	1012 · Bank of America Gen'l Ckg	
Bill	09/17/2021	32894		50% down payment on office furniture	1840 · Capital Assets	2,914.03
TOTAL						2,914.03
General Journal	09/17/2021	09/17/2021	ADP, LLC	ADP Tax Service for 08/07/21-588143012	1012 · Bank of America Gen'l Ckg	
				ADP Tax Service for 08/07/21-588143012	1012 · Bank of America Gen'l Ckg	155.50
				ADP Tax Service for 08/21/21-588143012	1012 · Bank of America Gen'l Ckg	161.55
				ADP Tax Service for 09/04/21-588143012	1012 · Bank of America Gen'l Ckg	155.50
TOTAL						472.55
Bill Pmt -Check	09/22/2021	23082	APPLEONE	01-6043311	1012 · Bank of America Gen'l Ckg	
Bill	09/17/2021	01-6043311		Brian Summers	6017.2 · Office Specialist Services	1,256.48
TOTAL						1,256.48
General Journal	09/21/2021	09/21/2021	HEALTH EQUITY	Health Equity Invoice 3056286	1012 · Bank of America Gen'l Ckg	
			HEALTH EQUITY	Health Equity Invoice 3056286	1012 · Bank of America Gen'l Ckg	53.55
TOTAL						53.55
Bill Pmt -Check	09/22/2021	ACH 092221	PUBLIC EMPLOYEES' RETIREMENT SYSTEM	Payor #3493	1012 · Bank of America Gen'l Ckg	
Bill	09/01/2021	16538390		Annual Unfunded Accrued Liability-Plan 3299	60180 · Employers PERS Expense	8,989.42
TOTAL						8,989.42
Bill Pmt -Check	09/22/2021	23083	BLUERIDGE SOFTWARE, INC.	10694	1012 · Bank of America Gen'l Ckg	
Bill	09/15/2021	10694		Annual support/maintenance 10/25/21-10/24/22	6054 · Computer Software	629.82
TOTAL						629.82
Bill Pmt -Check	09/22/2021	23084	FRONTIER COMMUNICATIONS	909-484-3890-050914-5	1012 · Bank of America Gen'l Ckg	
Bill	09/22/2021	90948438900509145		Office fax	6022 · Telephone	167.64
TOTAL						167.64
Bill Pmt -Check	09/22/2021	23085	GREAT AMERICA LEASING CORP.	30098879	1012 · Bank of America Gen'l Ckg	

**CHINO BASIN WATERMASTER**  
**Cash Disbursements For The Month of**  
**September 2021**

Financial Report - B6  
For Informational Purposes Only

Type	Date	Num	Name	Memo	Account	Paid Amount
Bill	09/16/2021	30098879		Invoice for September 2021	6043.1 · Ricoh Lease Fee	1,481.41
				Supply freight fee	6043.2 · Ricoh Usage & Maintenance Fee	8.57
				2021 San Bernardino County Property Tax	6043.3 · Ricoh Property Tax Fees	230.96
TOTAL						1,720.94
<b>Bill Pmt -Check</b>	<b>09/22/2021</b>	<b>23086</b>	<b>JOHN J. SCHATZ</b>	<b>Appropriative Pool Legal Services</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/31/2021			August 2021	8367 · Legal Service	15,791.00
TOTAL						15,791.00
<b>Bill Pmt -Check</b>	<b>09/22/2021</b>	<b>23087</b>	<b>PITNEY BOWES GLOBAL FINANCIAL SERVICE 3104962786</b>		<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	09/17/2021	3104962786		Property tax	6044 · Postage Meter Lease	25.53
TOTAL						25.53
<b>Bill Pmt -Check</b>	<b>09/22/2021</b>	<b>23088</b>	<b>READY REFRESH</b>	<b>0023230253</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	08/31/2021	0023230253		Office Water Bottle - August 2021	6031.7 · Other Office Supplies	80.44
TOTAL						80.44
<b>Bill Pmt -Check</b>	<b>09/22/2021</b>	<b>23089</b>	<b>SANTA ANA WATERSHED PROJECT AUTHORITY MSAR 2022-01</b>		<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	09/22/2021	MSAR 2022-01		FY 2021-22 SA River Pathogen TMDL Task Force	8471 · Ag Pool Expense	10,643.00
TOTAL						10,643.00
<b>Bill Pmt -Check</b>	<b>09/22/2021</b>	<b>23090</b>	<b>STANDARD INSURANCE CO.</b>	<b>Policy # 00-649299-0009</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	09/22/2021	006492990009		Policy # 00-649299-0009	60191 · Life & Disab.Ins Benefits	942.71
TOTAL						942.71
<b>Bill Pmt -Check</b>	<b>09/22/2021</b>	<b>23091</b>	<b>UNITED HEALTHCARE</b>	<b>052588403837</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	09/17/2021	052588403837		Dental Insurance Premium - October 2021	60182.2 · Dental & Vision Ins	732.28
TOTAL						732.28
<b>Bill Pmt -Check</b>	<b>09/22/2021</b>	<b>23092</b>	<b>VERIZON WIRELESS</b>	<b>9888328567</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
Bill	09/22/2021	9888328567		Acct #642073270-00002	7103.7 · Grdwtr Qual-Computer Svc	58.03
TOTAL						58.03
<b>General Journal</b>	<b>09/23/2021</b>	<b>09/23/2021</b>	<b>Payroll and Taxes for 09/05/21-09/18/21</b>	<b>Payroll and Taxes for 09/05/21-09/18/21</b>	<b>1012 · Bank of America Gen'l Ckg</b>	
			ADP, LLC	Direct Deposits for 09/05/21-09/18/21	1012 · Bank of America Gen'l Ckg	31,080.84
			ADP, LLC	Payroll Taxes for 09/05/21-09/18/21	1012 · Bank of America Gen'l Ckg	11,975.33
			MISSIONSQUARE RETIREMENT	457(b) EE Deductions for 09/05/21-09/18/21	1012 · Bank of America Gen'l Ckg	5,765.46
			MISSIONSQUARE RETIREMENT	401(a) EE Deductions for 09/05/21-09/18/21	1012 · Bank of America Gen'l Ckg	1,694.48
TOTAL						50,516.11

**CHINO BASIN WATERMASTER**  
**Cash Disbursements For The Month of**  
**September 2021**

Financial Report - B6  
For Informational Purposes Only

Type	Date	Num	Name	Memo	Account	Paid Amount
Bill Pmt -Check	09/23/2021	ACH092321	PUBLIC EMPLOYEES' RETIREMENT SYSTEM	Payor #3493	1012 · Bank of America Gen'l Ckg	
General Journal	09/22/2021	09/23/2021	PUBLIC EMPLOYEES' RETIREMENT SYSTEM	CalPERS Retirement for 09/05/21-09/18/21	2000 · Accounts Payable	9,186.50
TOTAL						<u>9,186.50</u>
General Journal	09/28/2021	09/28/2021	HEALTH EQUITY	Health Equity Invoice 3078054	1012 · Bank of America Gen'l Ckg	
			HEALTH EQUITY	Health Equity Invoice 3078054	1012 · Bank of America Gen'l Ckg	14.89
TOTAL						<u>14.89</u>
General Journal	09/28/2021	09/28/2021	HEALTH EQUITY	Health Equity Invoice 2999985	1012 · Bank of America Gen'l Ckg	
			HEALTH EQUITY	Health Equity Invoice 2999985	1012 · Bank of America Gen'l Ckg	76.25
TOTAL						<u>76.25</u>
					<b>Total Disbursements:</b>	<u><u>654,488.73</u></u>

# CHINO BASIN WATERMASTER

- I. CONSENT CALENDAR
  - C. APPLICATION: WATER TRANSACTION



# CHINO BASIN WATERMASTER

9641 San Bernardino Road, Rancho Cucamonga, CA 91730  
Tel: 909.484.3888 Fax: 909.484.3890 www.cbwm.org

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PETER KAVOUNAS, P.E.  
General Manager

## STAFF REPORT

DATE: October 21, 2021

TO: Advisory Committee Members

SUBJECT: Application: Water Transaction – City of Upland to Golden State Water Company (Consent Calendar Item I.C.)

### SUMMARY:

Issue: The purchase of 140 acre-feet of water from City of Upland by Golden State Water Company. This purchase is made from City of Upland's Annual Production Right.

Recommendation: Provide advice and assistance to the Watermaster Board on the proposed transaction.

Financial Impact: None

### Future Consideration

**Advisory Committee – October 21, 2021:** Advice and assistance.

**Watermaster Board – October 28, 2021:** Approval [Within WM Duties and Powers]

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### ACTIONS:

**Appropriative Pool – September 9, 2021:** Unanimously recommended Advisory Committee to recommend to the Watermaster Board to approve.

**Non-Agricultural Pool – September 9, 2021:** Unanimously recommended its representatives to support at Advisory Committee and Watermaster Board subject to changes they deem appropriate.

**Agricultural Pool – September 9, 2021:** Unanimously recommended Advisory Committee to recommend to the Watermaster Board to approve.

**Advisory Committee – October 21, 2021:**

**Watermaster Board – October 28, 2021:**

*Watermaster's function is to administer and enforce provisions of the Judgment and subsequent orders of the Court, and to develop and implement an Optimum Basin Management Program*

## BACKGROUND

The Court approved the Peace Agreement, the Implementation Plan, and the goals and objectives identified in the OBMP Phase I Report and ordered Watermaster to proceed in a manner consistent with the Peace Agreement on July 13, 2000. Under the Peace Agreement, Watermaster approval is required for applications to store, recapture, recharge, or transfer water, as well as for applications for credits or reimbursements, and storage and recovery programs.

Where there is no material physical injury, Watermaster must approve the transaction. Where the request for Watermaster approval is submitted by a Party to the Judgment, there is a rebuttable presumption that most of the transactions do not result in material physical injury to a Party to the Judgment or the Basin (Storage and Recovery Programs do not have this presumption).

The date of this application is July 18, 2021. Notice of the transaction along with the materials submitted by the requestors were transmitted electronically on September 3, 2021.

## DISCUSSION

Beyond confirmation of the source of the water to be transferred (Supplemental Water or Excess Carryover), Watermaster will evaluate the eventual disposition of the transferred water (e.g., production, storage, etc.) at the end of the production year and account for the same consistent with the Watermaster Guidance Documents.

Water transactions occur each year and are included as production by the respective entity (if produced) in any relevant analyses conducted by West Yost pursuant to the Peace Agreement and the Rules & Regulations. There is no indication that additional analysis regarding this transaction is necessary at this time. As part of the OBMP Implementation Plan, measurement of groundwater levels and ground level changes are ongoing. Based on no real change in the available data, we cannot conclude that the proposed water transaction will cause material physical injury to a Party to the Judgment, or to the Basin.

At their Pool Committee meetings held on September 9, 2021, the Appropriative and Overlying (Agricultural) Pools unanimously recommended Advisory Committee to recommend to the Watermaster Board to approve the proposed transaction; the Overlying (Non-Agricultural) Pool unanimously recommended its representatives to support at Advisory Committee and Watermaster Board subject to changes they deem appropriate.

## ATTACHMENTS

1. Consolidated Forms 3, 4, & 5
2. Notice Forms

**CONSOLIDATED WATER TRANSFER FORMS:  
 FORM 3: APPLICATION FOR SALE OR TRANSFER OF RIGHT TO PRODUCE WATER FROM STORAGE  
 FORM 4: APPLICATION OR AMENDMENT TO APPLICATION TO RECAPTURE WATER IN STORAGE  
 FORM 5: APPLICATION TO TRANSFER ANNUAL PRODUCTION RIGHT OR SAFE YIELD**

FISCAL YEAR 2021 - 2022

DATE REQUESTED: July 18, 2021

AMOUNT REQUESTED: 140 Acre-Feet

<p><b>TRANSFER FROM (SELLER / TRANSFEROR):</b></p> <p><u>City of Upland</u> Name of Party</p> <p><u>1370 North Benson Avenue</u> Street Address</p> <p><u>Upland</u>                      <u>CA</u>              <u>91786</u> City                              State              Zip Code</p> <p><u>(909) 291-2931</u> Telephone</p> <p>_____ Facsimile</p>	<p><b>TRANSFER TO (BUYER / TRANSFEREE):</b></p> <p><u>Golden State Water Company</u> Name of Party</p> <p><u>630 East Foothill Boulevard</u> Street Address</p> <p><u>San Dimas</u>                      <u>CA</u>              <u>91733</u> City                              State              Zip Code</p> <p><u>(909) 394-3600</u> Telephone</p> <p>_____ Facsimile</p>
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Have any other transfers been approved by Watermaster between these parties covering the same fiscal year?              Yes               No

**PURPOSE OF TRANSFER:**

- Pump when other sources of supply are curtailed
- Pump to meet current or future demand over and above production right
- Pump as necessary to stabilize future assessment amounts
- Other, explain \_\_\_\_\_

**WATER IS TO BE TRANSFERRED FROM:**

- Annual Production Right (Appropriative Pool) or Operating Safe Yield (Non-Agricultural Pool)
- Storage
- Annual Production Right / Operating Safe Yield first, then any additional from Storage
- Other, explain \_\_\_\_\_

**WATER IS TO BE TRANSFERRED TO:**

- Annual Production Right / Operating Safe Yield (common)
- Storage (rare)
- Other, explain \_\_\_\_\_



**IS THE 85/15 RULE EXPECTED TO APPLY?** (If yes, all answers below must be "yes.") Yes  No   
Is the Buyer an 85/15 Party? Yes  No   
Is the purpose of the transfer to meet a current demand over and above production right? Yes  No   
Is the water being placed into the Buyer's Annual Account? Yes  No

**IF WATER IS TO BE TRANSFERRED FROM STORAGE:**

Projected Rate of Recapture \_\_\_\_\_ Projected Duration of Recapture \_\_\_\_\_

**METHOD OF RECAPTURE (e.g. pumping, exchange, etc.):**

Pumping

**PLACE OF USE OF WATER TO BE RECAPTURED:**

Margarita well

**LOCATION OF RECAPTURE FACILITIES (IF DIFFERENT FROM REGULAR PRODUCTION FACILITIES):**

\_\_\_\_\_

**WATER QUALITY AND WATER LEVELS**

Are the Parties aware of any water quality issues that exist in the area? Yes  No

If yes, please explain:

\_\_\_\_\_

What are the existing water levels in the areas that are likely to be affected?

\_\_\_\_\_

**MATERIAL PHYSICAL INJURY**

Are any of the recapture wells located within Management Zone 1? Yes  No

Is the Applicant aware of any potential Material Physical Injury to a party to the Judgment or the Basin that may be caused by the action covered by the application? Yes  No

If yes, what are the proposed mitigation measures, if any, that might reasonably be imposed to ensure that the action does not result in Material Physical Injury to a party to the Judgment or the Basin?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**SAID TRANSFER SHALL BE CONDITIONED UPON:**

- (1) Transferee shall exercise said right on behalf of Transferor under the terms of the Judgment, the Peace Agreement, the Peace II Agreement, and the Management Zone 1 Subsidence Management Plan for the period described above. The first water produced in any year shall be that produced pursuant to carry-over rights defined in the Judgment. After production of its carry-over rights, if any, the next (or first if no carry-over rights) water produced by Transferee from the Chino Basin shall be that produced hereunder.
- (2) Transferee shall put all waters utilized pursuant to said Transfer to reasonable beneficial use.
- (3) Transferee shall pay all Watermaster assessments on account of the water production hereby Transferred.
- (4) Any Transferee not already a party must Intervene and become a party to the Judgment.

**ADDITIONAL INFORMATION ATTACHED**

Yes  No



\_\_\_\_\_  
Seller / Transferor Representative Signature

Stephen Parker, City Manager  
Seller / Transferor Representative Name (Printed)



\_\_\_\_\_  
Buyer / Transferee Representative Signature

Paul Rowley, VP of Operations  
Buyer / Transferee Representative Name (Printed)



\_\_\_\_\_  
Buyer / Transferee Representative Signature

Eva Tang, Sr. VP and CFO  
Buyer / Transferee Representative Name (Printed)

**TO BE COMPLETED BY WATERMASTER STAFF:**

DATE OF WATERMASTER NOTICE: September 3, 2021

DATE OF APPROVAL FROM APPROPRIATIVE POOL: \_\_\_\_\_

DATE OF APPROVAL FROM NON-AGRICULTURAL POOL: \_\_\_\_\_

DATE OF APPROVAL FROM AGRICULTURAL POOL: \_\_\_\_\_

HEARING DATE, IF ANY: \_\_\_\_\_

DATE OF ADVISORY COMMITTEE APPROVAL: \_\_\_\_\_

DATE OF BOARD APPROVAL: \_\_\_\_\_

***CHINO BASIN WATERMASTER***

**NOTICE**

**OF**

**APPLICATION(S)**

**RECEIVED FOR**

**WATER TRANSACTIONS – ACTIVITIES**

Date of Notice:

September 3, 2021

This notice is to advise interested persons that the attached application(s) will come before the Watermaster Board on or after 30 days from the date of this notice.

**TRANSFER OF WATER**

A party to the Judgment has submitted a proposed transfer of water for Watermaster approval. Unless contrary evidence is presented to Watermaster that overcomes the rebuttable presumption provided in Section 5.3(b)(iii) of the Peace Agreement, Watermaster must find that there is “no material physical injury” and approve the transfer. Watermaster staff is not aware of any evidence to suggest that this transfer would cause material physical injury and hereby provides this notice to advise interested persons that this transfer will come before the Watermaster Board on or after 30 days from the date of this notice. The attached staff report will be included in the meeting package at the time the transfer begins the Watermaster process (comes before Watermaster).

**NOTICE OF APPLICATION(S) RECEIVED**

Date of Application: **July 18, 2021**

Date of this notice: **September 3, 2021**

Please take notice that the following Application has been received by Watermaster:

- Notice of Sale or Transfer – The purchase of 140.0 acre-feet of water from the City of Upland by Golden State Water Company. This purchase is made from the City of Upland’s Annual Production Right.

This *Application* will first be considered by each of the respective pool committees on the following dates:

Appropriative Pool:	September 9, 2021
Non-Agricultural Pool:	September 9, 2021
Agricultural Pool:	September 9, 2021

This *Application* will be scheduled for consideration by the Advisory Committee *no earlier than thirty days from the date of this notice and a minimum of twenty-one calendar days* after the last pool committee reviews it.

After consideration by the Advisory Committee, the *Application* will be considered by the Board.

Unless the *Application* is amended, as *Contests* must be submitted a minimum of fourteen (14) days prior to the Advisory Committee’s consideration of an *Application*, parties to the Judgment may file *Contests* to the *Application* with Watermaster *within seven calendar days* of when the last pool committee considers it. Any *Contest* must be in writing and state the basis of the *Contest*.

Watermaster address:

Chino Basin Watermaster  
9641 San Bernardino Road  
Rancho Cucamonga, CA 91730

Tel: (909) 484-3888  
Fax: (909) 484-3890

# CHINO BASIN WATERMASTER

- I. CONSENT CALENDAR
  - D. APPLICATION: WATER TRANSACTION



# CHINO BASIN WATERMASTER

9641 San Bernardino Road, Rancho Cucamonga, CA 91730  
Tel: 909.484.3888 Fax: 909.484.3890 www.cbwm.org

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PETER KAVOUNAS, P.E.  
General Manager

## STAFF REPORT

DATE: October 21, 2021

TO: Advisory Committee Members

SUBJECT: Application: Water Transaction – West End Consolidated Water Company to Golden State Water Company (Consent Calendar Item I.D.)

### SUMMARY:

Issue: The purchase of 66.4 acre-feet of water from West End Consolidated Water Company by Golden State Water Company. This purchase is made from West End Consolidated Water Company's Annual Production Right. Golden State Water Company is utilizing this transaction to produce its West End Consolidated Water Company shares.

Recommendation: Provide advice and assistance to the Watermaster Board on the proposed transaction.

Financial Impact: None

### Future Consideration

**Advisory Committee – October 21, 2021:** Advice and assistance.

**Watermaster Board – October 28, 2021:** Approval [Within WM Duties and Powers]

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### ACTIONS:

**Appropriative Pool – September 9, 2021:** Unanimously recommended Advisory Committee to recommend to the Watermaster Board to approve.

**Non-Agricultural Pool – September 9, 2021:** Unanimously recommended its representatives to support at Advisory Committee and Watermaster Board subject to changes they deem appropriate.

**Agricultural Pool – September 9, 2021:** Unanimously recommended Advisory Committee to recommend to the Watermaster Board to approve.

**Advisory Committee – October 21, 2021:**

**Watermaster Board – October 28, 2021:**

*Watermaster's function is to administer and enforce provisions of the Judgment and subsequent orders of the Court, and to develop and implement an Optimum Basin Management Program*

## BACKGROUND

The Court approved the Peace Agreement, the Implementation Plan, and the goals and objectives identified in the OBMP Phase I Report and ordered Watermaster to proceed in a manner consistent with the Peace Agreement on July 13, 2000. Under the Peace Agreement, Watermaster approval is required for applications to store, recapture, recharge, or transfer water, as well as for applications for credits or reimbursements, and storage and recovery programs.

Where there is no material physical injury, Watermaster must approve the transaction. Where the request for Watermaster approval is submitted by a Party to the Judgment, there is a rebuttable presumption that most of the transactions do not result in material physical injury to a Party to the Judgment or the Basin (Storage and Recovery Programs do not have this presumption).

The date of this application is July 18, 2021. Notice of the transaction along with the materials submitted by the requestors were transmitted electronically on September 3, 2021.

## DISCUSSION

Beyond confirmation of the source of the water to be transferred (Supplemental Water or Excess Carryover), Watermaster will evaluate the eventual disposition of the transferred water (e.g., production, storage, etc.) at the end of the production year and account for the same consistent with the Watermaster Guidance Documents.

Water transactions occur each year and are included as production by the respective entity (if produced) in any relevant analyses conducted by West Yost pursuant to the Peace Agreement and the Rules & Regulations. There is no indication that additional analysis regarding this transaction is necessary at this time. As part of the OBMP Implementation Plan, measurement of groundwater levels and ground level changes are ongoing. Based on no real change in the available data, we cannot conclude that the proposed water transaction will cause material physical injury to a Party to the Judgment, or to the Basin.

At their Pool Committee meetings held on September 9, 2021, the Appropriative and Overlying (Agricultural) Pools unanimously recommended Advisory Committee to recommend to the Watermaster Board to approve the proposed transaction; the Overlying (Non-Agricultural) Pool unanimously recommended its representatives to support at Advisory Committee and Watermaster Board subject to changes they deem appropriate.

## ATTACHMENTS

1. Consolidated Forms 3, 4, & 5
2. Notice Forms

Consolidated Forms 3, 4 & 5

**CONSOLIDATED WATER TRANSFER FORMS:  
 FORM 3: APPLICATION FOR SALE OR TRANSFER OF RIGHT TO PRODUCE WATER FROM STORAGE  
 FORM 4: APPLICATION OR AMENDMENT TO APPLICATION TO RECAPTURE WATER IN STORAGE  
 FORM 5: APPLICATION TO TRANSFER ANNUAL PRODUCTION RIGHT OR SAFE YIELD**

FISCAL YEAR 2021 - 2022

DATE REQUESTED: July 18, 2021

AMOUNT REQUESTED: 66.4 Acre-Feet

<p><b>TRANSFER FROM (SELLER / TRANSFEROR):</b></p> <p><u>West End Consolidated Water Company</u>                  Name of Party</p> <p><u>1370 North Benson Avenue</u>                  Street Address</p> <p><u>Upland</u>                      <u>CA</u>              <u>91786</u>                  City                              State              Zip Code</p> <p><u>(909) 291-2931</u>                  Telephone</p> <p>_____                  Facsimile</p>	<p><b>TRANSFER TO (BUYER / TRANSFEREE):</b></p> <p><u>Golden State Water Company</u>                  Name of Party</p> <p><u>630 East Foothill Boulevard</u>                  Street Address</p> <p><u>San Dimas</u>                      <u>CA</u>              <u>91733</u>                  City                              State              Zip Code</p> <p><u>(909) 394-3600</u>                  Telephone</p> <p>_____                  Facsimile</p>
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Have any other transfers been approved by Watermaster between these parties covering the same fiscal year?      Yes       No

**PURPOSE OF TRANSFER:**

- Pump when other sources of supply are curtailed
- Pump to meet current or future demand over and above production right
- Pump as necessary to stabilize future assessment amounts
- Other, explain \_\_\_\_\_

**WATER IS TO BE TRANSFERRED FROM:**

- Annual Production Right (Appropriative Pool) or Operating Safe Yield (Non-Agricultural Pool)
- Storage
- Annual Production Right / Operating Safe Yield first, then any additional from Storage
- Other, explain \_\_\_\_\_

**WATER IS TO BE TRANSFERRED TO:**

- Annual Production Right / Operating Safe Yield (common)
- Storage (rare)
- Other, explain \_\_\_\_\_



**IS THE 85/15 RULE EXPECTED TO APPLY? (If yes, all answers below must be "yes.")**    Yes     No

Is the Buyer an 85/15 Party?    Yes     No

Is the purpose of the transfer to meet a current demand over and above production right?    Yes     No

Is the water being placed into the Buyer's Annual Account?    Yes     No

**IF WATER IS TO BE TRANSFERRED FROM STORAGE:**

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Projected Rate of Recapture \_\_\_\_\_ Projected Duration of Recapture \_\_\_\_\_

**METHOD OF RECAPTURE (e.g. pumping, exchange, etc.):**

Pumping

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**PLACE OF USE OF WATER TO BE RECAPTURED:**

Margarita well

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**LOCATION OF RECAPTURE FACILITIES (IF DIFFERENT FROM REGULAR PRODUCTION FACILITIES):**

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**WATER QUALITY AND WATER LEVELS**

Are the Parties aware of any water quality issues that exist in the area?    Yes     No

If yes, please explain:

\_\_\_\_\_

What are the existing water levels in the areas that are likely to be affected?

\_\_\_\_\_

**MATERIAL PHYSICAL INJURY**

Are any of the recapture wells located within Management Zone 1?    Yes     No

Is the Applicant aware of any potential Material Physical Injury to a party to the Judgment or the Basin that may be caused by the action covered by the application?    Yes     No

If yes, what are the proposed mitigation measures, if any, that might reasonably be imposed to ensure that the action does not result in Material Physical Injury to a party to the Judgment or the Basin?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**SAID TRANSFER SHALL BE CONDITIONED UPON:**

- (1) Transferee shall exercise said right on behalf of Transferor under the terms of the Judgment, the Peace Agreement, the Peace II Agreement, and the Management Zone 1 Subsidence Management Plan for the period described above. The first water produced in any year shall be that produced pursuant to carry-over rights defined in the Judgment. After production of its carry-over rights, if any, the next (or first if no carry-over rights) water produced by Transferee from the Chino Basin shall be that produced hereunder.
- (2) Transferee shall put all waters utilized pursuant to said Transfer to reasonable beneficial use.
- (3) Transferee shall pay all Watermaster assessments on account of the water production hereby Transferred.
- (4) Any Transferee not already a party must Intervene and become a party to the Judgment.

**ADDITIONAL INFORMATION ATTACHED**

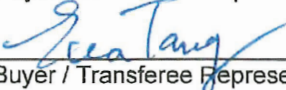
Yes  No

  
 \_\_\_\_\_  
 Seller / Transferor Representative Signature

Braden Yu, General Manager  
 \_\_\_\_\_  
 Seller / Transferor Representative Name (Printed)

  
 \_\_\_\_\_  
 Buyer / Transferee Representative Signature

Paul Rowley, VP of Operations  
 \_\_\_\_\_  
 Buyer / Transferee Representative Name (Printed)

  
 \_\_\_\_\_  
 Buyer / Transferee Representative Signature

Eva Tang, Sr. Vp and CFO  
 \_\_\_\_\_  
 Buyer / Transferee Representative Name (Printed)

**TO BE COMPLETED BY WATERMASTER STAFF:**

DATE OF WATERMASTER NOTICE: September 3, 2021

DATE OF APPROVAL FROM APPROPRIATIVE POOL: \_\_\_\_\_

DATE OF APPROVAL FROM NON-AGRICULTURAL POOL: \_\_\_\_\_

DATE OF APPROVAL FROM AGRICULTURAL POOL: \_\_\_\_\_

HEARING DATE, IF ANY: \_\_\_\_\_

DATE OF ADVISORY COMMITTEE APPROVAL: \_\_\_\_\_

DATE OF BOARD APPROVAL: \_\_\_\_\_

***CHINO BASIN WATERMASTER***

**NOTICE**

**OF**

**APPLICATION(S)**

**RECEIVED FOR**

**WATER TRANSACTIONS – ACTIVITIES**

Date of Notice:

September 3, 2021

This notice is to advise interested persons that the attached application(s) will come before the Watermaster Board on or after 30 days from the date of this notice.

**TRANSFER OF WATER**

A party to the Judgment has submitted a proposed transfer of water for Watermaster approval. Unless contrary evidence is presented to Watermaster that overcomes the rebuttable presumption provided in Section 5.3(b)(iii) of the Peace Agreement, Watermaster must find that there is “no material physical injury” and approve the transfer. Watermaster staff is not aware of any evidence to suggest that this transfer would cause material physical injury and hereby provides this notice to advise interested persons that this transfer will come before the Watermaster Board on or after 30 days from the date of this notice. The attached staff report will be included in the meeting package at the time the transfer begins the Watermaster process (comes before Watermaster).

**NOTICE OF APPLICATION(S) RECEIVED**

Date of Application: **July 18, 2021**

Date of this notice: **September 3, 2021**

Please take notice that the following Application has been received by Watermaster:

- Notice of Sale or Transfer – The purchase of 66.4 acre-feet of water from West End Consolidated Water Company by Golden State Water Company. This purchase is made from West End Consolidated Water Company’s Annual Production Right. Golden State Water Company is utilizing this transaction to produce its West End Consolidated Water Company shares.

This *Application* will first be considered by each of the respective pool committees on the following dates:

Appropriative Pool:	September 9, 2021
Non-Agricultural Pool:	September 9, 2021
Agricultural Pool:	September 9, 2021

This *Application* will be scheduled for consideration by the Advisory Committee *no earlier than thirty days from the date of this notice and a minimum of twenty-one calendar days* after the last pool committee reviews it.

After consideration by the Advisory Committee, the *Application* will be considered by the Board.

Unless the *Application* is amended, as *Contests* must be submitted a minimum of fourteen (14) days prior to the Advisory Committee’s consideration of an *Application*, parties to the Judgment may file *Contests* to the *Application* with Watermaster *within seven calendar days* of when the last pool committee considers it. Any *Contest* must be in writing and state the basis of the *Contest*.

Watermaster address:

Chino Basin Watermaster  
9641 San Bernardino Road  
Rancho Cucamonga, CA 91730

Tel: (909) 484-3888  
Fax: (909) 484-3890

# CHINO BASIN WATERMASTER

- I. CONSENT CALENDAR
  - E. APPLICATION: WATER TRANSACTION



# CHINO BASIN WATERMASTER

9641 San Bernardino Road, Rancho Cucamonga, CA 91730  
Tel: 909.484.3888 Fax: 909.484.3890 www.cbwm.org

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PETER KAVOUNAS, P.E.  
General Manager

## STAFF REPORT

DATE: October 21, 2021

TO: Advisory Committee Members

SUBJECT: Application: Water Transaction – West End Consolidated Water Company to City of Upland (Consent Calendar I.E.)

### SUMMARY:

Issue: The purchase of 708.3 acre-feet of water from West End Consolidated Water Company by City of Upland. This purchase is made from West End Consolidated Water Company's Excess Carry Over Storage Account. City of Upland is utilizing this transaction to produce its West End Consolidated Water Company shares.

Recommendation: Provide advice and assistance to the Watermaster Board on the proposed transaction.

Financial Impact: None

### Future Consideration

**Advisory Committee – October 21, 2021:** Advice and assistance.

**Watermaster Board – October 28, 2021:** Approval [Within WM Duties and Powers]

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### ACTIONS:

**Appropriative Pool – September 9, 2021:** Unanimously recommended Advisory Committee to recommend to the Watermaster Board to approve.

**Non-Agricultural Pool – September 9, 2021:** Unanimously recommended its representatives to support at Advisory Committee and Watermaster Board subject to changes they deem appropriate.

**Agricultural Pool – September 9, 2021:** Unanimously moved to oppose as presented.

**Advisory Committee – October 21, 2021:**

**Watermaster Board – October 28, 2021:**

*Watermaster's function is to administer and enforce provisions of the Judgment and subsequent orders of the Court, and to develop and implement an Optimum Basin Management Program*

## BACKGROUND

The Court approved the Peace Agreement, the Implementation Plan, and the goals and objectives identified in the OBMP Phase I Report and ordered Watermaster to proceed in a manner consistent with the Peace Agreement on July 13, 2000. Under the Peace Agreement, Watermaster approval is required for applications to store, recapture, recharge, or transfer water, as well as for applications for credits or reimbursements, and storage and recovery programs.

Where there is no material physical injury, Watermaster must approve the transaction. Where the request for Watermaster approval is submitted by a Party to the Judgment, there is a rebuttable presumption that most of the transactions do not result in material physical injury to a Party to the Judgment or the Basin (Storage and Recovery Programs do not have this presumption).

The date of this application is July 20, 2021. Notice of the transaction along with the materials submitted by the requestors were transmitted electronically on September 3, 2021.

## DISCUSSION

Beyond confirmation of the source of the water to be transferred (Supplemental Water or Excess Carryover), Watermaster will evaluate the eventual disposition of the transferred water (e.g., production, storage, etc.) at the end of the production year and account for the same consistent with the Watermaster Guidance Documents.

Water transactions occur each year and are included as production by the respective entity (if produced) in any relevant analyses conducted by West Yost pursuant to the Peace Agreement and the Rules & Regulations. There is no indication that additional analysis regarding this transaction is necessary at this time. As part of the OBMP Implementation Plan, measurement of groundwater levels and ground level changes are ongoing. Based on no real change in the available data, we cannot conclude that the proposed water transaction will cause material physical injury to a Party to the Judgment, or to the Basin.

On September 9, 2021, the Appropriative Pool unanimously recommended Advisory Committee to recommend to the Watermaster Board to approve the proposed transaction; the Overlying (Non-Agricultural) Pool unanimously recommended its representatives to support at Advisory Committee and Watermaster Board subject to changes they deem appropriate. The Overlying (Agricultural) Pool unanimously moved to oppose the proposed transaction as presented.

## ATTACHMENTS

1. Consolidated Forms 3, 4, & 5
2. Notice Forms

**CONSOLIDATED WATER TRANSFER FORMS:  
 FORM 3: APPLICATION FOR SALE OR TRANSFER OF RIGHT TO PRODUCE WATER FROM STORAGE  
 FORM 4: APPLICATION OR AMENDMENT TO APPLICATION TO RECAPTURE WATER IN STORAGE  
 FORM 5: APPLICATION TO TRANSFER ANNUAL PRODUCTION RIGHT OR SAFE YIELD**

FISCAL YEAR 2021-2022

DATE REQUESTED: July 20, 2021

AMOUNT REQUESTED: 708.3 Acre-Feet

<p><b>TRANSFER FROM (SELLER / TRANSFEROR):</b></p> <p><u>West End Consolidated Water Company</u> Name of Party</p> <p><u>1370 N. Benson Avenue</u> Street Address</p> <p><u>Upland</u>                      <u>CA</u>      <u>91786</u> City                              State      Zip Code</p> <p><u>(909) 291-2931</u> Telephone</p> <p>_____ Facsimile</p>	<p><b>TRANSFER TO (BUYER / TRANSFEREE):</b></p> <p><u>City of Upland</u> Name of Party</p> <p><u>460 N. Euclid Avenue</u> Street Address</p> <p><u>Upland</u>                      <u>CA</u>      <u>91786</u> City                              State      Zip Code</p> <p><u>(909) 931-4102</u> Telephone</p> <p>_____ Facsimile</p>
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Have any other transfers been approved by Watermaster between these parties covering the same fiscal year?      Yes       No

**PURPOSE OF TRANSFER:**

- Pump when other sources of supply are curtailed
- Pump to meet current or future demand over and above production right
- Pump as necessary to stabilize future assessment amounts
- Other, explain \_\_\_\_\_

**WATER IS TO BE TRANSFERRED FROM:**

- Annual Production Right (Appropriative Pool) or Operating Safe Yield (Non-Agricultural Pool)
- Storage
- Annual Production Right / Operating Safe Yield first, then any additional from Storage
- Other, explain Excess Carry Over

**WATER IS TO BE TRANSFERRED TO:**

- Annual Production Right / Operating Safe Yield (common)
- Storage (rare)
- Other, explain \_\_\_\_\_



**IS THE 85/15 RULE EXPECTED TO APPLY? (If yes, all answers below must be "yes.")**

Is the Buyer an 85/15 Party?

Yes  No

Is the purpose of the transfer to meet a current demand over and above production right? Is the water being placed into the Buyer's Annual Account?

Yes  No

Yes  No

Yes  No

**IF WATER IS TO BE TRANSFERRED FROM STORAGE:**

700-1,100 gpm

Projected Rate of Recapture

Projected Duration of Recapture

**METHOD OF RECAPTURE (e.g. pumping, exchange, etc.):**

Pumping

**PLACE OF USE OF WATER TO BE RECAPTURED:**

Regular Production Wells

**LOCATION OF RECAPTURE FACILITIES (IF DIFFERENT FROM REGULAR PRODUCTION FACILITIES):**

**WATER QUALITY AND WATER LEVELS**

Are the Parties aware of any water quality issues that exist in the area?

Yes  No

If yes, please explain:

Nitrate ~ 56 ppm & DBCP ~ 0.35 ppb

What are the existing water levels in the areas that are likely to be affected?

Static Water Level ~ 55 to 610 bgs

**MATERIAL PHYSICAL INJURY**

Are any of the recapture wells located within Management Zone 1?

Yes  No

Is the Applicant aware of any potential Material Physical Injury to a party to the Judgment or the Basin that may caused by the action covered by the application? Yes  No

If yes, what are the proposed mitigation measures, if any, that might reasonably be imposed to ensure that the action does not result in Material Physical Injury to a party to the Judgment or the Basin?

**SAID TRANSFER SHALL BE CONDITIONED UPON:**

- (1) Transferee shall exercise said right on behalf of Transferor under the terms of the Judgment, the Peace Agreement, the Peace II Agreement, and the Management Zone 1 Subsidence Management Plan for the period described above. The first water produced in any year shall be that produced pursuant to carry-over rights defined in the Judgment. After production of its carry-over rights, if any, the next (or first if no carry-over rights) water produced by Transferee from the Chino Basin shall be that produced hereunder.
- (2) Transferee shall put all waters utilized pursuant to said Transfer to reasonable beneficial use.
- (3) Transferee shall pay all Watermaster assessments on account of the water production hereby Transferred.
- (4) Any Transferee not already a party must Intervene and become a party to the Judgment.

**ADDITIONAL INFORMATION ATTACHED**

Yes  No

  
\_\_\_\_\_  
Seller / Transferor Representative Signature

Braden Yu, General Manager  
\_\_\_\_\_  
Seller / Transferor Representative Name (Printed)

  
\_\_\_\_\_  
Buyer / Transferee Representative Signature

Stephen Parker, Acting City Manager  
\_\_\_\_\_  
Buyer / Transferee Representative Name (Printed)

**TO BE COMPLETED BY WATERMASTER STAFF:**

DATE OF WATERMASTER NOTICE: September 3, 2021

DATE OF APPROVAL FROM APPROPRIATIVE POOL: \_\_\_\_\_

DATE OF APPROVAL FROM NON-AGRICULTURAL POOL: \_\_\_\_\_

DATE OF APPROVAL FROM AGRICULTURAL POOL: \_\_\_\_\_

HEARING DATE, IF ANY: \_\_\_\_\_

DATE OF ADVISORY COMMITTEE APPROVAL: \_\_\_\_\_

DATE OF BOARD APPROVAL: \_\_\_\_\_

***CHINO BASIN WATERMASTER***

**NOTICE**

**OF**

**APPLICATION(S)**

**RECEIVED FOR**

**WATER TRANSACTIONS – ACTIVITIES**

Date of Notice:

September 3, 2021

This notice is to advise interested persons that the attached application(s) will come before the Watermaster Board on or after 30 days from the date of this notice.

**TRANSFER OF WATER**

A party to the Judgment has submitted a proposed transfer of water for Watermaster approval. Unless contrary evidence is presented to Watermaster that overcomes the rebuttable presumption provided in Section 5.3(b)(iii) of the Peace Agreement, Watermaster must find that there is “no material physical injury” and approve the transfer. Watermaster staff is not aware of any evidence to suggest that this transfer would cause material physical injury and hereby provides this notice to advise interested persons that this transfer will come before the Watermaster Board on or after 30 days from the date of this notice. The attached staff report will be included in the meeting package at the time the transfer begins the Watermaster process (comes before Watermaster).

**NOTICE OF APPLICATION(S) RECEIVED**

Date of Application: **July 20, 2021**

Date of this notice: **September 3, 2021**

Please take notice that the following Application has been received by Watermaster:

- Notice of Sale or Transfer – The purchase of 708.3 acre-feet of water from West End Consolidated Water Company by the City of Upland. This purchase is made from West End Consolidated Water Company’s Excess Carryover Storage Account. The City of Upland is utilizing this transaction to produce its West End Consolidated Water Company shares.

This *Application* will first be considered by each of the respective pool committees on the following dates:

Appropriative Pool:	September 9, 2021
Non-Agricultural Pool:	September 9, 2021
Agricultural Pool:	September 9, 2021

This *Application* will be scheduled for consideration by the Advisory Committee *no earlier than thirty days from the date of this notice and a minimum of twenty-one calendar days* after the last pool committee reviews it.

After consideration by the Advisory Committee, the *Application* will be considered by the Board.

Unless the *Application* is amended, as *Contests* must be submitted a minimum of fourteen (14) days prior to the Advisory Committee’s consideration of an *Application*, parties to the Judgment may file *Contests* to the *Application* with Watermaster *within seven calendar days* of when the last pool committee considers it. Any *Contest* must be in writing and state the basis of the *Contest*.

Watermaster address:

Chino Basin Watermaster  
9641 San Bernardino Road  
Rancho Cucamonga, CA 91730

Tel: (909) 484-3888  
Fax: (909) 484-3890

# CHINO BASIN WATERMASTER

## II. BUSINESS ITEMS

- A. TASK ORDER NO. 6 UNDER MASTER AGREEMENT FOR COLLABORATIVE PROJECTS: LOSS OF HYDRAULIC CONTROL MITIGATION PLAN UPDATE



# CHINO BASIN WATERMASTER

9641 San Bernardino Road, Rancho Cucamonga, CA 91730  
Tel: 909.484.3888 Fax: 909.484.3890 www.cbwm.org

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**PETER KAVOUNAS, P.E.**  
General Manager

## STAFF REPORT

DATE: October 21, 2021

TO: Advisory Committee Members

SUBJECT: Task Order No. 6 Under Master Agreement for Collaborative Projects: Loss of Hydraulic Control Mitigation Plan Update (Business Item II.A.)

### SUMMARY:

Issue: The Regional Water Quality Control Board has required Watermaster and IEUA to update the Loss of Hydraulic Control Mitigation Plan.

Recommendation: Approve Task Order No. 6 as presented.

Financial Impact: This expense has not been included in the FY 2021/22 budget as the item was presented to Watermaster after the approval of the FY 2021/22 budget. A budget amendment for the Watermaster portion of the costs of \$72,000 is necessary and presented as separate agenda item.

### Future Consideration

**Advisory Committee – October 21, 2021:** Approval

**Watermaster Board – October 28, 2021:** Approval [Advisory Committee Approval Required]

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### ACTIONS:

**Appropriative Pool – October 14, 2021:** Unanimously recommended Advisory Committee approval

**Non-Agricultural Pool – October 14, 2021:** Unanimously recommended to direct its representatives to support at Advisory Committee and Watermaster Board subject to changes they deem appropriate.

**Agricultural Pool – October 14, 2021:** Unanimously recommended Advisory Committee approval

**Advisory Committee – October 21, 2021:**

**Watermaster Board – October 28, 2021:**

*Watermaster's function is to administer and enforce provisions of the Judgment and subsequent orders of the Court, and to develop and implement an Optimum Basin Management Program*

## BACKGROUND

Since 2004, pursuant to the Water Quality Control Plan for the Santa Ana Basin (Basin Plan) and the 2000 Optimum Basin Management Program (OBMP), Watermaster and IEUA have implemented the Maximum Benefit Salt Nutrient Management Plan for the Chino Basin (maximum benefit SNMP). The maximum benefit SNMP defines nine commitments that Watermaster and IEUA must implement to enable the reuse and recharge of recycled water in the Chino Basin.

Maximum-benefit commitment number 8 requires that Watermaster and IEUA achieve and maintain Hydraulic Control of groundwater outflow from the Chino-North groundwater management zone (GMZ). The objective of Hydraulic Control is to operate the Chino Basin Desalters in a manner that either eliminates groundwater discharge from the Chino-North GMZ to the Prado Basin Management Zone (PBMZ) or controls the discharge to de minimis levels. Commitment 8 also requires that Watermaster and IEUA have a Mitigation Plan in place to describe how both agencies would address any temporary failure to achieve or maintain Hydraulic Control. The Mitigation Plan was submitted to the Regional Board on March 3, 2005. The 2005 Mitigation Plan includes metrics for data collection and analysis to assess the state of Hydraulic Control.

The item was presented to the three Pool Committees on October 14, and was unanimously recommended for Advisory Committee approval.

## DISCUSSION

Based on the information provided in the *2020 Maximum Benefit Annual Report* and in response to a request by Watermaster, IEUA, and the CDA to allow and define operational flexibility of the CDA desalter well operations, the Regional Board has formally requested that Watermaster and IEUA submit an update to the 2005 Mitigation Plan (Attachment 1). Given the recent reduction in pumping by the CDA due to water quality regulations, the Regional Board seeks assurance that the Watermaster and IEUA are prepared to quantify and mitigate the impacts from the loss of hydraulic control. As such, the Regional Board has requested that a new Mitigation Plan for the Temporary Loss of Hydraulic Control be prepared that takes into consideration the latest CDA operations, hydrologic data, and analysis tools to assess hydraulic control. The updated Mitigation Plan must, at a minimum, include the following elements:

- A description of the potential challenges that could cause CDA pumping to be reduced below the required capacity (e.g., specify the CDA wells that will be offline for a foreseeable time period) and that could impact the ability to maintain hydraulic control.
- A model analysis (supported by groundwater monitoring data) to demonstrate the Basin response and state of hydraulic control when the CDA desalter wells are operating at reduced capacity. The model analysis must include multiple planning scenarios of the CDA desalter well pumping reductions and timing to quantify the range of potential mitigation requirements when hydraulic control is lost.
- A proposed definition of the minimum pumping required at the CCWF to maintain outflows to the PBMZ to de minimis levels.
- A proposed definition of operational flexibility around the 40,000 afy required pumping for the aggregate CDA facilities that ensures hydraulic control is maintained.
- An updated plan and schedule for mitigation of any temporary loss of hydraulic control.

Task Order No 6 (Attachment 2) represents the agreement between Watermaster and IEUA to cooperate and share the cost of the effort on a 50-50 basis. Watermaster's Engineer (West Yost) has proposed the scope for the work (Attachment 3); the estimated cost is \$144,000 dollars and Watermaster's portion is \$72,000.

*Watermaster's function is to administer and enforce provisions of the Judgment and subsequent orders of the Court, and to develop and implement an Optimum Basin Management Program*

ATTACHMENTS

1. Letter dated September 7, 2021, from Jayne Joy (Regional Board) addressed to Peter Kavounas and Shivaji Deshmukh with subject "Request for Update of the Chino Basin Watermaster and Inland Empire Utilities Agency 2005 Proposal for Mitigation of Temporary Loss of Hydraulic Control of the Chino Basin"
2. Task Order No. 6 Under Master Agreement for Collaborative Projects: Loss of Hydraulic Control Mitigation Plan Update
3. [Exhibit A] Proposal to Prepare an Updated Plan for Mitigation of Temporary Loss of Hydraulic Control of the Chino Basin





## Santa Ana Regional Water Quality Control Board

September 7, 2021

Peter Kavounas  
 General Manager  
 Chino Basin Watermaster  
 9641 San Bernardino Road  
 Rancho Cucamonga, CA 91730  
 ([PKavounas@cbwm.org](mailto:PKavounas@cbwm.org))

Shivaji Deshmukh, P.E.  
 General Manager  
 Inland Empire Utilities Agency  
 6075 Kimball Avenue  
 Chino, CA 91708  
 ([sdeshmukh@ieua.org](mailto:sdeshmukh@ieua.org))

### REQUEST FOR UPDATE OF THE CHINO BASIN WATERMASTER AND INLAND EMPIRE UTILITIES AGENCY 2005 PROPOSAL FOR MITIGATION OF TEMPORARY LOSS OF HYDRAULIC CONTROL OF THE CHINO BASIN

Dear Messrs. Kavounas and Deshmukh,

Thank you for taking the time to meet with our staff and the Chino Basin Desalter Authority (CDA) on March 30, 2021, for the annual Chino Basin Day discussion and review of the status of various programs and projects in the Chino Basin, including the CDA pumping requirements for the maintenance of hydraulic control.

#### Definition of Hydraulic Control

As part of the Maximum Benefit Salt and Nutrient Management Program for the Chino Basin (Maximum Benefit SNMP), the Santa Ana Regional Water Quality Control Board (Santa Ana Water Board) requires that Chino Basin Watermaster (Watermaster) and Inland Empire Utilities Agency (IEUA) achieve and maintain “hydraulic control” of groundwater outflow from Chino Basin (maximum-benefit commitment number 8). The Basin Plan defines hydraulic control as: “[...] eliminating groundwater discharge from the Chino Basin to the Santa Ana River, or controlling the discharge to *de minimis* levels [...].” In practice, Watermaster and the IEUA have used a more measurable definition of hydraulic control: eliminating groundwater discharge from the Chino-North Groundwater Management Zone (GMZ) to the Prado Basin Management Zone (PBMZ) or controlling the discharge to *de minimis* levels. In a letter from the Executive Officer of the Santa Ana Water Board to the Watermaster and the IEUA, dated October 12, 2011, the *de minimis* discharge of groundwater from the Chino-North GMZ to the PBMZ was defined as less than 1,000 acre-feet per year (afy). The Watermaster’s 2013 Chino Basin Model estimated that the amount of groundwater discharge from the Chino-North GMZ to the PBMZ in the absence of the Chino Creek Well Field (CCWF) has been about 2,400 afy (Wildermuth Environmental Inc.

LANA ONG PETERSON, CHAIR | JAYNE JOY, EXECUTIVE OFFICER

(WEI) 2014). The model was used to estimate the discharge with the CCWF in operation. The model results indicated that a planned production of 1,529 afy at the CCWF would assure that the groundwater discharge from the Chino-North GMZ to the PBMZ would decrease to about 900 afy, which is less than the *de minimis* threshold.

### **2020 Maximum Benefit Annual Report Findings**

We have received and reviewed the Watermaster and the IEUA “2020 Maximum Benefit Annual Report,” which was prepared pursuant to the Maximum Benefit SNMP and in accordance with the 2014 Maximum Benefit Monitoring Program Work Plan that was approved by the Santa Ana Water Board on April 25, 2014.

This most recent annual report describes the following items related to the maximum-benefit commitments for hydraulic control and the operations of the CDA desalter well fields:

- The groundwater elevation contours indicate that since 2006, hydraulic control has been achieved at and east of Chino-I Desalter well I-5.
- For the area west of Chino-I Desalter well I-5, the operation of the CCWF CDA wells I-16, I-17, I-20, and I-21 is intended to achieve hydraulic control to the defined *de minimis* level of less than 1,000 afy of subsurface outflow to PBMZ.
- In February 2016, the CDA commenced full-scale operation at the CCWF wells, I-16, I-17, I-20, and I-21. Total production at the wells in 2016 was about 1,665 af, which is greater than the model-estimated production needed to achieve hydraulic control to the *de minimis* standard west of Chino-I Desalter Well I-5 and by definition, hydraulic control was presumed to have been achieved in this area to the *de minimis* level.
- Since 2017, pumping at the CCWF has decreased to less than 1,529 afy as a result of the new maximum contaminant level (MCL) for 1,2,3-trichloropropane (1,2,3-TCP), which required the CDA to temporarily shut down operation of CCWF Well I-17.
- In 2020, the CCWF wells pumped a total of about 1,325 af, which is less than the amount previously reported by the Watermaster and IEUA to be necessary to ensure *de minimis* outflows to the PBMZ.
- In 2020, the Watermaster’s groundwater model was used to estimate the historical (2004- 2018) and projected (2019-2050) volume of groundwater discharge past the CCWF under revised pumping conditions at the CCWF. The model results indicate that both the estimated historical and projected discharge past the CCWF area is always below the *de minimis* threshold level of 1,000 afy based on an assumption of annual average pumping volume of 992 afy at the CCWF, starting in fiscal year 2019.
- Based on the new model results, the Watermaster and IEUA requested that Santa Ana Water Board staff work with them to formally update the definition of the minimum pumping required at the CCWF to maintain hydraulic control.
- In June 2020, the CDA officially reached the total pumping capacity of 40,000 afy across all of its wells to meet the requirements in the Maximum Benefit SNMP for the long-term maintenance of hydraulic control once agricultural pumping has ceased in the southern Chino Basin.
- The planned buildout of the CDA wells, treatment, and conveyance facilities will be complete and operational by August 2021, including CDA Well II-12.

At the March 30, 2021 meeting, the Watermaster, IEUA, and CDA requested that Santa Ana Water Board staff consider the following:

- (1) Formally updating the definition of the minimum pumping required at the CCWF to maintain hydraulic control based on the latest Watermaster modeling.
- (2) Allow for the definition of operational flexibility for the maximum-benefit commitment to operate the CDA desalter wells at a rate of 40,000 afy.
- (3) Terminate the quarterly reporting of status of the Chino Desalter expansion projects.

### **Request for Update of the 2005 Proposal for Mitigation of Temporary Loss of Hydraulic Control**

Based on the information provided in the 2020 Maximum Benefit Annual Report and in response to the request to allow and define flexibility of the CDA desalter well operations, the Santa Ana Water Board formally requests that you submit an update to the 2005 *Proposal for Mitigation of Temporary Loss of Hydraulic Control* (2005 Mitigation Plan) that was prepared by the Watermaster and IEUA pursuant to the maximum-benefit commitments. The 2005 Mitigation Plan was submitted to demonstrate how the Watermaster and IEUA would address the mitigation for any temporary loss of hydraulic control. The reports generated for the 2005 Mitigation Plan relied on information that is now outdated. For example, the reports relied on monitoring data collected in accordance with the Final Hydraulic Control Monitoring Program Work Plan, Optimum Basin Management Program (WEI, May 2004), which has been revised and replaced with the 2012 surface water monitoring program and the 2014 groundwater monitoring program. More importantly, the CDA operations and planning environment in the Chino Basin have changed significantly since 2005. Further, there are potential threats to the maintenance of hydraulic control, including the required shut-down of facilities due to the regulation of emerging contaminants such as 1,2,3-TCP, hexavalent chromium and Per- and polyfluoroalkyl substances (PFAS). The Santa Ana Water Board seeks assurance that the Watermaster and IEUA are prepared to quantify and mitigate the impacts from the loss of hydraulic control in this or other scenarios that could result in reduced pumping by the CDA.

### **Minimum Requirements for the Updated Mitigation Plan for Temporary Loss of Hydraulic Control**

The new Mitigation Plan for the Temporary Loss of Hydraulic Control must, at a minimum, include the following elements:

- A description of the potential challenges that could cause CDA pumping to be reduced below the required capacity (e.g., specify the CDA wells that will or could be offline for foreseeable time period) and that could impact the ability to maintain hydraulic control.
- A model analysis (supported by groundwater monitoring data) to demonstrate the Basin response and state of hydraulic control when the CDA desalter wells are operating at reduced capacity. The model analysis must include multiple planning scenarios of the CDA desalter well pumping reductions and timing to quantify the range of potential mitigation requirements when hydraulic control is lost.
- A proposed definition of the minimum pumping required at the CCWF to maintain outflows to the PBMZ to *de minimis* levels.
- A proposed definition of operational flexibility around the 40,000 afy required pumping for the aggregate CDA facilities that ensures hydraulic control is maintained.

- An updated plan and schedule for mitigation of any temporary loss of hydraulic control.

### Modification of Reporting Requirement

We concur that since the CDA desalter expansion project has been completed, CDA no longer needs to provide quarterly status reports. Instead, we request that CDA, or the Watermaster and IEUA jointly, provide annual performance reports of the CDA desalters (which can be included as a chapter in the Maximum Benefit Annual Report). The performance report must include tables and charts that show the volume of water pumped, and mass of total dissolved solids (TDS) and nitrate removed from each well on a quarterly basis, and cumulatively from all desalter wells on an annual basis from 2004 to the present. In addition, the report must include the TDS and nitrogen budget for the Optimum Basin Management Program (OBMP) facilities and operations that will show, by quarter and cumulatively, the TDS and nitrogen debits and credits attributed to the OBMP: recharge of storm, recycled and State Project Water; and TDS and nitrogen removed by the CDA desalter facilities. An annual assessment of hydraulic control status must be conducted based on groundwater monitoring data and modeling analysis results. Any temporary loss of hydraulic control that occurred during the year will be identified, and the means to improve OBMP operations will be specified and incorporated into subsequent operations.

We ask that you submit the new Mitigation Plan for the Temporary Loss of Hydraulic Control to Santa Ana Water Board staff no later than June 30, 2022, for our review and concurrence.

If you have any question regarding this letter, please contact Dr. Xinyu "Cindy" Li at [cindy.li@waterboards.ca.gov](mailto:cindy.li@waterboards.ca.gov), or (951) 782-4906.

Sincerely,

 Digitally signed by Jayne Joy  
Date: 2021.09.07 11:13:06  
-07'00'  
Water Boards

Jayne Joy, P.E.  
Executive Office  
Santa Ana Regional Water Quality Control Board

CC:

Tom O'Neill, Chino Desalter Authority, [toneill@chinodesalter.org](mailto:toneill@chinodesalter.org)  
Edgar Tellez Foster, Chino Basin Watermaster, [etellezfoster@cbwm.org](mailto:etellezfoster@cbwm.org)  
Christiana Daisy, Inland Empire Utilities Agency, [cdaisy@ieua.org](mailto:cdaisy@ieua.org)  
Samantha Adams, West Yost Associates, [sadams@westyost.com](mailto:sadams@westyost.com)  
Veva Weamer, West Yost Associates, [vweamer@westyost.com](mailto:vweamer@westyost.com)

**MASTER AGREEMENT BETWEEN  
CHINO BASIN WATERMASTER AND INLAND EMPIRE UTILITIES AGENCY  
REGARDING THE MANAGEMENT OF COLLABORATIVE PROJECTS**

**TASK ORDER NO. 6**  
**LOSS OF HYDRAULIC CONTROL MITIGATION PLAN UPDATE**

This Task Order is made and entered into as of the \_\_\_\_ day of October, 2021 by and between the Chino Basin Watermaster, hereinafter referred to as "Watermaster" and the Inland Empire Utilities Agency, hereinafter referred to as "IEUA" (each a "Party" and collectively, the "Parties").

In consideration of the mutual promises, covenants, and conditions as addressed in the Master Agreement between Chino Basin Watermaster and Inland Empire Utilities Agency Regarding Management of Collaborative Projects dated September 28, 2017 ("Master Agreement") and as specifically hereinafter set forth, the Parties do hereby agree as follows:

1. **PURPOSE**

The purpose of this Task Order is to govern the update of the Loss of Hydraulic Control Mitigation Plan ("Plan") that was first developed in 2005 pursuant to the Regional Water Quality Control Board, Santa Ana Region ("Regional Board"), 2004 Basin Plan Amendment. The Regional Board seeks assurance that CBWM and IEUA are prepared to quantify and mitigate the impacts from the potential loss of hydraulic control.

In a letter addressed to IEUA, Watermaster, and the Chino Basin Desalter Authority, the Regional Board requests that the Plan be updated no later than June 30, 2022.

In communication between IEUA and Watermaster, it was recommended that the services of Watermaster's engineer, West Yost Associates ("West Yost"), be retained to update the Plan. For the benefit of IEUA and Watermaster, Watermaster will contract the services of West Yost to provide the services described in Section 2, below.

2. **SCOPE**

West Yost will serve as the consultant to update the Hydraulic Control Mitigation Plan with oversight and input from IEUA and Watermaster. This effort will include developing plans to quantify and mitigate the impacts to the Chino Basin and the Santa Ana River from the loss of hydraulic control in multiple scenarios. All work will be completed in a timely manner and will meet the proposed schedule within reasonable circumstances. The request for proposal and planned scope of work encompassed by this Task Order is attached hereto as **Exhibit A**.

3. **IEUA RESPONSIBILITIES**

IEUA agrees it and its employees and consultants will cooperate with Watermaster and its contractors in the performance of services under this Task Order and will provide any necessary documentation and information in IEUA's possession. IEUA will also reimburse Watermaster for services described in Section 4.

4. WATERMASTER RESPONSIBILITIES

Watermaster agrees to provide project management and contract administration services that include, but are not limited to:

- Engagement and management of consulting services as needed;
- Coordination and communication with the project team;
- Provide access to associated available information; and,
- Payment of consultant invoices.

5. TOTAL BUDGET AND COST ALLOCATION

Unless the scope of work is changed, and an increase is authorized by the Parties, the total projected cost for the activities to be undertaken pursuant to this Task Order is one hundred forty-four thousand dollars (\$144,000) ("Budget"), which includes the estimated expenses of one hundred twenty-five thousand dollars (\$125,000) plus approximately 15% contingency. The Parties agree that the Budget is shared equally, as shown in the table below. The Parties shall budget, pursuant to their own budget mechanism, such that each is able to expend the amounts shown in the Fiscal Years shown in the table below, or as amended to this Task Order. If for any reason the project timeline is extended past June 30, 2022, the Parties agree to manage their respective budgets in a manner that allows the project to be completed in a timely manner and in coordination with the Regional Board.

Entity	Fiscal Year [2021/22]
Watermaster	\$72,000
IEUA	\$72,000
<b>Total</b>	<b>\$144,000</b>

6. TOTAL BUDGETED COST

The Parties agree to pay their respective portion of the total costs. The Parties shall not be required to pay more than \$144,000 ("Total Budgeted Cost").

7. MAXIMUM COSTS TO WATERMASTER

The costs to be required of Watermaster under this Agreement shall not exceed its share of the Total Budgeted Cost, as shown in Section 5 above, or \$72,000.

8. MAXIMUM COSTS TO IEUA

The costs to be required of IEUA under this Agreement shall not exceed its share of the Total Budgeted Cost, as shown in Section 5 above, or \$72,000.

9. TERM

Work to be undertaken pursuant to this Task Order shall be initiated upon the Effective Date, as described in Section 11, below. The terms of this Task Order shall remain effective until Watermaster's receipt of IEUA's share of costs expended, so that IEUA may close out the activities.

10. REIMBURSEMENT

IEUA's reimbursement of Watermaster for work performed under this Task Order shall be as provided in Article 3 of the September 2017 Master Agreement.

11. EFFECTIVE DATE

This Task Order No. 6 will become effective upon execution by both Parties.

IN WITNESS WHEREOF, the Parties have executed this Agreement on the day and year and at the place first above written.

CHINO BASIN WATERMASTER

By \_\_\_\_\_  
PETER KAVOUNAS  
General Manager

INLAND EMPIRE UTILITIES AGENCY

By \_\_\_\_\_  
SHIVAJI DESHMUKH  
General Manager

DRAFT



September 28, 2021

SENT VIA: EMAIL

Peter Kavounas, PE  
General Manager  
Chino Basin Watermaster  
9641 San Bernardino Road  
Rancho Cucamonga, CA 91730  
PKavounas@cbwm.org

Shivaji Deshmukh, PE  
Deputy General Manager  
Inland Empire Utilities Agency  
6075 Kimball Avenue  
Chino, CA 91708  
sdeshmukh@ieua.org

**Re: Proposal to Prepare an Updated Plan for Mitigation of Temporary Loss of Hydraulic Control of the Chino Basin**

Dear Mr. Kavounas and Mr. Deshmukh:

West Yost has prepared this letter proposal to prepare an update to the Chino Basin Watermaster (Watermaster) and the Inland Empire Utilities Agency (IEUA) existing plan for the mitigation of temporary loss of hydraulic control of the Chino Basin (Mitigation Plan). Pursuant to a letter dated September 7, 2021, the Regional Water Quality Control Board Santa Ana Region (Regional Board) is requiring that Watermaster and IEUA prepare the Mitigation Plan update by June 30, 2022.

## **BACKGROUND**

Since 2004, pursuant to the Water Quality Control Plan for Santa Ana Basin (Basin Plan) and the 2000 Optimum Basin Management Program (OBMP), Watermaster, and IEUA have implemented the Maximum Benefit Salt and Nutrient Management Plan for the Chino Basin (maximum benefit SNMP). The maximum benefit SNMP defines nine maximum-benefit commitments that Watermaster and IEUA must implement to enable the reuse and recharge of recycled water in the Chino Basin. Maximum-benefit commitment number 8 requires that Watermaster and IEUA achieve and maintain “hydraulic control” of groundwater outflow from the Chino-North groundwater management zone (GMZ). The objective of hydraulic control is to operate the Chino Basin Desalters in a manner that either eliminates groundwater discharge from the Chino-North GMZ to the Prado Basin Management Zone (PBMZ) or controls the discharge to *de minimis* levels. Commitment 8 also requires that Watermaster and IEUA to have a Mitigation Plan in place to describe how Watermaster and IEUA would address any temporary failure to achieve or maintain hydraulic control. The Mitigation Plan was submitted to the Regional Board on March 3, 2005. The 2005 Mitigation Plan includes metrics for data collection and analysis to assess the state of hydraulic control.

Watermaster and IEUA annually prepare and submit a report to the Regional Board demonstrating the status of compliance with each of the maximum-benefit commitments, including reporting on the state of hydraulic control based on the latest data and analyses. The most recent report, the *2020 Maximum Benefit Annual Report*, reported the following information related to hydraulic control and the operations of the Chino Basin Desalter Authority (CDA) desalter well fields:

- Groundwater elevation contours indicate that since 2006, hydraulic control has been achieved at and east of Chino-I Desalter Well I-5.
- For the area west of Chino-I Desalter Well I-5, the operation of the Chino Creek Well Field (CCWF) CDA Wells I-16, I-17, I-20, and I-21 is intended to achieve hydraulic control to the defined de minimis level of less than 1,000 acre-feet per year (afy) of subsurface outflow to the PBMZ.
- In February 2016, the CDA commenced full-scale operation at the CCWF Wells, I-16, I-17, I-20, and I-21. Total production at the wells in 2016 was about 1,665 acre-feet (af), which is more than the model-estimated production needed (1,529 afy) to achieve hydraulic control to the de minimis standard west of Chino-I Desalter Well 5 and by definition, hydraulic control was achieved in this area to the de minimis level.
- Since 2017, pumping at the CCWF has decreased to less than 1,529 afy as a result of the new maximum contaminant level (MCL) for 1,2,3-trichloropropane (1,2,3-TCP), which required the CDA to temporarily shut down operation of CCWF Well I-17.
- In 2020, the CCWF wells pumped a total of about 1,325 af, which is less than the amount previously reported by Watermaster and IEUA to be necessary to ensure de minimis outflows to the PBMZ.
- In 2020, Watermaster's groundwater model was used to estimate the historical (2004- 2018) and projected (2019-2050) volume of groundwater discharge past the CCWF under revised pumping conditions at the CCWF. The model-results indicate that both the estimated historical and projected discharge past the CCWF area is always below the de minimis threshold level of 1,000 afy based on actual historical pumping and an assumption of annual average pumping volume at the CCWF of 992 afy starting in fiscal year 2019.
- Based on the 2020 model results, the definition of the minimum pumping required at the CCWF to maintain hydraulic control should be formally updated.
- In June 2020, the CDA officially reached the total pumping capacity of 40,000 afy across all of its wells to meet the requirements in the maximum benefit SNMP for the long-term maintenance of hydraulic control once agricultural pumping has ceased in the southern Chino Basin.

Watermaster, IEUA, and CDA staff met with the Regional Board on March 30, 2021 to discuss compliance with the maximum benefit SNMP and other recent management activities in the Chino Basin. At the March 2021 meeting, the Watermaster, IEUA, and CDA requested that Regional Board staff consider (1) formally updating the definition of the minimum pumping required at the CCWF to maintain hydraulic control based on the latest Watermaster modeling and (2) allowing for a definition of operational flexibility for the maximum-benefit commitment to operate the CDA desalter wells at a rate of 40,000 afy.

Based on the information provided in the *2020 Maximum Benefit Annual Report* and in response to the request to allow and define operational flexibility of the CDA desalter well operations, the Regional Board has formally requested that Watermaster and IEUA submit an update to the 2005 Mitigation Plan. Given the recent reduction in pumping by the CDA due to water quality regulations, the Regional Board seeks assurance that the Watermaster and IEUA are prepared to quantify and mitigate the impacts from the loss of hydraulic control. As such, the Reginal Board has requested that a new Mitigation Plan for the Temporary Loss of Hydraulic Control be prepared that takes into consideration the latest CDA operations, hydrologic data, and analysis tools to assess hydraulic control. The updated Mitigation Plan must, at a minimum, include the following elements:

- A description of the potential challenges that could cause CDA pumping to be reduced below the required capacity (e.g., specify the CDA wells that will be offline for a foreseeable time period) and that could impact the ability to maintain hydraulic control.
- A model analysis (supported by groundwater monitoring data) to demonstrate the Basin response and state of hydraulic control when the CDA desalter wells are operating at reduced capacity. The model analysis must include multiple planning scenarios of the CDA desalter well pumping reductions and timing to quantify the range of potential mitigation requirements when hydraulic control is lost.
- A proposed definition of the minimum pumping required at the CCWF to maintain outflows to the PBMZ to de minimis levels.
- A proposed definition of operational flexibility around the 40,000 afy required pumping for the aggregate CDA facilities that ensures hydraulic control is maintained.
- An updated plan and schedule for mitigation of any temporary loss of hydraulic control.

The following is the proposed scope of work, schedule, and cost to prepare the Mitigation Plan in accordance with the Regional Board requirements.

## SCOPE OF WORK

The scope of work to prepare the Mitigation Plan includes six tasks:

- Task 1 – Project Coordination and Meetings
- Task 2 – Define Hydraulic Control Scenarios
- Task 3 – Develop a Particle-Tracking Simulation Framework and Finalize the Baseline Scenario Analysis
- Task 4 – Model Hydraulic Control Scenarios Defined in Task 2
- Task 5 – Develop and Model Mitigation Scenarios based on Results of Task 4
- Task 6 – Develop Draft and Final Mitigation Plan

### Task 1. Project Coordination and Meetings

The objective of this task is for West Yost staff to coordinate with Watermaster, IEUA, CDA, and Regional Board staff to support the development of analysis methods and scenarios, review of model results, and review of the draft Mitigation Plan. This work includes:

- Prepare for and conduct up to four meetings with Watermaster, IEUA, and CDA staff. The meetings include:
  - Review and finalize hydraulic control scenarios defined in Task 2
  - Review the results of the hydraulic control scenarios analyzed in Tasks 3 and 4
  - Review the results of the mitigation scenarios analyzed in Task 5
  - Review the draft Mitigation Plan
- Prepare for and conduct up to two meetings with Regional Board staff
- Perform monthly tasks to manage the project scope, schedule, and budget

## **Task 2. Define Hydraulic Control Scenarios**

The objective of this task is to clearly articulate a baseline scenario and up to three pumping operation scenarios that could result in the loss of hydraulic control (loss scenarios). West Yost staff will develop proposed loss scenarios and submit them to Watermaster, IEUA, and CDA for review and discussion. Following review and discussion at a meeting with Watermaster, IEUA, and CDA the loss scenario definitions will be finalized.

## **Task 3. Develop the Particle-Tracking Simulation Framework and Finalize the Baseline Scenario Analysis**

The objectives of this task are to develop the particle-tracking simulation framework to be used in the simulation and analysis of hydraulic control for all scenarios and simulate the baseline scenario defined in Task 2. In a particle-tracking simulation, particles are inserted into the groundwater model at specific times, and flow paths and travel times of the inserted particles are calculated based on the simulated flow fields of the Chino Valley groundwater model (CVM). Employing this method will allow the groundwater system response to be efficiently quantified and compared between the scenarios.

In this task, West Yost will develop the tools to set up the particle-tracking input files and process the particle tracking output files; and run multiple particle-tracking simulations using the baseline scenario to determine the following particle-tracking parameters to be used in the analysis of all subsequent scenarios: initial particle locations, number of particles, single pulse or continuous release of particles, and length of particle simulation time. Once the tools and particle-tracking parameters are developed, West Yost will run the particle tracking and hydraulic control analysis for the baseline scenario. The results will be analyzed and documented in tables and figures for review with Watermaster, IEUA, and CDA staff.

## **Task 4. Model Hydraulic Control Scenarios Defined in Task 2**

The objective of this task is to run the particle tracking and hydraulic control analysis for the loss scenarios defined in Task 2.

In this task, West Yost will begin by developing the tools to modify the groundwater pumping input files in the CVM. The tools developed in this task will also be used to facilitate the modeling of the mitigation scenarios analyzed in subsequent Task 5. For each loss scenario, West Yost will (1) prepare the groundwater pumping input files; (2) run the groundwater model; (3) run the particle-tracking simulation; (4) conduct the hydraulic control analysis, and (5) prepare tables and exhibits summarizing the results for review with Watermaster, IEUA, and CDA staff.

## **Task 5. Develop and Model Mitigation Scenarios based on Results of Task 4**

One or more of the loss scenarios analyzed in Task 4 may result in the temporary loss of hydraulic control and would require the development of a plan to mitigate the loss of hydraulic control. The objective of Task 5 is to define mitigation scenarios based on the results of the loss scenarios in Task 4 and run the particle tracking and hydraulic control analysis. The results will be used to assess the efficacy of the mitigation operations.

In this task, West Yost will (1) define up to two mitigation scenarios based on the results of the loss scenarios and in coordination with Watermaster, IEUA, and CDA; (2) prepare the groundwater pumping input files and run the CVM model to develop a new flow solution; (3) run the particle-tracking simulation and conduct the hydraulic control analysis; and (4) prepare tables and exhibits summarizing the results for review with Watermaster, IEUA, and CDA staff.

## Task 6. Develop Draft and Final Mitigation Plan

The objective of this task is to prepare a Mitigation Plan for submittal to the Regional Board. The Mitigation Plan will address all requirements listed in the letter dated September 7, 2021. The plan will document the results of the technical analysis and propose a mitigation plan and schedule based on the results. A draft Mitigation Plan will be prepared and submitted for review with Watermaster, IEUA, and CDA staff. A final Mitigation Plan addressing comments received will be prepared for submittal to the Regional Board.

## PROJECT BUDGET, SCHEDULE, AND STAFFING

### Estimated Cost to Perform Scope of Work

West Yost's proposed level of effort and budget to implement the scope of work described above is shown in Table 1. The total estimated cost is \$124,672. The services will be billed on a time-and-materials basis in accordance with the *Contract for Watermaster Engineering Services* dated July 1, 2019.

Task	Task Description	Labor Hours	Budget, dollars
1	Project Coordination and Meetings	100	22,035
2	Define Hydraulic Control Scenarios	32	7,252
3	Develop the Particle-Tracking Simulation Framework and Finalize the Baseline Scenario Analysis	112	20,877
4	Model Hydraulic Control Scenarios Defined in Task 2	129	23,569
5	Develop and Model Mitigation Scenarios based on Results of Task 4	108	21,066
6	Develop Draft and Final Mitigation Plan	153	29,873
	<b>Total</b>	<b>634</b>	<b>\$124,672</b>

### Project Schedule

West Yost is ready to begin work on the project upon notice to proceed. Table 2 lists the key project milestones and target completion dates required to meet the Regional Board deadline of June 30, 2022.

Table 2. Project Milestones and Schedule	
Milestone	Completion Date
Meeting to review the draft hydraulic control scenarios	November 19, 2021
Meeting to review the results of the hydraulic control scenarios analyzed in Tasks 3 and 4	February 4, 2022
Meeting to review the results of the mitigation scenarios analyzed in Task 5	March 11, 2022
Review the draft Mitigation Plan	May 6, 2022
Submit final Mitigation Plan to Regional Board	June 30, 2022

## Project Staffing

Veva Weamer will serve as the project manager for this task and will be responsible for the implementation of the scope of work in accordance with the budget and schedule presented herein. She will be supported by the modeling team of Eric Chiang, Garrett Rapp, and Lauren Sather. Samantha Adams will provide technical review of all deliverables and with regulatory compliance support in the development of the Mitigation Plan.

We appreciate the opportunity to submit this proposal to provide technical and regulatory support services for this important and timely project that will enable the continued use of recycled water in the Chino Basin. Please let us know if you have any questions.

Sincerely,  
WEST YOST



Veva Weamer  
Supervising Scientist



Samantha Adams  
Engineering/Scientist Manager

cc: Edgar Tellez Foster, Chino Basin Watermaster  
Christiana Daisy, IEUA  
Joshua Aguilar, IEUA

# CHINO BASIN WATERMASTER

## II. BUSINESS ITEMS

### B. FISCAL YEAR 2021/22 BUDGET AMENDMENT (FORM A-21-10-01)



# CHINO BASIN WATERMASTER

9641 San Bernardino Road, Rancho Cucamonga, CA 91730  
Tel: 909.484.3888 Fax: 909.484.3890 www.cbwm.org

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**PETER KAVOUNAS, P.E.**  
General Manager

## STAFF REPORT

DATE: October 21, 2021

TO: Advisory Committee Members

SUBJECT: Fiscal Year 2021/22 Budget Amendment (Form A-21-10-01) (Business Item II.B.)

### SUMMARY:

Issue: The Watermaster FY 2021/22 "Amended" budget needs to be increased by an additional amount of \$72,000 to include the Proposal to Prepare an Updated Plan for Mitigation of Temporary Loss of Hydraulic Control of the Chino Basin (Task Order No. 6).

Recommendation: Approve the Fiscal Year 2021/22 Budget Amendment (Form A-21-10-01).

Financial Impact: This action will increase the overall "Amended" FY 2021/22 budget from \$7,708,432 to \$7,780,432, an increase of \$72,000. The Assessment calculation will be increased by the same amount when the Assessment Package is considered in November 2021.

### Future Consideration

**Advisory Committee – October 21, 2021:** Approval

**Watermaster Board – October 28, 2021:** Adoption (Advisory Committee approval required)

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### ACTIONS:

**Appropriative Pool – October 14, 2021:** Recommended Advisory Committee approval

**Non-Agricultural Pool – October 14, 2021:** Recommended Advisory Committee approval and directed its representatives to support at the Watermaster Board meeting subject to changes they deem necessary.

**Agricultural Pool – October 14, 2021:** Unanimously recommended Advisory Committee approval.

**Advisory Committee – October 21, 2021:**

**Watermaster Board – October 28, 2021:**

*Watermaster's function is to administer and enforce provisions of the Judgment and subsequent orders of the Court, and to develop and implement an Optimum Basin Management Program*



## BACKGROUND

Budget Amendment Policy: If there are no budgeted funds available to transfer to the line item, the General Manager will submit a Budget Amendment request to the Pool Committees to request Advisory Committee approval, and then to the Board for formal adoption. The Budget Amendment should indicate the anticipated source of funding for the approved increase. All Budget Amendments are processed and recorded in the accounting system.

On September 23, 2021 the Watermaster Board adopted the September 23, 2021 version of the FY 2021/22 budget for \$7,708,432.

## DISCUSSION

The need for Budget Amendment (Form A-21-10-01) (Attachment 1) is described in the staff report of the previous item on this agenda titled "Task Order No. 6 Under Master Agreement for Collaborative Projects: Loss of Hydraulic Control Mitigation Plan Update."

With approval of the Fiscal Year 2021/22 Budget Amendment (Form A-21-10-01), the "Amended" Budget for FY 2021/22 would be \$7,780,432.

## ATTACHMENTS

1. Fiscal Year 2021/22 Budget Amendment (Form A-21-10-01)



**CHINO BASIN WATERMASTER  
BUDGET AMENDMENT FORM A-21-10-01**

To: **All Parties**

Fiscal Year 2021/22

From: Joseph S. Joswiak, CFO

Date: October 21, 2021

**Describe reason for the budget amendment here:** The current "Amended" Budget for FY 2021/22 is \$7,708,432. This "Amended" budget is the September 23, 2021 version adopted by the Board on September 23, 2021. This Budget Amendment Form is proposed to increase the total Watermaster "Amended" budget from \$7,708,432 (excluding any Carry-Over funding) to \$7,780,432, an increase of \$72,000. The additional funding will come from the Assessment Process when the Assessment Package is approved in November 2021, and invoices generated.

<b>Expenditure Amendment</b>				
<i>Line Item Description</i>	<i>Account Number</i>	<i>Approved Budget</i>	<i>Amended Budget</i>	<i>Amendment Amount</i>
Hydraulic Control - Mitigation Plan (TO No. 6)	7108.5	\$0	\$72,000	\$72,000
<b>TOTAL:</b>				<b>\$ 72,000</b>

<b>Revenue Source</b>				
<i>Line Item Description</i>	<i>Account Number</i>	<i>Approved Budget</i>	<i>Amended Budget</i>	<i>Amendment Amount</i>
Assessment Package	9999	\$7,708,432	\$7,780,432	\$72,000
<b>TOTAL:</b>				<b>\$ 72,000</b>

<p align="center"><b>Amendment Procedure</b></p> <ol style="list-style-type: none"> <li>1. Staff takes amendment requests to the Pools, Advisory Committee &amp; Board for approval.</li> <li>2. The Chief Financial Officer will prepare and process the budget entry.</li> <li>4. A log will be maintained by the Finance Department detailing the adjustment.</li> <li>5. A fiscal year file will also be kept to hold all budget amendment forms for auditor review.</li> </ol>	<p align="center"><b>Finance Use Only</b></p> <p>Date Board Approved _____</p> <p>Entered into System By _____</p> <p>Finance Log # _____</p> <p>Date Posted _____</p> <p>Approved By _____</p> <p>Date Approved _____</p>
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# CHINO BASIN WATERMASTER

## III. REPORTS/UPDATES

### E. INLAND EMPIRE UTILITIES AGENCY

1. MWD Update (Written)
2. State and Federal Legislative Reports (Written)
3. Community Outreach/Public Relations Report (Written)

### **III. REPORTS/UPDATES**

#### **E. INLAND EMPIRE UTILITIES AGENCY**

Click on this [link](#) for the IEUA Interagency Water Managers' Report

# CHINO BASIN WATERMASTER

## IV. INFORMATION

### 1. RECHARGE INVESTIGATIONS AND PROJECTS COMMITTEE (RIPCOMM)

#### **IV. INFORMATION**

##### **1. RECHARGE INVESTIGATIONS AND PROJECTS COMMITTEE (RIPCOMM)**

Reference Material from July 15, 2021 RIPComm Meeting

- Recharge Investigations and Projects Committee Meeting  
Agenda
- RMPU Status Updates
- RIPCom Budget Tracker

# Recharge Investigations and Projects

## Committee Meeting

### Agenda

**When:** Thursday, July 15, 2021 @ 09:30 a.m.

**Where:** Online only, please join the meeting from your computer, tablet, or smartphone:  
<https://us06web.zoom.us/j/88116340185?pwd=TTFueE9oVVVQMkd1ZTBZS04wMW5SZz09>

You can also dial in using your phone: (253) 215-8782

Meeting ID: 881 1634 0185

Passcode: 216994

#### **Topics:**

1. Introductions
2. New/Old Projects consideration
  - a) Open forum for potential new projects
3. IEUA/CBWM joint projects
  - a) Status updates
  - b) Budget updates
4. HCP status update

Next Recharge Investigations and Projects Committee (RIPComm) Meeting Date:

Thursday, October 14, 2021 @ 9:30 a.m.

# RMPU PROJECTS







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**SAN SEVAINE IMPROVEMENTS PROJECT**  
**PROJECT NO. EN13001**  
**STATUS UPDATE: JULY 8, 2021**

As part of the 2013 Amendment to the 2010 Recharge Master Plan Update (RMPU), this Project will evaluate, design, and construct basin improvements needed to maximize infiltration and recharge capture at the San Sevaire Basins. The final recommendation from the preliminary development report proposes to implement: (1) a new stormwater / recycled water pump station in Basin 5, (2) directly tying it into an existing RW pipeline, (3) place new pipelines and headwalls into Basins 1, 2, and 3, and (4) install monitoring wells and lysimeters. The proposed improvements will add 642 acre-feet per year of stormwater and 4,100 acre-feet per year of recycled water for groundwater recharge.

**Schedule:**

<u>Project Budget</u> \$6,460,000	<u>Actual Cost to Date</u> \$6,236,435
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<u>Phase</u>	<u>Start</u>	<u>Finish</u>	<u>Status</u>	<u>Projected Cost</u>	<u>Actual Cost</u>
Pre-design	10/01/12	05/14/15	Completed	\$160,000	\$159,898
Environmental Impact	06/26/13	01/20/16	Completed	\$30,000	\$24,283
Design	05/15/15	12/12/16	Completed	\$500,000	\$555,899
Permits	05/15/13	01/31/18	Completed	\$25,000	\$25,000
Bid and Award	12/13/16	09/20/17	Completed	\$5,000	\$5,000
Construction	09/21/17	01/31/19	Completed	\$5,740,000	\$5,466,355
Minor Task/Warranty	02/02/19	Pending	In-Progress		
				\$6,460,000	\$6,236,435

**Grant/Loan Update:**

Awarded a \$750,000 state grant from the Department of Water Resources through the Santa Ana Watershed Project Authority as part of Proposition 84 and a \$375,000 federal grant from the US Bureau of Reclamation. Awarded Clean Water State Revolving Fund (SRF) for the construction of the project. This awarded financing includes a \$2.5 million forgiveness grant against the principal.

**Cost Sharing Document:**

- Task Order No. 8 of the Master Agreement of 2014 (August 2014)
- 1<sup>st</sup> Amendment Task Order No. 8 of the Master Agreement of 2014 (April 2015)
- 2<sup>nd</sup> Amendment Task Order No. 8 of the Master Agreement of 2014 (May 2017)

**Project Update:**

- All major construction activities were completed on January 31, 2019.
- Finalizing warranty issue with pumps. The pumps were repaired under manufacture warranty to address the following issues:
  - Bearing cover on the units had seized, heated and cracked
  - Thrust bearings failed
  - Lower bearings failed
  - Bearing nut & washer damaged
  - Rotor wear on both bearing journals
  - Rotor bent
  - Impeller wear ring shows rub marks
  - Case wear ring shows rub marks

The repairs will replace support bearings with a different type to avoid similar issues. The project is to only pay the cost of shipping of all three pumps.

- IEUA is addressing concerns with confined space access with the pumps. Current installation of pumps in the well restricts routine access due to restrictive requirements with confined space. IEUA is proposing field changes to the power cable to limit the confined space conditions. This will allow support staff with immediate access to the pumps for testing and inspection.



**POST 2014 STORMWATER RECHARGE PROGRAM  
PROJECT NOS. RW15003.00/.01/.02/.03/.04/.05/.06 & RW15004.00  
STATUS UPDATE: JULY 8, 2021**

“Post 2014 Stormwater Recharge Program” recommended for final design, bid and construction:

PID	Basin Projects	Post 2014 Stormwater Recharge Program <sup>(2)</sup>	Initial Yield		Updated Yield <sup>(1)</sup>	
			SW	RW	SW	RW
			acre-feet per year			
12	Lower Day Basin	Increase stormwater diversion and basin storage	789	-	993	-
11	Victoria Basin	Improve the infiltration rate and increase storage by removing settled deposits	43	120	75	120
2	Montclair Basins	Increase storage and recharge capacity by directing more channel flow	248	-	96	-
18a	CSI Basin <sup>(3)</sup>	New storage and recharge facility by deepening basin	81	-	-	-
23a	Wineville, Jurupa, RP3 & Force Main	Improve storage and recharge capacity with pumps/conveyance systems between basins and provide new diversion structures	3,166	2,905	2,921	2,905
<b>Total</b>			<b>4,327</b>	<b>3,025</b>	<b>4,085</b>	<b>3,025</b>

- (1) Updated to reflect new values as calculated after the completion of the PDR.
- (2) San Sevaine Basin Improvement project is a part of the “Post 2014 Stormwater Recharge Program” but it is not listed here for it has its own status update sheet.
- (3) 18a (CSI) removed from the list of ongoing RMPU projects. Yield value of 100 AFY is removed.

**Project Budget:**

Project Budget  
\$23,016,080

Actual Cost to Date  
\$8,088,552

	RMPU Projects	Total Project Cost	Actual Cost (to date)	
Ongoing Projects	Lower Day Basin (PID 12)	\$4,008,000	\$3,753,533	
	Victoria Basin (PID 11)	\$176,072	\$176,072	
	Montclair Basins (PID 2)	\$1,788,100	\$292,420	
	RP-3 Basin <sup>(7)</sup>	(23a)	\$1,819,300	\$1,084,224
	Wineville Basin <sup>(7)</sup>		\$20,220,952	\$2,221,295
	Jurupa Basin <sup>(7)</sup>			
	Wineville/Jurupa Force Main <sup>(7)</sup>			
Deferred Projects	East Declaz (Non RMPU Project)	\$114,000	\$114,000	
	Declaz Basin (PID 27)	\$105,000	\$105,000	
	Turner Basin (PID 14)	\$42,000	\$42,000	
	Ely Basin (PID 15a)	\$236,000	\$236,000	
	CSI Basin (PID 18a)	\$64,008	\$64,008	
<b>Total</b>		<b>\$28,573,432</b>	<b>\$8,088,552</b>	

**Cost Sharing Documents:**

<b>Lower Day Basin – PID 12 (Task Order No. 2)</b>	
Watermaster’s Share	\$2,883,000
IEUA’s Share	\$0
Grant Funding	\$1,125,000
<b>Sub-Total</b>	<b>\$4,008,000</b>
<b>Victoria Basin – PID 11 (Task Order No. 10)<sup>(4)</sup></b>	
Watermaster’s Share	\$88,036
IEUA’s Share	\$88,036
<b>Sub-Total</b>	<b>\$176,072</b>
<b>Montclair Basin – PID 2 (Task Order No. 11)</b>	
Watermaster’s Share	\$1,788,100
IEUA’s Share	\$0
<b>Sub-Total</b>	<b>\$1,788,100</b>
<b>Wineville/Jurupa/RP3/Force Main – PID 23a (Task Order No. 9)<sup>(5)</sup></b>	
Watermaster’s Share	\$10,846,828
IEUA’s Share	\$360,043
Grants	\$10,833,381
<b>Sub-Total</b>	<b>\$22,040,252</b>
<b>East Declz/Declz – PID 27 /Turner – PID 27/Ely PID – 15a (Task Order No.1)</b>	
Watermaster’s Share	\$497,000
IEUA’s Share	\$0
<b>Sub-Total</b>	<b>\$497,000</b>
<b>CSI Basin (Task Order 12)</b>	
Watermaster’s Share	\$64,008
IEUA’s Share	\$0
<b>Sub-Total</b>	<b>\$64,008</b>
<b>Total</b>	<b>\$28,573,432</b>

(4) Amending TO 10 to reflect the total project cost from the projected cost of \$168,800 to the final cost of \$176,072.

(5) Includes RP-3, Wineville, Jurupa, and Wineville-Jurupa Force Main’s total projected costs. Task Order amended in May/June 2021 to reflect current project cost and additional grants.

**Grant/Loan Update:**

<b>RMPU Projects</b>	<b>Total Project Cost</b>	<b>Funding Program</b>	<b>Grant Amount</b>
Lower Day Basin (PID 12)	\$4,008,000	Grant Prop. 84 DWR/SAWPA	\$750,000
		USBR	\$375,000
Victoria Basin (PID 11)	\$168,800	-none-	
Montclair Basins (PID 2)	\$1,788,100	SRF Loan	
RP-3 Basin <sup>(7)</sup>	\$1,819,300	SWRCB – Stormwater	\$809,214
		USBR	\$290,000
Wineville/Jurupa /Force Main <sup>(7)</sup>	\$20,220,952	SWRCB – Stormwater	\$8,994,167
		2018 Water Smart Drought	\$740,000
<b>Total</b>	<b>\$28,005,153</b>		<b>\$11,958,381</b>

(6) Task Order No. 9 amended in May/June 2021 to reflect current project cost and additional grants.

## Project Update:

1) The following are updates to each of the on-going RMPU projects:

- a) **Victoria Basin** – Project completed.
- b) **Wineville/Jurupa Storm Water Distribution Pipeline** – April 8, 2021, six (6) bids were received where MNR Construction, Inc., was the lowest apparent bidder with a bid price of \$15,480,880. Bids ranged from the mentioned lowest to a high of \$24.9 million; and the three lowest were near to each other by 3-percent. These bids were above the engineer's estimate.

The higher bid prices are attributed to supply and demand issues caused by the current COVID-19 pandemic. The shortages of some supplies have resulted in record cost growth for materials such as steel and lumber. The pandemic has also affected the industry's health and safety, material delays and fluctuating material prices. In consideration of these conditions, IEUA and the engineering team found the bids to reasonable and fair.

On May 27, 2021, Watermaster's Board approved the first amendment to Task Order No. 9 to reflect changes to the project cost and additional grants. IEUA's Board finalized the amendment on June 16 and authorized the construction contract with MNR.

In addition to the construction effort, \$60,000 in mitigation efforts will be implemented as part of a permit condition to offset the project's impact within the Wineville Basin's wetland areas.

- c) **Montclair Basin** – Continuing to address the extended wait for a permit with US Army Corps. The Corps recently requested and received an additional permit application for the project to cover the Section 404 requirements. This additional permitting document will further delay the project construction bidding (see separate project schedule in the scheduling tables).
- d) **Lower Day Basin** – Construction is substantially complete. IEUA is coordinating with the contractor to finalize the following remaining tasks:
  - Provide the final components to have SCE provide utility power to the new improvements.
  - Address minor programming updates to the control gates to meet current programming requirements.
  - Replace a section of the gate lifting rod. Field conditions required 12-inches more to properly connect to the gate actuator.
  - Replace an incorrectly designed gate actuator. The control motor and signal wires were incorrectly specified. IEUA is ordering the required replacement parts.
- e) **RP-3 Basin Improvement** –
  - a) Demo work completed.
  - b) Excavation completed.
  - c) The remaining Basin Improvement at RP-3 was awarded in May 2021.

## Schedules:

### Wineville/Jurupa/Force main (PID 23a):

<u>Phases</u>	<u>Start</u>	<u>Finish</u>	<u>Status</u>
Project Development	07/01/14	12/17/14	Completed
Preliminary Design	12/18/14	06/21/17	Completed
Environmental	12/18/14	12/31/17	Completed
Permits	06/22/17	01/12/21	Completed
Design	12/18/14	02/28/20	Completed
Bid and Award	01/12/21	06/16/21	Completed
Construction	06/16/21	08/30/22	In Progress

### Montclair Basin (PID 2):

<u>Phases</u>	<u>Start</u>	<u>Finish</u>	<u>Status</u>
Project Development	07/01/14	12/17/14	Completed
Preliminary Design	12/18/14	06/21/17	Completed
Environmental	12/18/14	12/31/17	Completed
Permits	06/22/17	07/28/21	In Progress
Design	12/18/14	02/28/20	Completed
Bid and Award	07/28/21	11/17/21	Not Started
Construction	11/17/21	11/31/22	Not Started

### Lower Day (PID 12):

<u>Phases</u>	<u>Start</u>	<u>Finish</u>	<u>Status</u>
Project Development	07/01/14	12/17/14	Completed
Preliminary Design	12/18/14	06/21/17	Completed
Environmental	12/18/14	12/31/17	Completed
Permits	06/22/17	07/19/19	Completed
Design	12/18/14	07/19/19	Completed
Bid and Award	07/19/19	12/11/19	Completed
Construction	12/11/19	09/11/21	In Progress

**RP-3 Basin (PID 23a):**

<u>Phases</u>	<u>Start</u>	<u>Finish</u>	<u>Status</u>
Project Development	07/01/14	12/17/14	Completed
Preliminary Design	12/18/14	06/21/17	Completed
Environmental	12/18/14	12/31/17	Completed
Permits	06/22/17	01/09/18	Completed
Design	12/18/14	12/14/17	Completed
Bid and Award	01/10/18	06/20/18	Completed
Construction	06/21/18	12/31/21	In Progress

Photographs:

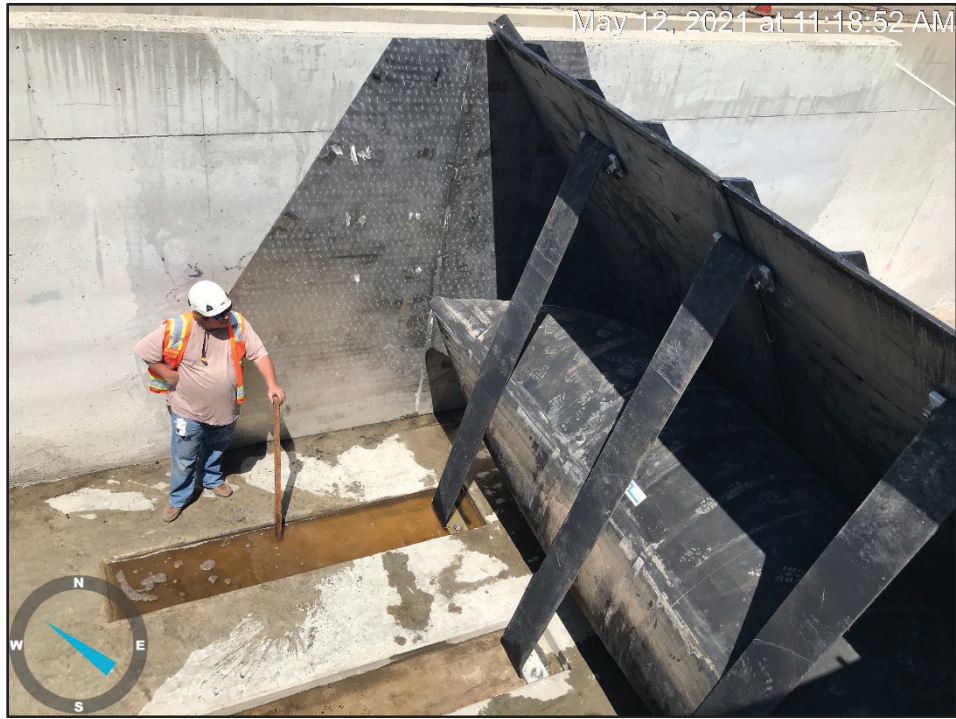


**Lower Day – New Catwalk for Cell 3**



**Lower Day – New Catwalk for Cell 3**





**Lower Day's Main Channel – New Stormwater Diversion Gate**



**Lower Day's Main Channel – New Stormwater Diversion Gate**

Recharge Investigation and Projects Committee, PAGE 1 OF 3

A1 A2 A3 A4 A5 A6 A7 A8 A9 A10 A11 A12 A13 A14

Project Name (Project ID) (Cost Sharing Task Order)	IEUA Project No.	Project Cost To Date	Approved Budget	COST SHARE		BUDGET ALLOCATION			IEUA PROJECT COSTS		CBWM PROJECT COSTS		
				IEUA	CBWM	Grant Funding	IEUA	CBWM	Share on Actual Cost To Date	Remaining Balance	Share on Actual Cost To Date	Invoices Paid To Date	Remaining Balance
<b>Pre-RMPU Ongoing Projects</b>													
GWR SCADA Upgrades (7690.61) (Task No. 4) <sup>1</sup>	EN14047.00	\$ 774,979	\$ 892,000	50%	50%	\$ 139,650	\$ 376,175	\$ 376,175	\$ 326,825	\$ 49,350	\$ 326,825	\$ 376,175	\$ 0
COMMUNICATION Upgrades (7690.62) (Task No. 3)	EN12019.00	\$ 1,227,096	\$ 1,227,096	50%	50%	\$ 192,850	\$ 517,123	\$ 517,123	\$ 517,123	\$ -	\$ 517,123	\$ 526,075	\$ (8,952)
Upper Santa Ana River HCP (7690.70) (Task No. 7)	RW15002.00	\$ 149,000	\$ 160,000	50%	50%	\$ -	\$ 80,000	\$ 80,000	\$ 74,500	\$ 5,500	\$ 74,500.00	\$ 59,937	\$ 20,063
<b>SUBTOTAL PRE-RMPU PROJECTS</b>		<b>\$ 2,151,075</b>	<b>\$ 2,279,096</b>	<b>---</b>	<b>---</b>	<b>\$ 332,500</b>	<b>\$ 973,298</b>	<b>\$ 973,298</b>	<b>\$ 918,448</b>	<b>\$ 54,850</b>	<b>\$ 918,448</b>	<b>\$ 962,187</b>	<b>\$ 11,111</b>
<b>RMPU Projects</b>													
San Sevaine Improvements PID7 (7690.40) (Task No. 8)	EN13001.00	\$ 6,236,435	\$ 6,460,000	50%	50%	\$ 3,625,000	\$ 1,417,500	\$ 1,417,500	\$ 1,368,444	\$ 49,056	\$ 1,368,444	\$ 368,410	\$ 1,049,090
Lower Day Basin Improvement PID12 (7690.8) (Task No. 2) *	RW15004.00	\$ 3,753,533	\$ 4,008,000	0%	100%	\$ 1,125,000	\$ -	\$ 2,883,000	\$ -	\$ -	\$ 3,753,533	\$ 488,252	\$ 2,394,748
East Declerz (7690.16) (1st Amendment - Task No. 1) *	RW15003.01	\$ 114,000	\$ 114,000	0%	100%	\$ -	\$ -	\$ 114,000	\$ -	\$ -	\$ 114,000	\$ 112,829	\$ 1,171
Declerz Basin PID 27 (7690.21) (Task No. 1) *	RW15003.00	\$ 105,000	\$ 105,000	0%	100%	\$ -	\$ -	\$ 105,000	\$ -	\$ -	\$ 105,000	\$ 105,000	\$ -
Turner Basins PID14 (7690.21) (Task No. 1) *	RW15003.00	\$ 42,000	\$ 42,000	0%	100%	\$ -	\$ -	\$ 42,000	\$ -	\$ -	\$ 42,000	\$ 42,000	\$ -
Ely Basin PID15a (7690.21) (Task No. 1) *	RW15003.00	\$ 236,000	\$ 236,000	0%	100%	\$ -	\$ -	\$ 236,000	\$ -	\$ -	\$ 236,000	\$ 236,000	\$ -
Victoria Basin Improvements PID11 (7690.25) (Task No. 10) *	RW15003.02	\$ 176,072	\$ 176,072	50%	50%	\$ -	\$ 88,036.000	\$ 88,036	\$ 88,036.000	\$ -	\$ 88,036	\$ 88,036	\$ -
Montclair Basin Improvements PID2 (7690.26) (Task No.11) *	RW15003.03	\$ 292,420	\$ 1,788,100	0%	100%	\$ -	\$ -	\$ 1,788,100	\$ -	\$ -	\$ 292,420	\$ 173,060	\$ 1,615,040
CSI Basin Improvements PID 18a (7690.27) (Task No. 12) *	RW15003.04	\$ 64,008	\$ 64,008	0%	100%	\$ -	\$ -	\$ 64,008	\$ -	\$ -	\$ 64,008	\$ 64,008	\$ -
RP3 Basin Improvements PID23a (7690.35) (Task No. 9) <sup>2</sup> *	RW15003.05	\$ 1,084,224	\$ 1,819,300	50%	50%	\$ 1,099,214	\$ 360,043	\$ 360,043	\$ 7,495	\$ 352,548	\$ 7,495	\$ 88,040	\$ 272,003
Wineville Basin Improvements PID23a (7690.36) (Task No. 9) <sup>2</sup> *	RW15003.06		\$ 4,838,077	0%	100%	\$ 2,329,003	\$ -	\$ 2,509,074	\$ -	\$ -	\$ 531,468	\$ 468,250	\$ 2,040,824
Jurupa Basin Improvements PID23a (7690.36) (Task No. 9) <sup>2</sup> *	RW15003.06	\$ 2,221,295	\$ 1,920,129	0%	100%	\$ 924,331	\$ -	\$ 995,798	\$ -	\$ -	\$ 210,928	\$ 185,838	\$ 809,960
Wineville/Jurupa Force Main PID 23a (7690.36) (Task No. 9) <sup>2</sup> *	RW15003.06		\$ 13,462,746	0%	100%	\$ 6,480,833	\$ -	\$ 6,981,913	\$ -	\$ -	\$ 1,478,898	\$ 1,302,982	\$ 5,678,931
<b>Post 2014 Storm Water Recharge Program *</b>		<b>\$ 8,088,552</b>	<b>\$ 28,573,432</b>			<b>\$ 11,958,381</b>	<b>\$ 448,079</b>	<b>\$ 16,166,972</b>	<b>\$ 95,531</b>	<b>\$ 352,548</b>	<b>\$ 6,923,787</b>	<b>\$ 3,354,296</b>	<b>\$ 12,812,676</b>
<b>SUBTOTAL RMPU PROJECTS</b>	<b>---</b>	<b>\$ 14,324,987</b>	<b>\$ 35,033,432</b>	<b>---</b>	<b>---</b>	<b>\$ 15,583,381</b>	<b>\$ 1,865,579</b>	<b>\$ 17,584,472</b>	<b>\$ 1,463,975</b>	<b>\$ 401,604</b>	<b>\$ 8,292,231</b>	<b>\$ 3,722,706</b>	<b>\$ 13,861,766</b>
<b>GRAND TOTALS</b>	<b>---</b>	<b>\$ 16,476,062</b>	<b>\$ 37,312,528</b>	<b>---</b>	<b>---</b>	<b>\$ 15,915,881</b>	<b>\$ 2,838,877</b>	<b>\$ 18,557,770</b>	<b>\$ 2,382,423</b>	<b>\$ 456,454</b>	<b>\$ 9,210,678</b>	<b>\$ 4,684,892</b>	<b>\$ 13,872,877</b>

NOTES:

<sup>1</sup> Watermaster Board approved an additional amount of \$45,700 (50% of the anticipated additional costs of \$91,400) on November 25, 2014 for the Programmable Logic Controller (PLC) replacements at the five Rubber Dam/Basin systems.

<sup>2</sup> On May/June 2021, Watermaster and IEUA Board approved Amendment No. 1 to TO#9 to reflect new project cost and additional grants.

Updated: 7/8/2021

Version: 2021-07

Recharge Investigation and Projects Committee, PAGE 2 OF 3

B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13	B14	B15	B16
	CBWM Fiscal Year 2020/21										CBWM Future Years				
Project Name	CURRENT YEAR CBWM BUDGET					CURRENT YEAR CBWM ACTUALS					CBWM FUTURE BUDGET NEEDS				
	Budget Carry-Over	Approved Budget	Approved Budget (Not Assessed or Collected)	Budget Amendments/ Transfers	Total Fiscal Year Budget	Actual to Date (Including Paid & Outstanding Invoices)	Remaining Balance Available	Completed Projects With Available Funds To Be Distributed	CBWM Remaining Projected Costs	Budget Amendment Required? (Yes/No)	Projected CarryOver Funds FY 2020/21	Fiscal Year 2021/22	Fiscal Year 2022/23	Fiscal Year 2023/24	Fiscal Year 2024/25
<b>Pre RMPU Ongoing Projects</b>															
GWR SCADA Upgrades (7690.61) (Task No. 4)	\$ 104,211	\$ -	\$ -	\$ -	\$ 104,211	\$ -	\$ 104,211	\$ 104,211	\$ -	No	\$ (104,211)	\$ -	\$ -	\$ -	\$ -
COMMUNICATION Upgrades (7690.62) (Task No. 3)	\$ (8,952)	\$ -	\$ -	\$ -	\$ (8,952)	\$ -	\$ (8,952)	\$ -	\$ (8,952)	No	\$ -	\$ -	\$ -	\$ -	\$ -
Upper Santa Ana River HCP (7690.7) (Task No. 7)	\$ 20,063	\$ -	\$ -	\$ -	\$ 20,063	\$ -	\$ 20,063	\$ -	\$ 20,063	No	\$ -	\$ -	\$ -	\$ -	\$ -
<b>SUBTOTAL PRE-RMPU PROJECTS</b>	<b>\$ 115,322</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 115,322</b>	<b>\$ -</b>	<b>\$ 115,322</b>	<b>\$ 104,211</b>	<b>\$ 11,111</b>	<b>---</b>	<b>\$ (104,211)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>RMPU Projects</b>															
San Sevaine Improvements (7690.4) (Task No. 8) <sup>1</sup>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,049,090	No	\$ -	\$ -	\$ 1,049,090	\$ -	\$ -
Lower Day Basin Improvement Project (7690.8) (Task No. 2) * <sup>2</sup>	\$ 238,647	\$ -	\$ -	\$ -	\$ 238,647	\$ -	\$ 238,647	\$ -	\$ 2,394,748	No	\$ -	\$ -	\$ 1,275,331	\$ 880,770	\$ -
East Declerz Basin (7690.16) (1st Amendment - Task No. 1) *	\$ 1,171	\$ -	\$ -	\$ -	\$ 1,171	\$ -	\$ 1,171	\$ -	\$ 1,171	No	\$ -	\$ -	\$ -	\$ -	\$ -
Declerz Basin PID 27 (7690.21) (Task No. 1) *	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No	\$ -	\$ -	\$ -	\$ -	\$ -
Turner Basins PID14 (7690.21) (Task No. 1) *	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No	\$ -	\$ -	\$ -	\$ -	\$ -
Ely Basin PID15a (7690.21) (Task No. 1) *	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No	\$ -	\$ -	\$ -	\$ -	\$ -
Victoria Basin Improvements PID11 (7690.25) (Task No. 10) *	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No	\$ -	\$ -	\$ -	\$ -	\$ -
Montclair Basin Improvements PID2 (7690.26) (Task No.11) *	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,615,040	No	\$ -	\$ -	\$ 1,007,733	\$ 554,311	\$ 52,996
CSI Basin Improvements PID 18a (7690.27) (Task No. 12) *	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No	\$ -	\$ -	\$ -	\$ -	\$ -
RP3 Basin Improvements PID23a (7690.35) (Task No. 9) *	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 272,003	No	\$ -	\$ -	\$ 272,003	\$ -	\$ -
Wineville Basin Improvements PID23a (7690.36) (Task No. 9) *	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,040,824	No	\$ -	\$ -	\$ 1,134,835	\$ 905,989	\$ -
Jurupa Basin Improvements PID23a (7690.36) (Task No. 9) *	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 809,960	No	\$ -	\$ -	\$ 484,901	\$ 325,059	\$ -
Wineville/Jurupa Force Main PID 23a (7690.36) (Task No. 9) *	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,678,931	No	\$ -	\$ -	\$ 2,409,753	\$ 2,924,810	\$ 344,368
2013 RMPU Amendment Yield Enhancement Projects (7690.15) (Task No. 1) * <sup>3</sup>	\$ 56,795	\$ -	\$ -	\$ -	\$ 56,795	\$ -	\$ 56,795	\$ -	\$ -	No	\$ -	\$ (56,795)	\$ -	\$ -	\$ -
<b>Post 2014 Storm Water Recharge Program *</b>	<b>\$ 296,613</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 296,613</b>	<b>\$ -</b>	<b>\$ 296,613</b>	<b>\$ -</b>	<b>\$ 12,812,677</b>	<b>No</b>	<b>\$ -</b>	<b>\$ (56,795)</b>	<b>\$ 6,584,556</b>	<b>\$ 5,590,939</b>	<b>\$ 397,364</b>
<b>SUBTOTAL RMPU PROJECTS</b>	<b>\$ 296,613</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 296,613</b>	<b>\$ -</b>	<b>\$ 296,613</b>	<b>\$ -</b>	<b>\$ 13,861,767</b>	<b>---</b>	<b>\$ -</b>	<b>\$ (56,795)</b>	<b>\$ 7,633,646</b>	<b>\$ 5,590,939</b>	<b>\$ 397,364</b>
<b>GRAND TOTALS</b>	<b>\$ 411,935</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 411,935</b>	<b>\$ -</b>	<b>\$ 411,935</b>	<b>\$ 104,211</b>	<b>\$ 13,872,878</b>	<b>---</b>	<b>\$ (104,211)</b>	<b>\$ (56,795)</b>	<b>\$ 7,633,646</b>	<b>\$ 5,590,939</b>	<b>\$ 397,364</b>

NOTES:

<sup>1</sup> Funding collected in prior years for San Sevaine Improvements of \$2,299,090.18 has been reallocated to Page 3 per RIPCom recommendation during the July 2018 meeting. Budget Transfer Form T-18-07-01 for \$2,377,205.84 approved during September 2018 meetings.  
<sup>2</sup> Lower Day funding of \$414,540.85 from Budget Transfer T-18-07-01 of \$78,115.66 and \$336,425.19 from Page 3. Budget Transfer Form T-18-07-01 approved during September 2018 meetings.  
<sup>3</sup> 2013 RMPU Amendment Yield Enhancement Projects funding of \$690,258.97 from Budget Transfer T-18-07-01 from Page 3. Budget Transfer Form T-18-07-01 approved during September 2018 meetings.

Columns B12-B16 \$ 13,460,943  
 Column B8 \$ 411,935  
 Column B10 \$ 13,872,877

Updated: 7/8/2021  
 Version: 2021-07

Recharge Investigation and Projects Committee, (COMPLETED PROJECTS) PAGE 3 of 3

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15
Project Name	CBWM Fiscal Year 2020/21									CBWM Future Years				
	CURRENT YEAR CBWM BUDGET				CURRENT YEAR CBWM ACTUALS					CBWM FUTURE BUDGET NEEDS				
	Budget Carry-Over	Approved Budget	Budget Amendments/ Transfers	Total Fiscal Year Budget	Actual to Date (Including Paid & Outstanding Invoices)	Remaining Balance Available	Completed Projects With Available Funds To Be Distributed <sup>1</sup>	CBWM Remaining Projected Costs	Budget Amendment Required? (Yes/No)	Projected CarryOver Funds FY 2020/21	Fiscal Year 2021/22	Fiscal Year 2022/23	Fiscal Year 2023/24	Fiscal Year 2024/25
<b>Pre RMPU Ongoing Projects</b>														
GWR SCADA Upgrades (7690.61) (Task No. 4) <sup>2</sup>	\$ 104,211	\$ -	\$ -	\$ 104,211	\$ -	\$ -	\$ 104,211	\$ -	No	\$ -	\$ -	\$ -	\$ -	\$ -
<b>SUBTOTAL PRE-RMPU PROJECTS</b>	<b>\$ 104,211</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 104,211</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 104,211</b>	<b>\$ -</b>	<b>---</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>RMPU Projects</b>														
2013 RMPU Amendment Yield Enhancement Projects (7690.15) (Task No. 1) <sup>2</sup>	\$ 56,795	\$ -	\$ -	\$ 56,795	\$ -	\$ -	\$ 56,795	\$ -	No	\$ -	\$ -	\$ -	\$ -	\$ -
East Declaz Basin (7690.16) (1st Amendment - Task No. 1) <sup>2</sup>	\$ 1,171	\$ -	\$ -	\$ 1,171	\$ -	\$ -	\$ 1,171	\$ -	No	\$ -	\$ -	\$ -	\$ -	\$ -
Funds Authorized for Distribution (7690.9) <sup>2</sup>	\$ 1,072,406	\$ -	\$ -	\$ 1,072,406	\$ -	\$ -	\$ 1,072,406	\$ -	No	\$ -	\$ -	\$ -	\$ -	\$ -
Funds on Hold for Projects (7690.9) <sup>1</sup>	\$ 200,000	\$ -	\$ -	\$ 200,000	\$ -	\$ -	\$ 200,000	\$ -	No	\$ -	\$ -	\$ -	\$ -	\$ -
<b>SUBTOTAL RMPU PROJECTS</b>	<b>\$ 1,330,372</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,330,372</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,330,372</b>	<b>\$ -</b>	<b>---</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>GRAND TOTALS</b>	<b>\$ 1,434,582</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,434,582</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,434,582</b>	<b>\$ -</b>	<b>---</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

Updated: 7/8/2021  
Version: 2021-07

**NOTES:**  
<sup>1</sup> By unanimous action of the Board on June 24, 2021 the amount of \$200,000.00 will be kept on hold until the warranty period for the San Sevaine Project has expired, and no warranty issues are noted.  
<sup>2</sup> By unanimous action of the Board on June 24, 2021 the amount of \$1,234,582.42 (\$104,210.50 + \$56,794.57 + \$1,171.33 + \$1,072,406.02 = \$1,234,582.42) is to be refunded to the Appropriative Pool with the upcoming November 2021 Assessment Package.

# CHINO BASIN WATERMASTER

## IV. INFORMATION 2. PLUMES STATUS REPORTS

#### **IV. INFORMATION**

##### **2. PLUMES STATUS REPORT**

Plumes Semi-Annual Status Reports

- South Archibald Plume
- Chino Airport Plume

## Semi-Annual Plume Status Report

### South Archibald Plume October 2021

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#### CONTAMINANTS

The primary contaminant is trichloroethene (TCE). The California maximum contaminant level (MCL) for TCE is 5 micrograms per liter ( $\mu\text{g/l}$ ). The maximum TCE concentration detected in a groundwater sample collected from wells within the plume during the last five years (July 2016 to June 2021) is 90  $\mu\text{g/l}$ .

#### LOCATION

The South Archibald TCE plume is located in the southern Chino Basin within the City of Ontario. Exhibit 1 shows the spatial extent of the plume with detectable TCE concentrations equal to or greater than 0.5  $\mu\text{g/l}$ , as delineated by the Chino Basin Watermaster (Watermaster) for the *2020 State of the Basin Report*.<sup>1</sup> This extent is based on the five-year maximum TCE concentration measured over the period of July 2015 to June 2020. The TCE plume is about 23,400 feet long, extending southward from State Route 60 to approximately Kimball Avenue, and is about 14,300 feet wide extending from Grove Avenue to Turner Avenue.

#### REGULATORY ORDERS

- Draft Cleanup and Abatement Orders (CAOs) — Six Draft CAOs were issued in 2005 to the following parties: Aerojet-General Corporation, The Boeing Company, Northrop Grumman Corporation, Lockheed Martin Corporation, General Electric Company, and United States Department of Defense.
- Draft CAO R8-2012-00XX for the City of Ontario, City of Upland, and Inland Empire Utilities Agency (IEUA), Former Ontario-Upland Sewage Treatment Plant (Regional Recycling Plant No. 1), City of Ontario, San Bernardino County — This CAO was issued jointly to the City of Ontario, City of Upland, and IEUA.
- Stipulated Settlement and CAO No. R8-2016-0016 for the City of Ontario, the City of Upland, the IEUA, Aerojet Rocketdyne, Inc.<sup>2</sup>, The Boeing Company, General Electric Company, Lockheed Martin Corporation, and the United States of America, Former Ontario-Upland Sewage Treatment Plant (Regional Recycling Plant No. 1) — This was the final CAO issued to all parties previously issued draft CAOs in 2005 and 2012, excluding Northrop Grumman.

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<sup>1</sup> West Yost (2020). *Optimum Basin Management Program – 2020 State of the Basin Report*. Prepared for the Chino Basin Watermaster. June 2021.

<sup>2</sup> Formerly known as Aerojet-General Corporation.

## REGULATORY AND MONITORING HISTORY

In the mid-1980s, the Metropolitan Water District of Southern California took water quality samples that indicated that TCE was present in private wells in the southern Chino Basin as part of its work associated with the Chino Basin Storage Program. The Santa Ana Regional Water Quality Control Board (Regional Board) confirmed this with subsequent rounds of sampling.

The Regional Board issued Draft CAOs in 2005 for six different parties who were tenants on the Ontario Airport property. On a voluntary basis, four of the parties — Aerojet-General Corporation, The Boeing Company, General Electric Company, and Lockheed Martin Corporation, collectively the ABGL parties, worked together, along with the U.S. Department of Defense, to investigate the source of contamination. Part of the investigations included collecting water-quality samples from private wells and taps at residences and the construction and sampling of four triple-nested monitoring wells (ABGL wells) in the northern portion of the plume. Alternative water systems were provided to private residences in the area where groundwater was contaminated with TCE above the MCL.

In 2008, Regional Board staff conducted research pertaining to the likely source of TCE contamination. Based on their work, Regional Board staff identified discharges of wastewater to the RP-1 treatment plant and associated disposal areas that potentially contained TCE, as the potential sources. The Regional Board identified several industries, including some previously identified tenants of the Ontario Airport property, that likely used TCE solvents before and during the early 1970s, and discharged wastes to the Cities of Ontario and Upland sewage systems tributary to the RP-1 treatment plant and disposal areas. In 2012, an additional Draft CAO was issued by the Regional Board jointly to the City of Ontario, City of Upland, and IEUA as the previous and current operators of the RP-1 treatment plant and disposal area (collectively the RP-1 parties).

Under the Regional Board's oversight from 2007 through 2014, the ABGL parties and the RP-1 parties individually and jointly conducted sampling at private residential wells and taps approximately every two years in the region where groundwater was potentially contaminated with TCE. By 2014, all private wells and taps in the area of the plume had been sampled at least once as part of the monitoring program. The report documenting this data was published in November 2014.<sup>3</sup> Both the ABGL and RP-1 parties provided potable water to residences in the area where well water contained TCE concentrations equal to or above 80 percent of the MCL for TCE (e.g. equal to or greater than 4.0 µg/l) by either water tank systems where potable water is delivered via truck or by bottled water service.

In July 2015, the RP-1 parties completed a draft feasibility study report for the South Archibald plume (Feasibility Study).<sup>4</sup> The Feasibility Study established cleanup objectives for domestic water supply and plume remediation and evaluated alternatives to accomplish these objectives. In August 2015, a Draft Remedial Action Plan (RAP) was concurrently prepared by the RP-1 parties<sup>5</sup> to present the preferred plume remediation and domestic water supply alternatives. A public review period followed, and two community meetings were held in September 2015 to educate the public about the plume, the Feasibility Study, and the RAP, and to solicit

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<sup>3</sup> Erler & Kalinowski, Inc. (2014). *Supplemental Data Report Trichloroethene Plume Central Chino Basin*. Prepared for Aerojet Rocketdyne, Boeing, General Electric, and Lockheed Martin. November 19, 2014.

<sup>4</sup> Dudek. (2015). *Draft Feasibility Study Report South Archibald Plume, Ontario, California*. Prepared for City of Ontario, City of Upland, and Inland Empire Utilities Agency. July 2015.

<sup>5</sup> Dudek. (2015). *Draft Remedial Action Plan South Archibald Plume, Ontario, California*. Prepared for City of Ontario, City of Upland, and Inland Empire Utilities Agency. August 2015.



comments on these reports. In November 2015, the revised Draft Feasibility Study<sup>6</sup> and RAP<sup>7</sup> and responses to comments were completed to address input from the public, ABGL, and other parties.

In September 2016, the Regional Board issued the Final Stipulated Settlement and CAO R8-2016-0016 (Stipulated CAO) collectively to the RP-1 parties and the ABGL parties (excluding Northrop Grumman). The Stipulated CAO was adopted by all parties in November 2016, thus approving the preferred plume remediation and domestic water supply alternatives identified in the RAP. The parties also reached a settlement agreement that aligned with the Stipulated CAO and authorized funding to initiate implementation of the plume remediation alternative.

## REMEDIAL ACTION

*Plume Remediation.* The plume remediation alternative identified in the Feasibility Study, RAP, and Stipulated CAO involves the use of previously existing and newly constructed Chino Basin Desalter Authority (CDA) wells and treatment facilities. The RP-1 parties and the CDA reached a Joint Facility Development Agreement for implementation of a project designed to remediate the South Archibald plume. The proposed project includes: the construction and operation of three new CDA wells (II-10, II-11, and II-12) and a dedicated pipeline to convey groundwater produced from these wells to the Chino-II Desalter treatment facility, and a modification to existing decarbonator at Chino-II Desalter to install air stripping system to remove TCE and other VOCs from the pumped water. Existing CDA well I-11 would also be pumped into the air-stripping treatment facility as part of the project. The construction of wells II-10 and II-11 was completed in September 2015. The equipping of these wells was completed in 2018, and pumping initiated at wells II-11 and II-10 in July and September 2018, respectively. The construction of an onsite monitoring well near the proposed location of well II-12 was completed in 2019 and the construction of well II-12 was completed in November 2020. The CDA completed the equipping of well II-12 in July 2021.

*Domestic Water Supply.* The domestic water supply alternative identified in the Feasibility Study and RAP is a hybrid between the installation of tank systems for some residences where potable water is delivered from the City of Ontario and the installation of a pipeline to connect some residences to the City of Ontario potable water system. Pursuant to the Stipulated CAO, the Cities of Ontario and Upland have assumed the responsibility for implementing the domestic water supply alternative for private residences currently receiving bottled water due to TCE groundwater contamination. In February 2017, the Cities of Ontario and Upland submitted a *Domestic Water Supply Work Plan*<sup>8</sup> to the Regional Board, outlining the approach to provide alternative water supplies to affected residences currently receiving bottled water. The Regional Board approved<sup>9</sup> the work plan on March 3, 2017. At that time, 32 residences were using tank systems that were previously installed, and 21 residences were receiving bottled water. The alternative water supply options include: 1) installation of a tank system; 2) connection to an existing City of Ontario water main; 3) connection to a future City of Ontario water main; or 4) remain on bottled water. In

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<sup>6</sup> Dudek. (2015). *Draft Feasibility Study Report South Archibald Plume, Ontario, California*. Prepared for City of Ontario, City of Upland, and Inland Empire Utilities Agency. November 2015.

<sup>7</sup> Dudek. (2015). *Draft Remedial Action Plan South Archibald Plume, Ontario, California*. Prepared for City of Ontario, City of Upland, and Inland Empire Utilities Agency. November 2015.

<sup>8</sup> Dudek. (2017). *Domestic Water Supply Work Plan South Archibald Plume, Ontario, California*. Prepared for the City of Ontario, City of Upland. February 2017.

<sup>9</sup> Regional Board. (2017). Letter from Kurt Berchtold to the City of Ontario. Domestic Water Supply Workplan – South Archibald Trichloroethylene Plume, Ontario, California. March 3, 2017.

accordance with the schedule in the Stipulated CAO and the work plan, tank systems would be installed within six months of resident consent, connections to Ontario's existing municipal water system would be constructed within three months of resident consent, and construction and connection to a new water main would occur within 18 months of resident consent. Additionally, bottled water would be supplied to any newly affected residents immediately upon determining that TCE is present at concentrations greater than 4 µg/l.

Pursuant to the February 2017 work plan, the Cities of Ontario and Upland conducted five rounds of sampling in 2017, 2018, 2019, and 2020 and the results were reported in annual groundwater monitoring reports submitted to the Regional Board. The annual reports are available on the GeoTracker online portal.<sup>10</sup>

In addition to the monitoring performed by the RP-1 parties, Watermaster routinely collects groundwater samples at private wells in the plume area. Watermaster uses the data obtained from its own monitoring efforts, with monitoring data collected by the CDA at the desalter wells, to delineate the South Archibald TCE plume as part of the biennial Chino Basin State of the Basin Report.

Since 2019, the City of Ontario and IEUA have been working with the CDA to design a monitoring and reporting plan pursuant to Section 2.2 of the *Proposition 1 Grant Agreement No. D1712507* (Prop 1 Grant Agreement) for funding the expansion of the CDA facilities to cleanup groundwater in the South Archibald plume, termed the Chino Basin Improvement and Groundwater Clean-up Project. In addition to monitoring the remediation of the South Archibald plume, this project will help monitor the cleanup of nitrate and total dissolved solids (TDS) within the area of the plume. The California State Water Resources Control Board Division of Drinking Water (DDW) and the Regional Board are both involved in the review process of this monitoring and reporting plan. Pursuant to requirements in the Prop 1 Grant Agreement, the Regional Board and the DDW requested the construction of at least two additional monitoring wells: one to be located just up gradient of well II-12 (II-MW-4), and one to be located within the area of the highest concentration of TCE within the plume (II-MW-5).<sup>11,12</sup> The CDA and IEUA collaborated with the Regional Board to finalize the monitoring and reporting plan for the Prop 1 Grant Agreement.<sup>13,14</sup> The final monitoring and reporting plan (Monitoring Plan) was submitted to the Regional Board in January 2021.<sup>15</sup> Quarterly reporting will be submitted to the Regional Board pursuant to this plan for the first five years and annually thereafter.

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<sup>10</sup> [https://geotracker.waterboards.ca.gov/profile\\_report?global\\_id=T10000004658](https://geotracker.waterboards.ca.gov/profile_report?global_id=T10000004658)

<sup>11</sup> CDA Board of Directors July 2020 Meeting Agenda and Minutes.  
<https://www.chinodesalter.org/AgendaCenter/ViewFile/Agenda/07022020-309>

<sup>12</sup> Regional Board (2020). Comments on Responses to Comments on Monitoring and Reporting Plan and Request for Additional Monitoring for Inland Empire Utilities Agency and Chino Basin Desalter Authority Clean-Up Project (Grant Agreement No. D1712507). April 24, 2020.

<sup>13</sup> Regional Board (2020). Comments on Monitoring and Reporting Plan and Request for Additional Monitoring for Inland Empire Utilities Agency and Chino Basin Desalter Authority Clean-Up Project (Grant Agreement No. D1712507). January 31, 2020.

<sup>14</sup> Region Board (2020). Comments on Draft Monitoring Plan and Draft Project Assessment and Evaluation Plan for Inland Empire Utilities Agency and Chino Basin Desalter Authority Clean-Up Project (Grant Agreement No. D1712507). April 24, 2020.

<sup>15</sup> Hazen and Sawyer. (2021). Monitoring Plan – Chino Basin Improvement and Groundwater Clean-up Project. Prepared for CDA and IEUA. January 2021.

The construction of four multi-depth well casings (II-MW-5) was completed in February 2021, and a single casing well (II-MW-4) was completed in March 2021. The locations of II-MW-4 and II-MW-5 are shown in Exhibit 1. The Monitoring Plan includes monitoring for 1,2,3-trichloropropane, 1,4-dioxane, perchlorate, and hexavalent chromium at the four multi-depth well casings at II-MW-5 for two sampling events: 1) one during the completion of well construction, and 2) one year after the completion of well construction. If these initial sampling results show concentrations of these constituent(s) above 80 percent of their respective MCLs or California notification levels (NLs), these constituents will be added to the Monitoring Plan for wells II-MW-4 and II-MW-5.

## RECENT ACTIVITY

In July 2021, the RP-1 parties collaborated with the Regional Board and Watermaster to distribute a Community Fact Sheet to residences overlying the plume on the health and environmental impacts of the groundwater contaminants per- and polyfluoroalkyl substances (PFAS), their presence at the nearby CDA wells, and sampling resources.

The RP-1 parties submitted the 2021 Private Water Supply Work Plan to the Regional Board in August 2021 for the monitoring of private wells in the South Archibald plume.<sup>16</sup> The annual monitoring event is scheduled for Fall 2021, and will be the sixth monitoring event pursuant to the Stipulated Settlement and CAO.

Construction of II-MW-5 and II-MW-4 were completed in early 2021 and groundwater quality was sampled at these wells following construction pursuant to the Monitoring Plan. The table below summarizes the results of the first monitoring event for the required contaminants at II-MW-5 after well construction in February 2021 and includes the highest concentration, MCL or NL, and indication if the concentration is 80 percent greater than the MCL or NL for each contaminant.

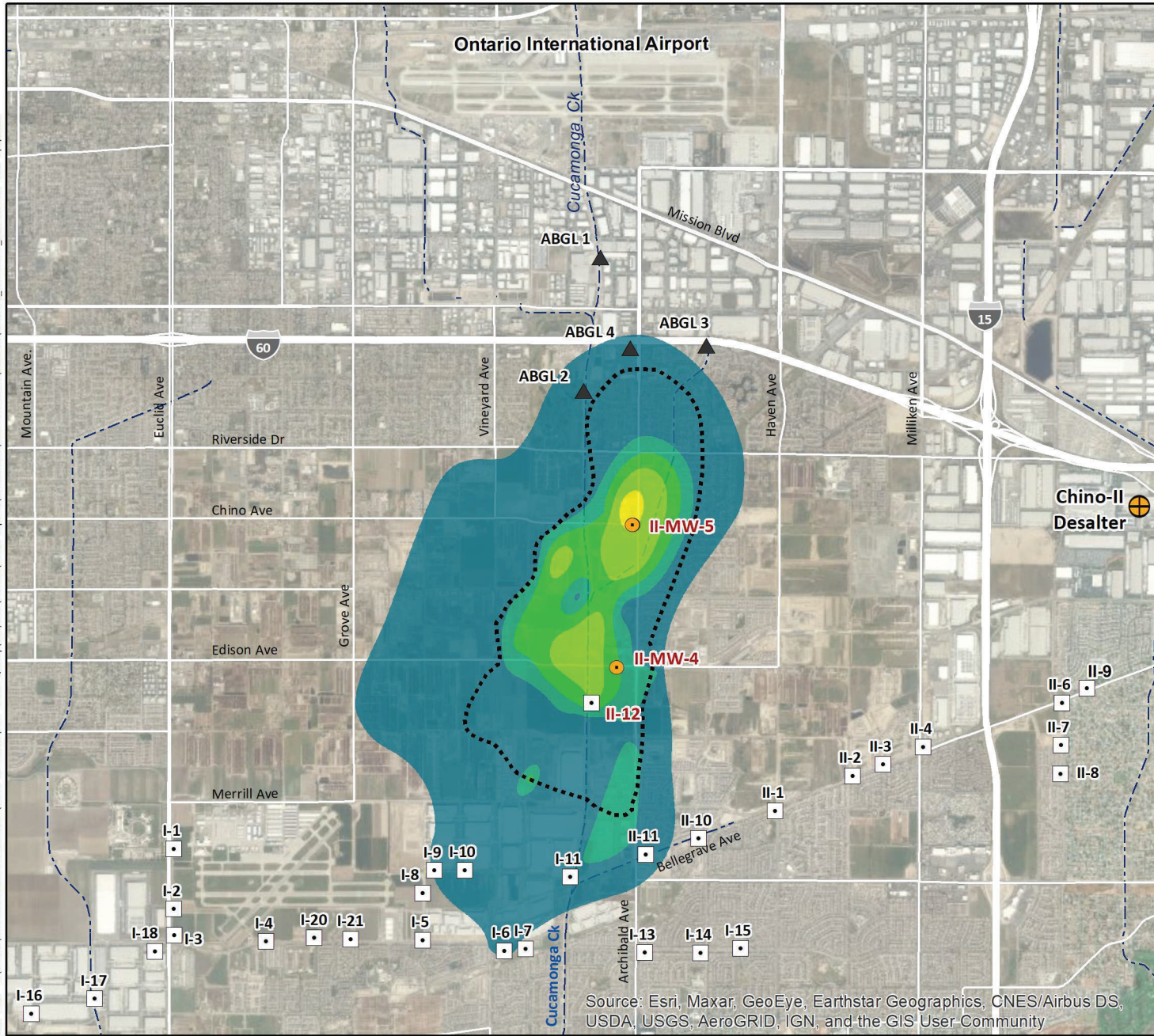
Contaminant	Max Concentration, µg/l	MCL, µg/l	NL, µg/l	80 Percent Greater than MCL or NL <sup>(a)</sup> (Yes/No)
TCE	74	5	NA	Yes
1,2,3-TCP	0.021	0.005	NA	Yes
1,4-Dioxane	1.6	NA	1	No
Hexavalent Chromium	8.6	10	NA	No
Perchlorate	4.1	6	NA	No

Notes:  
NA = Not applicable.  
(a) Pursuant to the Monitoring Plan, if 1,2,3-TCP, 1,4-dioxane, perchlorate, or hexavalent chromium was detected at concentration above 80 percent of the MCL or NL at II-MW-5 for two sampling events (during the completion of the well construction and one year after well construction), these contaminants will be added to the Monitoring Plan for wells II-MW-4 and II-MW-5.

The CDA completed the construction of the decarbonator and the equipping of well II-12 in May and July 2021, respectively. The final phase of the project completed with the construction of the dedicated raw water

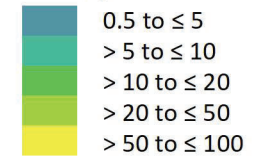
<sup>16</sup> EEC Environmental. 2021. *Work Plan – Private Water Supply Well Sampling*. Prepared for City of Ontario. August 6, 2021.

WEST YOST - K:\Clients\941 Chino Basin Watermaster\00-00-00 Master\PE6 - Water Quality\GIS\MXD\Plumes\Status Reports\Semianual\South Archibald\2021-04\Exhibit 1\_SArchibald\_210902.mxd - sour - 9/2/2021



Maximum TCE Concentration (µg/l)

July 2015 to June 2020

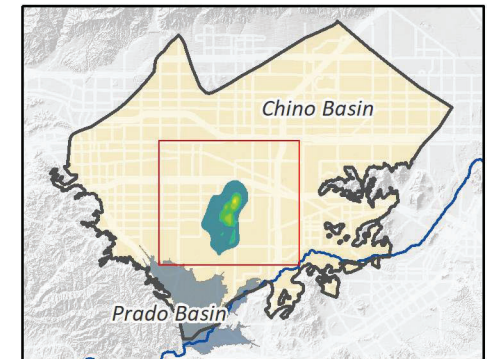


(Delineated by Watermaster in the 2018 State of the Basin Report)

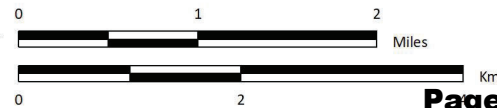
Approximate Extent of TCE greater than or equal to 5 µg/l as delineated in the 2020 Annual Groundwater Monitoring Report (Dudek, 2020)

- Chino Basin Desalter Authority
- Existing Production Wells
  - Monitoring Well
  - ⊕ Chino-II Desalter Treatment Facility
  - ▲ ABGL Monitoring Well
  - ~ Streams & Flood Control Channels

\*Red labels indicate wells that are specifically discussed in the report.



Prepared by:



Prepared for:

Chino Basin Watermaster  
Semi-Annual Plume Report  
South Archibald



South Archibald  
TCE Plume

Exhibit 1

## Semi-Annual Plume Status Report

### Chino Airport Plume October 2021

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#### CONTAMINANTS

The County of San Bernardino Department of Airports (County) identifies four primary contaminants associated with the Chino Airport groundwater plume: trichloroethene (TCE), 1,2,3-trichloropropane (1,2,3-TCP), cis-1,2-dichloroethene (cis-1,2-DCE), and 1,2-dichloroethane (1,2-DCA) with TCE and 1,2,3-TCP being the most frequently detected contaminants at the highest concentrations. For each of the four primary contaminants, the table below lists the California maximum contaminant level (MCL) and the maximum concentration detected in groundwater samples collected from wells within the plume area over the last five years.

<b>Table 1. Maximum Concentration of Contaminants of Concern between July 2016 to June 2021</b>				
Contaminant	MCL, µgl	Max Concentration, µgl	Sample Date	Well
TCE	5	830	April 2017	CAMW4
1,2,3-TCP	0.005	27	May 2017	CAMW56
cis-1,2-DCE	6	25	October 2016	CAMW30
1,2- DCA	0.5	1.4	June 2020	CAMW56

Other contaminants of concern include 1,1-dichloroethene (1,1-DCE), carbon tetrachloride, and 1,4 dioxane.

#### LOCATION

The Chino Airport is located in the southwestern portion of the Chino Basin within the City of Chino. Exhibit 1 shows the spatial extent of the TCE and 1,2,3-TCP plumes in groundwater, as delineated by both the Chino Basin Watermaster (Watermaster) for the *2020 State of the Basin Report* and the County for their *Semiannual Groundwater Monitoring Report – Winter and Spring 2020*.<sup>1,2</sup> The delineations prepared by Watermaster show the spatial extent of the plume with detectable concentrations of TCE and 1,2,3-

<sup>1</sup> West Yost. (2021). *Optimum Basin Management Program – 2020 State of the Basin Report*. Prepared for the Chino Basin Watermaster. June 2021.

<sup>2</sup> Tetra Tech. (2020). *Semiannual Groundwater Monitoring Report-Winter and Spring 2020*. Prepared for the County of San Bernardino Department of Airports. December 8, 2020.

TCP based on the five-year maximum concentrations measured over the period of July 2015 to June 2020. The delineations by the County show the area where TCE concentrations are greater than or equal to 5 µg/l, and where 1,2,3-TCP concentrations are greater than or equal to 0.005 µg/l, based on concentrations measured during the spring 2020 sampling event.

Since 2015, the County has characterized West and East Plumes, originating from two different source areas at the Chino Airport. TCE and 1,2,3-TCP concentrations are higher within the West Plume than the East Plume. The extent of the West Plume is also much larger, extending in a south-southwest direction. The East Plume extends in the same general direction but terminates within the boundary of the Chino Airport property. The West and East TCE Plumes are comingled and are delineated together as one plume, whereas the West and East 1,2,3-TCP Plumes are delineated as two distinct plumes.

## TCE and 1,2,3-TCP Plumes

The extent of the West Plume with detectable TCE concentrations greater than 0.5 µg/l is about 2.5 miles long. The plume extends south-southwest approximately two miles from the source area to Pine Avenue and then turns southeast toward the Prado Flood Control Basin. It extends another 0.5 miles in this direction terminating south of Pine Avenue. The change in direction of the plume in this area may be associated with the location of the Central Avenue Fault, the “no-flow” boundary conditions of the Chino Hills or historical pumping from former production wells. The source of the smaller East TCE Plume is approximately 1,500 feet northeast of the source of the West TCE Plume. The East TCE Plume extends south from the source area about 0.6 miles and then comingles with the West TCE plume between the two different source areas.

The extent of the West Plume with detectable 1,2,3-TCP concentrations greater than 0.005 µg/l follows the same general path as the West TCE Plume and extends about 2.6 miles southwest towards Pine Avenue before turning southeast for approximately 0.7 miles, following the same pathway as the West TCE plume toward the Prado Flood Control Basin. The smaller East 1,2,3-TCP Plume is approximately 0.6 miles lengthwise trending south, and is disconnected from the West 1,2,3-TCP Plume.

Over time, the vertical and lateral extents of the plumes have changed in response to groundwater production at nearby wells and other hydrological factors. Production at the nearby Chino Desalter Basin Authority (CDA) wells has likely played a role in affecting the extents of the plumes. Since monitoring began, groundwater production at the CDA wells has increased the vertical thickness of the West Plume by 100 feet or more and has drawn the plumes laterally in a southeast direction toward CDA Well I-20.

## REGULATORY ORDERS

- Cleanup and Abatement Order (CAO) No. 90-134 for the County of San Bernardino Department of Airports, Chino Airport—Issued to the County to address the groundwater contamination originating from the Chino Airport.
- CAO No. R8-2008-0064 for the San Bernardino County Department of Airports, Chino Airport—Required the County to define the lateral and vertical extent of the plume offsite from the Chino Airport and prepare a remedial action plan (RAP).
- CAO No. R8-2017-0011 for the San Bernardino County Department of Airports, Chino Airport—Required the County to respond to Santa Ana Regional Water Quality Control Board (Regional Board) comments on the draft Feasibility Study and submit a final Feasibility Study.

## REGULATORY AND MONITORING HISTORY

In 1990, the Regional Board issued CAO No. 90-134 to address groundwater contamination originating from the Chino Airport. From 1991 to 1992, ten inactive underground storage tanks and 310 containers of hazardous waste were removed, and 81 soil borings were drilled and sampled on the Chino Airport property. From 2003 to 2005, nine onsite monitoring wells were installed and used to collect groundwater quality samples. In 2007, the County conducted its first offsite groundwater characterization effort, which included 22 cone penetrometer tests (CPT) and direct push borings from which water quality samples were collected. In 2008, the Regional Board issued CAO No. R8-2008-0064, requiring the County to define the lateral and vertical extent of the plume offsite and to prepare a RAP. From 2009 to 2012, 33 offsite monitoring wells were installed at 15 locations to characterize the extent of the contamination downgradient from the Chino Airport property. From 2013 to 2014, the County conducted an extensive investigation of 20 areas of concern identified for additional characterization of the soil and groundwater contamination associated with the Chino Airport. The investigative work included: piezocone-penetrometer tests, vertical-aquifer-profiling (VAP) borings with depth-discrete groundwater sampling, soil-gas probe sampling, high-resolution soil sampling and analysis, real-time data analysis, and three-dimensional contaminant distribution modeling. Following the completion of this investigative work, from September 2014 through February 2015, an additional 33 groundwater monitoring wells were installed in 17 locations on and adjacent to the Chino Airport property.

The County completed a draft feasibility study in August 2016, identifying remedial action objectives for groundwater contaminants originating from the Chino Airport and evaluating remediation alternatives for mitigation.<sup>3</sup> On January 11, 2017, the Regional Board issued CAO R8-2017-0011 to the County, which superseded CAO R8-2008-0064. The order required that the County: (1) submit a final feasibility study within 60 days of receiving the Regional Board's comments on the draft feasibility study, (2) submit a final RAP within 60 days of the Regional Board approval of the final feasibility study, (3) implement the RAP in accordance with a Regional Board-approved schedule, and (4) prepare and submit technical reports and work plans as the Regional Board deems necessary. The County submitted the final feasibility study on May 15, 2017.<sup>4</sup> The preferred remedial action identified was a groundwater pump-and-treat system to provide hydraulic containment and treatment of both the West and the East Plumes. The Regional Board approved the final feasibility study on June 7, 2017 and requested that a RAP be prepared.

On December 18, 2017, the County submitted a draft interim remedial action plan (IRAP).<sup>5</sup> The IRAP was considered "interim" because the County is moving forward on an interim basis to initiate the remedial action as soon as possible, with the opportunity to evaluate and modify the remedy in the future. The draft IRAP identified a combination of institutional controls, monitored natural attenuation, and groundwater extraction and ex-situ treatment as the best remedial alternative. From April 2018 to January 2019 a CEQA analysis was completed for the proposed remedial strategy.<sup>6</sup> During this time, the Regional Board and County went through a series of comments and response to comments on the draft

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<sup>3</sup> Tetra Tech. (2016). *Draft Feasibility Study Chino Airport San Bernardino County, California*. Prepared for the County of San Bernardino Department of Airports. August 2016.

<sup>4</sup> Tetra Tech. (2017). *Final Feasibility Study Chino Airport San Bernardino County, California*. Prepared for the County of San Bernardino Department of Airports. May 2017.

<sup>5</sup> Tetra Tech. (2017). *Draft Interim Remedial Action Plan*. Chino Airport, San Bernardino County, California. Prepared for the County San Bernardino Department of Airports. December 2017.

<sup>6</sup> Filing of the Notice of Determination for the Mitigated Negative Declaration was completed on January 29, 2019.

IRAP. Modifications were made to the draft IRAP and the Final IRAP was submitted to the Regional Board on May 18, 2020.<sup>7</sup> The Final IRAP was approved by the Regional Board on November 4, 2020.

While the County was reviewing and finalizing the IRAP, they were simultaneously working on a Human Health and Screening Ecological Risk Assessment (HHERA) to provide technical support to the IRAP by identifying remedial actions to protect human health and the environment.<sup>8</sup> The HHERA ensured that the proposed remedial actions would meet the remedy selection criteria of the USEPA National Contingency Plan. A draft of the HHERA was submitted to the Regional Board for review in August 2018. The Regional Board and the Office of Environmental Health Hazard Assessment reviewed the report and identified several data gaps. The Regional Board requested that the County produce a work plan to address these data gaps, including additional shallow soil and soil gas sampling. On November 12, 2020, the County submitted a draft *Human Health and Ecological Risk Assessment Data Gap Workplan* to the Regional Board to evaluate the potential presence of volatile organic compounds (VOCs) and other contaminants in the shallow soil vapor.<sup>9</sup> On January 21, 2021, the Regional Board provided comments on the workplan.

In April and May 2020, the County installed a cluster of three downgradient wells (CAMW 68/69/70) to monitor the increasing concentrations of TCE in wells located along the southeastern plume boundary.

## REMEDIAL ACTION

As described in the IRAP, remedial action for the West and East TCE and 1,2,3-TCP Plumes will consist of a groundwater pump-and-treat system, institutional controls, and monitored natural attenuation. The groundwater pump-and-treat system includes ten extraction well sites (EW-1 through EW-10) constructed by the County both onsite and offsite. Due to the depth of the plume, each extraction well site will consist of up to three individual extraction wells to focus extraction at different depths. Exhibit 1 shows the location of the ten proposed extraction well sites.

To assist in the design of the groundwater pump-and-treat system, the County installed two of the extraction well sites (EW-2 and EW-5) in 2018, along with twelve piezometers, and eleven monitoring wells, and conducted aquifer pumping tests at these locations. The findings were submitted to the Regional Board on June 19, 2019 and used by the County to refine the design of the system.<sup>10</sup>

Altogether, the extraction wells are predicted to produce 1,700 gallons per minute (gpm) of groundwater, with individual wells ranging from 20-150 gpm each. The extraction well network will also include existing CDA Wells I-16, I-17, and I-18 to pump up to an additional 630 gpm of groundwater, and potentially CDA Wells I-20 and I-21 if treatment is required.

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<sup>7</sup> Tetra Tech. (2020). *Final Interim Remedial Action Plan Chino Airport San Bernardino County, California*. Prepared for the County of San Bernardino Department of Airports. May 18, 2020.

<sup>8</sup> Tetra Tech. (2018). *Human Health and Screening Ecological Risk Assessment Chino Airport San Bernardino County, California*. Prepared for the County of San Bernardino Department of Airports. August 8, 2018.

<sup>9</sup> Tetra Tech. (2020). *Draft Human Health and Ecological Risk Assessment Data Gap Work Plan, Chino Airport San Bernardino County, California*. Prepared for the County of San Bernardino Department of Airports. November 12, 2020.

<sup>10</sup> Tetra Tech. (2019). *Well Installation, Well Destruction, and Aquifer Pumping Test Report, Chino Airport, San Bernardino County, California*. Prepared for the County of San Bernardino Department of Airports. June 19, 2019.



Extracted groundwater will be treated using granular activated carbon (GAC) adsorption at the County's VOC treatment system at CDA Desalter Plant No. 1 (South VOC Treatment System). The South VOC Treatment System is designed to treat a total flow of 2,325 gpm from CDA Wells I-16, I-17, I-18, and up to 30 County wells. Additional GAC adsorption capacity can be added if CDA Wells I-20 and I-21 are added. Other treatment processes may also be added as needed to treat increasing concentrations of constituents or if regulatory limits decrease. An additional treatment system, the North VOC Treatment System will treat water from CDA Wells I-I through I-4. Both the North and South GAC Treatment Systems are expected to be ready by Summer 2022.

Once treated, water will be pumped to the existing CDA treatment facility for treatment for nitrates and TDS, both of which are regional contaminants and not associated with Airport operations or the plume. The County has already submitted a drinking water permit application to the State Water Resources Control Board Department of Drinking Water (DDW) for this treated water to be delivered as drinking water. The DDW provided two minor comments on the application and stated that as soon the comments are addressed, they will approve the initial permit application. The County is currently addressing these comments.

In January 2021 the *Draft Preliminary Well Design Report* for the pump-and-treat system was completed and submitted to the Regional Board for review.<sup>11</sup> The report included the preliminary design for drilling, constructing, developing, and testing the remaining eight groundwater extraction well sites. The final design of the extraction wells is expected to be completed in early 2022 with construction of the wells scheduled to commence in 2022 and be completed by 2024. Wells will be brought online as they are constructed. Design for the conveyance piping for the extraction wells is 90 percent complete and is expected to be completed by the end of 2021, with procurement completed in 2022, and construction commencing by the end of 2022.

## MONITORING AND REPORTING

Currently, the County conducts quarterly, annual, or biennial water-quality monitoring, and quarterly water-level monitoring at 89 site-related monitoring wells. The sampling frequency is determined by well classification (i.e., background wells, horizontal or vertical extent wells, seasonal/increasing trend wells, and guard wells). The purpose of the groundwater monitoring program is to collect data to track detections of VOCs in groundwater, monitor temporal trends of contaminants, and evaluate changes in each groundwater plume. All data collected by the County are posted on the Regional Board's GeoTracker website. Conclusions from the monitoring program can also be found in the semi-annual reports posted on GeoTracker. The most recent monitoring report, the *Semiannual Groundwater Monitoring Report-Summer and Fall 2020*, was submitted to the Regional Board in April 2021.<sup>12</sup>

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<sup>11</sup> Tetra Tech. (2021). *Draft Preliminary Well Design Report Chino Airport San Bernardino County, California*. Prepared for the County of San Bernardino Department of Airports. January 2021.

<sup>12</sup> Tetra Tech. (2021). *Semiannual Groundwater Monitoring Report-Summer and Fall 2020*. Prepared for the County of San Bernardino Department of Airports. April 9, 2021.

Watermaster also collects groundwater-quality samples from private wells in the plume area and at its HCMP-4 monitoring well, located in the southern end of the plume. Additionally, the CDA collects groundwater-quality samples from its production wells; these data are shared with Watermaster and the County. Watermaster uses data from the County, CDA, and its own sampling to perform an independent characterization of the areal extent and concentration of the TCE and 1,2,3-TCP plumes.

## RECENT ACTIVITY

The most recent semi-annual groundwater monitoring report prepared by the County was submitted to the Regional Board in April 2021. A total 89 wells were measured for groundwater elevation with 23 wells sampled for water quality in the summer and 30 wells sampled for water quality in the fall. The following describes the key conclusions presented in the summer/fall monitoring report:

- Groundwater potentiometric surface gradients sloped east-southeast beneath the airport and south-southwest offsite, which is consistent with previous monitoring events. The east-southeast gradients in the shallow groundwater beneath the airport property may be attributed to groundwater extraction from CDA wells and indicates the potential for continued lateral migration of the plumes in shallow groundwater.
- Notable head pressure loss was observed in both shallow/intermediate and deep-screened wells. Reduced pressure at depth and the vertical gradients appear to be influenced by groundwater extraction from nearby pumping wells and indicate the potential for vertical migration of contaminants.
- Up to nine VOCs were detected in the 53 well samples analyzed. TCE was detected above the MCL in seven of the wells (13 percent) with a maximum concentration of 240 µg/l at CAMW4. 1,2,3-TCP was detected above the MCL in seven of the wells sampled with a maximum concentration of 0.52 µg/l at CAMW52. All remaining detected VOCs were reported with concentrations below applicable screening level criteria. Contaminants of concern were detected in newly installed well CAMW70 with concentrations below the MCL in summer 2020 and above the MCL in fall 2020.

Between January and April 2021, the County worked to address the comments provided by the Regional Board on the *Draft Work Plan for Supplemental Data Collection for Vapor Intrusion and Shallow Soil* as part of the HHERA. The County submitted the final work plan to the Regional Board in April 2021, and it was approved in July 2021.<sup>13</sup> The supplemental data collection was completed in June 2021 and the *Draft Supplemental Data Collection for Vapor Intrusion and Shallow Soil Report* was submitted to the Water Board on September 30, 2021.

In May 2021, the County submitted a work plan to the Regional Board for the installation of piezometers in the Prado Basin.<sup>14</sup> The Regional Board approved the workplan on September 16, 2021 and requested that the County submit a report on the installation of the piezometers by December 31, 2021. The purpose of the piezometers is to monitor potential impacts to shallow groundwater in the riparian area from

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<sup>13</sup> Tetra Tech. (2021). *Final Work Plan for Supplemental Data Collection for Vapor Intrusion and Shallow Soil, Chino Airport*, San Bernardino County, California. Prepared for the County of San Bernardino Department of Airports. April 9, 2021.

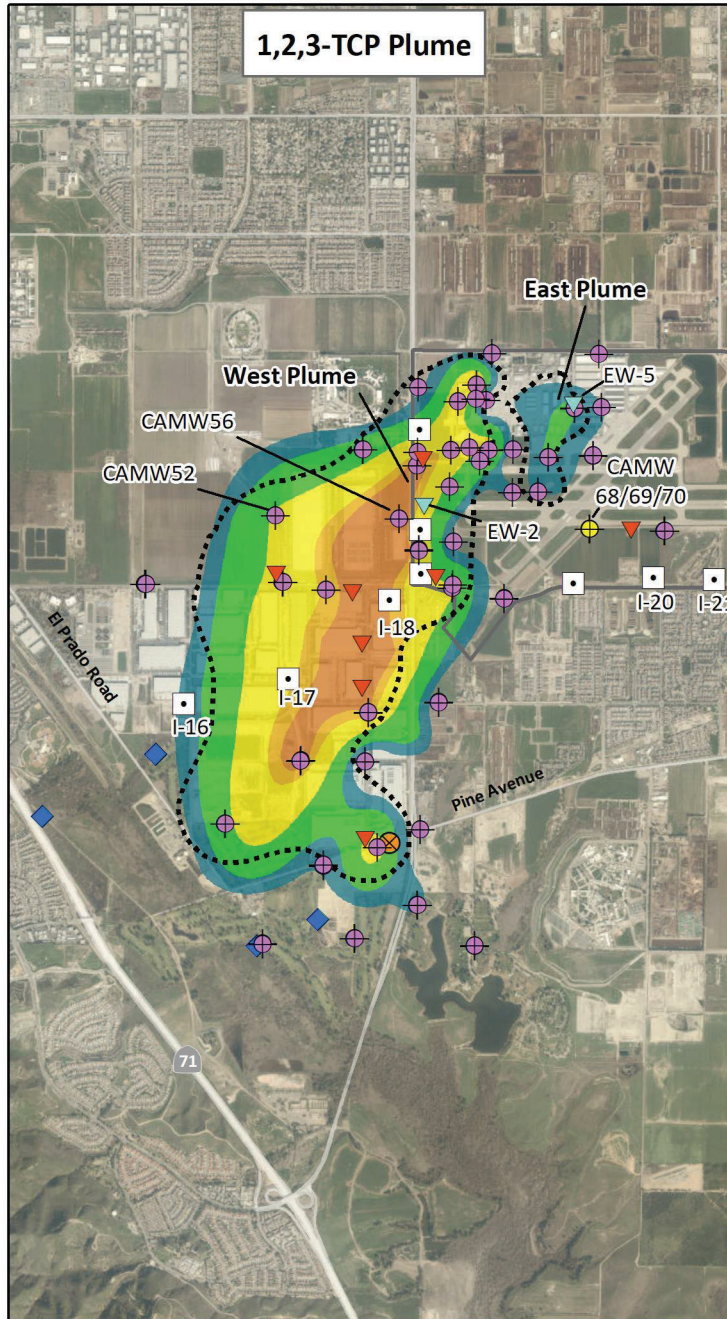
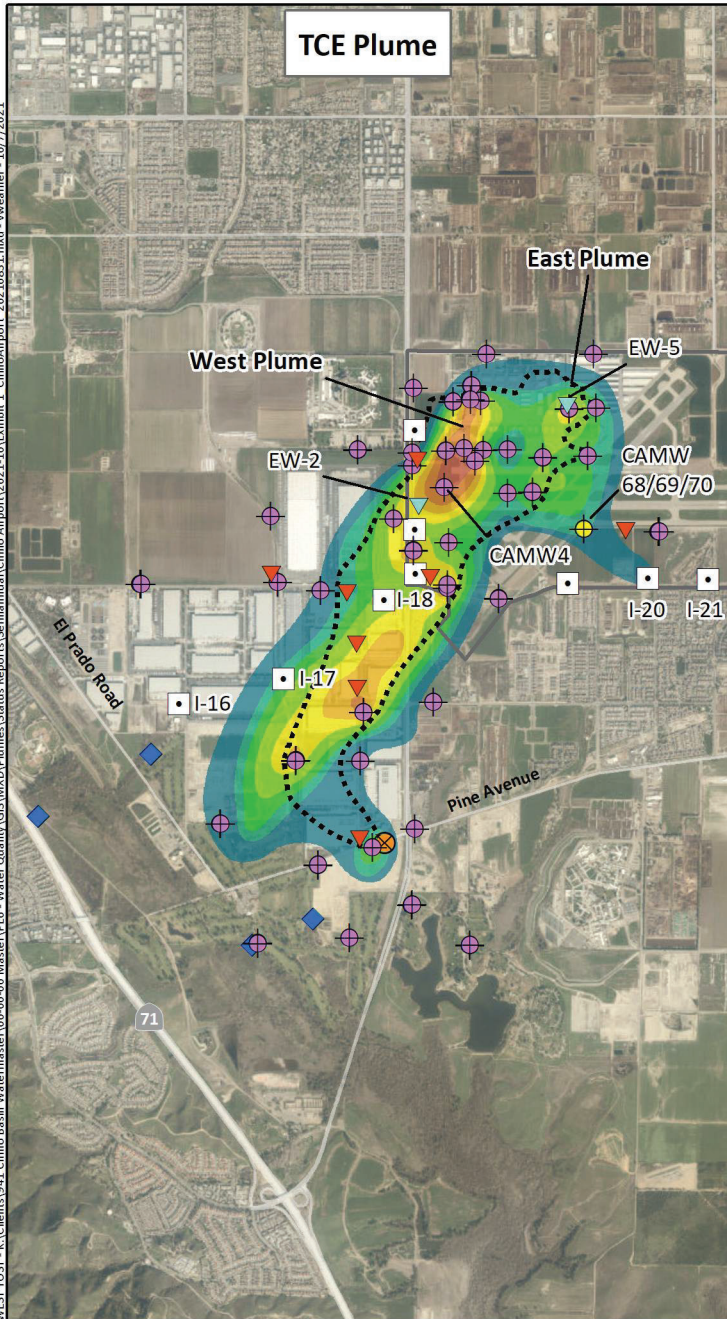
<sup>14</sup> Tetra Tech. (2021). *Work Plan for Installation of Piezometers for Riparian Area Monitoring, Chino Airport*, San Bernardino County, California. Prepared for the County of San Bernardino Department of Airports. May 17, 2021.

pumping at the extraction wells. The piezometers will also confirm the initial modeling results that the pumping related to the approved groundwater remedy does not significantly lower groundwater levels in this area. The County has proposed four piezometer locations within riparian areas approximately 1.5 miles southwest of the airport. It is anticipated that commencement of the field activities will begin during the fourth quarter of 2021 pending execution of access agreements with the Army Corps and the City of Chino Hills. Since the County's pumping will be incorporated into the CDA's operations, the long-term monitoring of groundwater levels in the riparian areas and any potential impacts would be addressed as part of the Prado Basin Habitat Sustainability Program.

In June 2021, the County published an update to the Chino Airport Community Involvement Plan to present the County's plan to inform and involve the public in the groundwater cleanup program.

In August 2021, the Regional Board provided comments on the Preliminary Well Design Report for the pump-and-treat system, submitted by the County in January 2021. The County plans to submit a RAP Work Plan in 2022 for the pump-and-treat system after designs are finalized.

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Maximum Concentration ( $\mu\text{g/L}$ )  
July 2015 - June 2020

TCE	1,2,3-TCP
0.5 to $\leq 5$	0.005 to $\leq 0.05$
$> 5$ to $\leq 10$	$> .05$ to $\leq .5$
$> 10$ to $\leq 20$	$> .5$ to $\leq 5$
$> 20$ to $\leq 50$	$> 5$ to $\leq 10$
$> 50$ to $\leq 100$	$> 10$ to $\leq 100$
$> 100$ to $\leq 200$	MCL = 0.005 $\mu\text{g/l}$
$> 200$ to $\leq 500$	
$> 500$	

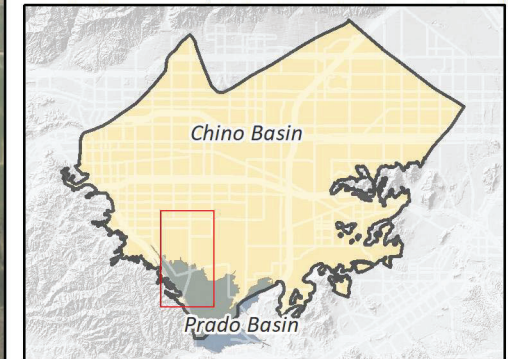
MCL = 5  $\mu\text{g/l}$  (Delineated by Watermaster in the 2020 State of the Basin Report)

Approximate Extent of TCE ( $>5 \mu\text{g/l}$ ) or 1,2,3-TCP ( $>0.005 \mu\text{g/l}$ ) Plume (Delineated by the County of San Bernardino using data from Spring 2020)

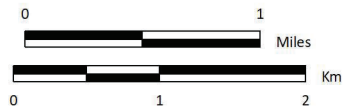
County of San Bernardino Monitoring Well\* (Some locations have multiple well casings at various depths)

- Well Constructed Between 2003 and 2019
- New Well Cluster Constructed in 2020
- HCMP Monitoring Well 4
- Extraction Well Cluster Constructed in 2018
- Location of Future Extraction Well Cluster
- Location of Future Piezometer
- CDA Production Well
- Chino Airport Boundary
- Streams & Flood Control Channels

\* Wells are labeled by well name if mentioned in the report



Prepared by:



Prepared for:

Chino Basin Watermaster  
Semi-Annual Plume Report



#### **IV. INFORMATION**

##### **2. PLUMES STATUS REPORT**

###### Plumes Annual Status Reports

- California Institution for Men Plume
- Former Kaiser Steel Mill Plume and CCG Ontario Monitoring and Remediation
- General Electric Test Cell Plume
- General Electric Flatiron Plume
- Milliken Landfill Plume
- Stringfellow Plume

## Annual Plume Status Report

### California Institution for Men Plume October 2021

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#### CONTAMINANTS

The primary contaminant is tetrachloroethene (PCE). The California maximum contaminant level (MCL) for PCE is 5 micrograms per liter ( $\mu\text{g/l}$ ). The highest concentration of PCE measured historically at a well within the plume is 1,990  $\mu\text{g/l}$  (MW-7 in 1998). Other contaminants of concern include the following volatile organic compounds (VOCs): trichloroethene (TCE), 1,2-dichloroethene, bromodichloromethane, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, and toluene.

#### LOCATION

The California Institution for Men (CIM) is a state correctional facility located in the City of Chino. The property occupies roughly 1,500 acres and is bounded by Eucalyptus Avenue to the north, Euclid Avenue to the east, Kimball Avenue to the south, and Central Avenue to the west. The plume is located predominantly beneath the western portion of the CIM property. Exhibit 1 shows the spatial extent of the PCE plume, as delineated by the Chino Basin Watermaster (Watermaster) in the *2020 State of the Basin Report*.<sup>1</sup> The extent of the plume with detectable PCE concentrations greater than 0.5  $\mu\text{g/l}$  is about 4,000 feet long and 3,000 feet wide.

#### SITE HISTORY

The State of California Department of Corrections and Rehabilitation (State) has operated CIM since 1939. The primary uses of the CIM property include agricultural operations, inmate housing, and correctional facilities. The Heman G. Stark Youth Correctional Facility occupies the eastern portion of the CIM property. In addition to producing water for its own facilities, CIM provides potable water produced from onsite groundwater wells to both the nearby Youth Correctional Facility and the California Institution for Women. CIM operates 11 water supply wells (six wells currently in use in 2021), a distribution system, and a water treatment plant. The land surrounding the CIM property was historically used for agriculture and dairy activities, but has rapidly developed in recent years for residential and commercial uses.

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<sup>1</sup> West Yost. (2021). *Chino Basin Optimum Basin Management Program-2020 State of the Basin Report*. Prepared for the Chino Basin Watermaster. June 2021.

## REGULATORY ORDERS

No regulatory orders for site remediation and monitoring were issued by the Regional Water Quality Control Board (Regional Board) for PCE contamination. The State conducted voluntary cleanup and monitoring under direction from the Regional Board, and on December 17, 2009, the Regional Board determined “No Further Action” was required for remediation and monitoring.

In addition, there are three leaking underground storage tank (LUST) cleanup sites on the CIM property that are considered unrelated to the PCE contamination and are regulated under the State Water Resources Control Board (State Board) Underground Storage Tank (UST) program. The UST program directs Regional Boards to implement a monitoring plan and oversee site closures under the State Board’s Low Threat Closure Policy (LTCP). No regulatory orders exist for groundwater remediation or monitoring at the CIM LUST sites. In 2006, two of the sites were closed by the State Board, having met the requirements under the LTCP. The CIM State Garage LUST site remains open with ongoing monitoring and remediation for petroleum hydrocarbons.

## REGULATORY AND MONITORING HISTORY

In 1990, PCE was detected at a concentration of 26 µg/l at CIM Drinking Water Supply Well 1. This prompted the California Department of Health Services (CDHS), now the California State Board Division of Drinking Water (DDW), to direct CIM to stop using the well as a source of drinking water. The detection of PCE concentrations in two other CIM drinking water supply wells (1A and 11A) triggered the Regional Board to request an investigation of the source and extent of the onsite PCE contamination. Following an initial investigation, the Regional Board sent the State a written request to perform a subsurface investigation to define the vertical and lateral extent of PCE in soil at four locations where PCE was detected in soil vapor samples during the investigation.

The Phase I Initial Site Assessment was performed at the CIM site in 1992, and included a review of CIM’s history, operations, and chemical use.<sup>2</sup> The investigation identified five potential sites where VOCs were used and could have impacted soil and groundwater. These areas included: the old laundry building, the furniture factory, the vocational shops, the state garage, and the powerhouse.

The Phase II Site Assessment was performed from 1992 to 1994 to assess the presence and concentrations of VOCs in soil vapor, soil, and groundwater beneath the site at the five potential sites identified in Phase I.<sup>3</sup> Seven groundwater monitoring wells were installed and sampled as part of this investigation. The results from the soil and the groundwater investigations showed low concentrations of contaminants throughout the site, with concentrations of PCE in groundwater samples from monitoring wells ranging from 0.6 to 19 µg/l. The old laundry facility and nearby areas had the highest concentration of PCE in soil samples and was thus identified as the most likely principal source of VOCs. A Phase III assessment was performed in 1996 to further investigate the distributions of VOC contamination beneath the CIM and included depth discrete groundwater sampling at four exploratory boreholes. The investigation showed that there were three distinct aquifer zones below the CIM and that PCE and other VOCs were migrating laterally from the shallow zone to the intermediate and deep zones where the drinking water supply wells

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<sup>2</sup> Geomatrix Consultants, Inc. (1992). *Report of Phase I Investigation, VOCs in Soil and Groundwater, Department of Corrections California Institution for Men, Chino*. April 20, 1992.

<sup>3</sup> Geomatrix Consultants, Inc. (1994). *Phase II Assessment of VOCs in Soil and Groundwater, California Institution for Men Chino, California. Prepared for the Department of General Services Development and Management*. October 4, 1994.

are screened.<sup>4</sup> Between August 1994 and May 2001, a network of 43 monitoring wells at varying depths in the shallow, intermediate, and deep aquifer zones were constructed.

In 1997, the Regional Board approved an interim pump-and-treat system for the hydraulic containment of VOC-affected groundwater using Well 1. In 2001, construction began on two new CIM water supply wells (Wells 14 and 15) and associated pipelines to prevent VOC-impacted groundwater at the southern end of the plume from migrating away from the site. Additionally, two agricultural wells were destroyed to protect the deeper aquifer from the downward movement of VOC contaminated groundwater due to pumping.

The 43 monitoring wells were sampled intermittently through 2007 to analyze the extent and concentrations of VOCs in the groundwater beneath the CIM property. It was determined that the VOC impacts to groundwater were limited to the source area and immediately downgradient. Furthermore, the plume had not and was not expected to migrate off the property. A final monitoring event was conducted by the State during January 2007, which included groundwater quality sampling at 39 water supply and monitoring wells at the CIM property.<sup>5</sup> Based on this monitoring event and data from previous monitoring efforts, it was concluded that despite the concentrations of PCE exceeding the MCL at three monitoring wells, PCE concentrations in groundwater in the shallow zone were overall stable or decreasing. PCE concentrations in the deeper aquifer at the CIM drinking water supply wells were all below the MCL and had been since April 2003 with a few exceptions in early/mid 2006. Moreover, there had been no detections of TCE or other VOCs above the MCL in groundwater samples since December 2002.

In February 2007, the State submitted a request to the Regional Board for a No Further Action (NFA) finding for groundwater remediation and monitoring at CIM. On December 17, 2009, the Regional Board issued a determination of NFA for the CIM site.<sup>6</sup>

In March 2019, the Regional Board formally rejected the State's request for closure of the State Garage LUST site located northwest of CIM Water Supply Well 1A within the center of the PCE plume, and requested that further assessment be done to determine if fuel-related contaminants beneath the site could impact downgradient Well 1A.<sup>7</sup> An investigation was completed in May 2020 and a report was submitted to the Regional Board in July 2020 on the monitoring and findings.<sup>8</sup> The investigation concluded that fuel-related contaminants have decreased several orders of magnitude in the perched aquifer below the State Garage LUST site and downgradient extent of the dissolved total petroleum hydrocarbon plume from the site is not migrating and has not impacted the CIM water supply Well 1A. However, some gasoline residue remains in the soil downgradient of the source area.

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<sup>4</sup> Geomatrix Consultants, Inc. (1997). *Phase III Groundwater Assessment and Remediation Planning Report, California Institution for Men, Chino*. July 21, 1997.

<sup>5</sup> Geomatrix Consultants, Inc. (2007). *January 2007 Groundwater Monitoring PCE Remediation Project California Institution for Men Chino, California*. Prepared for the Department of General Services Real Estate Services Division Project Management Branch. May 17, 2007.

<sup>6</sup> California Regional Water Quality Control Board, Santa Ana Region (2009). *Determination of No Further Action (NFA), Tetrachloroethylene Remediation Project, California Institution for Men, Chino*. December 17, 2009.

<sup>7</sup> California Regional Water Quality Control Board, Santa Ana Region. (2019). *Response to Soil Vapor Investigation and Path to Closure, California Institution for Men, Garage*. March 8, 2019.

<sup>8</sup> Avocet Environmental, Inc. (2020). *2020 Annual Groundwater Monitoring and Additional Investigations Report California Institution for Men – State Garage*. July 29, 2020.



## REMEDIAL ACTION

In July 1997, the State implemented remediation activities, termed *The PCE Remediation Project*, with an interim remedial measure to pump and treat groundwater from Well 1.<sup>9</sup> The groundwater was treated for VOCs using air stripping. Operation of the air stripper continued until 2004, when the permeability of the air stripper packing was compromised by the accumulation of mineral precipitates. During its operation, the pump-and-treat process at Well 1 removed 57.9 pounds of PCE and TCE collectively. After 2004, both PCE and TCE concentrations were below the MCL in groundwater extracted from Well 1, and pumping continued without treatment with approval from the CDHS and Regional Board. A supplemental remedial measure began in 2001, which included the construction of two new CIM water supply wells (Well 14 and Well 15), located in an area to intercept the toe of the VOC plume, promoting hydraulic containment of the VOCs within the groundwater beneath CIM. Wells 14 and 15 operated without treatment from January 2003 to December 2008; during this time, these two wells removed an additional 13.8 pounds of PCE and TCE collectively.

The need for remedial action was considered to address the elevated levels of PCE in the soil below the old laundry site, but it was determined that it would not provide a cost-effective benefit to the protection of groundwater quality despite some potential contribution of PCE from the soil to groundwater beneath the site.

Remediation requirements at CIM ended in December 2009 with the Regional Board's determination of NFA. Since then, PCE has been periodically detected at concentrations above the MCL at CIM supply Wells 1 and 15. Additionally, other contaminants have been detected above their respective MCLs, including 1,2,3-TCP and nitrate. CIM operates a water treatment plant to remove contaminants for drinking water supply.

## MONITORING AND REPORTING

The State conducted voluntary monitoring at CIM from 1992 to 2007 at 43 monitoring wells and 14 water supply wells. Voluntary monitoring ended in December 2009 with the Regional Board's approval of the 2009 determination of NFA. As part of the NFA, the State was required to decommission the monitoring wells located onsite in accordance with California Well Standards (DWR Bulletin No. 74-81). It was agreed amongst the consultants, counsel, the State, and the Watermaster to preserve some of the CIM monitoring wells for the Watermaster's groundwater-level monitoring program conducted pursuant to the *Optimum Basin Management Program (OBMP)*.<sup>10</sup> Watermaster and the State agreed to preserve 16 wells. The location of these wells is shown in Exhibit 1.

CIM continues to monitor groundwater quality at its supply wells as part of its water supply operations under DDW regulations. The State samples the active potable supply wells for PCE and TCE every one to two months and reports the data to the DDW. Watermaster routinely collects all groundwater-quality data from the DDW's Water Quality Analyses Database for the CIM potable supply wells as part of the

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<sup>9</sup> Geomatrix Consultants, Inc. (2005). *PCE Remediation Project Report. California Institution for Men*. Prepared for the California Department of General Services. July 2005.

<sup>10</sup> Wildermuth Environmental, Inc. (1999). *Optimum Basin Management Program. Phase I Report*. Prepared for the Chino Basin Watermaster. August 19, 1999.

OBMP groundwater-quality monitoring program, and uses these data to characterize the areal extent and concentration of the PCE plume every two years.<sup>11</sup>

## RECENT ACTIVITY

There has been no further regulatory activity associated with PCE contamination monitoring and remediation at CIM since the NFA determination.

The most recent characterization of the plume was completed by Watermaster in the *2020 State of the Basin Report* (Exhibit 1). Based on available data, the PCE plume has shown no significant change since the NFA determination. Table 1 below summarizes the five-year maximum detected PCE concentration (July 2016 to June 2021) for the CIM supply wells, based on monthly DDW sampling.

Well	Maximum PCE, µg/l	Date
1	10	11/2/2016
1A	1.67	5/2/2018
3	ND (<0.5)	all samples in time period
11A	1	7/6/2016
14	ND (<0.5)	all samples in time period
15	2.39	5/1/2019
16	0.402	3/6/2019

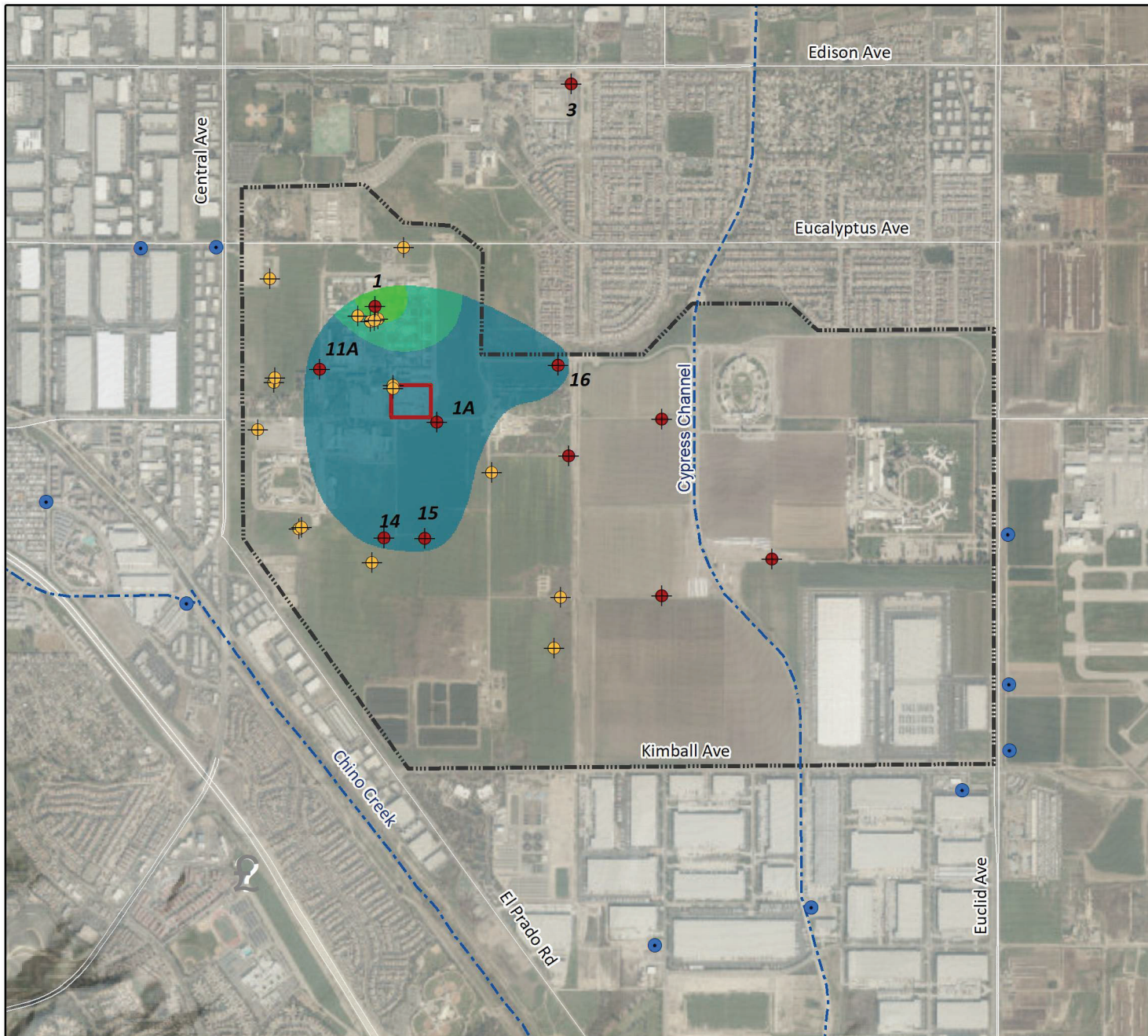
There are recent activities associated with the CIM State Garage LUST cleanup site that impact the area of the PCE plume. The State completed the State Car Garage annual groundwater monitoring for 2021 in May, during which they collected groundwater samples from 25 monitoring wells.<sup>12</sup> The analytical results from sampling were consistent with the 2020 findings in that fuel-related contaminants have decreased several orders of magnitude below the State Garage LUST site and the extent of the dissolved total petroleum hydrocarbon plume from the LUST site is not migrating, and there are no fuel-related VOCs found in the downgradient CIM water supply Well 1A pumping from the deeper aquifer. Some gasoline residue remains in the soil downgradient of the source area. The State recommended the site for closure based on the following:

- Soil and soil vapor samples are below Scenario 4 screening levels.
- Groundwater data indicate the declining TPH plumes are limited to the two shallow perched zones and have not impacted deeper groundwater where CIM water supply Well 1A produces.
- The site is purposed as a maintenance garage at a correctional facility.

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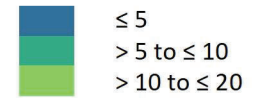
<sup>11</sup> [https://www.waterboards.ca.gov/drinking\\_water/certlic/drinkingwater/EDTlibrary.shtml](https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/EDTlibrary.shtml)

<sup>12</sup> Avocet Environmental, Inc. (2021). *2021 Annual Groundwater Monitoring Report and Request for Closure*. Prepared for California Department of Corrections and Rehabilitation, FPCM – Environmental and Regulatory Compliance Section. August 17, 2021



Maximum Concentration ( $\mu\text{g/L}$ )  
July 2016 - June 2021

TCE

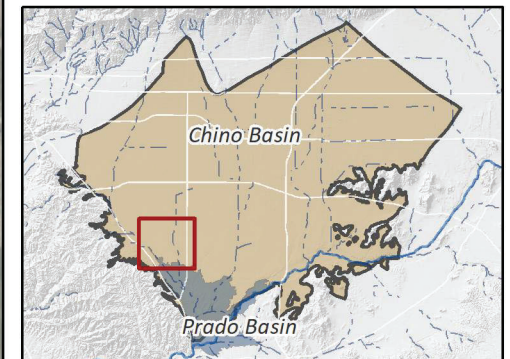


MCL = 5  $\mu\text{g/l}$

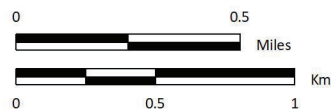
(Delineated by Watermaster in the 2020 State of the Basin Report)

- CIM Water Supply Well
- Other Agency Municipal Water Supply Well
- CIM Monitoring Well Preserved for the Watermaster Groundwater-Level Monitoring Program\*
- CIM Property Boundary
- Boundary of CIM State Garage LUST Site
- Streams & Flood Control Channels

\*Some locations have multiple wells at various depths



Prepared by:



Prepared for:

Chino Basin Watermaster  
Annual Plume Report



California Institution for Men (CIM)  
PCE Plume

## Annual Plume Status Report

### Former Kaiser Steel Mill Plume and CCG Ontario Monitoring and Remediation October 2021

#### CONTAMINANTS

From 1983 to 1993, the primary contaminants of concern (COC) for the Former Kaiser Steel Mill site were total dissolved solids (TDS) and total organic carbon (TOC). In 2008, additional investigations commenced to identify other COCs. Currently, the COCs associated with the site include hexavalent chromium, carbon tetrachloride, and chloroform. The maximum concentrations of these COCs detected in groundwater samples collected from the Former Kaiser Steel Mill site from July 2016 through June 2021 compared to the maximum contaminant levels (MCLs) are shown in Table 1 below.

Contaminant	MCL, µg/l	Max Concentration, µg/l	Sample Date	Well
Hexavalent Chromium	50 <sup>(a)</sup>	840	November, 2016	MW-14S
Carbon Tetrachloride	0.5	6.2	August, 2019	MW-25
Chloroform	80	10.9	February, 2021	SW-3

Notes:  
µg/l = micrograms per liter  
(a) Currently, there is no MCL for hexavalent chromium. There was a California MCL of 10 µg/l for hexavalent chromium that was invalidated in 2016. The MCL for total chromium of 50 µg/l is currently used to regulate hexavalent chromium. The State Water Resources Control Board Division of Drinking Water is in the process of developing a new MCL for hexavalent chromium.

TDS and TOC are no longer considered COCs associated with Former Kaiser Steel Mill site.

#### LOCATION

The Former Kaiser Steel Mill site is a 1,200-acre parcel in an unincorporated area of the San Bernardino County between the Cities of Fontana and Ontario. The site is bounded by Whittram Avenue to the north, Interstate 10 to the south, and Etiwanda and Cherry Avenues to the west and east, respectively. Exhibit 1 shows the location of the Former Kaiser Steel Mill site. The last delineation of the Kaiser TDS/TOC plume extent was completed in 2008<sup>1</sup> by the Chino Basin Watermaster (Watermaster), and at that time, the plume was approximately 7,000 feet wide and 18,500 feet long, extending southwest from the site (see Exhibit 1). No plume delineations for other COCs have been prepared.

<sup>1</sup> Wildermuth Environmental, Inc. (2008). *Chino Basin Management Zone 3 Monitoring Program Final Report*. Prepared for Chino Basin Watermaster and Inland Empire Utilities Agency. December 2008.

## SITE HISTORY

The Kaiser Steel Corporation operated the Kaiser Steel Mill from 1942 to 1983, and during peak production, the facility was the largest steel producer in the western United States. From 1942 through 1972, solid and liquid wastes produced from manufacturing processes were disposed of in waste pits and unlined surface impoundments for percolation and evaporation throughout the site. In the early 1970s, the surface impoundments were lined to eliminate percolation to groundwater. In 1987, the Kaiser Steel Corporation filed for bankruptcy and reorganized into Kaiser Resources, Inc., which became Kaiser Ventures, Inc. in 1995.

After the Kaiser Steel Corporation ceased steel operations in 1983, portions of the property were divided and leased or sold to the following organizations:

- Chemwest Industrial, Inc., a chemical manufacturing company, leased land in the southwest portion of the property (East Slag Pile Area in Exhibit 1) but no longer operates onsite.
- California Steel Industries purchased and continues to operate 458 acres to manufacture rolled steel.
- The Auto Club Speedway (formerly California Speedway) was constructed by the Penske Corporation on 500 acres in the northern corner of the site in 1995.
- CCG Ontario, LLC (CCG)<sup>2</sup> purchased 592 acres along the western and southern portions of the property in 2000 and inherited responsibility for site contamination, remediation, and monitoring from Kaiser Ventures, Inc. (see Exhibit 1 for the property location).

## REGULATORY ORDERS

There have been several regulatory orders issued to various tenants of the Former Kaiser Steel Mill site for the investigation and remediation of soil and groundwater contamination:

- Regional Water Quality Control Board Santa Ana Region (Regional Board) Cleanup and Abatement Order (CAO) No. 87-121 (August 1987)—Required Kaiser Steel Corporation to initiate a Phase IV groundwater investigation and implement a remediation action alternative for groundwater contamination.
- California Department of Health Services (now Department of Toxic Substances Control (DTSC)) Consent Order with the Kaiser Steel Corporation (August 1988)—Required the Kaiser Steel Corporation to investigate any release of contamination to air, soil, surface water, and groundwater, and to ensure appropriate remedial measures were taken.
- Regional Board CAO No. 91-40 (March 1991)—Required a feasibility study for a salt-offset remediation alternative for groundwater contamination.
- California Department of Health Services (now DTSC) Consent Order with California Steel Industries, Inc. (CSI) (August 1995)—Required CSI to conduct a Site Investigation, perform health risk assessment at the CSI property, and develop and implement an action plan to remediate contaminations on site.
- DTSC Imminent and Substantial Endangerment Determination Consent Order with CCG (August 2000)—Transferred responsibility of investigation and remedial activities associated

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<sup>2</sup> CCG Ontario is a subsidiary of Prologis, a real-estate and supply chain logistics company.

with the 592 acres purchased by CCG and the sale of the Coal Tar Pits Parcel from Kaiser Ventures, Inc. to CCG.

## REGULATORY AND MONITORING HISTORY

In July 1983, a phased investigation of potential groundwater contamination, resulting from the disposal of high-salinity wastewater to unlined ponds during its early years of operation, was performed at the Former Kaiser Steel Mill site. The Phase I and II investigations<sup>3</sup> were completed in December 1983 and identified 28 waste sites and four likely point-sources that contributed to TDS and TOC groundwater contamination beneath the facility. Groundwater samples were collected at existing onsite and offsite wells to determine the preliminary extent of groundwater contamination and to assess groundwater quality downgradient from the site. The Phase III investigation,<sup>4</sup> completed in March 1986, resulted in the construction of monitoring wells at six additional locations (five single-nested and one quadruple-nested wells). Based on these investigations, three separate TDS plumes were identified: one located onsite, extending to a depth of 770 feet below ground surface (ft-bgs), and two that migrated offsite. Additionally, one TOC plume was identified onsite extending to a depth of approximately 100 ft-bgs. The Phase III investigation determined that the TDS plumes were moving downgradient at a rate of 100 to 300 feet per year with the potential to impact downgradient municipal production wells.

In 1987, the Regional Board issued CAO No. 87-121<sup>5</sup> to the Kaiser Steel Corporation in response to the findings of the phased investigations, which required a Phase IV groundwater investigation to further characterize the plume's extent and evaluate remediation strategies, such as groundwater extraction and treatment.

On August 22, 1988, a Consent Order<sup>6</sup> was signed between the Kaiser Steel Corporation and the California Department of Health Services, Toxic Substances Control Division (now known as the DTSC) to ensure that any release or threatened release of contamination to the air, soil, surface water, or groundwater at the site is thoroughly investigated, and that appropriate remedial actions are taken. Two preliminary assessments/site investigations were completed in August 1988 and January 1989. The results of these investigations were published in the *Resource Conservation and Recovery Act (RCRA) Facility Assessment Report*,<sup>7</sup> which identified twenty areas for remedial investigation. The Phase I and II remedial investigations<sup>8</sup> were completed in April and October of 1990, respectively. The results of these investigations concluded:

- Three areas of the Former Kaiser Steel Mill site required remediation and further investigation: the tar pits, the byproducts plant area, and the east slag pile.

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<sup>3</sup> James M. Montgomery and Associates. (1983). *Final Report, Kaiser Steel Corporation Groundwater Evaluations*. December 1983.

<sup>4</sup> James M. Montgomery and Associates. (1986). *Kaiser Steel Corporation Phase III Groundwater Investigation*. Prepared for Kaiser Steel Corporation. March 1986.

<sup>5</sup> Regional Board. (1987). Cleanup and Abatement Order No. 87-121 for Kaiser Steel Corporation Fontana, San Bernardino County. August 26, 1987.

<sup>6</sup> DTSC Docket No. HAS 87/88-032CO. Consent Order (Health and Safety code sections 205,25355.1(a)(1)) August 22, 1988.

<sup>7</sup> JMM. (1989). *RCRA Facility Assessment Report*. Prepared for Kaiser Steel Resources, Inc. January 1989.

<sup>8</sup> [https://www.envirostor.dtsc.ca.gov/public/profile\\_report?global\\_id=60001356](https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=60001356)

- Two areas required the removal of contaminated materials: the cooling tower sludge pit and the furnace dust and mill scale piles. Remediation of the byproducts plant area and cooling tower sludge pit began in 1995 prior to the construction of the Auto Club Speedway.

In 1990, Kaiser Resources, Inc. (formerly Kaiser Steel Corporation) initiated plans for a 'salt-offset' as an alternative to groundwater extraction and treatment of the TDS and TOC plumes. In March 1991, the Regional Board rescinded CAO No. 87-121 and issued CAO No. 91-40, which allowed Kaiser Resources, Inc. to complete a feasibility study for a salt-offset program. The *Phase IV Groundwater Remediation Feasibility Study Draft Report*<sup>9</sup> was published in 1991; it analyzed a salt-offset alternative and nine other groundwater remediation alternatives. In 1993, CAO No. 91-40 was rescinded when Kaiser Resources, Inc. and the Regional Board entered into a settlement agreement (known as the Salt Offset Agreement). Under the Salt Offset Agreement, Kaiser Resources, Inc. would contribute financial resources and dedicate its Chino Basin water rights to support the construction and operation of the Chino Basin Desalters in exchange for release from any future liability for TDS and TOC contamination. Kaiser Resources, Inc. made a one-time contribution of \$1.5 million and 25,000 acre-feet of its water rights established under the Chino Basin Judgement.

Between 1986 and 1994, an interim groundwater-quality monitoring program was implemented to further characterize the extent of the TDS and TOC groundwater contamination. The monitoring program consisted of a sampling a network of 30 onsite and offsite monitoring and production wells, including newly constructed monitoring wells KOSF-1 and Kaiser-MP2. The maximum TDS and TOC concentrations detected in groundwater samples during this time were 1,600 milligrams per liter (mg/l) and 70 mg/l, respectively.

In 1995, the DTSC issued the Consent Order for CSI to develop and implement an Expedited Remedial Action Plan (ERAP) on its property that was purchased from the Former Kaiser Steel Mill Site.<sup>10</sup> Pursuant to the ERAP, a site investigation was performed at 28 areas on the CSI property which identified 31 Areas of Concern (AOCs). In 2004 and 2013, carcinogen risk assessments of onsite soil indicated that 26 AOCs do not require further remediation other than restrictions that land use can only be industrial uses. The selected mitigation measures for the remaining AOCs included the installation of a surface soil cover system (cap) and maintaining an existing surface cap.<sup>11</sup> Contaminant fate and transport analyses conducted as part of the site investigation indicated that there are no risks to the underlying groundwater at these areas. Annual cap inspections and five-year reviews are ongoing with supplemental characterization and remedial actions conducted intermittently.

In 2000, CCG purchased 592 acres of the Former Kaiser Steel Mill site and entered into a Consent Order<sup>12</sup> with the DTSC, transferring responsibility for the remediation of site-related contamination from Kaiser Ventures, Inc. (formerly Kaiser Steel Corporation and Kaiser Resources Inc.) to CCG. The 2000 Consent Order also required CCG to perform groundwater investigations and, if necessary, develop remediation alternatives for COCs other than TDS and TOC.

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<sup>9</sup> Mark J. Wildermuth. (1991). *Phase IV Groundwater Remediation Feasibility Draft Report*. Prepared for Kaiser Steel Resources, Inc. November 1991.

<sup>10</sup> DTSC No. HAS 95/96-068 Expedited Remedial Action Voluntary Enforceable Agreement (Health and Safety Code Section 25398.2b). August 8, 1995.

<sup>11</sup> DTSC (2015). Approval of the Final Remedial Design and Implementation Plan for Area of Concern (AOC) 9 and AOC 22, California Steel Industries, Inc., Fontana, California. September 15, 2015.

<sup>12</sup> DTSC No. I&SE -CO 00/01-001 Imminent and Substantial Endangerment Determination and Consent Order (Health and Safety Code Sections 25355.5(a)(1)(B) and (C), 25358.3 (a), 58009 and 58010.) August 10, 2000.

## REMEDIAL ACTION

As previously noted, remediation activities associated with the TDS and TOC plumes ended with the adoption of the 1993 Salt Offset Agreement. The 2000 Consent Order between the DTSC and CCG divided the site into four 'Operable Units' (OUs) (see Exhibit 1 for OU boundaries) and required the remediation of each OU. The following describes the Remedial Action Plans (RAPs) for OU-1 through OU-4:

- **OU-1 – Tar Pits.** The RAP included an in-situ solidification of the tar and surrounding soil and the construction of cover system (cap) over the tar pits parcel.<sup>13</sup> The DTSC approved the final amended RAP in 2001.<sup>14</sup>
- **OU-2 – Auto Club Speedway/By-Products Area.** The RAP included the removal and treatment of contaminated sludge waste, construction of a two-foot protective soil layer and a 13-acre cap over the protective soil layer, and groundwater monitoring.<sup>15</sup> The DTSC approved the final RAP on May 1, 1995.<sup>16</sup>
- **OU-3 – East Slag Pile Landfill Area.** The RAP included the construction of a four-foot thick monolithic soil cover, a landfill gas collection and control system, landfill gas monitoring probes, pavement on the upper surface of east slag pile, a surface water drainage system, groundwater monitoring, and long-term operations and maintenance of at least 30 years.<sup>17</sup> The DTSC approved the final RAP on October 31, 2007.<sup>18</sup>
- **OU-4 – Chemwest Upper Ponds/Consolidated Waste Cell/Aboveground Storage Tanks/Chrome Ponds and Adjacent Areas (CCAC).** The RAP included the construction of a cap over the CCAC, groundwater monitoring, and long-term operations and maintenance. The DTSC approved the final RAP on February 13, 2009.<sup>19</sup>

The above remedial actions specified for OU-1 through OU-4 have been implemented. Site maintenance, inspection, and monitoring reports on the implemented remedial measures are published semi-annually for OU-1, OU-3, and OU-4, and annually for OU-2 to ensure the completed remedies are operating properly.

In 2008, an additional operable unit (OU-5; not a geographical area) was established to prescribe site-wide groundwater monitoring in accordance with the 2000 Consent Order between the DTSC and CCG. The 2008 *Groundwater Remedial Investigation Work Plan*<sup>20</sup> (2008 Work Plan) was prepared to address site-wide data gaps in characterizing groundwater contamination other than TDS and TOC and to develop a long-term, site-wide monitoring program. The 2008 Work Plan was approved by the DTSC on November

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<sup>13</sup> Arcadis Geraghty & Miller, Inc. (2001). Second Amendment to the Remedial Action Plan – Operable Unit No. 1 Tar Pits Parcel, Former Kaiser Steel Corporation, Fontana, California. Prepared for Kaiser Ventures. December 10, 2001.

<sup>14</sup> DTSC. (2001). Letter from Thomas M. Cota – Final Second Amendment to the Remedial Action Plan for the Kaiser Steel Site, Operable Unit Number 1, Tar Pits Area. December 20, 2001.

<sup>15</sup> Iris Environmental. (2014). Third Five-Year Review Report Auto Club Speedway Operable Unit No. 2, By-Products Area Former Kaiser Steel Mill Facility San Bernardino County, California. Prepared for CCG-Ontario LLC. June 2014

<sup>16</sup> DTSC. (1995). Letter – Remedial Action Plan for Kaiser Resources, Inc. Operable Unit No. 2 is Approved. May 1, 1995.

<sup>17</sup> Shaw Environmental, Inc. (2007). Remedial Action Plan – East Slag Pile Landfill, Former Kaiser Steel Mill Site, Fontana, California. Prepared for CCG Ontario, LLC. August 2007.

<sup>18</sup> DTSC. (2007). Letter from Rebecca Chou – Approval of the Final Remedial Action Plan for the East Slag Pile Landfill (ESPL) Area, Former Kaiser Steel Mill, Fontana, California. October 31, 2007.

<sup>19</sup> Shaw Environmental, Inc. (2009). *Final Remedial Action Plan OU-4*. Prepared for CCG Ontario LLC. January 2009.

<sup>20</sup> Shaw Environmental, Inc. (2008). *Groundwater Remedial Investigation Work Plan; Former Kaiser Steel Mill*. Prepared for CCG Ontario LLC. October 2008.



3, 2008 and resulted in the creation of the Site-Wide Groundwater Monitoring Program. In 2009, groundwater monitoring wells were installed at 24 locations over a five-month period as part of the Site-Wide Groundwater Monitoring Program. Eight quarterly groundwater sampling events were performed from 2009 to 2011. Data collected from the sampling efforts were used to perform a health risk assessment by comparing contaminant concentrations detected in the offsite groundwater monitoring wells with Environmental Protection Agency regional screening levels (RSLs). Hexavalent chromium, carbon tetrachloride, and chloroform were detected at concentrations above the risk-based screening concentrations and were therefore determined to be site-wide constituents of concern, warranting continued monitoring.

On September 1, 2016, CCG completed the *Final Groundwater Remedial Investigation Report/Feasibility Study and Remedial Action Plan*<sup>21</sup> (2016 Final RI/FS/RAP), which included the results of the Site-Wide Groundwater Monitoring Program from 2009 through 2011 and selected continued annual groundwater monitoring as the RAP for OU-5. In September 2016, DTSC approved the RAP and requested CCG to submit a Remedial Design Implementation Plan to implement the approved RAP monitoring for OU-5.<sup>22</sup> CCG is working with DTSC to complete the Remedial Design Implementation Plan in 2022.<sup>23</sup>

## MONITORING AND REPORTING

Current groundwater monitoring activities are performed pursuant to the long-term<sup>24</sup> operations and maintenance plans for OU-2,<sup>25</sup> OU-3,<sup>26</sup> and OU-4.<sup>27</sup> The Site-Wide Groundwater Monitoring Program for OU-5 includes annual sampling of 20 monitoring wells (11 well sites), and annual reporting to the DTSC. Continued annual groundwater monitoring and reporting for OU-5 was included in the *Sitewide Water Quality Sampling and Analysis Plan* as Appendix M of the approved 2016 Final RI/FS/RAP. As part of the effort to finalize the Remedial Design Implementation Plan for OU-5, CCG sampled all existing OU-5 wells in 2019 to determine the need and the locations of additions wells for incorporation into the Site-Wide Groundwater Monitoring Program. Monitoring activities for the OU-5 Site-Wide Groundwater Monitoring Program have not initiated as of June 2021.

Exhibit 1 shows the locations of the current well sites monitored for OU-2 through OU-4 and future monitoring locations for OU-5. Table 2 below summarizes the number monitoring wells, sampling frequency, and duration of sampling for each monitored OU.

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<sup>21</sup> Iris Environmental, Inc. (2016). *Final Groundwater Remedial Investigation Report/Feasibility Study and Remedial Action Plan*. Prepared for CCG Ontario, LLC. September 2016.

<sup>22</sup> DTSC. (2016). Letter from Eileen Mananian – Approval of the Final Groundwater Remedial Investigation/Feasibility Study and Remedial Action Plan, Former Kaiser Steel Mill, Fontana, California. September 13, 2016

<sup>23</sup> Email correspondence with DTSC on August 31, 2021.

<sup>24</sup> Long-term includes at least 30 years of operations and maintenance for each OU.

<sup>25</sup> SCS Engineers. (1995). *Operation & Maintenance Agreement – Operable Unit No. 2*. Prepared for Kaiser Resources, Inc. September 1995.

<sup>26</sup> Shaw Environmental, Inc. (2010). *Operations and Maintenance Plan – East Slag Pile Landfill Area, Former Kaiser Steel Mill Facility, Fontana, California*. Prepared for CCG Ontario, LLC. June 2010.

<sup>27</sup> Shaw Environmental, Inc. (2010). *Operations and Maintenance Plan – Chemwest Upper Ponds/Consolidated Waste Cell, Above-Ground Storage Tanks, Chrome Ponds, and Adjacent Areas, Former Kaiser Steel Mill Facility, Fontana California*. Prepared for CCG Ontario, LLC. June 2010.

Operable Unit	No. of Wells	Sampling Frequency (Duration)
OU-2	5	Quarterly (2009-2014); Semi-annual (2015-present)
OU-3	9	Quarterly (2009-2014); Semi-annual (2015-present)
OU-4	14	Quarterly (2009-present)

Note:  
There are a total of 37 monitoring wells in OU-2 through OU-5. Some wells were specifically installed outside OU boundaries, and other wells were installed inside multiple OU boundaries; as a result, multiple wells are sampled as part of more than one OU monitoring program.

Groundwater monitoring reports for OU-2, OU-3, and OU-4 are published on a quarterly or semi-annual basis. Site-Wide Five-Year Review Reports are prepared and submitted to the DTSC to determine if the implemented remedial actions remain protective of human health and the environment. CCG is required to prepare these reports in accordance with the 2000 Consent Order. The first *Site-Wide Five-Year Review Report*<sup>28</sup> was submitted to the DTSC on April 1, 2016. The report concluded that the remedial actions for all OUs were functioning as intended.

In 2019, groundwater samples at the CCG well MW-16s, which is located downgradient of the CSI site, showed an increasing trend in chromium concentration. To determine the source of this increase, the DTSC requested that CSI conduct a groundwater investigation on its property.<sup>29</sup> The DTSC is working with CSI to initiate the groundwater investigation.<sup>30</sup>

Watermaster samples eleven monitoring wells annually at four downgradient locations for the Key Well Groundwater Quality Monitoring Program (KWGWQMP) and provides monitoring results to CCG upon request. These key wells include five Former Kaiser Steel Mill site monitoring wells in two locations and six Chino Basin Management Zone 3 (MZ3) monitoring wells in two locations shown in Exhibit 1. Table 3 below summarizes the contaminants with concentrations that exceeded the MCL at one or more monitoring wells in the KWGWQMP over the last five years from July 2016 to June 2020.

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<sup>28</sup> RPS Iris Environmental. (2016). *Final Site-Wide Five-Year Review Report*. Prepared for CCG Ontario LLC. April 2016.

<sup>29</sup> DTSC (2019). Request for Groundwater Investigation Work Plan, California Steel Industries, Inc., Fontana, California (Site Code: 490001). December 30, 2019.

<sup>30</sup> Email correspondence with DTSC on September 1, 2021.

<b>Table 3. Concentration of Contaminants Detected above the MCL at Key Wells between July 2016 to June 2021</b>			
<b>Contaminant</b>	<b>MCL</b>	<b>Max Concentration</b>	<b>No. of Wells Exceeded MCL</b>
1,1-Dichloroethene	6 µg/l	36 µg/l	2
Arsenic	0.01 mg/l	0.018 mg/l	1
Chromium	50 µg/l	5,200 µg/l	3
Nitrate <sup>(a)</sup>	10 mg/l	14 mg/l	3
Perchlorate	6 µg/l	9.8 µg/l	3
TDS	500 mg/l	770 mg/l	2
Trihalomethanes	80 µg/l	93 µg/l	1

Note:  
Not all key wells were sampled in August and September 2020.  
mg/l = milligrams per liter  
(a) Nitrate as nitrogen

Watermaster will conduct its 2021 annual KWGWQMP groundwater sampling by the end of 2021.

## RECENT ACTIVITY

CCG submitted the second Site-Wide Five-Year Review Report to the DTSC in May 2021. The report will be available for review and public comment by Spring 2022.<sup>31</sup>

CCG is working with DTSC to revise and finalize the Remedial Design Implementation Plan for OU-5. Monitoring activities for the OU-5 will initiate once the Remedial Design Implementation Plan is finalized.

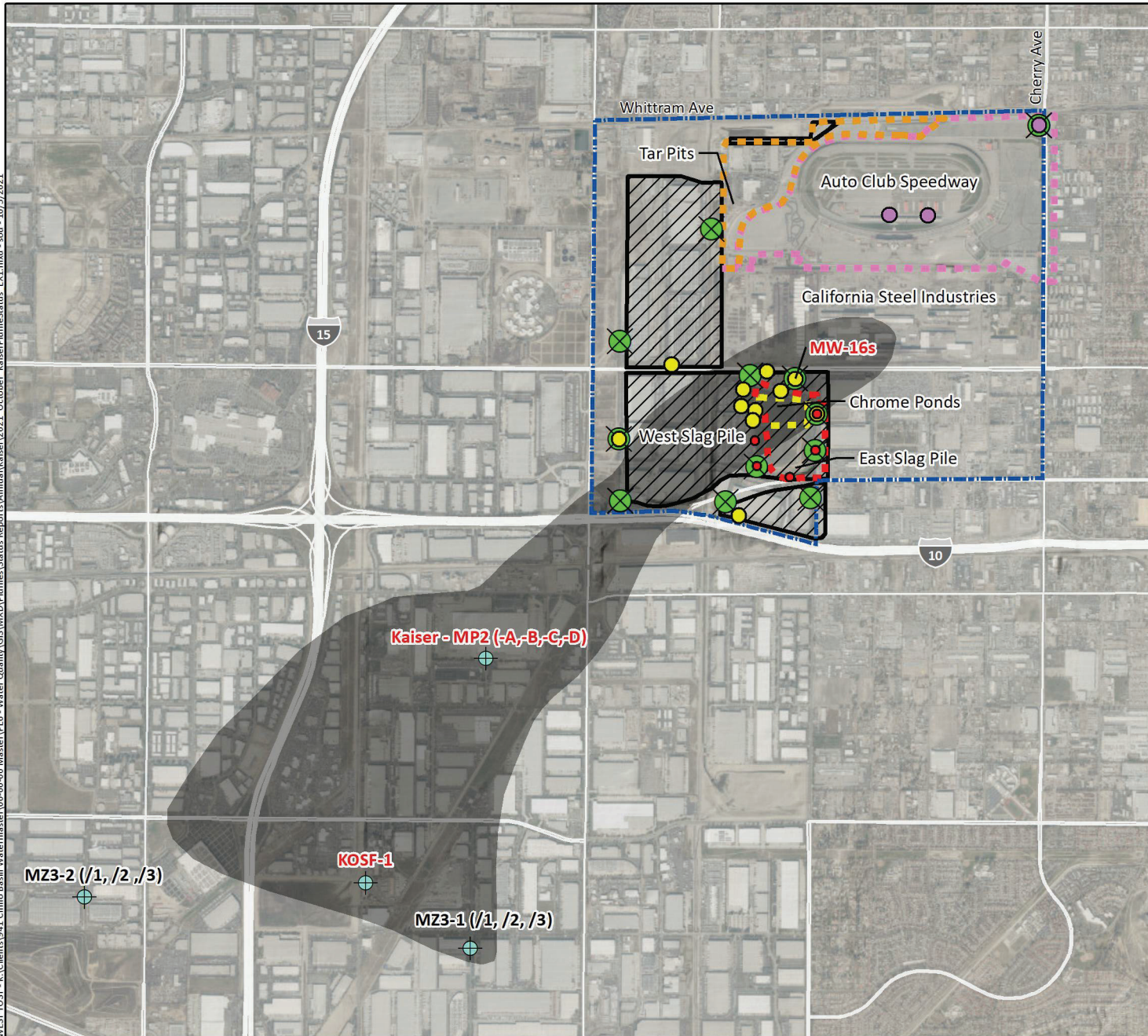
Semi-annual groundwater monitoring events for OU-2 and OU-3 and quarterly groundwater monitoring events for OU-4 continue pursuant to their operations and maintenance plans. Table 4 summarizes the concentrations of COCs that exceeded the MCLs for the most recent monitoring events in November 2020 and February 2021.













<b>Table 4. Maximum Concentration of Contaminants of Concern for Recent Monitoring</b>					
<b>Operable Unit</b>	<b>MCL, µg/l</b>	<b>Contaminant</b>	<b>Max Concentration, µg/l</b>	<b>Sample Date</b>	<b>Well</b>
OU-2	50 <sup>(a)</sup>	Hexavalent Chromium	64.2	November, 2020	SW-3
OU-4	0.5	Carbon Tetrachloride	1.4	February, 2021	MW-25

Note:  
(a) Currently, there is no MCL for hexavalent chromium. There was a California MCL of 10 µg/l for hexavalent chromium that was invalidated in 2016. The MCL for total chromium of 50 µg/l is currently used to regulate hexavalent chromium. The State Water Resources Control Board Division of Drinking Water is in the process of developing a new MCL for hexavalent chromium.

<sup>31</sup> Email correspondence with the DTSC on September 1, 2021.

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-  Original Property Extent of Former Kaiser Steel Mill
-  Property Extent Purchased by CCG Ontario From Kaiser Ventures Inc. in 2000 (592 acres)
- Operable Unit (OU) Boundaries**
-  OU-1
-  OU-3
-  OU-2
-  OU-4
- CCG Site Monitoring Wells (some locations have multiple wells at various depths)\***
-  OU-2
-  OU-4
-  OU-3
-  OU-5
-  Monitoring Wells Sampled Annually by Watermaster for the KWGWMP (some locations have wells at various depths)
-  Extent of the Kaiser TDS plume in 2008 as Delineated by Watermaster

\*Multiple wells are part of more than one OU monitoring program and are shown as overlapping wells.  
\*Red labels indicate wells that are mentioned in the report.



## Annual Plume Status Report

### General Electric Test Cell Plume October 2021

#### CONTAMINANTS

The primary contaminant is trichloroethene (TCE). The California maximum contaminant level (MCL) for TCE is 5 micrograms per liter ( $\mu\text{g/l}$ ). The maximum TCE concentration detected in a groundwater sample collected from a well within the plume during the last five years (July 2016 to June 2021) is 2,300  $\mu\text{g/l}$ , measured at well OW-15Pi in October 2018. This is also the highest concentration of TCE ever measured at a well within the plume. Other contaminants of concern include the following volatile organic compounds (VOCs): tetrachloroethene (PCE), 1,1-dichloroethene (1,1-DCE), 1,2-dichloroethane (1,2-DCA), and cis-1,2-dichloroethene (cis-1,2-DCE). The five-year maximum concentrations for these contaminants are summarized in the table below:

**Table 1. Maximum Concentration of Contaminants of Concern between July 2016 to June 2021**

Contaminant	MCL, $\mu\text{g/l}$	Max Concentration, $\mu\text{g/l}$	Sample Date	Well
TCE	5	2,300	10/2018	OW-15
PCE	5	55	04/2020	MW-8-s
1,1-DCE	6	32	07/2020	OW-18-d
1,2-DCA	0.5	2.2	01/2020	MW-8-s
cis-1,2-DCE	6	32	04/2019	MW-9-s

#### LOCATION

The General Electric (GE) Test Cell plume is located in the central Chino Basin in the City of Ontario south of the Ontario International Airport. It extends southwest from the former GE Engine Services Test Cell Facility (Test Cell Facility) located at 2264 East Avion Place. The Chino Basin Watermaster (Watermaster) last updated its delineation of the extent of the plume in the *2020 State of the Basin Report*.<sup>1</sup> This characterization is based on the five-year maximum TCE concentration measured over the period of July 2015 through June 2020. The plume is elongated and extends offsite from the facility in a downgradient (southwest) direction approximately 1.9 miles, and measures approximately 0.5 miles wide. Exhibit 1

<sup>1</sup> West Yost Associates. (2021). *Chino Basin Optimum Basin Management Program, 2020 State of the Basin Report*. Prepared for Chino Basin Watermaster. June 2021.

shows the location and extent of the plume as delineated by Watermaster in 2020, compared to the most recent characterization by GE in its *2021 Second Quarter Groundwater Monitoring Report*.<sup>2</sup>

## SITE HISTORY

From 1956 to 2010, the Test Cell Facility was used to test and maintain commercial and military jet engines. Chlorinated solvents used at the facility for cleaning and degreasing, including TCE, were stored in 55-gallon drums and aboveground storage tanks. In the early 1970s, TCE was replaced with 1,1,1-TCA, which was then replaced in 1981 with isopropyl alcohol—the only solvent used onsite through 1996. Until 1974, wastewater with residual solvents, along with fuel and oil residues, was diverted to below-ground separators where it was recycled. Excess wastewater from the separators occasionally flowed into a natural wash along the north side of the property, which drained into the Cucamonga Creek. From 1974 to 1980, two dry wells were connected to the separators, extending approximately 270 feet below ground surface (ft-bgs). From 1980 to 2006, wastewater continued to be captured by the separators where it was either recycled or treated offsite. Beginning in 2006, the wastewater was stored in above ground storage tanks and transported offsite for treatment and disposal. The Test Cell Facility ceased operations in 2011, and the site is currently vacant.

## REGULATORY ORDERS

- State of California Department of Health Services (CDHS) Docket No. 88/89- 009CO. Consent Order Health and Safety Code Section 25355.5(a)(1)(B) and 25355.5 (a)(1)(C). In the Matter of: General Electric Engine Maintenance Center. September 1988. This Order required GE to perform a remedial investigation and feasibility study to evaluate and monitor soil, surface water, and groundwater contamination at the site and to prepare a remedial action plan.

## REGULATORY AND MONITORING HISTORY

In 1984, an investigation performed by C.H.J, Inc. soil engineers detected TCE, PCE, 1,1,1-TCA, and dibromochloromethane in soil samples in the vicinity of the dry wells. Results from this investigation were deemed invalid due to inappropriate analytical methods.<sup>3</sup> In 1985, another consulting firm retained by GE detected 1,1,1-TCA, TCE, and PCE in onsite subsurface soil samples.<sup>4</sup> An investigation performed in 1987 revealed the presence of multiple VOCs in the soil near the disposal sites.<sup>5</sup>

In 1988, a Consent Order was signed between GE and the CDHS (now Department of Toxic Substances and Control [DTSC]) to initiate an investigation of soil, surface water, and groundwater contamination, and the appropriate remedial actions.<sup>4</sup> In 1990, GE performed a Phase I remedial soil investigation to

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<sup>2</sup> Wood Environmental & Infrastructure Solutions, Inc. (2021). *Second Quarter 2021 Groundwater Monitoring Report*. Prepared for GE Engine Services Test Cell Facility. July 26, 2021.

<sup>3</sup> The investigation is described in State of California Department of Health Services. (1998). Docket No. 88/89-009CO. Consent Order Health and Safety Code Section 25355.5(a)(1)(B) and 25355.5 (a)(1)(C). In the Matter of General Electric Engine Maintenance Center. September 1988.

<sup>4</sup> Ibid.

<sup>5</sup> Dames & Moore. (1987). *Subsurface Investigation, Ontario California, for General Electric Aviation Services Operations*. Prepared for GE Engine Services Test Cell Facility. February 4, 1987.

determine the impacts of VOCs and jet fuel in the soil in the vicinity of the dry wells and Cucamonga Creek.<sup>6</sup> During the Phase I remedial investigation, VOCs were detected in soil samples collected onsite and in excavated soil from the dry wells. Phase II of the remedial investigation was aimed at assessing groundwater conditions beneath the site, including an evaluation of the nature, extent, and migration characteristics of dissolved VOCs in groundwater.<sup>7,8</sup> In 1991, as part of the Phase II investigation, GE installed seven monitoring wells onsite and upgradient of the site. Monitoring performed at these wells indicated the presence of VOCs in groundwater beneath the Test Cell Facility with the possibility of offsite migration. Pursuant to the DTSC 1988 Consent Order, a feasibility study and a remedial investigation was completed in 1993, and a remedial action plan was prepared in 1994.<sup>9,10,11</sup> The remedial action identified was an in-situ soil vapor extraction treatment system (VETS) to reduce VOCs to levels that would not impact groundwater. The VETS began operating in 1996.

In 1994, the Santa Ana Regional Water Quality Control Board (Regional Board) was retained as the lead agency to oversee the groundwater investigation, while the DTSC maintained oversight of the soil investigation and operation of the VETS. The Regional Board requested an offsite investigation be performed to determine the extent of groundwater contamination. An extensive offsite investigation was completed in multiple phases from 1995 to the early 2000s. The initial phase was completed in 1995 and included the installation of four offsite monitoring wells. Offsite groundwater investigations continued from 1996 to the early 2000s when 22 additional offsite monitoring wells were constructed within multi-depth well clusters. Monitoring at these wells indicated that the VOC plume composed of TCE, cis-1,2-DCE, and 1,1-DCE (byproducts of TCE degradation) extended offsite. Between 2001 and 2002, two offsite multi-depth well clusters were installed to provide information on the vertical distribution of VOCs. Monitoring of these multi-depth wells indicated that TCE concentrations in the plume were highest in the intermediate and deep interval zones. In 2003, GE submitted a groundwater feasibility study to the Regional Board (2003 Feasibility Study), followed by a draft remedial action plan (RAP) in 2006.<sup>12,13</sup> The 2003 Feasibility Study and 2006 RAP identified pump-and-treat and monitored natural attenuation as remedial alternatives.

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<sup>6</sup> Dames & Moore. (1990). *Phase I Remedial Investigation, Engine Maintenance Center Test Cell Facility, Ontario, California*. Prepared for General Electric Company.

<sup>7</sup> Dames & Moore. (1990). *Phase II A Remedial Investigation Work Plan, Engine Maintenance Center Test Cell Facility, Ontario, California*. Prepared for General Electric Company.

<sup>8</sup> Dames & Moore. (1991). *Phase II B Remedial Investigation, Engine Maintenance Center Test Cell Facility, Ontario, California*. Prepared for General Electric Company.

<sup>9</sup> Dames & Moore. (1993). *Feasibility Study Report*, General Electric Jet Engine Test Cell Facility, Jet Engine Test Cell Facility, 2264 Avion Place, Ontario, California.

<sup>10</sup> Dames & Moore (1993). *Remedial Investigation Report*, Jet Engine Test Cell Facility, 2264 Avion Place, Ontario California.

<sup>11</sup> Dames & Moore. (1994). *Remedial Action Plan for Impacted Soil*, General Electric Jet Engine Test Cell Facility, 2264 Avion Place, Ontario, California. September 16, 1994.

<sup>12</sup> Geosyntec. (2003). *Groundwater Feasibility Study – GE Engines Test Cell Facility, Ontario, California*. Prepared for GE Engine Services. December 3, 2003.

<sup>13</sup> Geosyntec. (2006). *Draft Groundwater Remedial Action Plan*, GE Engine Services Test Cell Facility, 2264 Avion Place, Ontario, California. Prepared for GE Engine Services Test Cell Facility. November 17, 2006.

In 2005 and 2008, GE submitted five-year review reports to the DTSC in compliance with the 1988 Consent Order on the evaluation of the soil VETS. Following the 2008 report, GE requested site closure and to cease operation of the soil VETS. The DTSC granted final closure and completion of the soil remediation in 2009 with the condition that institutional controls were implemented to limit the site to commercial/industrial uses.

Following the closure of the soil VETS, GE continued conducting quarterly groundwater monitoring at their network of onsite and offsite monitoring wells and constructed additional multi-depth wells in six additional locations.

In May 2019, the DTSC transferred regulatory oversight of all environmental activities at the Test Cell Facility to the Regional Board, including the soil investigation, for the following reasons: (1) the Regional Board is currently the lead agency that is overseeing the groundwater investigations related to the site; (2) there have been recent increasing trends in VOC concentrations in some groundwater monitoring wells that may require additional evaluation; and (3) to minimize any overlap of the investigation or cleanup activities between the two agencies.

In 2019, the Regional Board stated that the impacts to groundwater and soil had not been adequately addressed and indicated that monitored natural attenuation may not be suitable as the only groundwater remedial action, and requested that GE prepare a Conceptual Site Model to aid in determining the appropriate remedial action.<sup>14</sup> GE submitted the Conceptual Site Model to the Regional Board in November 2019.<sup>15</sup> The Conceptual Site Model showed that TCE concentrations near the onsite source area (old dry wells) have decreased one to two orders of magnitude since monitoring began, demonstrating the success of the onsite remediation of soil vapor. Also, TCE concentrations in the most downgradient monitoring well (OW-11) have remained below the MCL since monitoring began. Several monitoring wells located along the northern edge of the plume have, however, shown notable increases in TCE concentrations since around 2016, likely due to displacement from increased recharge at the Ely Basin recharge basins. Overall, the Conceptual Site Model concluded that natural attenuation is occurring and has maintained a stable groundwater plume.

## REMEDIAL ACTION

### Groundwater

The 2003 Feasibility Study and 2006 draft RAP identified two groundwater remediation alternatives:

1. Extraction and treatment of groundwater for areas that have VOC concentrations approximately ten times the MCL (>50 µg/l);
2. Monitored natural attenuation of groundwater for areas that have VOC concentrations less than ten times the MCL.

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<sup>14</sup> Email correspondence with Mr. Alan Kouch at the Regional Board on September 19, 2019.

<sup>15</sup> Wood Environmental & Infrastructure Solutions, Inc. (2019). *Conceptual Site Model Former General Electric Engine Services Test Cell Facility*. Prepared for General Electric Company. November 5, 2019.



Following the submittal of the draft RAP, ongoing monitoring of the plume indicated that natural attenuation was occurring, with TCE concentrations decreasing in monitoring wells across the extent of the plume from 2003 onwards. In 2008, GE determined that the plume extending downgradient from the facility with TCE concentrations above 50 µg/l had decreased in size from about 4,000 feet to about 2,600 feet.

Fate and transport modeling indicated that implementation of either natural attenuation or a pump-and-treat alternative would decrease the TCE in the plume to concentrations equal to or less than the MCL within the same time frame of 50 years. In 2008, GE met with the Regional Board to discuss the status of the plume and to reevaluate the RAP to consider monitored natural attenuation as the primary remedial action. Based on this discussion, GE agreed to install additional monitoring well clusters between the former GE facility and well cluster OW-16, located in the center of the plume.<sup>16</sup> This well was selected because, at the time, it had the highest historical offsite TCE concentrations in the intermediate and deep intervals of the aquifer. Pursuant to this agreement, two offsite well clusters (OW-17 and OW-18) and one onsite well cluster (MW-8) were installed in August and September 2009. The 2006 draft RAP was withdrawn in February 2010, and since then GE and the Regional Board have continued to meet to evaluate monitored natural attenuation as the remedial action for the Test Cell Facility.

## Soil

In 1996, pursuant to the 1988 Consent Order, GE began operating the VETS to remove VOCs in the soil onsite and to prevent the soil contaminants from entering groundwater. The treatment system operated from 1996 to 2005, with verification monitoring from 2004 to 2007. During this time, GE was required to submit a review and reevaluation of the remedial actions every five years. The *Second Five-Year Review Report* was submitted to the DTSC in October 2008 and concluded that the soil remediation program had significantly reduced VOC concentrations in soil to levels that are no longer harmful to human health or groundwater quality;<sup>17</sup> it also indicated that there was no significant VOC rebound after treatment ceased in 2005. The report recommended that soil remediation be deemed complete, and that the DTSC grant final closure on soil remediation. The DTSC granted final closure in 2009 with the condition that institutional controls to limit the site to commercial/industrial use were implemented.

## MONITORING AND REPORTING PROGRAM

The objectives of the monitoring program are to evaluate the extent and magnitude of the plume emanating from the Test Cell Facility and to support the ongoing evaluation of monitored natural attenuation as a remedial action. Groundwater monitoring is performed quarterly and consists of measuring groundwater levels and collecting groundwater samples at all accessible onsite and offsite monitoring wells and piezometers. This includes 13 single casing monitoring wells, 17 multi-depth monitoring wells in six locations, and seven piezometers. Exhibit 1 shows the locations of all monitoring sites. Quarterly groundwater quality samples are analyzed for VOCs. Reports summarizing the results and

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<sup>16</sup> Geosyntec Consultants. (2009). *Monitoring Well Installation Work Plan, GE Engines Services Test Cell Facility*. Prepared for GE Engine Services Test Cell Facility. July 2, 2009.

<sup>17</sup> Geosyntec Consultants. (2008). *Second Five-Year Review Report, Ge Engine Services Test Cell Facility*. Prepared for GE Engine Services Test Cell Facility. October 27, 2008.

conclusions of the monitoring are published each quarter. These reports and all data that have been collected by GE since 2005 are posted on the Regional Board's GeoTracker website.<sup>18</sup>

Annual soil sampling and monitoring ceased following the approval of the request for closure of the VETS in 2009. Since then, soil-vapor has been sampled once, in 2014, per request of the Regional Board.

## RECENT ACTIVITY

The most recently submitted monitoring report for the GE Test Cell facility is the *Second Quarter 2021 Groundwater Monitoring Report*. Groundwater quality samples and groundwater-level measurements were collected at 31 monitoring wells and four piezometers. The monitoring event was conducted in April 2021, and the report documenting the sampling event and results was submitted to the Regional Board in July 2021.<sup>19</sup> The following summarizes some of the key results and conclusions contained in the report:

- TCE concentrations for 22 of the 31 wells sampled were greater than the MCL. Three wells were non-detect for TCE.
- Overall detected TCE concentrations at wells onsite and adjacent to the former GE Test Cell Facility remain low, ranging from ND (<1.0) µg/l to 23 µg/l.
- The highest TCE concentrations in groundwater are detected approximately 3,000 feet downgradient of the former GE Test Cell Facility boundary, as confirmed in well OW-16i with a concentration of 1,300 µg/l.
- The most downgradient monitoring well (OW-11) has had TCE concentrations below the MCL since groundwater monitoring began.
- Groundwater elevations are generally within historical ranges with higher elevations observed closer to the Ely Basins.

GE will continue to monitor groundwater quality pursuant to the Regional Board Clean-Up Status of *Open – Verification Monitoring*. The third quarter 2021 monitoring event was performed in July 2021, and GE will submit its monitoring report to the Regional Board around October 2021.

In March 2021, GE submitted a *Work Plan for Soil Vapor and Groundwater Investigation at Upgradient and Cross-Gradient Locations* to the Regional Board for review.<sup>20</sup> The objective of the investigation is to evaluate potential upgradient sources that might be contributing to the VOC concentrations observed at Well OW-6. The investigation will include the installation of three to five borings for soil vapor and groundwater sampling. Depending on the results, one or more borings may be converted to a groundwater monitoring well.

In response to a Regional Board request for further investigation at the site, GE submitted a *Work Plan for On-Site Soil Vapor and Groundwater Investigation* to the Regional Board in July 2021.<sup>21</sup> The Regional Board

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<sup>18</sup> [https://geotracker.waterboards.ca.gov/profile\\_report?global\\_id=SL208133868](https://geotracker.waterboards.ca.gov/profile_report?global_id=SL208133868)

<sup>19</sup> Wood Environmental & Infrastructure Solutions, Inc. (2021). *Second Quarter 2021 Groundwater Monitoring Report, GE Engine Services Test Cell Facility*. Prepared for General Electric Company. July 26, 2021.

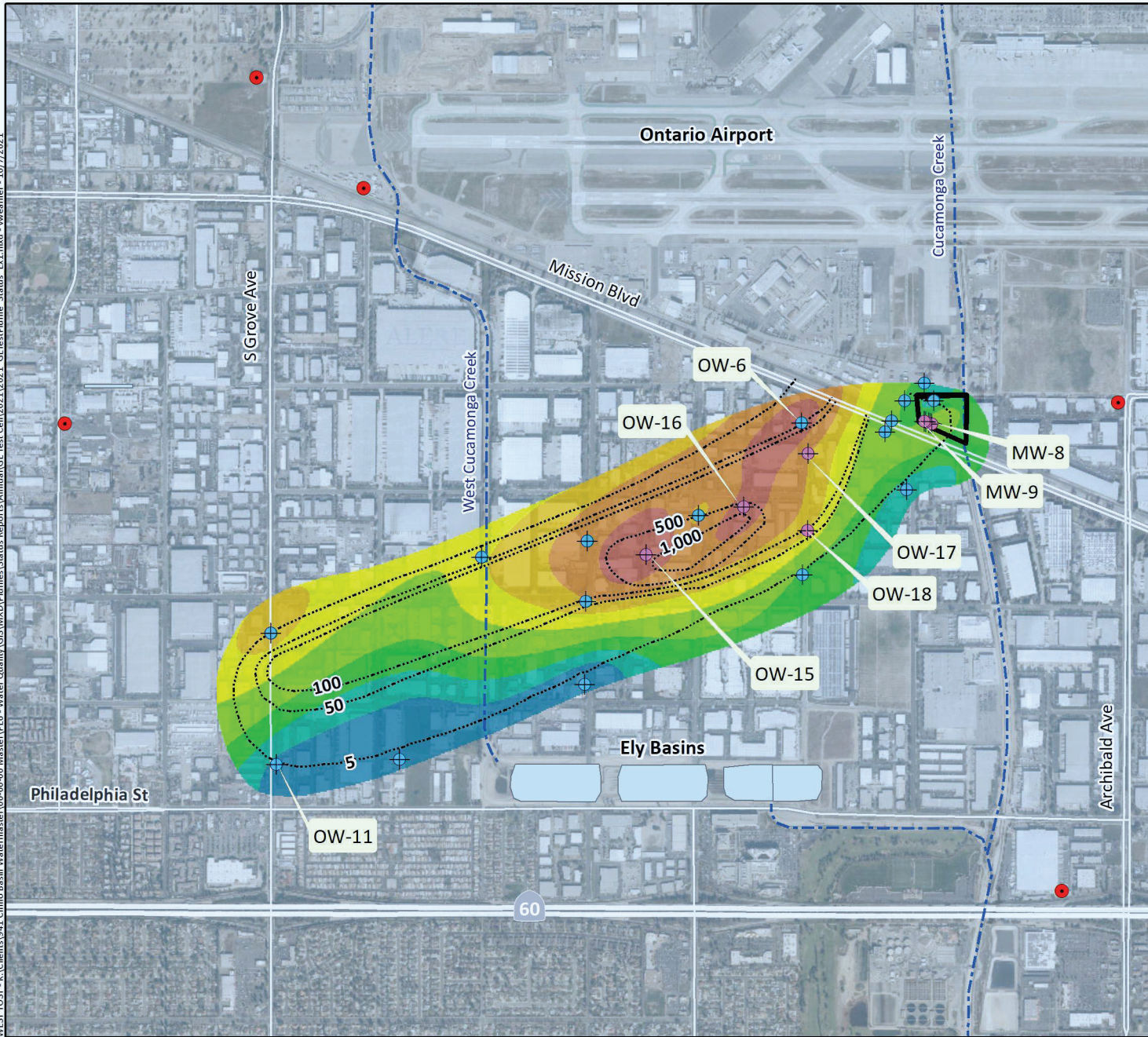
<sup>20</sup> Wood Environmental & Infrastructure Solutions, Inc. (2021). *Work Plan for Soil Vapor and Groundwater Investigation at Upgradient and Cross-Gradient Locations*. March 12, 2021.

<sup>21</sup> Wood Environmental & Infrastructure Solutions, Inc. (2021). *Work Plan for On-Site Soil Vapor and Groundwater Investigation*. July 29, 2021.

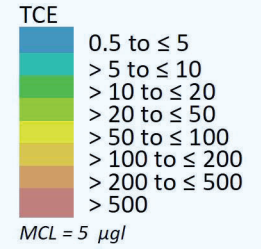
requested this investigation to determine whether the historical VETS sufficiently removed VOCs in soil vapor onsite to levels protective of the waters of the State. This follows previous requests by the Regional Board for sampling around Well MW-9 in 2014, and their statement in 2019 that monitored natural attenuation may not be suitable as the only remediation strategy. The objective of the investigation is to evaluate the extent and magnitude of VOC concentrations in onsite soil vapor and groundwater that may present a concern for vapor intrusion into buildings and/or offsite groundwater quality.

GE and the Regional Board are presently negotiating a Cleanup and Abatement Order (CAO) for the onsite work. The work plan will include re-sampling of 23 existing soil vapor extraction wells and the installation of four new shallow soil vapor monitoring probe nests screened in three zones. In addition, six new deep soil borings will be installed; three of these borings will be installed in areas where soil treatment previously occurred, and three will be installed at perimeter locations to evaluate the potential lateral distribution of VOCs in soil vapor and groundwater. Field activities are expected to take approximately eight weeks, followed by a technical report prepared and submitted to the Regional Board within six weeks of receiving the final laboratory analytical results.

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Maximum Concentration (µg/L)  
July 2015 - June 2020



(Delineated by Watermaster in the 2020 State of the Basin Report)

- Contours of TCE Concentration (µg/L) in the shallow zone delineated by Wood Consultants in 2021 Quarter 2 Groundwater Monitoring Report
- Former GE Test Cell Property Boundary

General Electric Monitoring Wells\*

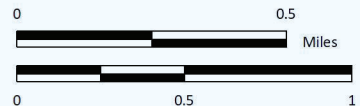
- Single Casing
- Multi-Depth Cluster
- Active/Inactive Potable Municipal Water Supply Wells

Streams & Flood Control Channels

\* Wells are labeled by well name if mentioned in the report



Prepared by:



Prepared for:

Chino Basin Watermaster  
Annual Plume Report



General Electric (GE) Test Cell  
TCE Plume

## Annual Plume Status Report

### General Electric Flatiron Plume October 2021

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#### CONTAMINANTS

The primary contaminant is trichloroethene (TCE), which has a California maximum contaminant level (MCL) of 5 micrograms per liter (µg/l). The maximum TCE concentration detected in groundwater samples collected from wells within the plume in the last five years (July 2016 to June 2021) was 33,000 µg/l, measured at well MW-22A in April 2021; this is also the maximum TCE concentration ever measured at a plume monitoring well. Other contaminants of concern include tetrachloroethylene (PCE), total chromium, and hexavalent chromium. The five-year maximum concentrations for these contaminants are summarized in the table below.

<b>Table 1. Maximum Concentration of Contaminants of Concern between July 2016 to June 2021</b>				
Contaminant	MCL, µg/l	Max Concentration, µg/l	Sample Date	Well
PCE	5	5,800	July, 2020	MW-21
Total Chromium	50	2,100	April 2021	MW-23A
Hexavalent Chromium	50 <sup>(a)</sup>	2,400	April, 2021	MW-23A
Notes:				
(a) Currently, there is no MCL for hexavalent chromium. There was a California MCL of 10 µg/l for hexavalent chromium that was invalidated in 2016. The MCL for total chromium of 50 µg/l is currently used to regulate hexavalent chromium. The State Water Resources Control Board Division of Drinking Water is in the process of developing a new MCL for hexavalent chromium.				

#### LOCATION

The General Electric (GE) Flatiron TCE plume is located in the northern Chino Basin within the City of Ontario; it extends south-southwest from the former GE Flatiron Facility, located at 234 East Main Street. The Chino Basin Watermaster (Watermaster) last updated its delineation of the extent of the plume in the *2020 State of the Basin Report*.<sup>1</sup> This characterization is based on the five-year maximum TCE concentration measured between July 2015 and June 2020. The extent of the plume with TCE concentrations greater than 0.5 µg/l measures approximately 0.6 miles wide and about 2.3 miles long. Exhibit 1 shows the location and extent of the TCE plume as delineated by Watermaster in 2020 and the most recent delineation of the plume prepared by GE in 2016.<sup>2</sup> Note that GE’s 2016 delineation of the

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<sup>1</sup> West Yost. (2021). *Optimum Basin Management Program – 2020 State of the Basin Report*. Prepared for the Chino Basin Watermaster. June 2021.

<sup>2</sup>Amec Foster Wheeler. (2016). *2016 Conceptual Site Model Former General Electric Company Housewares Site 234 East Main Street, Ontario, California*. Prepared for General Electric Company. October 4, 2016.

plume does not account for water quality data collected from monitoring well clusters MW-19 through MW-24, which were constructed in 2017. For this reason, the TCE plume delineated by Watermaster shows a larger extent than the GE delineation.

## SITE HISTORY

GE manufactured clothes irons at the Flatiron Facility from the early 1900s to 1982. During World War II, the facility was also used to manufacture equipment to support the war effort for the U.S. War Department. In 1982, GE closed the facility and sold the property. Since then, ownership has changed several times; the property is currently owned by Ontario Business Park, LLC.

## REGULATORY ORDERS

- Investigative Order No. 87-146—Requires the characterization of onsite conditions and groundwater beneath and downgradient of the GE Flatiron site using gas surveys, soil boring installation and sampling, and groundwater monitoring well installation and sampling.
- Waste Discharge Requirements (WDRs) and Monitoring and Reporting Programs (M&RPs) Order No. 95-62 and R8-2011-0019 (current)—General WDRs and M&RPs for the discharge of treated water from the pump-and-treat system.

## REGULATORY AND MONITORING HISTORY

In 1987, groundwater-quality samples collected from an inactive City of Ontario production well downgradient of the Flatiron Facility had TCE and chromium concentrations above drinking water MCLs. This prompted the Santa Ana Regional Water Quality Control Board (Regional Board) to request that GE prepare a Phase I investigation to determine if the Flatiron Facility was the source of the contaminants detected. The results of the Phase I investigation prompted the Regional Board to issue Investigative Order No. 87-146, requiring GE and West End Investments (the property owner at the time) to characterize onsite conditions and the groundwater flow gradient beneath the Flatiron Facility. The Phase II through V investigations<sup>3, 4, 5, 6</sup> included soil gas surveys, soil boring installation and sampling, as well as groundwater monitoring well installation and sampling, to define the extent of contaminants in groundwater both on and offsite. These investigations, conducted from 1987 to 1992, indicated that a contaminant plume was present beneath and downgradient of the Flatiron Facility and showed that the TCE and total dissolved chromium concentrations in groundwater were above the California primary MCLs of 5 and 50 µg/l, respectively.

In 1993, the results from the multi-phase investigation prompted the proposal of an interim remedial measure (IRM) for groundwater contamination. Local and regional-scale numerical groundwater models

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<sup>3</sup> Bechtel Environmental, Inc. (1989). *Phase II Soil and Groundwater Investigation*, Former GE Flatiron Manufacturing, Ontario, California. January 1989.

<sup>4</sup> Bechtel Environmental, Inc. (1990). *Phase III Investigation Report*, Former GE Flatiron Manufacturing, Ontario, California. August 1990.

<sup>5</sup> Geomatrix Consultants, Inc., and Beak Consultants Ltd. (1992). *Phase IV Investigation Report 234 East Main Street and Vicinity*, Ontario, California. January 1992.

<sup>6</sup> Geomatrix Consultants, Inc., and Beak Consultants Ltd. (1993). *Phase V Investigation Report 234 East Main Street and Vicinity*, Ontario, California. January 1993.

were constructed to provide a basis for the design of the IRM and were used to investigate the use of extraction wells to obtain hydraulic containment near the downgradient extent of the plume. In December 1993, extraction well (EW-01) was completed. A monitoring well and three piezometers were also constructed nearby to provide observation points during aquifer testing at EW-01. The IRM began in 1996 and involved pumping groundwater from EW-01, treating it at GE Flatiron's groundwater treatment system to remove TCE and other contaminants of concern, and discharging the treated water to the Ely Basins recharge basins. Discharge to Ely Basins was regulated under WDR Order No. 95-62, issued by the Regional Board.

In 1995, a feasibility study was completed to evaluate groundwater and soil remediation alternatives.<sup>7</sup> In October of 1997, the Regional Board approved a groundwater remediation alternative that included the ongoing use of extraction well EW-01 and the construction of an additional extraction well (EW-02) near the center of the contaminant plume to pump and treat contaminated groundwater. Extraction well EW-02 was constructed in 1999 and began operation in 2002. In 2003, GE constructed a soil vapor extraction (SVE) system to remove VOC mass from impacted site soils. The system consisted of five SVE wells and a treatment system. It was completed and began operation in 2003.

Due to the Inland Empire Utilities Agency (IEUA) and Watermaster's increased use of the Ely Basins for storm, recycled, and imported water recharge, capacity eventually became insufficient for GE's discharge into the Ely Basins. In 2005, GE began evaluating alternative discharge options for its treated groundwater and decided to install an injection well field at 2025 South Bon View Avenue to accept the treated groundwater. In 2011, the Regional Board approved WDR Order R8-2011-0019 to modify the point of discharge for the treated groundwater to injection wells located at this site.<sup>8</sup> The 2011 WDR defines the discharge prohibitions, effluent limitations, and required monitoring and reporting program.

In 2015, GE submitted a work plan to the Regional Board to outline a program for evaluating the effectiveness of existing remedial measures and to provide recommendations for additional investigation or remediation.<sup>9</sup> Implementation of the work plan began in 2016 with the drilling of four borings to collect discrete-depth soil and groundwater samples, which were tested for TCE, PCE, total dissolved chromium, and hexavalent chromium.

In 2016, the Regional Board required the development of a conceptual site model that incorporated all historical data and new information from recent investigations. This model was to be used to develop a framework to identify data gaps and guide future decisions on investigation, monitoring, and remedial actions.<sup>10</sup> One critical component of the conceptual site model, as highlighted by the Regional Board, was the installation of a sentinel monitoring well downgradient of the plume.

On June 22, 2016, a work plan was submitted to the Regional Board, defining the plan and schedule to construct a new-multi-depth well cluster (MW-19) to further assess the dissolved-phase chromium and

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<sup>7</sup> Geomatrix Consultants, Inc. (1995). *Feasibility Study Report*, 234 East Main Street and Vicinity, Ontario, California. November 1995.

<sup>8</sup> Santa Ana Regional Water Quality Control Board. (2011). *Issuance of Waste Discharge Requirements for General Electric Company, GE Francis Water Treatment Plant*, San Bernardino County, Order No. R8-2011-0019. April 22, 2011.

<sup>9</sup> Amec Foster Wheeler. (2015). *Work Plan for Supplemental Remedial Investigation*. 234 East Main Street and Vicinity, Ontario California. Prepared for General Electric Company. March 30, 2015.

<sup>10</sup> Amec Foster Wheeler. (2016). *2016 Conceptual Site Model*. Former General Electric Company Housewares Site 234 East Main Street, Ontario, California. Prepared for General Electric Company. October 4, 2016.

VOC concentrations downgradient of the known plume extent.<sup>11</sup> The first sampling event at well cluster MW-19 in January 2017 indicated that TCE concentrations in the shallow casing were greater than the MCL. This finding prompted the Regional Board to request that an additional monitoring well cluster be constructed downgradient of MW-19 and upgradient of the City of Chino's municipal production well (Chino-11) to allow for further evaluation of the plume's extent. On November 14, 2016, GE submitted a work plan for the construction of well cluster MW-20, to be located about 420 feet upgradient from Chino-11, and by May 2017, construction was complete.<sup>12</sup> The first sampling event at well cluster MW-20 in July 2017 indicated that TCE in the intermediate-depth casing (MW-20B) was greater than the MCL.

From May 2016 to March 2017, four additional monitoring well clusters (MW-21 through MW-24) were constructed at the upgradient end of the plume as part of the supplemental remedial investigation activities. From 2019 to 2021, the highest concentrations of PCE, TCE, total dissolved chromium, and hexavalent chromium associated with the plume were detected at these wells (specifically, MW-21 through MW-23).

## REMEDIAL ACTION

### Groundwater

In 1996, GE began operation of a groundwater treatment system located at 501 West Francis Street in Ontario, CA. Its two extraction wells (EW-01 and EW-02) began operating in 1996 and 2002, respectively, and are intended to prevent migration of the plume. EW-01 pumps at an approximate rate of 850 gallons per minute (gpm), and EW-02 pumps at a rate of approximately 600 gpm. Groundwater pumped from the extraction wells is conveyed by separate pipelines to the treatment system where it is combined into a single stream and treated. Pumped groundwater is first treated with an ion exchange resin, which removes chromium, and then with liquid-phase granular activated carbon to remove VOCs. As detailed in WDR Order No. R8-2011-0019, the discharge from the treatment system facility is required to have average monthly concentrations of TCE, PCE, 1,1,1-TCA, and chromium below their respective MCLs of 5, 5, 200, and 50 µg/l. Currently, three injection wells (IW-01, IW-02, and IW-03) are used to inject treated water into the Chino Basin. Exhibit 1 shows the locations of the extraction wells, the treatment system facility, and the injection well field. As of July 2021, EW-01 and EW-02 had extracted about 15,665 acre-feet and 4,877 acre-feet of groundwater, respectively. Collectively, the treatment system has removed 12,498 pounds of TCE and 4,211 pounds of chromium.<sup>13</sup>

### Soil

In 2003, in accordance with the *Draft Remedial Action Plan*, GE began operating a soil vapor extraction (SVE) system to treat TCE and PCE in the soil, as well as 1,1,1-trichloroethane and 1,1,2-trichloroethane.<sup>14,15</sup> The SVE system consists of five onsite soil vapor extraction wells, which extract VOC impacted vapors from the shallow soils. In 2007, GE constructed three additional SVE wells, which were later connected to the

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<sup>11</sup> Amec Forster Wheeler. (2016). *Work Plan for Installation of Cross-Gradient Monitoring Well Clusters*. General Electric Company Former Flatiron Facility. Prepared for General Electric Company. August 15, 2016.

<sup>12</sup> Amec Forster Wheeler. (2016). *Work Plan for Installation of Additional Sentinel Monitoring Well Cluster*. General Electric Company Former Flatiron Facility. Prepared for General Electric Company. November 14, 2016.

<sup>13</sup> Wood Environment & Infrastructure Solutions, Inc. (2021). *First Half 2021 Groundwater Monitoring and Remediation Report*. Prepared for General Electric Company. July 26, 2021.

<sup>14</sup> Geomatrix. (2002). *Draft Remedial Action Plan*. August 2002.

<sup>15</sup> Geomatrix. (2003). *SVE Implementation Report*. July 2003.



system.<sup>16</sup> On June 21, 2018, GE submitted its *Work Plan for Interim Measures – Phase I Expansion* to the Regional Board for an expansion of the SVE system to reduce potential migration of soil vapor off site and to groundwater.<sup>17</sup> Between 2019 and 2020, GE installed three nested deep SVE wells and three shallow SVE wells, and expanded the treatment system. On April 8, 2021, following the installation of the new SVE wells, GE submitted the *Implementation of the Phase I Expansion of the Interim Measures* summarizing the work performed.<sup>18</sup> As of the fourth quarter 2021, the system had not started operation. There are currently six SVE wells connected to the system, and in total, the SVE system has removed a total of 48,418 pounds of VOCs.<sup>19</sup>

## MONITORING AND REPORTING

The monitoring and reporting program for the GE Flatiron site includes both plume and remediation system monitoring and reporting. The objectives of the respective programs are to monitor groundwater elevations and the concentrations/extents of the dissolved-phase plume over time and to track and evaluate the performance of the remediation system.

The plume monitoring and reporting includes measuring groundwater levels and collecting groundwater-quality samples for chemical analyses from monitoring wells at a quarterly frequency. Currently, depth to groundwater is measured at 31 wells and three piezometers every quarter. Groundwater-quality samples are also collected from 31 monitoring wells and three piezometers, although the number of wells sampled each quarter varies based on the specific quarter's monitoring plan. Water-quality samples are analyzed for dissolved metals, VOCs, and general minerals. Reports summarizing the results of the GE Flatiron groundwater monitoring are published semiannually in January and July.

The remediation system monitoring and reporting consists of the monitoring for the operations for both the groundwater and SVE treatment systems. For the groundwater treatment system, at a minimum, monthly sampling and analysis of the influent to the treatment plant from EW-01 and EW-02 and treated effluent is performed pursuant to WDR Order No. R8-2011-0019. The results from the treatment system monitoring are included in the semiannual reports for the groundwater monitoring. Additionally, monthly reports are submitted to the Regional Board on the groundwater treatment system operations and compliance for WDR Order No. R8-2011-0019.

For the SVE treatment system, monitoring activities occur both weekly and monthly, and reporting activities occur quarterly in compliance with the Sampling and Monitoring Plan.<sup>20</sup> Additionally, indoor air sampling is conducted on a semiannual basis. Overtime, the monitoring has demonstrated that vapor mitigation measures are effective at controlling vapor intrusion.

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<sup>16</sup> Arcadis U.S., Inc. (2007). *Soil Vapor Extraction System Modification Workplan, General Electric (GE) Flatiron Facility*, 234 E. Main Street, Ontario, CA. Letter to General Electric Company. August 21, 2007.

<sup>17</sup> Wood Environment & Infrastructure Solutions, Inc. (2018). *Work Plan for Interim Measures – Phase I Expansion*. June 21, 2018.

<sup>18</sup> Wood Environment & Infrastructure Solutions, Inc. (2021). *Implementation of the Phase I Expansion of the Interim Measures, General Electric Company Flatiron Facility*, 234 East Main Street and Vicinity, Ontario, California. Prepared for General Electric Company. April 8, 2021.

<sup>19</sup> Wood Environment & Infrastructure Solutions, Inc. (2021). *Second Quarter 2021 Soil Vapor Extraction System Operation, Maintenance, and Monitoring Status Report*. Prepared for General Electric Company. July 26, 2021.

<sup>20</sup> Geomatrix (2002). *Sampling and Monitoring Plan*. Prepared for General Electric Company. 2002.

All semiannual and monthly reports, and other relevant documents/data, can be found on the Regional Board's GeoTracker website.<sup>21</sup>

## RECENT ACTIVITY

The most recent groundwater monitoring report prepared by GE is the *First Half 2021 Groundwater Monitoring and Remediation Report*.<sup>22</sup> This report summarizes groundwater monitoring at 31 wells and three piezometers, as well as the remediation activities performed between January 1 and June 30, 2021. The following describes the key findings presented in the report:

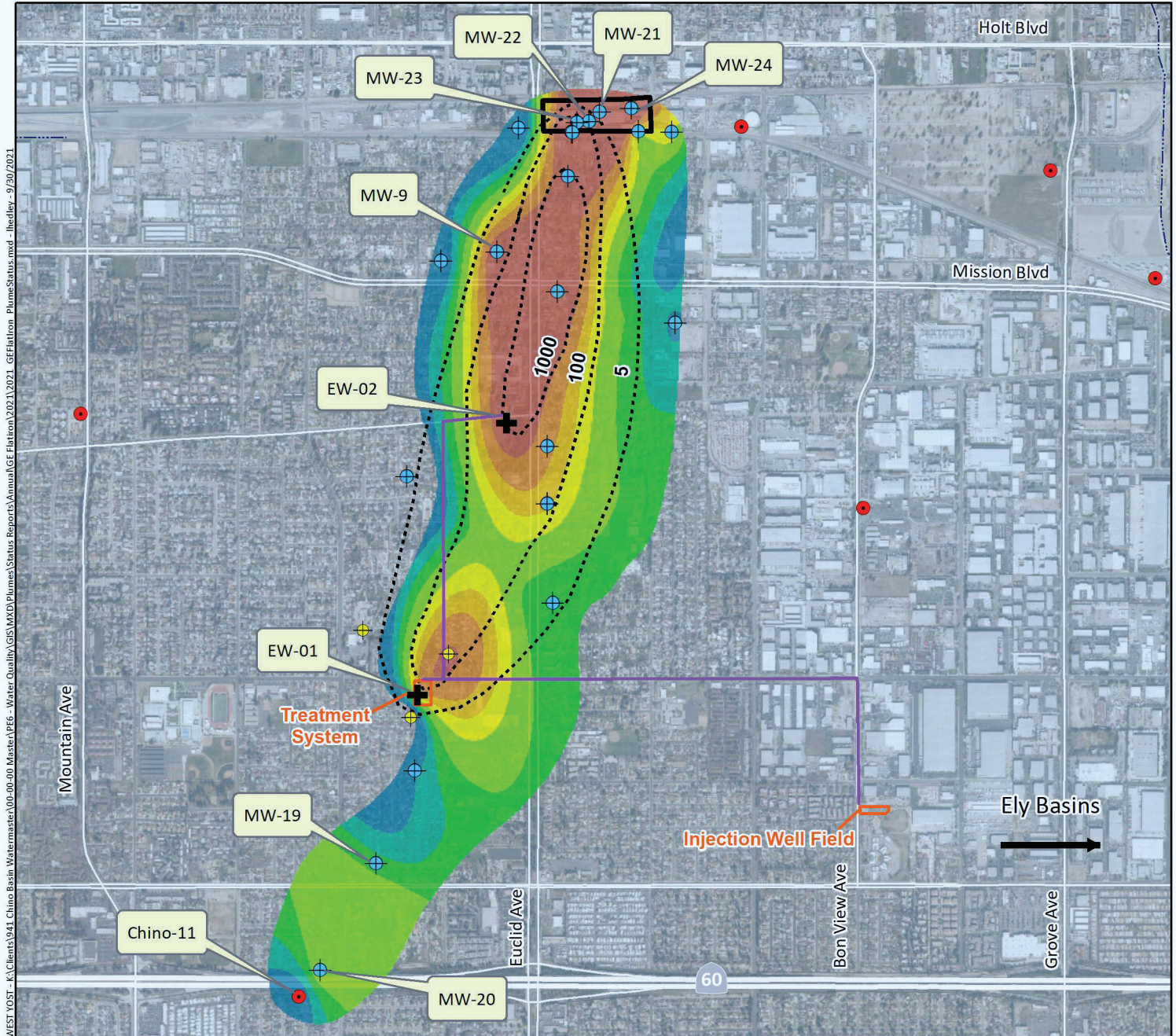
- Groundwater elevations decreased over the reporting period after having increased from 2019 to 2020. The exception was MW-21, which reached a new groundwater-elevation high in the third quarter 2020.
- Although concentrations of all four contaminants of concern reached historic highs over the reporting period, overall, concentrations of these contaminants remain stable and are consistent with historical values. The increase in concentrations at MW-21 may be due to increasing groundwater levels.
- The highest concentrations of TCE, PCE, total dissolved chromium, and hexavalent chromium continue to be detected at onsite wells at the north end of the plume (MW-21 through MW-23).
- The second highest hexavalent chromium concentrations were in downgradient offsite well MW-09; however, after showing an increasing trend for dissolved chromium and hexavalent chromium from 2017-2019, it is now showing a decreasing trend.
- EW-02 was shut down in mid-September 2020 due to pump issues. Maintenance and repair activities were conducted from January through March 2021 and a full system restart was initiated in May 2021. EW-02 was then shutdown again in June 2021 while IW-01 was redeveloped. As of July 2021, EW-02 remains offline.

GE will continue remediation and monitoring at the Flatiron Facility pursuant to the Regional Board Cleanup Status of Open – Assessment & Interim Remedial Action. Groundwater monitoring activities are scheduled for July and October 2021, and the next semiannual monitoring report will be submitted to the Regional Board in 2022.

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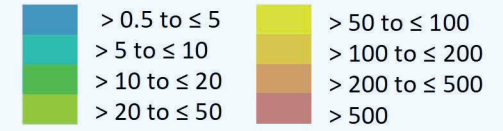
<sup>21</sup> [https://geotracker.waterboards.ca.gov/profile\\_report?global\\_id=SL0607132486](https://geotracker.waterboards.ca.gov/profile_report?global_id=SL0607132486)

<sup>22</sup> Wood Environment & Infrastructure Solutions, Inc. (2021). *First Half 2021 Groundwater Monitoring and Remediation Report*. Prepared for General Electric Company. July 26, 2021.



Maximum Concentration ( $\mu\text{g/L}$ )  
July 2015 - June 2020

TCE



MCL = 5  $\mu\text{g/l}$

(Delineated by Watermaster in the 2020 State of the Basin Report)

Contours of TCE Concentration ( $\mu\text{g/l}$ )  
(Delineated by GE in the 2016 Conceptual Site Model)

GE Extraction Well

GE Monitoring Well  
(some locations have multiple wells at various depths)\*

GE Piezometer

Active/Inactive Potable Municipal Water Supply Well

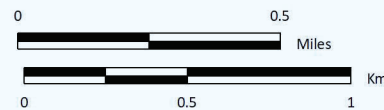
Former GE Flatiron Property Boundary

Conveyance Pipeline

\* Wells are labeled by well name if mentioned in the report



Prepared by:



Page 173

Prepared for:

Chino Basin Watermaster  
Annual Plume Report



General Electric (GE) Flatiron  
TCE Plume

Exhibit 1

## Annual Plume Status Report

### Milliken Landfill Plume October 2021

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#### CONTAMINANTS

The primary contaminant is trichloroethene (TCE). The California maximum contaminant level (MCL) for TCE is 5 micrograms per liter ( $\mu\text{g/l}$ ). The maximum TCE concentration detected in groundwater samples collected from wells within the plume area during the last five years (July 2016 to June 2021) is 12  $\mu\text{g/l}$  (measured at well M-8B in January 2017). The highest concentration of TCE ever measured on site is 178  $\mu\text{g/l}$  (measured at well M-2B in April 1997). Other contaminants of concern include the following volatile organic compounds (VOCs): tetrachloroethene (PCE), dichlorodifluoromethane, trichlorofluoromethane, 1,1-dichloroethane, and cis-1,2-dichloroethene.

#### LOCATION

The Milliken Sanitary Landfill (MSL) is located in the City of Ontario along the northwest intersection of Milliken Avenue and Mission Boulevard. The MSL occupies an area of approximately 196 acres, about one mile west of Interstate 15 and 1.2 miles southeast of Ontario International Airport. The MSL is owned and managed by the County of San Bernardino Solid Waste Management Division (County). The MSL TCE plume extends downgradient from the site in a southwestern direction. The Chino Basin Watermaster (Watermaster) last updated its delineation of the extent of the plume in the *2020 State of the Basin Report*.<sup>1</sup> This characterization is based on the five-year maximum TCE concentration measured over the period of July 2015 through June 2020. The extent of the plume is about 2,400 feet wide and 1,700 feet long. Exhibit 1 shows the location and extent of the TCE plume as delineated by Watermaster, compared to the County's most recent delineation of the extent of total VOCs.<sup>2</sup>

#### SITE HISTORY AND CLOSURE

The MSL was operated as a Class III Municipal Solid Waste Management Unit, accepting non-hazardous waste from 1958 to March 1999. On June 24, 1991, the Santa Ana Regional Water Quality Control Board (Regional Board) issued Cleanup and Abatement Order (CAO) No. 91-92<sup>3</sup> to the County and other landfill

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<sup>1</sup> West Yost Associates. (2021). *Chino Basin Optimum Basin Management Program, 2020 State of the Basin Report*. Prepared for Chino Basin Watermaster. June 2021.

<sup>2</sup> Geo-Logic Associates. (2015). County of San Bernardino Workplan: Investigation of Off-Site Impacts to Groundwater at the Milliken Sanitary Landfill. Prepared for County of San Bernardino Solid Waste Management Division. July 2015.

<sup>3</sup> Regional Board. (1991). *Cleanup and Abatement Orders for County and City Landfills (CAO) No. 91-92*. Letter from Gerard J. Thibeault to the County of San Bernardino Solid Waste Management Department. June 24, 1991.

operators in the Santa Ana region. The order required the correction of drainage and erosion control deficiencies on the landfill property that could potentially cause the discharge of pollutants to groundwater. In 1994, the CAO was rescinded when the landfills achieved compliance, and concurrently, Order No. 94-17<sup>4</sup> was adopted to amend the Waste Discharge Requirements (WDRs) for all landfills in the Santa Ana Region and combine them under one WDR and Monitoring and Reporting Program (M&RP). In 1996, the Regional Board issued Cease and Desist Order No. 96-41 for the MSL for failure to maintain the drainage and erosion control systems.<sup>5</sup> In October 1999, the Regional Board approved the *Final Closure and Post Closure Maintenance Plan* for the MSL.<sup>6</sup> The MSL began its multiphase closure process while still accepting waste. Phase one, termed the “East Mound Closure”, was completed in March 1997, and was a pilot project to aid in the design of a soil cover for the rest of the landfill to prevent soil contaminants from leaching into the groundwater during precipitation events. Phase two, termed the “North and East Slope Closure”, was completed in 1997 and included the construction of a six-foot-thick monolithic cover over 45 acres of the landfill. The final phase of the landfill closure was completed in March 2005 when the remaining 72 acres of the landfill were covered with a four-foot-thick monolithic cover.

Since its closure, the County maintains the MSL drainage and erosion control systems to ensure, to the greatest extent possible, that ponding, infiltration, inundation, erosion, slope failure, and washout are prevented during peak storm flows. The drainage control facilities consist of a network of earthen berms, benches, asphalt down drains and V-channels, concrete channels, reinforced concrete pipes, and sedimentation basins.

Since 2017, the County has leased a portion of the MSL property to PVN Milliken, LLC for a photovoltaic solar facility. The three-megawatt power generating solar facility consists of about 14.5 acres of solar panels located on the top and intermediate decks of the closed landfill. Exhibit 1 shows the footprint of this facility.

## REGULATORY ORDERS

- Waste Discharge Requirements (WDR) and Monitoring and Reporting Program (M&RP) Order No. 81-3 and subsequent WDRs and M&RPs Order Nos. 93-57, 94-17, 96-40, 98-89, and R8-2015-0040 (current). Requirements for the design, construction, and maintenance of run-on runoff drainage control systems at the landfill and the supportive monitoring and reporting requirements. Orders Nos. 93-57, 94-17, 96-4, and 98-89 are combined WDRs and M&RPs for all landfills in the Santa Ana Region.
- CAO Order No. 91-92. Requirement for the MSL to correct drainage and erosion control deficiencies that existed on the landfill property.

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<sup>4</sup> Regional Board. (1994). *Tentative Order No. 94-17, Amending Waste Discharge Requirement for Municipal Solid Waste Landfills Within the Santa Ana Region*. Letter from Kurt V. Berchtold to the County of San Bernardino Solid Waste Management Department February 9, 1994.

<sup>5</sup> Regional Board. (1996). *Tentative Cease and Desist Order No. 96-41, for Violations of WDRs (Order No. 81-3, as Amended by Order No. 93-57, Order No. 94-17, and Order No. 96-40) at the Milliken Sanitary Landfill, San Bernardino County*. April 5, 1996.

<sup>6</sup> Project Navigator, Ltd. (1999). *Final Postclosure Maintenance Plan, Milliken Sanitary Landfill*. Prepared for the County of San Bernardino Solid Waste System Division. September 1999.

- Cease and Desist Order No. 96-41. Requirement for the MSL to submit a workplan with a schedule for the design and construction of a permanent and effective drainage and erosion control system and for the implementation of the workplan.
- WDRs R8-2002-0033, amended by R8-2002-0085 and R8-2013-0020. General WDRs for the re-injection/percolation of extracted and treated groundwater within the Santa Ana Region. Terminated in May 2019 because the pump-and-treat system is no longer operable.<sup>7</sup>
- Water Code Section 13267 Order No. R8-2020-0033 (For the Determination of the Presence of Per- and Polyfluoroalkyl Substances (PFAS) at Closed Municipal Solid Waste Landfills Within the Santa Ana Region, San Bernardino County). Requirement to prepare workplan, conduct sampling and analysis, and submit sampling results to determine the presence of PFAS.

## REGULATORY AND MONITORING HISTORY

On February 26, 1981, the Regional Board adopted WDR No. 81-3<sup>8</sup> for the discharge of municipal solid wastes to land at the MSL. The WDR addressed the placement, monitoring, and reporting of waste at the landfill; however, it did not require groundwater monitoring. In 1987, groundwater monitoring began with the installation of five monitoring wells as part of the Solid Waste Assessment Test (SWAT) investigation.<sup>9</sup> The initial monitoring results indicated that there were multiple contaminants in the groundwater underlying and adjacent to the landfill at concentrations significantly above background levels. The contaminants included multiple VOCs: dichlorodifluoromethane, 1,1-dichloroethene, PCE, and TCE.

On May 1989, the Regional Board requested that the County investigate the nature and extent of the VOC contamination. The County submitted a workplan to the Regional Board in July 1989 to implement the Phase I Evaluation Monitoring Program (EMP) and began implementing the approved Phase I EMP in 1992.<sup>10</sup> During the implementation of the Phase I EMP, the County installed ten new monitoring wells: eight wells downgradient from the facility and two wells upgradient from the facility.<sup>11</sup> Contaminants including TCE and PCE were detected in the new downgradient monitoring wells. Subsequent to the implementation of the Phase I EMP, the County installed three additional monitoring wells along the southern boundary of the property, as well as one well upgradient and six wells downgradient of the property to further characterize the lateral and vertical extent of the TCE plume.

On January 1996, the County submitted a workplan for the Phase II EMP to install two additional monitoring wells along the southern boundary of the facility and two additional monitoring wells downgradient. The

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<sup>7</sup> Regional Board. (2019). *Termination of Regulatory Coverage Under Waste Discharge Requirements, Order No. R8-2002-0033, Groundwater Cleanup Project for Milliken Sanitary Landfill, San Bernardino County*. Letter from Cindy Li to the County. May 9, 2019.

<sup>8</sup> Regional Board. (1981). *Order No. R8-2002-0033, Waste Discharge Requirements for the County of San Bernardino Solid Waste Management, Milliken Sanitary Landfill*. February 26, 1981.

<sup>9</sup> IT Corporation. (1989). *Final Report Solid Waste Assessment Test Milliken Sanitary Landfill, Project No. 240275*. Prepared for County of San Bernardino Environmental Public Works Agency Solid Waste Management Department. June 1898.

<sup>10</sup> IT Corporation. (1989). *Quarterly Report: Subchapter 15 Detection Monitoring Program for Cajon, Colton, Midvalley, Milliken, Plunge Creek, San Timoteo, and Yucaipa Landfills*. Prepared for County of San Bernardino Solid Waste Management Division. July 1989.

<sup>11</sup> Converse Consultants Inland Empire. (1994). *Groundwater Contamination Evaluation, Milliken Sanitary Landfill*. Prepared for the County of San Bernardino Solid Waste Management Division.

workplan was approved by the Regional Board in February 1996.<sup>12</sup> Under the direction of the Regional Board, the County completed the Phase II EMP and an Engineering Feasibility Study in 1998.<sup>13,14</sup> Groundwater flow modeling was also performed to support the selection of an appropriate remediation strategy.<sup>15</sup>

The Regional Board approved a remediation alternative that included (1) a pump-and-treat system for onsite contaminated groundwater and (2) monitored natural attenuation for offsite contaminated groundwater. Construction of the pump-and-treat system was completed on March 4, 1999 and consisted of 13 groundwater extraction wells located at the downgradient edge of the MSL site. Offsite monitoring for natural attenuation began at four offsite wells in 1998.

In 2000, groundwater levels began to decline monotonically in the vicinity of the MSL and by 2007, the groundwater level dropped below the total depths of all 13 onsite extraction wells and five offsite monitoring wells. In response, the Regional Board requested that the County complete an updated feasibility study to evaluate the effectiveness of the remediation strategy and the extent of the contaminant plume. In March 2013, the County finalized the Updated Engineering Feasibility Study for the MSL (2013 Feasibility Study).<sup>16</sup> The 2013 Feasibility Study evaluated several potential alternative treatments to mitigate the plume. The County concluded that monitored natural attenuation was the appropriate remediation alternative. This revised remediation alternative was approved by the Regional Board on May 15, 2013.

In 2018, the County performed an evaluation of offsite impacts to groundwater at the MSL to the Regional Board in response to a June 17, 2015 letter from the Regional Board.<sup>17</sup> The 2015 letter requested that the evaluation of offsite impacts include the following actions: 1) update the 1998 groundwater-flow model to incorporate the non-operating groundwater pump-and-treat system and use updated monitoring data; 2) collect gas samples from specified landfill gas probes; and 3) prepare a report and evaluate the need for corrective action based on the findings. Based on the results of the updated modeling and monitoring for the offsite evaluation, the County proposed the installation of a downgradient monitoring well (see Exhibit 1) and a soil-gas investigation to determine whether soil gas mitigation is necessary. The Regional Board accepted the proposed actions on March 29, 2018. Since then, the County has conducted two pilot studies on a Soil Vapor Extraction (SVE) system, the most recent of which was completed in late-2019.

The County and PVN Milliken, LLC submitted a revised Final Post-Closure Maintenance Plan in November 2016 and a land use plan in December 2016 to modify the MSL's end use plan to include the solar plant

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<sup>12</sup> Regional Board. (1996). *Milliken Landfill – Addendum to Phase II Workplan, Contaminant Plume Investigation*. Letter from Dixie B. Lass. February 6, 1996.

<sup>13</sup> Geo-Logic Associates. (1998). *Phase II Evaluation Monitoring Report, Milliken Sanitary Landfill*. Prepared for the County of San Bernardino Solid Waste System Division. May 1998.

<sup>14</sup> Geo-Logic Associates. (1998). *Engineering Feasibility Study, Milliken Sanitary Landfill*. Prepared for the County of San Bernardino Solid Waste System Division. May 1998.

<sup>15</sup> Geo-Logic Associates. (1999). *Groundwater Flow Model, Milliken Sanitary Landfill*. Prepared for the County of San Bernardino Solid Waste System Division. February 1999.

<sup>16</sup> Geo-Logic Associates. (2013). *Updated Engineering Feasibility Study for Corrective Action. Milliken Sanitary Landfill County of San Bernardino, California*. Prepared for the County of San Bernardino Solid Waste System Division. March 2013.

<sup>17</sup> Regional Board. (2015) *Groundwater Impacts Evaluation for Milliken Sanitary Landfill, San Bernardino County*. June 17, 2015

on the landfill surface.<sup>18,19</sup> The Regional Board approved the plans in January 2017.<sup>20</sup> The revised post-closure maintenance plan provides a basis for plan inspection, maintenance, and monitoring of the MSL during the post-closure maintenance period. The revised land use plan describes PVN Milliken's modification to the landfill, and its responsibility to maintain and monitor the land in a way that does not impact groundwater and surface water quality.

## REMEDIAL ACTION

As previously noted, the original remedial action plan that consisted of a pump-and-treat system and monitored natural attenuation had to be revised due to declining water levels. All 13 onsite extraction wells and five of the eight offsite monitoring wells dried up as groundwater elevations declined below well depths, causing the pump-and-treat system to cease operations in 2007. The 2013 Feasibility Study identified monitored natural attenuation, coupled with the existing mitigation measures, as the best remedial alternative of downgradient groundwater impacts and included certain trigger points that would require mitigation measures to be initiated. These trigger points include:

- When the total VOC load<sup>21</sup> in samples from downgradient monitoring well M-8A or M-8B exceeds the model-predicted VOC concentrations for two consecutive quarters, improvements to the existing landfill gas extraction system would be implemented.
- Once the improvements are implemented, the following trigger would require additional mitigation measures to be implemented when a "statistically significant" increasing<sup>21</sup> VOC concentration trend is identified in monitoring well M-8A or M-8B over a one-year period after the landfill gas improvements have been implemented.

The trigger points were approved by the Regional Board in 2013.<sup>22</sup> If additional remedial action is deemed necessary based on these trigger points, the most appropriate and cost-effective remediation measure will be evaluated at that time.

The 2013 Feasibility Study also specified that if VOC concentrations increase to one-half of the model-predicted VOC concentrations in wells at the center of the plume, an additional offsite monitoring well would be necessary near well M-19 to monitor the natural attenuation of the plume in the lower aquifer as the plume moves away from the site.

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<sup>18</sup> Project Navigator, Ltd. (2016). *Final Postclosure Maintenance Plan Milliken Sanitary Landfill 36-AA-0054 Ontario, California*. Prepared for the County of San Bernardino Department of Public Works – Solid Waste Management Division on behalf of PVN Milliken, LLC. September 10, 1999. Revised June 2004. Revised 2014. Revised November 2016.

<sup>19</sup> Project Navigator, Ltd. (2016). *Land Use Plan for the Milliken Sanitary Landfill 36-AA-0054 Ontario, California, County of San Bernardino*. Prepared for the County of San Bernardino Department of Public Works – Solid Waste Management Division on behalf of PVN Milliken, LLC. December 2016.

<sup>20</sup> Regional Board. (2017). *Approval of the Revised Final Post Closure Maintenance Plan and Land Use Plan for Milliken Landfill, Ontario, San Bernardino County*. January 19, 2017.

<sup>21</sup> Statistically significant increasing or decreasing trends are determined using Sen's Slope/Mann Kendall trend test.

<sup>22</sup> Regional Board. (2013). *Identification of Triggers for Additional Corrective Action System for the Milliken Landfill, San Bernardino County*. Letter dated May 15, 2013.



## MONITORING AND REPORTING

The County conducts groundwater, surface water, and soil-pore gas monitoring at the MSL pursuant to a Corrective Action Program to address impacts to groundwater. The monitoring program consists of 26 groundwater monitoring wells, one piezometer, and three surface water monitoring stations. There are also five soil-pore gas monitoring probes, and one landfill gas condensate station for monitoring VOCs in soil and vapor. Groundwater quality and groundwater levels are collected quarterly at the monitoring wells that are not dry. Surface-water quality sampling is conducted quarterly when there is water at the sites. Field soil-gas screening is performed semi-annually during the second and fourth quarters, and a measurement is collected for laboratory analysis when methane is detected at a concentration that is greater than five percent in volume. Landfill gas condensate sampling is conducted annually in the fourth quarter.

The groundwater data collected during the quarterly sampling events is statistically analyzed to identify increasing or decreasing trends of VOCs and other constituents of concern. The quarterly groundwater monitoring data are also used to assess the natural attenuation of the offsite extent of the plume. VOC concentrations at monitoring wells M-8B and M-8A (if not dry) are used to determine if there are triggers that would necessitate further corrective actions. These triggers are based on model-predicted concentrations from the 1999 groundwater modeling performed to evaluate the pump-and-treat system. Exhibit 1 shows the locations of wells M-8A and M-8B. The following table shows the model-predicted VOC concentrations over time:

Year	Total VOC Load at M-8A or M-8B <sup>(a)</sup> , µg/l	Year	Total VOC Load at M-8A or M-8B <sup>(a)</sup> , µg/l	Year	Total VOC Load at M-8A or M-8B <sup>(a)</sup> , µg/l
2013	120	2027	123	2041	50
2014	123	2028	117	2042	45
2015	125	2029	112	2043	40
2016	128	2030	106	2044	35
2017	130	2031	101	2045	30
2018	130	2032	96	2046	25
2019	129	2033	90	2047	20
2020	128	2034	85	2048	18
2021	127	2035	80	2049	16
2022	126	2036	75	2050	14
2023	125	2037	70	2051	13
2024	124	2038	65	2052	12
2025	124	2039	60	2053	11
2026	123	2040	55	2054	10

Notes:  
(a) Total VOC load (µg/l) equals the sum of all detected VOC concentrations in a given sample.

## RECENT ACTIVITY

The County's most recent monitoring event occurred in April 2021, and the results were reported in the second quarter 2021 monitoring report submitted to the Regional Board in July 2021.<sup>23</sup> During the sampling event, groundwater levels were measured at eight wells and three piezometers, and groundwater-quality samples were collected at seven wells. Ten monitoring wells, seven piezometers, and all three surface water monitoring stations were dry. No methane was detected in the soil-pore gas screening samples. Exhibit 1 shows the monitoring wells that were sampled during the second quarter of 2021, and the wells that were dry. The following section summarizes the results from the April 2021 quarterly monitoring event:

- Seventeen wells were dry and seven wells were sampled for water quality.
- The TCE concentrations at most of the active monitoring wells (except for M-8B) were below the MCL.
- Monitoring well M-8A was dry, and the maximum total VOC loads for monitoring well M-8B was 19.17 µg/l, which is below the predicted load threshold of 127 µg/l for 2021.
- There continues to be a significant decreasing trend in the TCE concentration measured in monitoring well M-8B, located at the central and southern portion of the plume.
- No additional corrective actions have been triggered since the current VOC load at M-8B is below the predicted load threshold, and there is a decreasing TCE trend in M-8B. Ongoing source control and routine monitoring and reporting will continue.

On July 21, 2020, the County was issued an Investigative Order by the Regional Board pursuant to California Water Code Section 13267 to monitor for PFAS at the MSL.<sup>24</sup> Pursuant to the Investigative Order, the County submitted a workplan on September 16, 2020, which was approved by the Regional Board on October 12, 2020.<sup>25</sup> Sampling of 42 PFAS at the MSL was conducted on November 17 and 18, 2020. Sampling occurred at four monitoring wells (M-5B, M-2D, M-6B, M-15B) and one landfill gas condensate location. The final report was submitted to the Regional Board on December 30, 2020. Perfluoro-n-pentanoic acid (PFPeA) and 6:2 fluorotelomer sulfonate (6:2 FTS) were detected at concentrations above the laboratory reporting limits at wells M-5B, M-6B, and M-15B, and perfluorohexane sulfonate (PFHxS) and perfluorooctanoic acid (PFOS) were detected above the laboratory reporting limits at well M-5B but below the notification level for PFOS of 6.5 µg/l.<sup>26</sup> All wells sampled had perfluorooctanoic acid (PFOA) concentrations below the notification level of 5.1 µg

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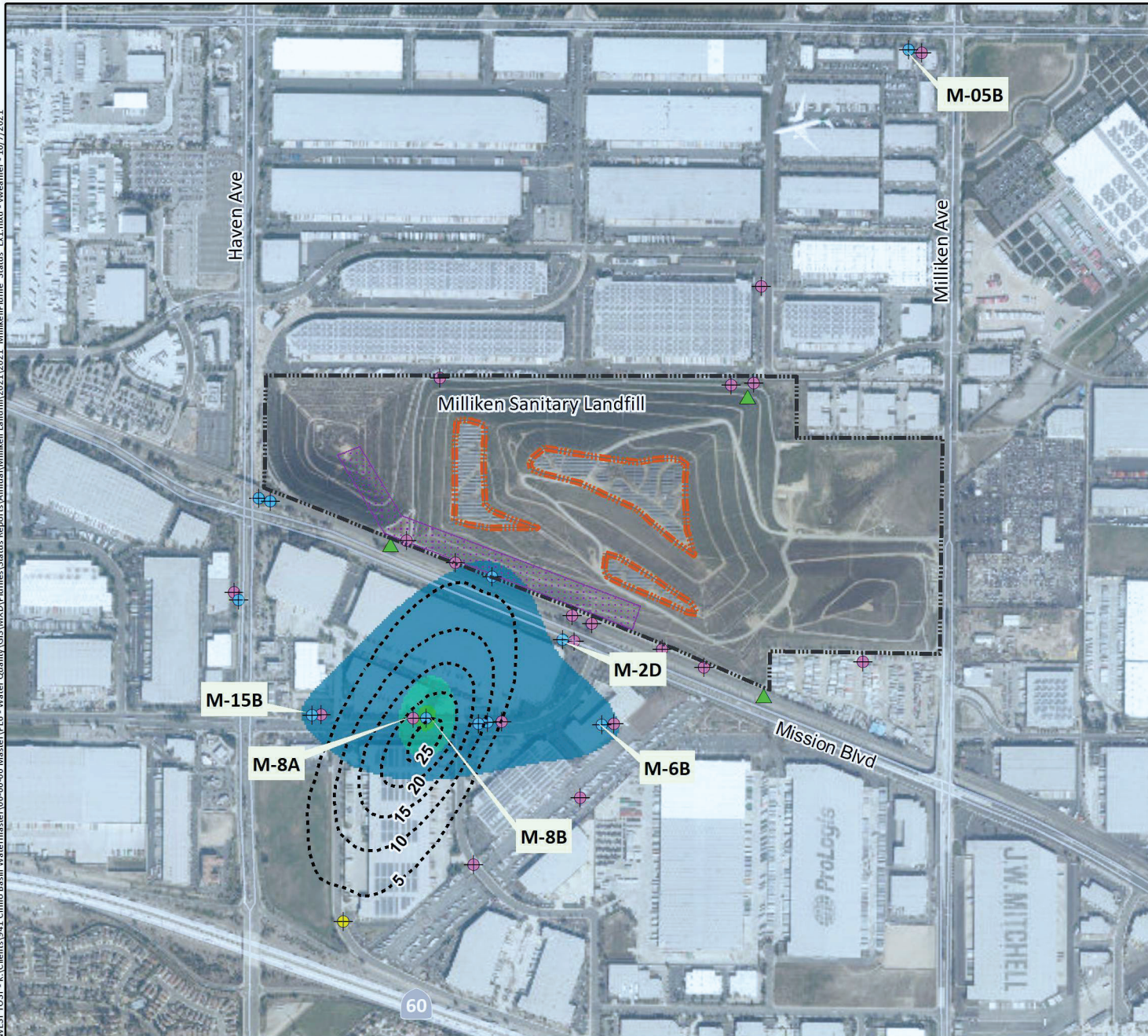
<sup>23</sup> Geosyntec. (2021). *Second Quarter 2021 Monitoring Report Water Quality Monitoring Program Milliken Sanitary Landfill Ontario, California*. July 30, 2021.

<sup>24</sup> Regional Board. (2020). *Water Code Section 13267 Order No. R8-2020-0033, For the Determination of the Presence of Per- and Polyfluoroalkyl Substances (PFAS) at Closed Municipal Solid Waste Landfills Within the Santa Ana Region, San Bernardino County*. July 21, 2020.

<sup>25</sup> San Bernardino County, Solid Waste Management Division. (2020). *Work Plan for Sampling and Analyses of Per- & Polyfluoroalkyl (PFAS) at Select Santa Ana Region Closed Landfill Facilities*. September 16, 2020

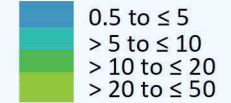
<sup>26</sup> Geo-Logic Associates. (2020). *Results for Sampling and Analyses of Per – and Polyfluoroalkyl Substances at Select Santa Ana Region Closed Landfill Facilities*. December 30, 2020.

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Maximum Concentration ( $\mu\text{g/L}$ )  
July 2016 - June 2021

TCE



MCL = 5  $\mu\text{g/l}$

(Delineated by Watermaster in the 2020 State of the Basin Report)

Contours of Total VOCs Concentrations ( $\mu\text{g/l}$ ) as delineated by the County in 2015

County of San Bernardino Monitoring Wells\*

- Sampled in 2021
- Dry in 2021
- Proposed New Well Location
- Surface Water Monitoring Station (Dry)
- Extent of Solar Facility
- Milliken Sanitary Landfill Boundary
- 2019 SVE Pilot Test Area Using the 13 Dry Extraction Wells

\* Wells are labeled by well name if mentioned in the report



Prepared by:



Prepared for:

Chino Basin Watermaster  
Annual Plume Report



## Annual Plume Status Report

### Stringfellow Plume October 2021

### CONTAMINANTS

The primary contaminants at the Stringfellow site are perchlorate, trichloroethene (TCE), and chloroform. The California maximum contaminant levels (MCL) for perchlorate and TCE are 6 micrograms per liter (µg/l) and 5 µg/l, respectively. Chloroform does not have an MCL but is assessed to a cleanup level of 6 µg/l for the Stringfellow site.<sup>1</sup> The five-year maximum contaminant concentrations detected in groundwater within the various designated zones of the Stringfellow site are shown in Table 1 below.

<b>Table 1. Five-Year Maximum Contaminant Concentrations in Stringfellow by Zone between July 2016 to June 2021</b>			
Contaminant	MCL or Cleanup Level, µg/l	Five-Year Maximum Concentration – July 2016 – June 2021, µg/l	
		Zones 1-3 (Within Pyrite Canyon)	Zone 4 (Downgradient of Pyrite Canyon)
Perchlorate	6	10,000	140
TCE	5	280,000	24
chloroform	6	11,000	15

Additional contaminants at the site include other volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides, para-chlorobenzene sulfonic acid, n-nitrosodimethylamine, and various heavy metals. Also, the groundwater beneath the former waste evaporation ponds has a pH of <4.

### LOCATION

The Stringfellow plume is located in the City of Jurupa Valley in the eastern portion of the Chino Basin in Riverside County. The plume extends south-southwest from Pyrite Canyon in the Jurupa Mountains which is the location of the former Stringfellow hazardous waste facility. The plume is geographically divided into four groundwater zones in Pyrite Canyon and downgradient from the canyon in consideration of various operational and remediation activities. These zones, shown in Exhibit 1, include:

- **Zone 1 (On-site/Upper Mid-Canyon Area)** is located in the northern most part of Pyrite Canyon and includes the original 17-acre disposal facility. It is divided into two areas

<sup>1</sup> Cleanup levels were established for TCE (5 µg/l and equal to the MCL) and chloroform (6 µg/l) in the Interim Records of Decision 4 by the United States Environmental Protection Agency.

(Zone 1A and Zone 1B) that are separated by a man-made clay barrier constructed downgradient of the evaporation ponds in 1980 to mitigate subsurface flow. Zone 1A is located upgradient of the clay barrier and includes the former evaporation ponds. Zone 1B extends 600 feet south of the barrier below the evaporation ponds and includes the Pyrite Canyon Treatment Facility.

- **Zone 2 (Mid-Canyon Area)** comprises the central portion of Pyrite Canyon and includes the Pre-Treatment Plant and a line of extraction wells.
- **Zone 3 (Lower Canyon Area)** extends from just south of the extraction wells in Zone 2 to just north of Highway 60 and includes the Lower Canyon Treatment Facility.
- **Zone 4** is the largest zone and extends from Highway 60 to immediately north of the Santa Ana River; it is a residential and light industrial area in the City of Jurupa Valley, and includes the Community Well Head Treatment System.

Exhibit 1 shows the general extent of the TCE plume originating from the former Stringfellow hazardous waste facility with detectable concentrations of TCE greater than or equal to 0.5 µg/l, as delineated by the Chino Basin Watermaster (Watermaster) for the *2020 State of the Basin Report*.<sup>2</sup> The plume is approximately 2.6 miles long and 0.2 miles wide and extends from Zone 1 to the midpoint of Zone 4 near the Community Wellhead Treatment System.

Exhibit 1 also shows the general extent of the perchlorate plume originating from the Stringfellow site with concentrations greater than or equal to 6 µg/l, as delineated in 2019 for the *2019 Annual Groundwater Monitoring and Remedy Effectiveness Evaluation Report*.<sup>3</sup> The perchlorate plume extends from Zone 1 approximately 4.7 miles south/southwest to Zone 4, all the way to the edge of the Santa Ana River. The width of the perchlorate plume varies between approximately 0.1 and 1 mile wide. There are several smaller perchlorate plumes to the east and west of the main plume as shown in Exhibit 1.

The extent of the chloroform plume, which is much smaller than the TCE and perchlorate plumes, is limited to Zones 1 and 2 and is not shown in Exhibit 1.

## SITE HISTORY

Stringfellow Quarry Company Inc. operated the site as a Class I Hazardous Waste Disposal Facility from 1956 to 1972 pursuant to the issuance of a land use variance by the Riverside County Planning Commission in 1952. During this time, an estimated 34 million gallons of industrial liquid waste containing spent acids, caustics, solvents, pesticide byproducts, metals, and other organic and inorganic constituents—derived primarily from electroplating, metal finishing, and pesticide manufacturing—were deposited in as many as 20 evaporation ponds (located within Zone 1a on Exhibit 1).<sup>4</sup> Liquid wastes were also sprayed into the air to reduce the volume of wastes accumulating in the ponds. In 1969, heavy rainfall caused the disposal ponds at the facility to overflow resulting in the discharge of contaminated liquids to Pyrite Creek. In 1978, heavy rains again threatened to cause the ponds to overflow and the Regional Water Quality Control

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<sup>2</sup> West Yost Associates. (2021). *Optimum Basin Management Program - 2020 State of the Basin Report*. Prepared for the Chino Basin Watermaster. June 2021.

<sup>3</sup> Kleinfelder. (2021). *2019 Annual Groundwater Monitoring and Remedy Effectiveness Evaluation Report, Stringfellow Superfund Site*. Prepared for California Department of Toxic Substances Control. April 1, 2021.

<sup>4</sup> U.S. Army Corps of Engineers. (2016). *Fifth Five-Year Review Report for Stringfellow Superfund Site Riverside County, California*. September 2016.

Board (Regional Board) authorized an 800,000-gallon release from the ponds to prevent a larger uncontrolled release caused by the heavy rains.

Between 1975 and 1980, following closure of the site, approximately 6.5 million gallons of liquid wastes were removed from the facility. Following the removal activities, the United States Environmental Protection Agency (USEPA) and the United States Coast Guard (USCG) assisted the Regional Board with the initiation of response actions and site investigation studies. In October 1981, the Stringfellow site was placed on the USEPA Interim Priorities List of Hazardous Waste Sites. On December 30, 1982, the Stringfellow site was proposed for the USEPA's final National Priorities List (NPL) as a Superfund site, and on September 8, 1983 it was placed on the final NPL. In 1993 the Department of Toxic Substances Control (DTSC) assumed responsibility for maintenance of the Stringfellow site on behalf of the State of California through a Cooperative Agreement with the USEPA. Since that time, over 45 phases of investigation, feasibility testing, and remedial actions have been performed by various entities at the site. A record of these activities and associated reports can be found on the DTSC EnviroStor website (<https://www.envirostor.dtsc.ca.gov/public/>).

## REGULATORY ORDERS

From 1983 to 1990, the USEPA adopted four interim Records of Decision (RODs) to guide remediation efforts at the Stringfellow site. The following summarizes the four RODs and major remedial actions set forth therein:

- **ROD 1** (USEPA 1983).<sup>5</sup> The first ROD directed completion of several initial abatement activities including: fencing the site, erosion control, hauling and disposal of contaminated liquids, and interim source control.
- **ROD 2** (USEPA 1984).<sup>6</sup> The second ROD included the construction of the Pre-Treatment Plant in the mid-canyon area located within Zone 2.
- **ROD 3** (USEPA 1987).<sup>7</sup> The third ROD included the installation of an upgradient surface water diversion north of the original contamination site within Zone 1A, and the installation of a groundwater barrier system in the lower canyon area located within Zone 3.
- **ROD 4** (USEPA 1990).<sup>8</sup> The fourth ROD delineated the site into four geographic zones (Zones 1-4, as described above), and directed the construction of the Community Wellhead Treatment Facility in Zone 4, the dewatering of the of the original disposal area in Zone 1, field testing of soil vapor extraction, and field testing of the reinjection of treated groundwater in the upper canyon area.

A fifth and final ROD (ROD 5), outlining the final remedial action objectives for Zones 1, 2, 3, and 4, is expected to be published by the end of 2021.

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<sup>5</sup> United States Environmental Protection Agency (USEPA). (1983). *EPA Superfund, Record of Decision: Stringfellow Acid Pits Site*. USEPA ID: CAT080012826, OU01, Mira Loma, California. July 1983.

<sup>6</sup> United States Environmental Protection Agency (USEPA). (1984). *Record of Decision, Stringfellow Acid Pits, Summary of Remedial Alternative Selection*. July 1984.

<sup>7</sup> United States Environmental Protection Agency (USEPA). (1987). *Record of Decision: Stringfellow Acid Pits, Summary of Remedial Alternative Selection (Early Implementation Action)*. June 1987.

<sup>8</sup> United States Environmental Protection Agency (USEPA). (1990). *Record of Decision: Stringfellow Hazardous Waste Site*. September 1990.

## REMEDIAL ACTION

In 1980, prior to the first ROD, the Regional Board adopted an interim abatement program to contain the waste and minimize the risk of further contaminant migration. Several remedial solutions were implemented, including the removal of liquid waste from ponds, partial neutralization and capping of wastes, the construction of a subsurface clay barrier wall downgradient from the pond area, and drainage control features.

Following the completion of remedial measures required by ROD 1 and the issuance of ROD 2, a groundwater extraction and treatment system was developed and has become the primary remedial action implemented at the site. The groundwater extraction and treatment system, which has expanded over time, currently consists of a network of over 70 extraction wells throughout Zones 1-4 and two treatment plants operated by the DTSC on behalf of the State of California: the Pyrite Canyon Treatment Facility and the Community Wellhead Treatment System. The Pre-Treatment Plant and Lower Canyon Treatment Facility are no longer active. Exhibit 1 shows the locations of the four treatment plants; the following is a brief description of each:

- **Pyrite Canyon Treatment Facility.** This plant treats contaminated groundwater from extraction wells in Zones 1, 2, 3, and 4 (wells CTN-TW1 and CTS-TW1). The Pyrite Canyon Treatment Facility was constructed in 2017 to replace the aging infrastructure of Pre-Treatment Plant and began operating on April 4, 2017. The constituents treated include low pH, pesticides, metals, and VOCs. The Pyrite Canyon Treatment Facility is located in Zone 1B and has the potential to treat a wider range of contaminants than the Pre-Treatment Plant. Treated effluent is stored onsite and then released to the Inland Empire Brine Line and the Orange County Sanitation Districts wastewater collection, treatment, and disposal facilities under permit from the Santa Ana Watershed Project Authority. Some of the treated effluent is used for utility water at the treatment facility.
- **Community Wellhead Treatment System.** This plant treats contaminated groundwater pumped from two wells in Zone 4 for VOCs and perchlorate (Wells CTP-TW1 and CTP-TW2). Treated effluent is discharged to Pyrite Creek under an NPDES permit and can also be used for irrigation by local residents.
- **Pre-Treatment Plant.** This plant is located in Zone 2 and began operating in 1985 pursuant to the second ROD. It formerly treated VOCs in groundwater removed from extraction wells operating in Zones 3 and 4 and stored at the Lower Canyon Treatment Facility; this groundwater was redirected for treatment at the Pyrite Canyon Treatment Facility as of October 29, 2019. It has been shut down and is in the process of decommissioning.
- **Lower Canyon Treatment Facility.** This facility formerly treated contaminated groundwater pumped from extraction wells in Zones 3 and 4 for VOCs. Treated effluent from the Lower Canyon Treatment Facility was piped to and stored at the Pre-Treatment Plant and subsequently released to the Inland Empire Brine Line. Currently, the facility is in a stand-by state. As of October 29, 2019, groundwater extracted from Zones 3 and 4 has been redirected for treatment at the Pyrite Canyon Treatment Facility.

The USEPA has initiated a groundwater and soil investigations to develop remedial actions for perchlorate for Areas 1 and 2 (see Exhibit 1) in Pyrite Canyon, potentially from sources on the west and east sides of Pyrite Canyon. A draft remedial investigation report for Area 1 (completed in 2017) and a remedial investigation report for Area 2 (completed in 2018) will inform feasibility studies to support the selection

of a remedial action.<sup>9, 10</sup>A Remedial Investigation (RI) report was prepared by Ramboll to evaluate the results of the USEPA investigation for Area 2 (completed in April 2020). An RI for Area 1 has not yet been submitted.<sup>11</sup>

## MONITORING AND REPORTING

Currently there are more than 600 wells that are actively monitored for groundwater elevations and/or groundwater quality at and downgradient of the Stringfellow site. Groundwater monitoring is performed in accordance with the *2016 Site-Wide Groundwater and Surface Water Monitoring Plan*.<sup>12</sup> The DTSC performs routine monitoring either annually or quarterly to evaluate groundwater quality and the effectiveness of the groundwater pump-and-treat system, and reports its findings in quarterly monitoring reports, annual monitoring reports, and annual groundwater remedy effectiveness evaluation reports. In general, new wells are sampled quarterly for two years and then incorporated into the annual sampling schedule. The number and type of wells monitored in each zone or area are summarized in Table 2 below based on the most current *Annual Groundwater Monitoring and Remedy Effectiveness Evaluation Report*.<sup>3</sup>

<b>Table 2. Monitoring Well Schedule</b>						
Zone or Area	Number of Wells	Well Type				
		Monitoring Well	Extraction Well	Piezometer	Extraction Sump	Water Supply Well
1A	127	82	39	0	6	-
1B	72	51	10	11	-	-
2	35	27	8	0	-	-
3	136	124	12	0	-	-
4	202	160	4	35	-	3
USEPA Area 1/2	36	36	0	0	-	-
<b>Total</b>	<b>607</b>	<b>479</b>	<b>73</b>	<b>46</b>	<b>6</b>	<b>3</b>

<sup>9</sup> CH2M. (2017). *Draft Final Remedial Investigation Report, EPA Area 1, Stringfellow Superfund Site, Jurupa Valley, California*. Prepared for USEPA. April 2017.

<sup>10</sup> Ramboll US Corporation. (2018). *EPA Area 2 Remedial Investigation Report, Stringfellow Superfund Site*. Prepared for California Department of Toxic Substances Control. October 19, 2018.

<sup>11</sup> Ramboll. (2020). *EPA Area 2 Remedial Investigation Report, Stringfellow Superfund Site Riverside County, California*. Prepared for California Department of Toxic Substances Control. April 6, 2020.

<sup>12</sup> Kleinfelder. (2016). *Final Sitewide and Surface Water Monitoring Plan and Sampling and Analysis Plan Stringfellow Superfund Site, Jurupa Valley California*. Prepared for California Department of Toxic Substances Control. July 19, 2016.



The DTSC initiated surface water sampling in 2005 to evaluate perchlorate concentrations in storm water runoff in Pyrite Creek and its tributary channels. Currently, surface water sampling and reporting are executed pursuant to the *Final Surface Water Sampling and Analysis Plan*<sup>13</sup> and are performed during qualifying storm events, which are classified using the following criteria: at least 72 hours of dry weather have elapsed since a previous storm event and a storm event produces sufficient runoff during daylight hours to perform sampling.

Watermaster collects all relevant groundwater and surface water data from the DTSC's Stringfellow Interface for Data and Documents (SIDD database) on a bi-annual basis as part of its Chino Basin Data Collection effort. These data are periodically used by Watermaster to support its basin management initiatives.

## RECENT ACTIVITY

The following is a summary of key activities that have occurred since October 2020:

- The *2020 Annual Groundwater Sampling and Analysis Report* was completed by the DTSC and submitted to the USEPA in December 2020. Groundwater levels and groundwater-quality samples were collected from 495 wells and piezometers.<sup>14</sup> Groundwater quality samples and level measurements were unable to be collected at 45 of the scheduled wells due to various reasons.
- On May 27, 2021, the DTSC submitted two Groundwater Sampling and Analysis Reports for non-routine groundwater monitoring events in August and November 2020.<sup>15,16</sup> Seventeen new monitoring wells in Zones 1B and 4 were sampled in August and November 2020.
- The *Final 2019 Annual Groundwater Monitoring and Remedy Effectiveness Evaluation Report* was submitted by the DTSC on April 1, 2021.<sup>17</sup> During this reporting period, the Pyrite Canyon Treatment Facility, Pre-Treatment Plant, and Community Wellhead Treatment System, and the surface water control discharge systems to Pyrite Creek, functioned without issue regarding permit conditions or major equipment malfunctions. The report concludes that the remedial actions have been effective in reducing contamination by removing a substantial mass of solutes. From 2009 to 2019, 1,514 pounds of TCE, 287 pounds of chloroform, and 175 pounds of perchlorate were removed from remediation activities and treatment systems the Site. In general, contaminant concentrations in groundwater are decreasing across the site and the spatial extent of all contaminants of concern is similar to previous monitoring events. There is evidence that there may be additional sources of perchlorate contamination from the west and east sides of Pyrite Canyon (USEPA Areas 1 and 2) contributing to the contamination downgradient.

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<sup>13</sup> Geo-Logic Associates. (2016). *Final Surface Water Sampling and Analysis Plan; Stringfellow Superfund Site*. Prepared for California Department of Toxic Substances Control. July 2016.

<sup>14</sup> DTSC. (2020). *2020 Annual Groundwater Sampling and Analysis Report; Stringfellow Superfund Site*. Prepared for the USEPA. December 23, 2020.

<sup>15</sup> Geo-Logic Associates. (2021). *August 2020 Groundwater Sampling and Analysis Report; Stringfellow Superfund Site*. Prepared for California Department of Toxic Substances Control. May 27, 2021.

<sup>16</sup> Geo-Logic Associates. (2021). *November 2020 Groundwater Sampling and Analysis Report; Stringfellow Superfund Site*. Prepared for California Department of Toxic Substances Control. May 27, 2021.

<sup>17</sup> Kleinfelder. (2021). *2019 Annual Groundwater Monitoring and Remedy Effectiveness Evaluation Report, Stringfellow Superfund Site*. Prepared for California Department of Toxic Substances Control. April 1, 2021.

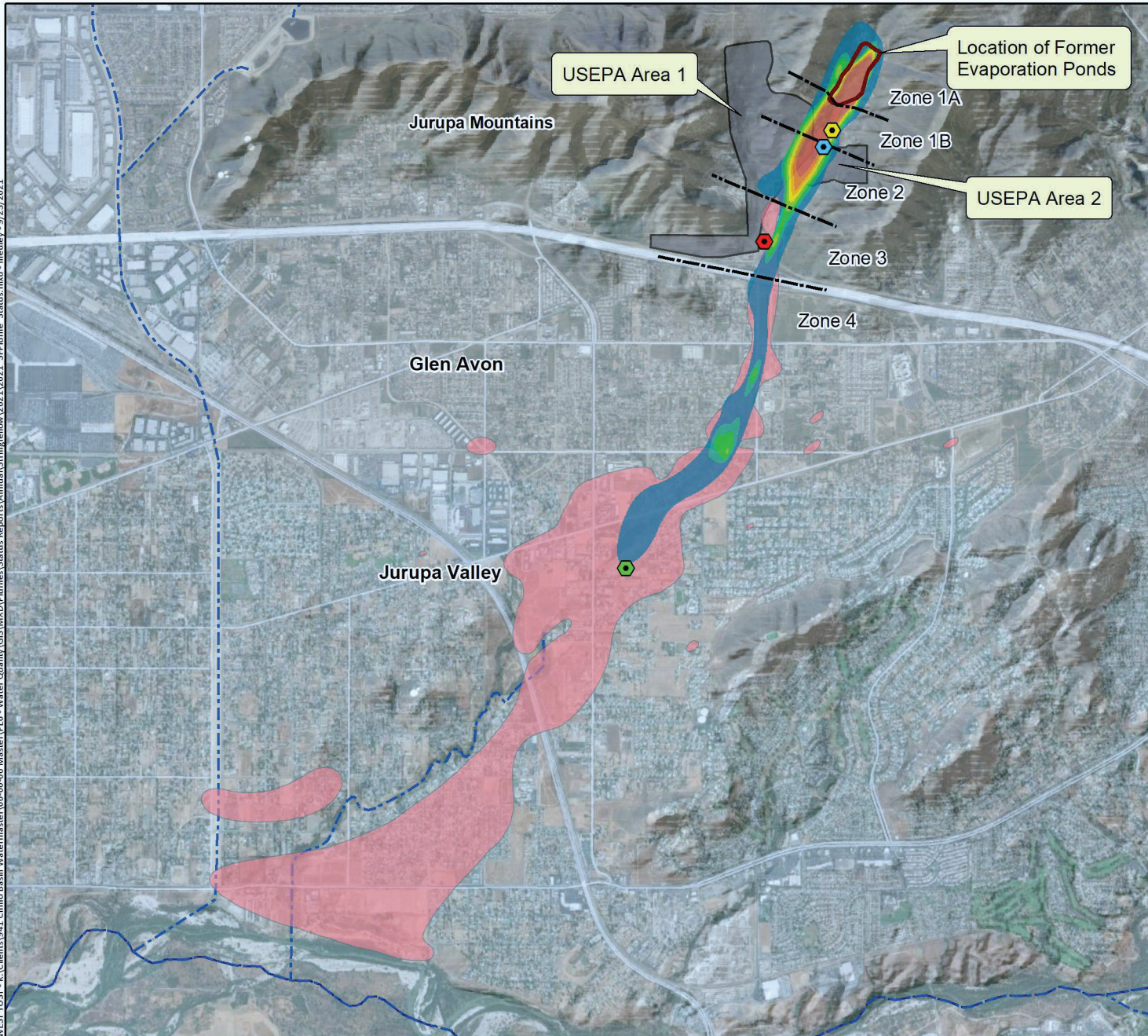
- A *Pyrite Canyon Groundwater Flow Model* was submitted to DTSC in 2021.<sup>18</sup> The model is intended to be used to evaluate general groundwater flow and solute transport in the canyon, and to assess the effectiveness of groundwater extraction systems at the Site in preventing site-related chemicals in groundwater from migrating further downcanyon and into Zone 4. The model demonstrates that groundwater flow is directed towards the center of Pyrite Canyon, consistent with the conceptual model and the observed extent of the perchlorate plume. It also confirms that existing extraction systems are adequately capturing contaminants, except for areas located to the west of the extraction systems. These findings will help support the addendum to the Supplemental Feasibility Study published in 2009 which will detail the remediation alternatives modeled and evaluated for implementation. The USEPA and DTSC will release a Proposed Plan to present the preferred remediation alternatives. Following the selection of a remedy, the USEPA will prepare the Final ROD (ROD 5) to provide a rationale for the selected remedy and outline its goals. The Final ROD (ROD 5) is expected to be approved in 2022.
- The DTSC continues to inform the communities in the City of Jurupa Valley of updates on the remediation and monitoring of the Stringfellow Superfund Site through its annual Community Update fact sheet.<sup>19</sup>

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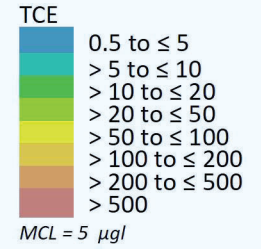
<sup>18</sup> Ramboll. (2021). *Pyrite Canyon Groundwater Flow Model*. Prepared for California Department of Toxic Substances Control. January 27, 2021.

<sup>19</sup> California Department of Toxic Substances Control. (2020). *Legacy Landfills Office Community Update: Stringfellow Superfund Site*. October 2020.

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Maximum Concentration (µg/L)  
July 2015 - June 2020



(Delineated by Watermaster in the 2020 State of the Basin Report)

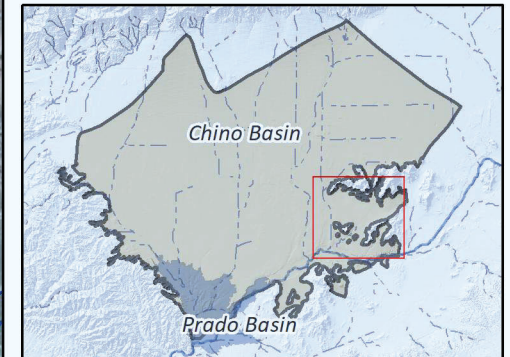
█ Extent of perchlorate plume ( ≥ 6 µg/l)

Delineated by Kleinfelder in the 2019 Annual Groundwater Monitoring and Remedy Effectiveness Evaluation Report (2021)

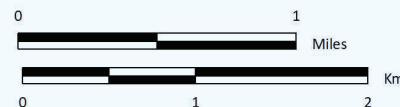
Groundwater Treatment Facilities

- ⬡ Pyrite Canyon Treatment Facility
- ⬡ Pre-Treatment Plant
- ⬡ Lower Canyon Treatment Facility
- ⬡ Community Wellhead Treatment System

Streams & Flood Control Channels



Prepared by:



Prepared for:

Chino Basin Watermaster  
Annual Plume Report



# CHINO BASIN WATERMASTER

- IV. INFORMATION
- 3. GROUND-LEVEL MONITORING STATUS REPORT

## Semi-Annual Status Report

### Chino Basin Watermaster Ground-Level Monitoring Committee October 2021

This semi-annual status report describes the background of the Ground-Level Monitoring Committee (GLMC) and the Ground-Level Monitoring Program (GLMP), the main GLMP activities conducted during the period April 2021 through September 2021, and the main activities planned for the period October 2021 through March 2022.

Historically, the utilization of the Chino Basin has inadvertently resulted in land subsidence and ground fissuring. Pursuant to the Watermaster Optimum Basin Management Program (OBMP) implementation plan, the Watermaster developed and continues to implement the Chino Basin Subsidence Management Plan (Subsidence Management Plan). The objective of the Subsidence Management Plan is to minimize or abate the occurrence of land subsidence and ground fissuring.

The Subsidence Management Plan identifies four “Areas of Subsidence Concern” and the MZ-1 Managed Area in the western portion of the Chino Basin. Figure 1 shows the locations of these areas. These are areas where land subsidence and ground fissuring have historically occurred, or where the underlying hydrogeologic conditions makes these areas susceptible to land subsidence and ground fissuring. In the MZ-1 Managed Area, Watermaster has conducted monitoring and testing programs, and has developed Management Criteria for the groundwater pumpers within the area to minimize or abate the future occurrence of land subsidence and ground fissuring. The Management Criteria consists of the following main elements:

- A list of pumping wells in the MZ-1 Managed Area that are subject to the Subsidence Management Plan.
- An index water level measured at Watermaster’s PA-7 piezometer at Ayala Park. The index water level is called the Guidance Level.
- A Watermaster recommendation that the well owners collectively manage their pumping so that the water level at the PA-7 piezometer remains above the Guidance Level.

The Subsidence Management Plan also calls for:

1. An ongoing monitoring and reporting program to verify the protective nature of the Subsidence Management Plan and identify new threats or occurrences of land subsidence.
2. A process to adapt the Subsidence Management Plan to minimize or abate land subsidence and ground fissuring.

Since the initial Subsidence Management Plan was adopted by the Watermaster in 2007, Watermaster has conducted the GLMP to implement the monitoring and reporting program in 1. above.

The main activities of the GLMP include:

- Setup and maintenance of monitoring facilities
- Monitoring and testing
- Data analysis and reporting
- Meetings of the GLMC

The recent results and conclusions of the GLMP have been:

- Very little permanent land subsidence has been occurring in the MZ-1 Managed Area, which indicates that subsidence is successfully being managed in this area.
- Land subsidence has been occurring in Northwest MZ-1. Of particular concern is that subsidence in Northwest MZ-1 has occurred differentially across the San Jose Fault and in other areas—the same pattern of differential subsidence that occurred in the MZ-1 Managed Area during the time of ground fissuring.

Based on these results, the GLMC and the Watermaster have determined that the Subsidence Management Plan needs to be updated to include a *Subsidence Management Plan for Northwest MZ-1* with the long-term objective to minimize or abate the occurrence of differential land subsidence. The Subsidence Management Plan was updated in 2015 to include the [Work Plan to Develop a Subsidence Management Plan for Northwest MZ-1](#) (Work Plan). The Work Plan includes eleven tasks that include investigations, construction of monitoring facilities, monitoring and testing programs, modeling, reporting, and ultimately, an update to the Subsidence Management Plan.

## 1.1 ACTIVITIES PERFORMED FROM APRIL 2021 THROUGH SEPTEMBER 2021

### 1.1.1 Setup and Maintenance of Monitoring Facilities

- Performed monthly routine maintenance and quarterly data collection and verification at the Ayala Park, Chino Creek, and Pomona Extensometer (PX) facilities.

### 1.1.2 Northwest MZ-1 Investigation

- Continued to collect depth-specific and high-frequency hydraulic head, aquifer-system deformation, and vibrating wireline transducer data from the PX facility.
- Continued the collection of high-frequency hydraulic head for the Northwest MZ-1 monitoring program.
- Constructed and calibrated a one-dimensional (1D) compaction model to represent the aquifer-system at the MVWD-28 and PX locations. The calibration results will be used to estimate the current (2018) pre-consolidation stresses through the aquifer system at these specific locations.

## 1.2 MONITORING AND TESTING

- Performed monthly to quarterly collection, verification, and storing of piezometric and aquifer-system deformation data from the Ayala Park, Chino Creek, and PX facilities.

## 1.3 DATA ANALYSIS AND REPORTING

- Finalized the technical memorandum: *Recommended Scope of Services and Budget of the Ground-Level Monitoring Committee for FY 2021/22.*
- Prepared the draft *2020/21 Annual Report of the Ground-Level Monitoring Committee* and sent the report to the GLMC for review and comment on September 24, 2021.

## 1.4 MEETINGS OF THE GLMC

Two GLMC meetings were conducted during the reporting period. The meeting agendas included:

### 1.4.1 April 1, 2021

- Recommended Scope and Budget of the Ground-Level Monitoring Committee for FY 2021/22.

### 1.4.2 September 30, 2021

- Review of the draft *2021/21 Annual Report of the Ground-Level Monitoring Committee.*

## 1.5 ACTIVITIES PLANNED FOR OCTOBER 2021 THROUGH MARCH 2022

### 1.5.1 Setup and Maintenance of Monitoring Facilities

- Perform monthly routine maintenance at the Ayala Park Extensometer, Chino Creek Extensometer, and PX facilities.

### 1.5.2 Monitoring and Testing

- Perform monthly to quarterly collection, checking, and storing of piezometric and aquifer-system deformation data from the piezometers and extensometers at the Ayala Park Extensometer, Chino Creek Extensometer, and PX facilities.

### 1.5.3 Northwest MZ-1 Investigation

- Portions of the Work Plan (Tasks 8 and 9) are planned to continue through FY 2021/22:
  - Continue monitoring piezometric levels and pumping at wells for the Northwest MZ-1 monitoring program.
  - Review the one-dimensional (1D) aquifer-system compaction models construction and calibration results at the MVWD-28 and PX locations at a GLMC meeting.
  - The 1D compaction models at MVWD-28 and PX will be used to characterize the mechanical response of the aquifer-system to a Baseline Management Alternative (BMA) and Initial Subsidence Management Alternative (ISMA). Multiple GLMC meetings will be held between October 2021 and April 2022 to review the 1D compaction model evaluations of the subsidence management alternatives.

## 1.5.4 Data Analysis and Reporting

- Submit the final *2020/21 Annual Report of the Ground-Level Monitoring Committee*. The final report will be published in November 2021.
- Submit a draft technical memorandum to the GLMC documenting the 1D compaction model construction, calibration results, and preliminary estimates of the pre-consolidation stress at the MVWD-28 and PX locations. Receive feedback and comments from the GLMC and finalize the technical memorandum.
- Submit a draft technical memorandum to the GLMC summarizing the evaluation of the BMA using the 1D compaction models at the MVWD-28 and PX locations. Receive feedback and comments from the GLMC and finalize the technical memorandum.

## 1.6 MEETINGS OF THE GLMC

Three GLMC meetings are anticipated between October 2021 and March 2022. The meeting agenda items will include:

### 1.6.1 October 2021

- Review and discuss the 1D compaction models construction and calibration results from the MVWD-28 and PX sites.

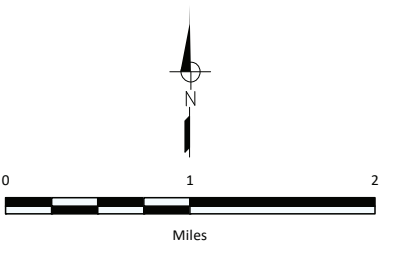
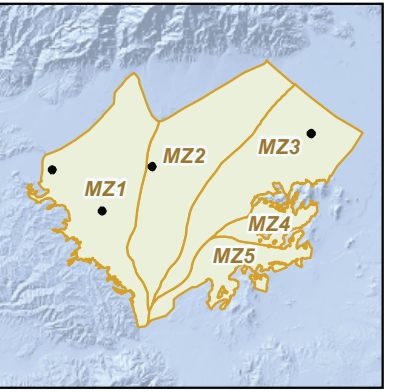
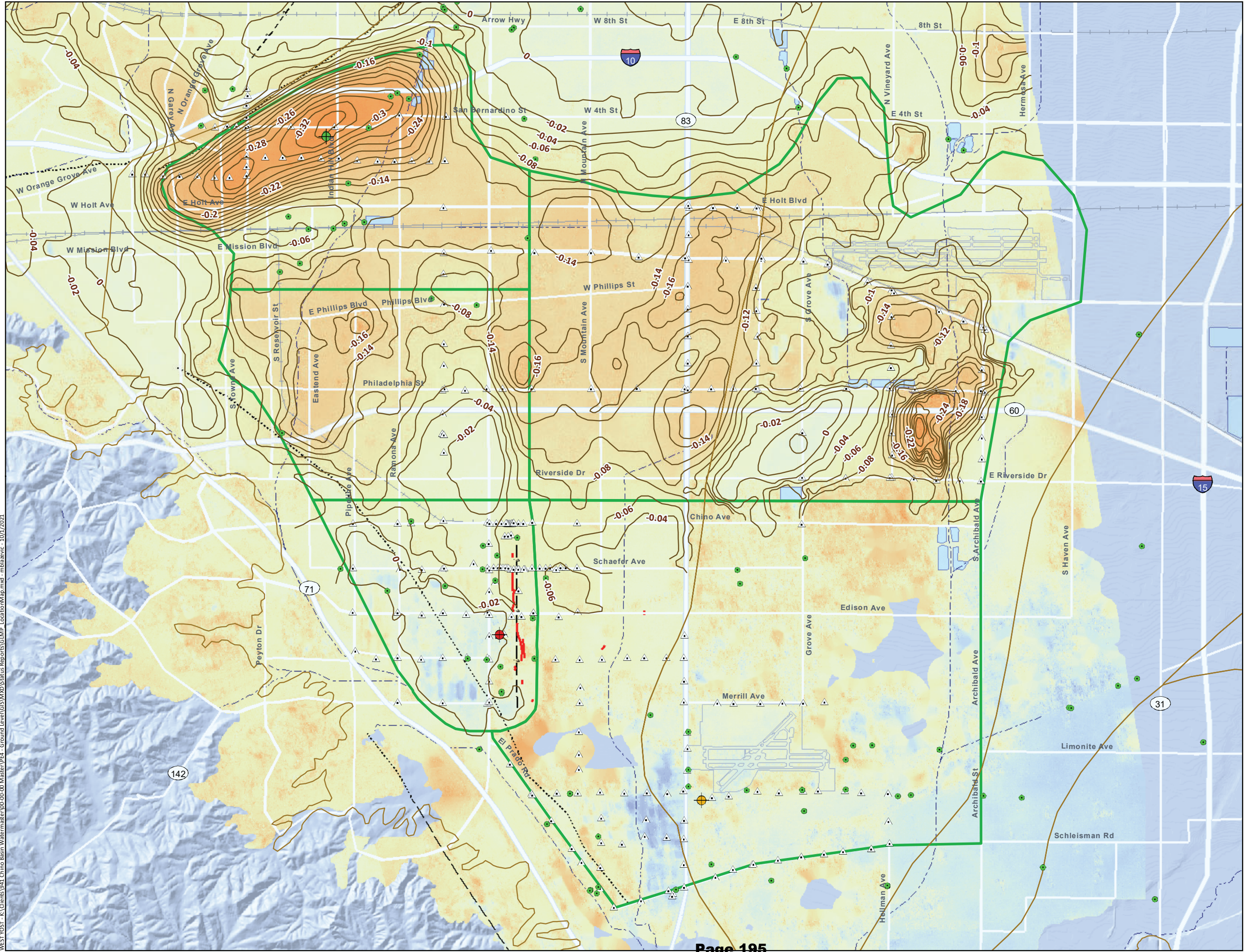
### 1.6.2 December 2021

- Review comments from the GLMC on the draft technical memorandum summarizing the 1D compaction models construction and calibration results at the MVWD-28 and PX sites and recommendation for the BMA.

### 1.6.3 February 2022

- Review and discuss the draft recommended scope and budget of the GLMC for FY 2022/23.





Relative Change in Land Surface Altitude as Estimated by InSAR (March 2011 to March 2021)

- +0.45 ft
- 0 ft
- 0.45 ft
- InSAR absent or incoherent
- Areas of Subsidence Concern
- Pomona Extensometer Facility
- Chino Creek Extensometer Facility
- Ayala Park Extensometer Facility
- Well Equipped with Pressure Transducer or Other Water Level Monitoring Device
- Ground-Level Survey Benchmark
- Approximate Location of the Riley Barrier
- Ground Fissures



**Figure 1**  
**Ground-Level Monitoring Program**  
**Fiscal Year 2021/22**  
 Chino Basin Watermaster  
 Ground-Level Monitoring Committee

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