

CHINO BASIN WATERMASTER



NOTICE OF MEETINGS

Thursday, February 11, 2016

- 9:00 a.m. – Appropriative Pool Meeting
- 11:00 a.m. – Non-Agricultural Pool Meeting
- 1:30 p.m. – Agricultural Pool Meeting

*AT THE CHINO BASIN WATERMASTER OFFICES
9641 San Bernardino Road
Rancho Cucamonga, CA 91730
(909) 484-3888*

CHINO BASIN WATERMASTER

Thursday, February 11, 2016

- 9:00 a.m. – Appropriative Pool Meeting
- 11:00 a.m. – Non-Agricultural Pool Meeting
- 1:30 p.m. – Agricultural Pool Meeting

POOL AGENDAS

**CHINO BASIN WATERMASTER
APPROPRIATIVE POOL MEETING**

9:00 a.m. – February 11, 2016

WITH

Mr. Darron Poulsen, Chair

Mr. Todd Corbin, Vice-Chair

At The Offices Of

Chino Basin Watermaster

9641 San Bernardino Road

Rancho Cucamonga, CA 91730

AGENDA

CALL TO ORDER

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

1. Minutes of the Annual Appropriative Pool Meeting held January 14, 2016 *(Page 1)*

B. FINANCIAL REPORTS

1. Cash Disbursements for the month of December 2015 *(Page 21)*
2. Watermaster VISA Check Detail for the month of December 2015 *(Page 33)*
3. Combining Schedule for the Period July 1, 2015 through December 31, 2015 *(Page 37)*
4. Treasurer's Report of Financial Affairs for the Period December 1, 2015 through December 31, 2015 *(Page 41)*
5. Budget vs. Actual Report for the Period July 1, 2015 through December 31, 2015 *(Page 45)*

C. SAN ANTONIO WATER COMPANY – APPLICATION FOR RECHARGE *(Page 61)*

Notice of Application for Recharge – On January 22, 2016, San Antonio Water Company submitted an Application for Recharge for up to 200.000 acre-feet to be recharged into Montclair 2, 3, and 4, and Brooks recharge basins.

II. BUSINESS ITEMS

A. MID-YEAR REVIEW OF FISCAL YEAR 2015/16 (Information Only) *(Page 149)*

III. REPORTS/UPDATES

A. LEGAL COUNSEL REPORT

1. Motion re Board Reappointment
2. Motion re 2015 Safe Yield Reset Agreement
3. Non-Ag Pool Request for Entry of Order re Filing and Service

B. CFO REPORT

None

C. GM REPORT

1. Basin Boundary Modification Update
2. Business Plan Update
3. Overlying Non-Agricultural Pool Available Water Per Restated Judgment Exhibit "G"
4. Other

IV. INFORMATION

1. Cash Disbursements for January 2016 (*Page 163*)
2. Recharge Investigations and Projects Committee (RIPCom) (*Page 173*)

V. POOL MEMBER COMMENTS

VI. OTHER BUSINESS

VII. CONFIDENTIAL SESSION - POSSIBLE ACTION

Pursuant to the Appropriative Pool Rules & Regulations, a Confidential Session may be held during the Watermaster Pool meeting for the purpose of discussion and possible action.

1. Appropriative Pool Strategic Planning Discussion

VIII. FUTURE MEETINGS AT WATERMASTER

2/11/16	Thu	9:00 a.m.	Appropriative Pool
2/11/16	Thu	11:00 a.m.	Non-Agricultural Pool
2/11/16	Thu	1:30 p.m.	Agricultural Pool
2/18/16	Thu	8:00 a.m.	Appropriative Pool Strategic Planning (Confidential Session Only)
2/18/16	Thu	9:00 a.m.	Advisory Committee
2/18/16	Thu	9:30 a.m.	Recharge Investigations and Projects Committee (RIPCom)
2/23/16	Tue	9:00 a.m.	Groundwater Recharge Coordinating Committee (GRCC at CBWCD)
2/25/16	Thu	11:00 a.m.	Watermaster Board

ADJOURNMENT

**CHINO BASIN WATERMASTER
NON-AGRICULTURAL POOL MEETING**

11:00 a.m. – February 11, 2016

WITH

Mr. Brian Geye, Chair

Mr. Bob Bowcock, Vice-Chair

(800) 930-9525 PASS CODE: 917924

Call can be taken at

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

AGENDA

CALL TO ORDER

ROLL CALL

AGENDA – ADDITIONS/REORDER

I. BUSINESS ITEMS - ROUTINE

A. MINUTES

1. Minutes of the Annual Non-Agricultural Pool Meeting held January 14, 2016 *(Page 7)*
2. Minutes of the Special Non-Agricultural Pool Meeting held January 27, 2016 *(Page 13)*

B. FINANCIAL REPORTS

1. Cash Disbursements for the month of December 2015 *(Page 21)*
2. Watermaster VISA Check Detail for the month of December 2015 *(Page 33)*
3. Combining Schedule for the Period July 1, 2015 through December 31, 2015 *(Page 37)*
4. Treasurer's Report of Financial Affairs for the Period December 1, 2015 through December 31, 2015 *(Page 41)*
5. Budget vs. Actual Report for the Period July 1, 2015 through December 31, 2015 *(Page 45)*

C. SAN ANTONIO WATER COMPANY – APPLICATION FOR RECHARGE *(Page 61)*

Notice of Application for Recharge – On January 22, 2016, San Antonio Water Company submitted an Application for Recharge for up to 200.000 acre-feet to be recharged into Montclair 2, 3, and 4, and Brooks recharge basins.

II. BUSINESS ITEMS

A. MID-YEAR REVIEW OF FISCAL YEAR 2015/16 (Information Only) *(Page 149)*

B. SERVICE LIST (Discussion Only)

C. MEMBER STATUS CHANGES (For Discussion and Possible Action)

1. Any proposed transfer of Safe Yield by a Member.
2. Any transfer of Safe Yield that has actually closed or been completed.
3. Any change in name or corporate identity of a Member (such as results from a merger or filing of a change of name certificate).
4. Any change in the name of a representative or alternate representative of a Member, or a change in e-mail address for either such person.

III. REPORTS/UPDATES

A. LEGAL COUNSEL REPORT

1. Motion re Board Reappointment
2. Motion re 2015 Safe Yield Reset Agreement
3. Non-Ag Pool Request for Entry of Order re Filing and Service

B. CFO REPORT

None

C. GM REPORT

1. Basin Boundary Modification Update
2. Business Plan Update
3. Overlying Non-Agricultural Pool Available Water Per Restated Judgment Exhibit "G"
4. Other

IV. INFORMATION

1. Cash Disbursements for January 2016 (*Page 163*)
2. Recharge Investigations and Projects Committee (RIPCom) (*Page 173*)

V. POOL MEMBER COMMENTS

VI. OTHER BUSINESS

VII. CONFIDENTIAL SESSION - POSSIBLE ACTION

Pursuant to the Non-Agricultural Pool Rules & Regulations, a Confidential Session may be held during the Watermaster Pool meeting for the purpose of discussion and possible action.

1. Safe Yield Reset

VIII. FUTURE MEETINGS AT WATERMASTER

2/11/16	Thu	9:00 a.m.	Appropriative Pool
2/11/16	Thu	11:00 a.m.	Non-Agricultural Pool
2/11/16	Thu	1:30 p.m.	Agricultural Pool
2/18/16	Thu	8:00 a.m.	Appropriative Pool Strategic Planning (Confidential Session Only)
2/18/16	Thu	9:00 a.m.	Advisory Committee
2/18/16	Thu	9:30 a.m.	Recharge Investigations and Projects Committee (RIPCom)
2/23/16	Tue	9:00 a.m.	Groundwater Recharge Coordinating Committee (GRCC at CBWCD)
2/25/16	Thu	11:00 a.m.	Watermaster Board

ADJOURNMENT

**CHINO BASIN WATERMASTER
AGRICULTURAL POOL MEETING**

1:30 p.m. – February 11, 2016

WITH

Mr. Bob Feenstra, Chair

Mr. Jeff Pierson, Vice-Chair

At The Offices Of

Chino Basin Watermaster

9641 San Bernardino Road

Rancho Cucamonga, CA 91730

AGENDA

CALL TO ORDER

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

1. Minutes of the Annual Agricultural Pool Meeting held January 14, 2016 (*Page 15*)

B. FINANCIAL REPORTS

1. Cash Disbursements for the month of December 2015 (*Page 21*)
2. Watermaster VISA Check Detail for the month of December 2015 (*Page 33*)
3. Combining Schedule for the Period July 1, 2015 through December 31, 2015 (*Page 37*)
4. Treasurer's Report of Financial Affairs for the Period December 1, 2015 through December 31, 2015 (*Page 41*)
5. Budget vs. Actual Report for the Period July 1, 2015 through December 31, 2015 (*Page 45*)

C. SAN ANTONIO WATER COMPANY – APPLICATION FOR RECHARGE (*Page 61*)

Notice of Application for Recharge – On January 22, 2016, San Antonio Water Company submitted an Application for Recharge for up to 200.000 acre-feet to be recharged into Montclair 2, 3, and 4, and Brooks recharge basins.

II. BUSINESS ITEMS

A. MID-YEAR REVIEW OF FISCAL YEAR 2015/16 (Information Only) (*Page 149*)

B. OLD BUSINESS

III. REPORTS/UPDATES

A. LEGAL COUNSEL REPORT

1. Motion re Board Reappointment
2. Motion re 2015 Safe Yield Reset Agreement
3. Non-Ag Pool Request for Entry of Order re Filing and Service

B. CFO REPORT

None

C. GM REPORT

1. Basin Boundary Modification Update
2. Business Plan Update
3. Overlying Non-Agricultural Pool Available Water Per Restated Judgment Exhibit "G"
4. Other

D. AGRICULTURAL POOL LEGAL COUNSEL REPORT

IV. INFORMATION

1. Cash Disbursements for January 2016 (*Page 163*)
2. Recharge Investigations and Projects Committee (RIPCom) (*Page 173*)

V. POOL MEMBER COMMENTS

VI. OTHER BUSINESS

VII. CONFIDENTIAL SESSION - POSSIBLE ACTION

Pursuant to the Agricultural Pool Rules & Regulations, a Confidential Session may be held during the Watermaster Pool meeting for the purpose of discussion and possible action.

VIII. FUTURE MEETINGS AT WATERMASTER

2/11/16	Thu	9:00 a.m.	Appropriative Pool
2/11/16	Thu	11:00 a.m.	Non-Agricultural Pool
2/11/16	Thu	1:30 p.m.	Agricultural Pool
2/18/16	Thu	8:00 a.m.	Appropriative Pool Strategic Planning (Confidential Session Only)
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2/23/16	Tue	9:00 a.m.	Groundwater Recharge Coordinating Committee (GRCC at CBWCD)
2/25/16	Thu	11:00 a.m.	Watermaster Board

ADJOURNMENT

CHINO BASIN WATERMASTER

I. CONSENT CALENDAR

A. MINUTES

1. Annual Appropriative Pool Meeting held on January 14, 2016

DRAFT MINUTES
CHINO BASIN WATERMASTER
ANNUAL APPROPRIATIVE POOL MEETING

January 14, 2016

The annual Appropriative Pool meeting was held at the offices of Chino Basin Watermaster located at 9641 San Bernardino Road, Rancho Cucamonga, CA on January 14, 2016.

APPROPRIATIVE POOL MEMBERS PRESENT

Darron Poulsen, Chair	City of Pomona
Todd Corbin, Vice-Chair	Jurupa Community Services District
Rosemary Hoerning	City of Upland
Bob Page	County of San Bernardino
Dave Crosley	City of Chino
Teri Layton	San Antonio Water Company
Justin Scott-Coe	Monte Vista Water District
Van Jew	Monte Vista Irrigation Company
Ron Craig	City of Chino Hills
Jo Lynne Russo-Pereyra for Marty Zvirbulis	Cucamonga Valley Water District
Josh Swift	Fontana Water Company
Cris Fealy	Fontana Union Water Company
Ryan Shaw for Scott Burton	City of Ontario
Ben Lewis	Golden State Water Company

WATERMASTER BOARD MEMBERS PRESENT

J. Arnold Rodriguez	Santa Ana River Water Company
Bob Kuhn	Three Valleys Municipal Water District

WATERMASTER STAFF PRESENT

Peter Kavounas	General Manager
Danielle Maurizio	Assistant General Manager
Joseph Joswiak	Chief Financial Officer
Anna Truong	Recording Secretary

WATERMASTER CONSULTANTS PRESENT

Brad Herrema	Brownstein Hyatt Farber Schreck, LLP
Andy Malone	Wildermuth Environmental, Inc.

OTHERS PRESENT

Pete Hall	State of California – CIM
Raul Garibay	City of Pomona
Scott Burton	City of Ontario
David DeJesus	Three Valleys Municipal Water District
Manny Martinez	Monte Vista Water District
Curtis Paxton	Chino Basin Desalter Authority
Sheri Rojo	Fontana Water Company
Marsha Westropp	Orange County Water District
Andy Campbell	Inland Empire Utilities Agency
John Abushiam	NRG California South, LP
Marco Tule	NRG California South, LP
Tom Crowley	West Valley Water District

CALL TO ORDER

Ms. Hoerning, 2015 Appropriative Pool Chair, called the annual Appropriative Pool meeting to order at 9:02 a.m.

AGENDA – ADDITIONS/REORDER

None

SPECIAL PROCEDURE – 2016 VOLUME VOTE (ACTION)

(0:01:05) Mr. Kavounas gave an overview of the item.

(0:01:51)

*Motion by Mr. Justin Scott-Coe, seconded by Ms. Teri Layton, and by unanimous vote
Moved to approve the 2016 Volume Vote as presented*

I. ANNUAL ELECTIONS (ACTION)

A. Elect the following calendar year 2016 Officers of the Pool: Chair, Vice-Chair, Secretary, Treasurer, and Assistant Secretaries and Treasurers as may be appropriate.

Chair	<u>Darron Poulsen</u>
Vice-Chair	<u>Todd Corbin</u>
Secretary/Treasurer	<u>Watermaster General Manager</u>

Ms. Hoerning called for a confidential session discussion at 9:05 a.m.

The Pool came out of confidential session at 9:40 a.m. and the reportable action is shown in sequence below, under Confidential Session.

(0:05:44)

*Motion by Mr. Van Jew, seconded by Mr. Ryan Shaw, and by unanimous vote
Moved to approve calendar year 2016 Appropriative Pool Officers as indicated above*

Ms. Hoerning handed control of the meeting to the newly elected Chair, Mr. Darron Poulsen.

B. Calendar Year 2016 Appropriative Pool Minor Representatives to the 2016 Advisory Committee

According to the Appropriative Pool Pooling Plan, each major Appropriator is entitled to one representative on the Advisory Committee. In addition, the minor Appropriators shall elect two representatives to serve on the Advisory Committee. The minor producers for 2016 are: Arrowhead Mountain Spring Water, City of Fontana, City of Norco, County of San Bernardino, Golden State Water Company, Marygold Mutual Water Company, Monte Vista Irrigation Company, Niagara Bottling Company, Nicholson Trust, San Antonio Water Company, Santa Ana River Water Company, West End Consolidated Water Company, and West Valley Water District.

Minor Rep #1	<u>Monte Vista Irrigation Company</u>
Minor Rep #2	<u>San Antonio Water Company</u>

(0:06:56)

Motion by Ms. Rosemary Hoerning, representing West End Consolidated Water Co., seconded by Mr. Arnold Rodriguez, and by unanimous vote

Moved to approve retaining the 2015 slate of Monte Vista Irrigation Company and San Antonio Water Company as the two Minor representatives on the 2016 Advisory Committee

C. Calendar Year 2016 Appropriative Pool Member Appointed to Serve as Advisory Committee Officer

According to the rotation sequence established among the Pools, the Appropriators will be asked to appoint a designated representative to serve as Chair on the Advisory Committee during calendar year 2016.

Appropriative Pool Officer (Chair) Appointment to the Advisory Committee:

Rosemary Hoerning

(0:07:54)

Motion by Mr. Justin Scott-Coe, seconded by Ms. Teri Layton and by unanimous vote

Moved to nominate Ms. Rosemary Hoerning as 2016 Advisory Committee Chair

D. Calendar Year 2016 Appropriative Pool Representation on the Watermaster Board (Information Only)

According to the Board rotation schedule filed with the Court in 2000 and updated on November 17, 2015, the Appropriators listed below are to each appoint a representative and alternate to serve on the Board for the calendar year.

City of Upland

New Member: Tom Thomas

Alternate: Jeannette Vagnozzi

Cucamonga Valley Water District

New Member: Jim Curatalo

Alternate: Kathy Tiegs

(0:08:27) Mr. Kavounas announced the names of the incoming representatives to the Board for 2016.

II. CONSENT CALENDAR

A. MINUTES

1. Minutes of the Appropriative Pool Meeting held November 17, 2015

B. FINANCIAL REPORTS

1. Cash Disbursements for the month of October 2015
2. Watermaster VISA Check Detail for the month of October 2015
3. Combining Schedule for the Period July 1, 2015 through October 31, 2015
4. Treasurer's Report of Financial Affairs for the Period October 1, 2015 through October 31, 2015
5. Budget vs. Actual Report for the Period July 1, 2015 through October 31, 2015
6. Cash Disbursements for the month of November 2015
7. Watermaster VISA Check Detail for the month of November 2015
8. Combining Schedule for the Period July 1, 2015 through November 30, 2015
9. Treasurer's Report of Financial Affairs for the Period November 1, 2015 through November 30, 2015
10. Budget vs. Actual Report for the Period July 1, 2015 through November 30, 2015

C. CHINO BASIN WATERMASTER INVESTMENT POLICY

Recommend that the Advisory Committee recommends approval of Resolution 2016-01 – Resolution of the Chino Basin Watermaster, San Bernardino County, California, Re-Authorizing the Watermaster’s Investment Policy

D. LOCAL AGENCY INVESTMENT FUND

Recommend that the Advisory Committee recommends approval of Resolution 2016-02 – Resolution Authorizing Investment of Monies in the Local Agency Investment Fund (LAIF)

E. CHINO BASIN WATERMASTER 36TH ANNUAL REPORT

Recommend that the Advisory Committee recommend to the Watermaster Board to adopt the 36th Annual Report, along with filing a copy with the Court, subject to any necessary non-substantive changes.

F. WATER TRANSACTION

The purchase of 500.000 acre-feet of water from San Antonio Water Company by Cucamonga Valley Water District. This purchase is made from San Antonio Water Company’s storage Account. Date of application: September 8, 2015

(0:09:14) Mr. Jew raised a question on page 90, budget vs. actual figures for the Safe Yield Reset item. Mr. Kavounas confirmed that the figure is in fact accurate.

(0:09:59)

*Motion by Mr. Ron Craig, seconded by Ms. Rosemary Hoerning and by unanimous vote
Moved to approve the Consent Calendar as presented*

III. BUSINESS ITEMS

A. NOTICE OF OVERLYING (NON-AGRICULTURAL) POOL AVAILABLE WATER PER RESTATED JUDGMENT EXHIBIT “G” (Information Only)

(0:11:00) Mr. Kavounas gave a report.

IV. REPORTS/UPDATES

A. LEGAL COUNSEL REPORT

1. Motion re Board Reappointment
2. Motion re 2015 Safe Yield Reset Agreement
3. Alvarez CalPERS Appeal

(0:11:57) Mr. Herrema gave a report.

B. CFO REPORT

1. Interim 2015/16 Assessment Invoicing

(0:16:19) Mr. Joswiak gave a report.

C. GM REPORT

- 1. New Employee Introduction
- 2. Recharge Investigations and Projects Committee Membership
- 3. Recommendation re Basin Boundary Revision Request

(0:17:34) Mr. Kavounas gave a report and added an item regarding the Business Plan Update.

(0:19:10) Messrs. Raul Garibay (City of Pomona) and Ryan Shaw (City of Ontario) are appointed by the Appropriative Pool to represent on the Recharge Investigations and Projects Committee. A discussion ensued.

V. INFORMATION

- 1. Annual Filing of Notice of Intent Regarding the Determination of Operating Safe Yield
- 2. Cash Disbursements for December 2015
- 3. Recharge Investigations and Projects Committee (RIPCom)
- 4. Ground Level Monitoring Report
- 5. Update on South Archibald and Chino Airport Plumes
- 6. RMPU Status Report

VI. POOL MEMBER COMMENTS

(0:26:14) Ms. Hoerning raised a question on page 145 regarding the Recharge projects. A discussion ensued.

VII. OTHER BUSINESS

None

VIII. CONFIDENTIAL SESSION - POSSIBLE ACTION

The Pool convened into confidential session at 9:05 a.m. as shown above in I.A. to discuss the Annual Elections, Watermaster Reappointment, and Safe Yield Reset. Confidential session concluded at 9:40 a.m. with the following reportable action:

(0:04:18) The Pool intends to convene a monthly confidential session meeting every Third Thursday (day of Advisory Committee) at 8:00 a.m. at the Watermaster office to discuss Strategic Planning Issues and would like for staff to assist with calendaring.

ADJOURNMENT

Chair Poulsen adjourned the Appropriative Pool meeting at 10:08 a.m.

Secretary: _____

Approved: _____

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CHINO BASIN WATERMASTER

I. BUSINESS ITEM ROUTINE

A. MINUTES

1. Annual Non-Agricultural Pool Meeting held on January 14, 2016
2. Non-Agricultural Pool Special Meeting held on January 27, 2016

DRAFT MINUTES
CHINO BASIN WATERMASTER
ANNUAL NON-AGRICULTURAL POOL MEETING
January 14, 2016

The annual Non-Agricultural Pool meeting was held at the offices of Chino Basin Watermaster and via conference call using the Chino Basin Watermaster conference call number on January 14, 2016.

NON-AGRICULTURAL POOL MEMBERS PRESENT AT WATERMASTER

Brian Geye, Chair	Auto Club Speedway
Bob Bowcock, Vice-Chair	Calmat Company (Vulcan Materials Co.)
Bob Page	County of San Bernardino
Marco Tule	NRG California South LP
Ken Jeske	California Steel Industries (CSI)
Mark Kinsey	Monte Vista Water District

NON-AGRICULTURAL POOL MEMBERS PRESENT ON CALL

David Penrice	Aqua Capital Management, LP
Tom O'Neill	Ontario City Non-Agricultural

WATERMASTER STAFF PRESENT AT WATERMASTER

Peter Kavounas	General Manager
Danielle Maurizio	Assistant General Manager
Joseph Joswiak	Chief Financial Officer
Anna Truong	Recording Secretary

WATERMASTER CONSULTANTS PRESENT AT WATERMASTER

Andy Malone	Wildermuth Environmental, Inc.
Brad Herrema	Brownstein Hyatt Farber Schreck, LLP

OTHERS PRESENT AT WATERMASTER

John Abusham	NRG California South LP
Pete Hall	State of California – CIM
Andy Campbell	Inland Empire Utilities Agency
Dave Crosley	City of Chino

NON-AGRICULTURAL POOL LEGAL COUNSEL PRESENT ON CALL

Allen Hubsch	Hogan Lovells US, LLP
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CALL TO ORDER

Mr. Geye called the annual Non-Agricultural Pool meeting to order at 11:00 a.m.

ROLL CALL

Ms. Truong conducted the roll call.

AGENDA – ADDITIONS/REORDER

None

I. ANNUAL ELECTIONS (ACTION)

A. Elect the following Calendar Year 2016 Officers of the Pool: Chair, Vice-Chair, Secretary, Treasurer, and Assistant Secretaries and Treasurers as may be appropriate.

Chair	<u>Brian Geye</u>
Vice-Chair	<u>Bob Bowcock</u>
Secretary	<u>Peter Kavounas</u>
Treasurer	<u>Peter Kavounas</u>

B. Election of Calendar Year 2016 Advisory Committee Members

According to the Non-Agricultural Pool Pooling Plan, the Pool shall designate at least three members of the Pool Committee, and their alternates, to serve on the Advisory Committee.

Member: Brian Geye Alternate: None

Member: Ken Jeske Alternate: Ramsey Haddad

Member: Tom O'Neill Alternate: Michael Sigsbee

C. Calendar Year 2016 Non-Agricultural Pool Member Appointed to Serve as Advisory Committee Officer

Based on the rotation sequence established among the Pools, the members of the Non-Agricultural Pool will be asked to appoint a designated representative to serve as Vice-Chair of the Advisory Committee during calendar year 2016.

Non-Agricultural Pool Officer (Vice-Chair) Appointment to the Advisory Committee:

Brian Geye

D. Appointment of Calendar Year 2016 Non-Agricultural Pool Representation on Watermaster Board

According to the Board rotation schedule filed with the Court in 2000 and updated on November 17, 2015, the Non-Agricultural Pool is to appoint one representative and alternate to serve on the Board for the calendar year.

Member: Bob Bowcock Alternate: Ken Jeske

(0:02:46) Mr. Jeske recommended the slate from 2015 be repeated again for 2016. A discussion ensued.

(0:04:08)

Motion by Mr. Mark Kinsey, second by Mr. Bob Page. Mr. Geye called for dissent, and, none being noted, the motion was deemed passed by unanimous vote of those present.

Moved to approve the Non-Agricultural Pool appointments to be filled as indicated above for calendar year 2016

II. BUSINESS ITEMS - ROUTINE

A. MINUTES

1. Minutes of the Non-Agricultural Pool Meeting held November 12, 2015

(0:05:29)

Motion by Mr. Bob Page, second by Mr. Ken Jeske. The Chair called for dissent, and, none being noted, the motion was deemed passed by unanimous vote of those present.

Moved to receive and file Business Item II.A. as presented.

B. FINANCIAL REPORTS

1. Cash Disbursements for the month of October 2015
2. Watermaster VISA Check Detail for the month of October 2015
3. Combining Schedule for the Period July 1, 2015 through October 31, 2015
4. Treasurer's Report of Financial Affairs for the Period October 1, 2015 through October 31, 2015
5. Budget vs. Actual Report for the Period July 1, 2015 through October 31, 2015
6. Cash Disbursements for the month of November 2015
7. Watermaster VISA Check Detail for the month of November 2015
8. Combining Schedule for the Period July 1, 2015 through November 30, 2015
9. Treasurer's Report of Financial Affairs for the Period November 1, 2015 through November 30, 2015
10. Budget vs. Actual Report for the Period July 1, 2015 through November 30, 2015

(0:05:52)

Motion by Mr. Ken Jeske, second by Mr. Bob Page. The Chair called for dissent, and, none being noted, the motion was deemed passed by unanimous vote of those present.

Moved to receive and file Business Item II.B. without approval as presented.

C. CHINO BASIN WATERMASTER INVESTMENT POLICY

Recommend that the Advisory Committee recommends approval of Resolution 2016-01 – Resolution of the Chino Basin Watermaster, San Bernardino County, California, Re-Authorizing the Watermaster's Investment Policy

(0:06:30)

Motion by Mr. Mark Kinsey, second by Mr. Ken Jeske. The Chair called for dissent, and, none being noted, the motion was deemed passed by unanimous vote of those present.

Moved to direct the Pool representatives to support Business Item II.C. at the Advisory Committee and Watermaster Board meetings subject to changes which they deem appropriate.

D. LOCAL AGENCY INVESTMENT FUND

Recommend that the Advisory Committee recommends approval of Resolution 2016-02 – Resolution Authorizing Investment of Monies in the Local Agency Investment Fund (LAIF)

(0:07:13)

Motion by Mr. Mark Kinsey, second by Mr. Ken Jeske. The Chair called for dissent, and, none being noted, the motion was deemed passed by unanimous vote of those present.

Moved to direct the Pool representatives to support Business Item II.D. at the Advisory Committee and Watermaster Board meetings subject to changes which they deem appropriate.

E. CHINO BASIN WATERMASTER 36TH ANNUAL REPORT

Recommend that the Advisory Committee recommend to the Watermaster Board to adopt the 36th Annual Report, along with filing a copy with the Court, subject to any necessary non-substantive changes.

(0:08:36)

Motion by Mr. Ken Jeske, second by Mr. Bob Page. The Chair called for dissent, and, none being noted, the motion was deemed passed by unanimous vote of those present.

Moved to direct the Pool representatives to support Business Item II.E. at the Advisory Committee and Watermaster Board meetings subject to changes which they deem appropriate.

F. WATER TRANSACTION

The purchase of 500,000 acre-feet of water from San Antonio Water Company by Cucamonga Valley Water District. This purchase is made from San Antonio Water Company's storage Account. Date of application: September 8, 2015

(0:09:02)

Motion by Mr. Bob Page, second by Mr. Mark Kinsey. The Chair called for dissent, and, none being noted, the motion was deemed passed by unanimous vote of those present.

Moved to direct the Pool representatives to support Business Item II.F. at the Advisory Committee and Watermaster Board meetings subject to changes which they deem appropriate.

III. BUSINESS ITEMS**A. NOTICE OF OVERLYING (NON-AGRICULTURAL) POOL AVAILABLE WATER PER RESTATED JUDGMENT EXHIBIT "G" (Information Only)**

(0:09:21) Mr. Kavounas gave a report. A discussion ensued.

B. DECEMBER 2, 2015 COURT ORDER AND OVERLYING (NON-AGRICULTURAL) POOL SERVICE LIST (Discussion Only)

(0:11:06) Mr. Hubsch gave a report. A discussion ensued. Mr. Hubsch is to provide staff with a sample format to use in order to update the service list.

C. MEMBER STATUS CHANGES (For Discussion and Possible Action)

1. Any proposed transfer of Safe Yield by a Member.
2. Any transfer of Safe Yield that has actually closed or been completed.
3. Any change in name or corporate identity of a Member (such as results from a merger or filing of a change of name certificate).
4. Any change in the name of a representative or alternate representative of a Member, or a change in e-mail address for either such person.

(0:27:00) Ms. Truong gave the following report:

Mr. Jeffrey Bruny, Ameron International Corporation's VP of Manufacturing, sent a letter to Watermaster indicating that Mr. Mark Ward is retiring and that he will be their representative effective immediately. Mr. Bruny's email address is Jeffrey.Bruny@nov.com

Mr. Lee Moore, Plant Manager of NRG California South LP, sent a letter to Watermaster indicating that their new primary representative is Mr. Marco Tule, and alternate representative is Mr. John Abusham. Mr. Tule's email address is Marco.Tule@nrg.com and Mr. Abusham's email address is John.Abusham@nrg.com

The County of San Bernardino sent a letter to Watermaster adding Mr. Andrew Silva as Mr. Bob Page's alternate for 2016 on all three Pool Committees. Mr. Silva's email address is Andrew.Silva@cao.sbcounty.gov

Southern California Edison sent a letter to Watermaster changing their representative from Mr. Jorge Rosa to Ms. Erika Clement. Ms. Clement's email address is Erika.Clement@sce.com

General Electric Company sent a letter to Watermaster changing their representative from Ms. Lisa Hamilton to Mr. Randall McAlister. Mr. McAlister's email address is Randall.McAlister@ge.com Mr. Roger Florio remains their alternate representative.

IV. REPORTS/UPDATES

A. LEGAL COUNSEL REPORT

1. Motion re Board Reappointment
2. Motion re 2015 Safe Yield Reset Agreement
3. Alvarez CalPERS Appeal

(0:28:35) Mr. Herrema gave a report and also added an update on the Santa Ana Sucker Critical Habitat Designation.

B. CFO REPORT

1. Interim 2015/16 Assessment Invoicing

(0:32:38) Mr. Joswiak gave a report.

C. GM REPORT

1. New Employee Introduction
2. Recharge Investigations and Projects Committee Membership
3. Recommendation re Basin Boundary Revision Request

(0:34:11) Mr. Kavounas gave a report and added an update regarding the Business Plan. A discussion ensued. Mr. Ken Jeske will remain the Pool's designee on the Recharge Investigations and Projects Committee.

V. INFORMATION

1. Annual Filing of Notice of Intent Regarding the Determination of Operating Safe Yield
2. Cash Disbursements for December 2015
3. Recharge Investigations and Projects Committee (RIPCom)
4. Ground Level Monitoring Report
5. Update on South Archibald and Chino Airport Plumes
6. RMPU Status Report

VI. POOL MEMBER COMMENTS

(0:38:37) Mr. Kinsey commented on the investment strategy. A discussion ensued.

VII. OTHER BUSINESS

None

VIII. CONFIDENTIAL SESSION - POSSIBLE ACTION

Chair Geye called for a confidential session to discuss the Safe Yield Reset. Confidential session concluded at 12:12 p.m. with no reportable action.

ADJOURNMENT

Chair Geye adjourned the Non-Agricultural Pool meeting at 12:12 p.m.

Secretary: _____

Approved: _____

DRAFT MINUTES
CHINO BASIN WATERMASTER
NON-AGRICULTURAL POOL SPECIAL MEETING
CONFERENCE CALL ONLY
January 27, 2016

The Non-Agricultural Pool special meeting was held via conference call on January 27, 2016.

NON-AGRICULTURAL POOL MEMBERS PRESENT ON CALL

Brian Geye, Chair	Auto Club Speedway
Ken Jeske	California Steel Industries (CSI)
David Starnes	Hamner Park Associates
Tom O' Neill	Ontario City Non-Agricultural

NON-AGRICULTURAL POOL LEGAL COUNSEL PRESENT ON CALL

Allen Hubsch	Hogan Lovells US, LLP
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CALL TO ORDER

Chair Geye called the Non-Agricultural Pool special meeting to order at 2:05 p.m.

ROLL CALL

Chair Geye conducted the roll call.

AGENDA – ADDITIONS/REORDER

None

I. CONFIDENTIAL SESSION - POSSIBLE ACTION

The Pool went into confidential session to discuss the Safe Yield Reset and Court Filing Procedures.

Confidential session concluded at 2:35 p.m. with the following reportable actions:

1. The Pool directed counsel to file a pleading prior to the February 1, 2016 deadline.
2. The Pool directed counsel to prepare an order regarding proposed court filing procedures.

ADJOURNMENT

Chair Geye adjourned the Non-Agricultural Pool special meeting at 2:35 p.m.

Secretary: _____

Approved: _____

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CHINO BASIN WATERMASTER

I. CONSENT CALENDAR

A. MINUTES

1. Annual Agricultural Pool Meeting held on January 14, 2016

DRAFT MINUTES
CHINO BASIN WATERMASTER
ANNUAL AGRICULTURAL POOL MEETING

January 14, 2016

The annual Agricultural Pool meeting was held at the offices of Chino Basin Watermaster located at 9641 San Bernardino Road, Rancho Cucamonga, CA on January 14, 2016.

AGRICULTURAL POOL MEMBERS PRESENT

Bob Feenstra, Chair	Dairy
Jeff Pierson, Vice-Chair	Crops
Nathan deBoom	Dairy
Carol Boyd	State of California – CIM
Bob Page	County of San Bernardino
Pete Hall	State of California – CIM
Rob Vanden Heuvel	Dairy
Larry Dimock	State of California – CIM
John Huitsing	Dairy
Henry DeHaan for Gene Koopman	Dairy
Ron LaBrucherie, Jr.	Crops

WATERMASTER BOARD MEMBER PRESENT

Paul Hofer	Crops
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WATERMASTER STAFF PRESENT

Peter Kavounas	General Manager
Danielle Maurizio	Assistant General Manager
Joseph Joswiak	Chief Financial Officer
Anna Truong	Recording Secretary

WATERMASTER CONSULTANTS PRESENT

Brad Herrema	Brownstein Hyatt Farber Schreck, LLP
Andy Malone	Wildermuth Environmental, Inc.

OTHERS PRESENT

Richard Rees	AMEC
Tracy Egoscue	Egoscue Law Group
Marilyn Levin	State of California, DOJ
Dave Crosley	City of Chino
Noah Golden-Krasner	State of California, DOJ

CALL TO ORDER

Mr. Feenstra called the annual Agricultural Pool meeting to order at 1:30 p.m.

AGENDA – ADDITIONS/REORDER

None

(0:00:34) The Pool convened into confidential session at 1:31 p.m. to discuss Pool business. Confidential session concluded at 2:26 p.m. with no reportable action and will also be noted in sequence below.

I. ANNUAL ELECTIONS (ACTION)

A. Calendar Year 2016 Agricultural Pool Members

According to the Overlying (Agricultural) Pool Rules and Regulations the Agricultural Pool membership shall consist of not less than nine (9) representatives selected at large by members of the Pool. Pool members will be asked to make any necessary changes to the following list in order to establish pool membership and alternates during calendar year 2016:

2015 Agricultural Pool Members

Dairy: Robert Feenstra
Gene Koopman
Nathan deBoom
John Huitsing
Rob Vanden Heuvel

Crops: Glen Durrington
Jeff Pierson

State: Carol Boyd
Pete Hall
Larry Dimock

County: Bob Page

2015 Alternates

Dairy: Henry DeHaan

Crops: Dan Hostetler

State: Marilyn Levin
Julie Cavender
David Huskey
Helen Arens
None
None

County: None

2016 Agricultural Pool Members

Dairy: Robert Feenstra
Gene Koopman
Nathan deBoom
John Huitsing
Rob Vanden Heuvel

Crops: Ron LaBrucherie, Jr.
Jeff Pierson

State: Carol Boyd
Pete Hall
Larry Dimock

County: Bob Page

2016 Alternates

Dairy: Henry DeHaan

Crops: Dan Hostetler

State: Marilyn Levin
Julie Cavender
David Huskey
Diana Frederick
Noah Golden-Krasner
Michael Thompson

County: Andrew Silva

(0:01:40) Mr. Feenstra announced the 2016 members and recommended that Mr. Ron LaBrucherie, Jr. replace Mr. Glen Durrington's seat for Crops. Ms. Boyd provided an update of State alternates as indicated above.

(0:05:21)

Motion by Mr. Nathan deBoom, seconded by Mr. Jeff Pierson, and by unanimous vote

Moved to approve calendar year 2016 Agricultural Pool members and alternates as listed above.

B. Annual Elections

Elect the following calendar year 2016 Officers of the Pool: Chair, Vice-Chair, Secretary, Treasurer, and Assistant Secretaries and Treasurers as may be appropriate.

Mr. Feenstra gave control of the meeting the General Manager Kavounas to run the election of officers.

Chair	<u>Robert Feenstra</u>
Vice-Chair	<u>Jeff Pierson</u>
Secretary/Treasurer	<u>Watermaster General Manager</u>

(0:06:13)

Motion by Mr. Rob Vanden Heuvel, seconded by Mr. Nathan deBoom, and by unanimous vote
Moved to approve calendar year 2016 Agricultural Pool Chair and Vice-Chair as listed above.

C. Election of Calendar Year 2016 Advisory Committee Members

According to the Agricultural Pool Pooling Plan, the Pool shall designate up to 10 members of the Pool Committee, and their alternates, to serve on the Advisory Committee.

(0:07:53)

Motion by Mr. Rob Vanden Heuvel, seconded by Mr. Nathan deBoom, and by unanimous vote
Moved to approve all members of the 2016 Agricultural Pool to be appointed to serve on the Advisory Committee for 2016 with the exception of Mr. Rob Vanden Heuvel, the 11th member, who will serve as an alternate.

D. Calendar Year 2016 Agricultural Pool Member Appointed to Serve as Advisory Committee Officer

Based on the rotation sequence established among the Pools, the members of the Agricultural Pool will be asked to appoint a designated representative to serve as 2nd Vice-Chair of the Advisory Committee during calendar year 2016.

Agricultural Pool Officer (2nd Vice-Chair) Appointment to the Advisory Committee:

Jeff Pierson

(0:08:40)

Motion by Mr. Nathan deBoom, seconded by Mr. Pete Hall, and by unanimous vote
Moved to approve Agricultural Pool appointment of Chair to the Advisory Committee for 2016 as listed above.

E. Appointment of Calendar Year 2016 Pool Representation on Watermaster Board

According to the Board rotation schedule filed with the Court in 2000 and updated on November 17, 2015, the Agricultural Pool is to appoint two representatives and alternates, as shown below, to serve on the Board for the calendar year.

Member: Geoffrey Vanden Heuvel Alternate: Jeff Pierson

Member: Paul Hofer Alternate: Bob Feenstra

(0:09:36)

Motion by Chair Feenstra, seconded by Vice-Chair Pierson, and by unanimous vote

Moved to approve Agricultural Pool members to the Watermaster Board for 2016 as listed above.

(0:10:18) Ms. Carol Boyd indicated that the State of California is yielding its position on the Watermaster Board for Calendar Year 2016 to the Crops representatives in the Agricultural Pool.

(0:11:01)

Motion by Mr. Rob Vanden Heuvel, seconded by Mr. Nathan deBoom, and by unanimous vote

Moved to approve Agricultural Pool members and alternates to the Watermaster Board for 2016 as listed above.

II. CONSENT CALENDAR

A. MINUTES

1. Minutes of the Agricultural Pool Meeting held November 12, 2015
2. Minutes of the Agricultural Pool Special Meeting held December 8, 2015

B. FINANCIAL REPORTS

1. Cash Disbursements for the month of October 2015
2. Watermaster VISA Check Detail for the month of October 2015
3. Combining Schedule for the Period July 1, 2015 through October 31, 2015
4. Treasurer’s Report of Financial Affairs for the Period October 1, 2015 through October 31, 2015
5. Budget vs. Actual Report for the Period July 1, 2015 through October 31, 2015
6. Cash Disbursements for the month of November 2015
7. Watermaster VISA Check Detail for the month of November 2015
8. Combining Schedule for the Period July 1, 2015 through November 30, 2015
9. Treasurer’s Report of Financial Affairs for the Period November 1, 2015 through November 30, 2015
10. Budget vs. Actual Report for the Period July 1, 2015 through November 30, 2015

C. CHINO BASIN WATERMASTER INVESTMENT POLICY

Recommend that the Advisory Committee recommends approval of Resolution 2016-01 – Resolution of the Chino Basin Watermaster, San Bernardino County, California, Re-Authorizing the Watermaster’s Investment Policy

D. LOCAL AGENCY INVESTMENT FUND

Recommend that the Advisory Committee recommends approval of Resolution 2016-02 – Resolution Authorizing Investment of Monies in the Local Agency Investment Fund (LAIF)

E. CHINO BASIN WATERMASTER 36TH ANNUAL REPORT

Recommend that the Advisory Committee recommend to the Watermaster Board to adopt the 36th Annual Report, along with filing a copy with the Court, subject to any necessary non-substantive changes.

F. WATER TRANSACTION

The purchase of 500.000 acre-feet of water from San Antonio Water Company by Cucamonga Valley Water District. This purchase is made from San Antonio Water Company's storage Account. Date of application: September 8, 2015

(0:12:11) Vice-Chair Pierson inquired whether or not discussion took place at the Appropriative or Non-Agricultural Pool meetings regarding the investment policy. A discussion ensued.

(0:13:21)

*Motion by Vice-Chair Pierson, seconded by Mr. Nathan deBoom, and by unanimous vote
Moved to approve Consent Calendar as presented*

III. BUSINESS ITEMS

A. NOTICE OF OVERLYING (NON-AGRICULTURAL) POOL AVAILABLE WATER PER RESTATED JUDGMENT EXHIBIT "G" (Information Only)

(0:13:52) Mr. Kavounas gave a report.

B. OLD BUSINESS

IV. REPORTS/UPDATES

A. LEGAL COUNSEL REPORT

1. Motion re Board Reappointment
2. Motion re 2015 Safe Yield Reset Agreement
3. Alvarez CalPERS Appeal

(0:15:07) Mr. Herrema gave a report and included an item on the Santa Ana Sucker Critical Habitat Designation. A discussion ensued.

B. CFO REPORT

1. Interim 2015/16 Assessment Invoicing

(0:25:26) Mr. Joswiak gave a report.

C. GM REPORT

1. New Employee Introduction
2. Recharge Investigations and Projects Committee Membership
3. Recommendation re Basin Boundary Revision Request

(0:26:56) Mr. Kavounas gave a report and also added an update on the Business Plan. A discussion ensued. Messrs. Pete Hall and Jeff Pierson will resume as the Pool's representatives on the Recharge Investigations and Projects Committee for 2016.

D. AGRICULTURAL POOL LEGAL COUNSEL REPORT

None

V. INFORMATION

1. Annual Filing of Notice of Intent Regarding the Determination of Operating Safe Yield
2. Cash Disbursements for December 2015
3. Recharge Investigations and Projects Committee (RIPCom)
4. Ground Level Monitoring Report

- 5. Update on South Archibald and Chino Airport Plumes
- 6. RMPU Status Report

VI. POOL MEMBER COMMENTS

(0:32:29) Mr. Romero introduced himself.

VII. OTHER BUSINESS

None

VIII. CONFIDENTIAL SESSION - POSSIBLE ACTION

Confidential session was taken at the start of the meeting at 1:31 p.m. and concluded at 2:26 p.m. with no reportable action.

ADJOURNMENT

Chair Feenstra adjourned the annual Agricultural Pool meeting at 3:02 p.m.

Secretary: _____

Approved: _____

CHINO BASIN WATERMASTER

I. CONSENT CALENDAR (App & Ag Pool)

B. FINANCIAL REPORTS

1. Cash Disbursements for the month of December 2015
2. Watermaster VISA Check Detail for the month of December 2015
3. Combining Schedule for the Period July 1, 2015 through December 31, 2015
4. Treasurer's Report of Financial Affairs for the Period December 1, 2015 through December 31, 2015
5. Budget vs. Actual Report for the Period July 1, 2015 through December 31, 2015

I. BUSINESS ITEM ROUTINE (Non-Ag Pool)

B. FINANCIAL REPORTS

1. Cash Disbursements for the month of December 2015
2. Watermaster VISA Check Detail for the month of December 2015
3. Combining Schedule for the Period July 1, 2015 through December 31, 2015
4. Treasurer's Report of Financial Affairs for the Period December 1, 2015 through December 31, 2015
5. Budget vs. Actual Report for the Period July 1, 2015 through December 31, 2015



CHINO BASIN WATERMASTER

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

PETER KAVOUNAS, P.E.
General Manager

STAFF REPORT

DATE: February 11, 2016
TO: Pool Committee Members
SUBJECT: Cash Disbursement Report - Financial Report B1 (December 31, 2015)

SUMMARY

Issue: Record of Cash Disbursements for the month of December 31, 2015.

Recommendation: Receive and file Cash Disbursements for December 31, 2015 as presented.

Financial Impact: Funds disbursed were included in the FY 2015/16 "Amended" Watermaster Budget.

Future Consideration

Appropriative Pool: February 11, 2016; Receive and File
Non-Agricultural Pool: February 11, 2016; Receive and File
Agricultural Pool: February 11, 2016; Receive and File
Advisory Committee: February 18, 2016; Receive and File
Watermaster Board: February 25, 2016; Receive and File (Normal Course of Business)

ACTIONS:

February 11, 2016 – Appropriative Pool –
February 11, 2016 – Non-Agricultural Pool –
February 11, 2016 – Agricultural Pool –
February 18, 2016 – Advisory Committee –
February 25, 2016 – Watermaster Board –

BACKGROUND

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

DISCUSSION

Total cash disbursements during the month of December 2015 were \$312,337.27.

The most significant expenditures during the month were to Brownstein Hyatt Farber and Schreck in the amount of \$82,955.26 (check number 19106 dated December 21, 2015).

ATTACHMENTS

1. Financial Report - B1

CHINO BASIN WATERMASTER
Cash Disbursements For The Month of
December 2015

Financial Report - B1

Type	Date	Num	Name	Memo	Account	Paid Amount
Bill Pmt -Check	12/02/2015	19052	STANDARD INSURANCE CO.	Policy # 00-649299-0009	1012 · Bank of America Gen'l Ckg	
Bill	11/25/2015	006492990009		Policy # 00-649299-0009	60191 · Life & Disab.Ins Benefits	689.35
TOTAL						<u>689.35</u>
Bill Pmt -Check	12/02/2015	19053	STATE COMPENSATION INSURANCE FUND	1970970-15	1012 · Bank of America Gen'l Ckg	
Bill	12/01/2015	1970970-15		1970970-15	60183 · Worker's Comp Insurance	961.58
TOTAL						<u>961.58</u>
Bill Pmt -Check	12/03/2015	ACH 120315	CALPERS	1394905143	1012 · Bank of America Gen'l Ckg	
Bill	11/18/2015	1394905143		Medical Insurance - 1394905143	60182.1 · Medical Insurance	6,622.64
TOTAL						<u>6,622.64</u>
General Journal	12/05/2015	12/05/2015	Payroll and Taxes for 11/22/15-12/05/15	Payroll and Taxes for 11/22/15-12/05/15	1012 · Bank of America Gen'l Ckg	
				Direct Deposits for 11/22/15-12/05/15	1012 · Bank of America Gen'l Ckg	21,128.88
				Payroll Taxes for 11/22/15-12/05/15	1012 · Bank of America Gen'l Ckg	7,846.67
			ICMA-RC	457(f) Employee Deductions for 11/22/15-12/05/15	1012 · Bank of America Gen'l Ckg	3,586.68
			ICMA-RC	401(a) Employee Deductions for 11/22/15-12/05/15	1012 · Bank of America Gen'l Ckg	1,121.70
TOTAL						<u>33,683.93</u>
Bill Pmt -Check	12/07/2015	19054	GREAT AMERICA LEASING CORP.	17857382	1012 · Bank of America Gen'l Ckg	
Bill	11/25/2015	17857382		Invoice	6043.1 · Ricoh Lease Fee	3,285.29
TOTAL						<u>3,285.29</u>
Bill Pmt -Check	12/07/2015	19055	WILLIAMS, SARAH M.	Temporary Assignment	1012 · Bank of America Gen'l Ckg	
Bill	12/07/2015				6011 · WM Staff Salaries	1,075.13
TOTAL						<u>1,075.13</u>
Bill Pmt -Check	12/09/2015	19056	BOWMAN, JIM	Board Member Compensation	1012 · Bank of America Gen'l Ckg	
Bill	11/19/2015	11/19 Board Mtg		11/19/15 Board Meeting	6311 · Board Member Compensation	125.00
TOTAL						<u>125.00</u>
Bill Pmt -Check	12/09/2015	19057	CHEF DAVE'S CAFE & CATERING	5792	1012 · Bank of America Gen'l Ckg	
Bill	11/19/2015	5792		Lunch for 11/19/15 Watermaster Board meeting	6312 · Meeting Expenses	861.20
TOTAL						<u>861.20</u>
Bill Pmt -Check	12/09/2015	19058	DC LAW	10579	1012 · Bank of America Gen'l Ckg	
Bill	11/25/2015	10579		Agricultural Pool Legal Services - October 2015	8467 · Ag Legal & Technical Services	60.00
TOTAL						<u>60.00</u>

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CHINO BASIN WATERMASTER
Cash Disbursements For The Month of
December 2015

Type	Date	Num	Name	Memo	Account	Paid Amount
Bill Pmt -Check	12/09/2015	19059	DE BOOM, NATHAN	Ag Pool Member Compensation	1012 · Bank of America Gen'l Ckg	
Bill	11/12/2015	11/12 Ag Pool Mtg		11/12/15 Ag Pool Meeting	8470 · Ag Meeting Attend -Special	125.00
Bill	11/19/2015	11/19 Advisory Comm		11/19/15 Advisory Committee Meeting	8470 · Ag Meeting Attend -Special	125.00
TOTAL						250.00
Bill Pmt -Check	12/09/2015	19060	DE HAAN, HENRY	Ag Pool Member Compensation	1012 · Bank of America Gen'l Ckg	
Bill	11/12/2015	11/12 Ag Pool mtg		Ag Pool Member Compensation	8411 · Compensation	25.00
				11/12/15 Ag Pool Meeting	8470 · Ag Meeting Attend -Special	100.00
TOTAL						125.00
Bill Pmt -Check	12/09/2015	19061	EGOSCUE LAW GROUP	11088	1012 · Bank of America Gen'l Ckg	
Bill	11/30/2015	11088		Agricultural Pool Legal Services - November 2015	8467 · Ag Legal & Technical Services	15,125.00
TOTAL						15,125.00
Bill Pmt -Check	12/09/2015	19062	ELIE, STEVEN	Board Member Compensation	1012 · Bank of America Gen'l Ckg	
Bill	11/03/2015	11/03 WM Discussion		11/03/15 WM Business Discussion Meeting	6311 · Board Member Compensation	125.00
Bill	11/12/2015	11/12 SY Discussion		11/12/15 SY Discussion	6311 · Board Member Compensation	125.00
P24 Bill	11/19/2015	11/19 Board Mtg		11/19/15 Board Meeting	6311 · Board Member Compensation	125.00
Bill	11/24/2015	11/24 WM Business		11/24/15 WM Business Discussion	6311 · Board Member Compensation	125.00
Bill	11/30/2015	11/30 Personnel Comm		11/30/15 Personnel Committee Meeting	6311 · Board Member Compensation	125.00
TOTAL						625.00
Bill Pmt -Check	12/09/2015	19063	EUROFINS EATON ANALYTICAL		1012 · Bank of America Gen'l Ckg	
Bill	11/30/2015	L0242032		L0242032	7103.5 · Grdwtr Qual-Lab Svcs	1,476.00
Bill	11/30/2015	L0241658		L0241658	7103.5 · Grdwtr Qual-Lab Svcs	922.00
TOTAL						2,398.00
Bill Pmt -Check	12/09/2015	19064	FEDAK & BROWN LLP		1012 · Bank of America Gen'l Ckg	
Bill	11/30/2015			Progress Billing - November 2015	6062 · Audit Services	1,274.00
TOTAL						1,274.00
Bill Pmt -Check	12/09/2015	19065	FEENSTRA, BOB	Ag Pool Member Compensation	1012 · Bank of America Gen'l Ckg	
Bill	11/12/2015	11/12 Ag Pool Mtg		11/12/15 Ag Pool Meeting	8470 · Ag Meeting Attend -Special	125.00
Bill	11/19/2015	11/19 Advisory Comm		11/19/15 Advisory Committee Meeting	8470 · Ag Meeting Attend -Special	125.00
Bill	11/19/2015	11/19 Board Mtg		11/19/15 Board Meeting	8470 · Ag Meeting Attend -Special	125.00
Bill	11/30/2015	11/30 Personnel Comm		11/30/15 Personnel Committee Meeting	8470 · Ag Meeting Attend -Special	125.00
TOTAL						500.00
Bill Pmt -Check	12/09/2015	19066	HALL, PETE*	Ag Pool Member Compensation	1012 · Bank of America Gen'l Ckg	

CHINO BASIN WATERMASTER
Cash Disbursements For The Month of
December 2015

Type	Date	Num	Name	Memo	Account	Paid Amount	
Bill	11/12/2015	11/12 Ag Pool Mtg		11/12/15 Ag Pool Meeting	8470 · Ag Meeting Attend -Special	125.00	
Bill	11/19/2015	11/19 Advisory Comm		11/19/15 Advisory Committee Meeting	8470 · Ag Meeting Attend -Special	125.00	
Bill	11/19/2015	11/19 RIPCom Mtg		11/19/15 RIPCom Meeting	8470 · Ag Meeting Attend -Special	125.00	
Bill	11/19/2015	11/19 Board Mtg		11/19/15 Board Meeting	8470 · Ag Meeting Attend -Special	125.00	
TOTAL						500.00	
Bill Pmt -Check	12/09/2015	19067	HUITSING, JOHN	Ag Pool Member Compensation	1012 · Bank of America Gen'l Ckg		
Bill	11/12/2015	11/12 Ag Pool Mtg		11/12/15 Ag Pool Meeting	8470 · Ag Meeting Attend -Special	125.00	
TOTAL						125.00	
Bill Pmt -Check	12/09/2015	19068	JESKE, KEN'	Board Member Compensation	1012 · Bank of America Gen'l Ckg		
Bill	11/19/2015	11/19 Board Mtg		11/19/15 Board Meeting	6311 · Board Member Compensation	125.00	
TOTAL						125.00	
Bill Pmt -Check	12/09/2015	19069	KUHN, BOB	Board Member Compensation	1012 · Bank of America Gen'l Ckg		
Bill	11/17/2015	11/17 Appro Pool Mtg		11/17/15 Appropriative Pool Meeting	6311 · Board Member Compensation	125.00	
Bill	11/19/2015	11/19 Board Mtg		11/19/15 Board Meeting	6311 · Board Member Compensation	125.00	
TOTAL						250.00	
P25	Bill Pmt -Check	12/09/2015	19070	MIJAC ALARM	380702	1012 · Bank of America Gen'l Ckg	
	Bill	12/01/2015	380702	Fire monitoring 12/01/15-2/29/16	6026 · Security Services	411.00	
				Opening & closing reports 12/01/15-2/29/16	6026 · Security Services	54.00	
				Annex-Opening & closing reports 12/01/15-2/29/16	6026 · Security Services	45.00	
				Commercial monitoring 12/01/15-2/29/16	6026 · Security Services	147.00	
TOTAL						657.00	
Bill Pmt -Check	12/09/2015	19071	MONTE VISTA WATER DIST	Board Member Compensation	1012 · Bank of America Gen'l Ckg		
Bill	11/19/2015	11/19 Advisory Comm		11/19/15 Advisory Committee Meeting - Kinsey	6311 · Board Member Compensation	125.00	
TOTAL						125.00	
Bill Pmt -Check	12/09/2015	19072	OFFICE DEPOT	806091031001	1012 · Bank of America Gen'l Ckg		
Bill	11/25/2015	806091031001		Miscellaneous office supplies	6031.7 · Other Office Supplies	39.40	
TOTAL						39.40	
Bill Pmt -Check	12/09/2015	19073	PARK PLACE COMPUTER SOLUTIONS, INC.	505	1012 · Bank of America Gen'l Ckg		
Bill	11/30/2015	505		IT Consulting Services - November 2015	6052.1 · Park Place Comp Solutn	1,200.00	
TOTAL						1,200.00	
Bill Pmt -Check	12/09/2015	19074	PAYCHEX	2015112600	1012 · Bank of America Gen'l Ckg		
Bill	11/30/2015	2015112600		November 2015	6012 · Payroll Services	481.62	

CHINO BASIN WATERMASTER
Cash Disbursements For The Month of
December 2015

Financial Report - B1

Type	Date	Num	Name	Memo	Account	Paid Amount
TOTAL						481.62
Bill Pmt -Check	12/09/2015	19075	PIERSON, JEFFREY	Ag Pool Member Compensation	1012 · Bank of America Gen'l Ckg	
Bill	11/12/2015	11/12 Ag Pool Mtg		11/12/15 Ag Pool Meeting	8470 · Ag Meeting Attend -Special	125.00
TOTAL						125.00
Bill Pmt -Check	12/09/2015	19076	PUBLIC EMPLOYEES' RETIREMENT SYSTEM	Payor #3493	1012 · Bank of America Gen'l Ckg	
Bill	12/01/2015	100000014665379		Annual unfunded accrued liability	60180 · Employers PERS Expense	3,077.00
TOTAL						3,077.00
Bill Pmt -Check	12/09/2015	19077	READY REFRESH BY NESTLE	0023230253	1012 · Bank of America Gen'l Ckg	
Bill	11/30/2015	0023230253		Office Water Bottle - November 2015	6031.7 · Other Office Supplies	53.93
TOTAL						53.93
Bill Pmt -Check	12/09/2015	19078	RR FRANCHISING, INC.	14269	1012 · Bank of America Gen'l Ckg	
Bill	12/01/2015	14269		Janitorial Services - December 2015	6024 · Building Repair & Maintenance	740.00
TOTAL						740.00
P26 Bill Pmt -Check	12/09/2015	19079	SANTA ANA RIVER WATER COMPANY	Board Member Compensation	1012 · Bank of America Gen'l Ckg	
Bill	11/30/2015	11/30 Personnel Comm		11/30/15 Personnel Committee Mtg. - Rodriguez	6311 · Board Member Compensation	125.00
TOTAL						125.00
Bill Pmt -Check	12/09/2015	19080	STAPLES BUSINESS ADVANTAGE	8036923234	1012 · Bank of America Gen'l Ckg	
Bill	11/21/2015	8036923234		Date stamp	6031.7 · Other Office Supplies	82.46
TOTAL						82.46
Bill Pmt -Check	12/09/2015	19081	UNITED HEALTHCARE	039114789	1012 · Bank of America Gen'l Ckg	
Bill	11/17/2015	0039114789		Dental Insurance - December 2015	60182.2 · Dental & Vision Ins	712.68
TOTAL						712.68
Bill Pmt -Check	12/09/2015	19082	USA-FACT INC		1012 · Bank of America Gen'l Ckg	
Bill	11/19/2015	5112715		Background check for candidates	6016 · New Employee Search Costs	14.00
Bill	11/25/2015	5112016		Background check for candidates	6016 · New Employee Search Costs	402.49
TOTAL						416.49
Bill Pmt -Check	12/09/2015	19083	VANDEN HEUVEL, GEOFFREY	Board Member Compensation	1012 · Bank of America Gen'l Ckg	
Bill	11/12/2015	11/12 Ag Pool Mtg		11/12/15 Ag Pool Meeting	6311 · Board Member Compensation	125.00
Bill	11/19/2015	11/19 Board Mtg		11/19/15 Board Meeting	6311 · Board Member Compensation	125.00
TOTAL						250.00

CHINO BASIN WATERMASTER
Cash Disbursements For The Month of
December 2015

Type	Date	Num	Name	Memo	Account	Paid Amount
Bill Pmt -Check	12/09/2015	19084	VANDEN HEUVEL, ROB	Ag Pool Member Compensation	1012 · Bank of America Gen'l Ckg	
Bill	11/19/2015	11/19 Advisory Comm		11/19/15 Advisory Committee Meeting	8470 · Ag Meeting Attend -Special	125.00
TOTAL						125.00
Bill Pmt -Check	12/09/2015	19085	VERIZON	012519128144592510	1012 · Bank of America Gen'l Ckg	
Bill	11/25/2015	012519128144592510		012519128144592510	6022 · Telephone	143.03
TOTAL						143.03
Bill Pmt -Check	12/09/2015	19086	VISION SERVICE PLAN	00-101789-0001	1012 · Bank of America Gen'l Ckg	
Bill	11/25/2015	001017890001		Vision Insurance - December 2015	60182.2 · Dental & Vision Ins	73.46
TOTAL						73.46
Bill Pmt -Check	12/09/2015	19087	VISTAGE WORLDWIDE, INC.	SOPINV00000351366	1012 · Bank of America Gen'l Ckg	
Bill	11/25/2015	SOPINV00000351366		Kavounas-Membership dues-Oct. 2015-Sept. 2016	1433 · Prepaid Membership Dues	15,600.00
TOTAL						15,600.00
Bill Pmt -Check	12/09/2015	19088	WESTERN MUNICIPAL WATER DISTRICT	Board Member Compensation	1012 · Bank of America Gen'l Ckg	
Bill	11/19/2015	11/19 Board Mtg		11/19/15 Board Meeting - Galleano attendance	6311 · Board Member Compensation	125.00
TOTAL						125.00
Bill Pmt -Check	12/09/2015	19089	YUKON DISPOSAL SERVICE	08-K2 213849	1012 · Bank of America Gen'l Ckg	
Bill	12/01/2015	08-k2 213849		December 2015	6024 · Building Repair & Maintenance	111.57
TOTAL						111.57
Bill Pmt -Check	12/09/2015	19090	VERIZON	642073270-0001	1012 · Bank of America Gen'l Ckg	
Bill	11/25/2015	642073270-00001		642073270-0001	7103.7 · Grdwtr Qual-Computer Svc	226.12
TOTAL						226.12
Bill Pmt -Check	12/09/2015	19091	ACWA		1012 · Bank of America Gen'l Ckg	
Bill	11/25/2015			2016 Annual Agency Dues	1433 · Prepaid Membership Dues	16,115.00
TOTAL						16,115.00
Bill Pmt -Check	12/09/2015	19092	APPLIED COMPUTER TECHNOLOGIES	2640	1012 · Bank of America Gen'l Ckg	
Bill	11/30/2015	2640		Database Consulting - November 2015	6052.2 · Applied Computer Technol	3,750.00
TOTAL						3,750.00
Bill Pmt -Check	12/10/2015	19093	SIGNARAMA ONTARIO	008214	1012 · Bank of America Gen'l Ckg	
Bill	12/10/2015	008214		Installation of white lettering on front office decals	6031.7 · Other Office Supplies	74.67
TOTAL						74.67

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CHINO BASIN WATERMASTER
Cash Disbursements For The Month of
December 2015

Type	Date	Num	Name	Memo	Account	Paid Amount
Bill Pmt -Check	12/11/2015	19094	CORELOGIC INFORMATION SOLUTIONS	81642955	1012 · Bank of America Gen'l Ckg	
Bill	11/30/2015	81642955		81642955	7103.7 · Grdwtr Qual-Computer Svc	62.50
				81642955	7101.4 · Prod Monitor-Computer	62.50
TOTAL						125.00
Bill Pmt -Check	12/11/2015	19095	DIRECTV	019447404	1012 · Bank of America Gen'l Ckg	
Bill	11/30/2015	019447404		Service for office 11/19/15 - 12/18/15	6031.7 · Other Office Supplies	110.98
TOTAL						110.98
Bill Pmt -Check	12/11/2015	19096	HOGAN LOVELLS	2947509	1012 · Bank of America Gen'l Ckg	
Bill	11/30/2015	2947509		Non-Ag Pool Legal Services - October 2015	8567 · Non-Ag Legal Service	8,311.40
TOTAL						8,311.40
Bill Pmt -Check	12/11/2015	19097	IAAP	93902097	1012 · Bank of America Gen'l Ckg	
Bill	12/10/2015	93902097		Annual dues for J.Wilson IAAP membership	6111 · Membership Dues	141.00
TOTAL						141.00
Bill Pmt -Check	12/11/2015	19098	PREMIERE GLOBAL SERVICES	19924253	1012 · Bank of America Gen'l Ckg	
Bill	11/30/2015	19924253		Administrative call on 10/29	6141.3 · Admin Meetings	13.79
				WM coordination call on 11/02	6909.1 · OBMP Meetings	19.50
				SGMA call w/DWR and CBWM on 11/04	6909.1 · OBMP Meetings	19.86
				Nitrate/Nitrogen Objectives call on 11/05	6909.1 · OBMP Meetings	21.21
				WM coordination call on 11/09	6909.1 · OBMP Meetings	35.44
				Non-Ag Pool mtg call on 11/12	8512 · Meeting Expense	34.78
				SY call on 11/12	6906.73 · OBMP-Safe Yield Recalculation	5.06
				SY call on 11/12	6906.73 · OBMP-Safe Yield Recalculation	13.22
				WM coordination call on 11/16	6909.1 · OBMP Meetings	17.55
				GVH call on 11/20	6312 · Meeting Expenses	9.47
				WM coordination call on 11/23	6909.1 · OBMP Meetings	25.20
				Climate Modeling Discussion call on 11/24	6909.1 · OBMP Meetings	28.51
				Fee - General Line	6022 · Telephone	49.00
				Fee- Confidential Line	6022 · Telephone	49.00
				Service fee	6022 · Telephone	8.67
TOTAL						350.26
Bill Pmt -Check	12/11/2015	19099	VERIZON	012561121521714508	1012 · Bank of America Gen'l Ckg	
Bill	12/10/2015	012561121521714508		012561121521714508	7405 · PE4-Other Expense	197.56
TOTAL						197.56
Bill Pmt -Check	12/11/2015	19100	WEST POINT MEDICAL CENTER	ZAP124553	1012 · Bank of America Gen'l Ckg	

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CHINO BASIN WATERMASTER
Cash Disbursements For The Month of
December 2015

Type	Date	Num	Name	Memo	Account	Paid Amount
Bill	11/25/2015	ZAP124553		Physical and Drug Screening - ZAP124553	6016 · New Employee Search Costs	110.00
TOTAL						110.00
Bill Pmt -Check	12/11/2015	ACH 121115	PUBLIC EMPLOYEES' RETIREMENT SYSTEM	Payor #3493	1012 · Bank of America Gen'l Ckg	
General Journal	12/05/2015	12/05/2015	PUBLIC EMPLOYEES' RETIREMENT SYSTEM	CalPERS Retirement for 11/22/15-12/05/15	2000 · Accounts Payable	6,045.30
TOTAL						6,045.30
Check	12/15/2015	12/15/2015	Service Charge	Service Charge	1012 · Bank of America Gen'l Ckg	
				Service Charge	6039.1 · Banking Service Charges	411.53
TOTAL						411.53
General Journal	12/19/2015	12/19/2015	Payroll and Taxes for 12/06/15-12/19/15	Payroll and Taxes for 12/06/15-12/19/15	1012 · Bank of America Gen'l Ckg	
				Direct Deposits for 12/06/15-12/19/15	1012 · Bank of America Gen'l Ckg	22,095.56
				Payroll Taxes for 12/06/15-12/19/15	1012 · Bank of America Gen'l Ckg	8,023.39
			ICMA-RC	457(f) Employee Deductions for 12/06/15-12/19/15	1012 · Bank of America Gen'l Ckg	3,586.52
			ICMA-RC	401(a) Employee Deductions for 12/06/15-12/19/15	1012 · Bank of America Gen'l Ckg	1,121.70
TOTAL						34,827.17
P29 Bill Pmt -Check	12/21/2015	19101	ACWA JOINT POWERS INSURANCE AUTHORITY	0384361	1012 · Bank of America Gen'l Ckg	
Bill	12/15/2015	0384361		Prepayment - January 2016	1409 · Prepaid Life, BAD&D & LTD	124.53
				December 2015	60191 · Life & Disab.Ins Benefits	124.52
TOTAL						249.05
Bill Pmt -Check	12/21/2015	19102	BANK OF AMERICA	XXXX-XXXX-XXXX-9341	1012 · Bank of America Gen'l Ckg	
Bill	11/30/2015	XXXX-XXXX-XXXX-9341		Purchase Logitech mouse and keyboard for GM	6031.7 · Other Office Supplies	33.37
				Purchase miscellaneous office supplies	6031.7 · Other Office Supplies	43.98
				Membership-Society for HR Management-Joswiak	6111 · Membership Dues	190.00
				Renew subscription for Norton Security	6054 · Computer Software	49.99
				Purchase door bell for north side of office	6031.7 · Other Office Supplies	31.60
				Ship package to Sacramento	6042 · Postage - General	60.43
				Purchase certificate frames for office	6031.7 · Other Office Supplies	81.32
				Purchase miscellaneous office supplies	6031.7 · Other Office Supplies	203.21
				Purchase door bell for south side of office	6031.7 · Other Office Supplies	39.06
				Purchase software for org. chart creation	6054 · Computer Software	197.00
				Purchase replacement monitor for IT room	6055 · Computer Hardware	111.99
				Purchase super glue for office	6031.7 · Other Office Supplies	5.39
				Tinting of front office window	6031.7 · Other Office Supplies	200.00
				Subscription for Success Magazine	6112 · Subscriptions/Publications	34.95
				PK meeting w/Hoerning, City of Upland	8312 · Meeting Expenses	24.14
				Registration-Maurizio-ACWA 2015 Fall Conf.	6193.2 · Conference - Registration Fee	720.00

CHINO BASIN WATERMASTER
Cash Disbursements For The Month of
December 2015

Financial Report - B1

	<u>Type</u>	<u>Date</u>	<u>Num</u>	<u>Name</u>	<u>Memo</u>	<u>Account</u>	<u>Paid Amount</u>
TOTAL							2,026.43
	Bill Pmt -Check	12/21/2015	19103	CALPERS	1394905143	1012 · Bank of America Gen'l Ckg	
	Bill	12/15/2015	1394905143		Medical Insurance	60182.1 · Medical Insurance	7,533.91
TOTAL							7,533.91
	Bill Pmt -Check	12/21/2015	19104	CHARTER COMMUNICATIONS	8245100651455350	1012 · Bank of America Gen'l Ckg	
	Bill	12/15/2015	8245100651455350		12/06/15-1/05/16	6053 · Internet Expense	64.99
TOTAL							64.99
	Bill Pmt -Check	12/21/2015	19105	VERIZON WIRELESS	9756676641	1012 · Bank of America Gen'l Ckg	
	Bill	12/15/2015	9756676641			6022 · Telephone	299.31
TOTAL							299.31
	Bill Pmt -Check	12/21/2015	19106	BROWNSTEIN HYATT FARBER SCHRECK		1012 · Bank of America Gen'l Ckg	
	Bill	11/30/2015	622955		622955	6078 · BHFS Legal - Miscellaneous	19,937.25
					Expenses	6078 · BHFS Legal - Miscellaneous	396.15
					Expenses	8475 · BHFS Legal - Agricultural Pool	18.80
					Expenses	8575 · BHFS Legal - Non-Ag Pool	18.79
					Expenses	6375 · BHFS Legal - Board Meeting	750.00
					Expenses	8375 · BHFS Legal - Appropriative Pool	37.59
	Bill	11/30/2015	622956		McLaughlin	6073 · BHFS Legal - Personnel Matters	40.50
					Alvarez-CalPERS	6073 · BHFS Legal - Personnel Matters	2,350.80
					Personnel Committee	6073 · BHFS Legal - Personnel Matters	229.50
	Bill	11/30/2015	622957		Audit Response	6078 · BHFS Legal - Miscellaneous	1,477.35
	Bill	11/30/2015	622958		622958	6275 · BHFS Legal - Advisory Committee	3,595.50
					Expenses	6275 · BHFS Legal - Advisory Committee	37.59
	Bill	11/30/2015	622959		622959	6375 · BHFS Legal - Board Meeting	6,723.00
	Bill	11/30/2015	622960		622960	8375 · BHFS Legal - Appropriative Pool	2,142.00
	Bill	11/30/2015	622961		622961	8475 · BHFS Legal - Agricultural Pool	1,797.75
	Bill	11/30/2015	622962		622962	8575 · BHFS Legal - Non-Ag Pool	1,999.35
	Bill	11/30/2015	622963		622963	6071 · BHFS Legal - Court Coordination	918.00
	Bill	11/30/2015	622964		622964	6907.39 · Recharge Master Plan	1,616.85
	Bill	11/30/2015	622965		622965	6907.42 · Safe Yield Recalculation	38,476.35
					Expenses	6907.42 · Safe Yield Recalculation	392.14
TOTAL							82,955.26
	Bill Pmt -Check	12/21/2015	19107	CUCAMONGA VALLEY WATER DISTRICT	Lease due January 1, 2016	1012 · Bank of America Gen'l Ckg	
	Bill	12/16/2015			Lease due January 1, 2016	1422 · Prepaid Rent	6,371.16
TOTAL							6,371.16

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CHINO BASIN WATERMASTER
Cash Disbursements For The Month of
December 2015

Type	Date	Num	Name	Memo	Account	Paid Amount
Bill Pmt -Check	12/21/2015	19108	LEGAL SHIELD	0111802	1012 · Bank of America Gen'l Ckg	
Bill	12/21/2015	0111802		Employee deductions - December 2015	60194 · Other Employee Insurance	51.80
TOTAL						51.80
Bill Pmt -Check	12/21/2015	19109	LEVEL 3 COMMUNICATIONS	08802542	1012 · Bank of America Gen'l Ckg	
Bill	11/30/2015	08802542		11/10/15-12/09/15	6053 · Internet Expense	1,052.40
TOTAL						1,052.40
Bill Pmt -Check	12/21/2015	19110	OFFICE TEAM	44614881	1012 · Bank of America Gen'l Ckg	
Bill	12/21/2015	44614881		Week ending 12/11/15	6017.2 · Office Specialist Services	453.59
TOTAL						453.59
Bill Pmt -Check	12/21/2015	19111	STAULA, MARY L	Retiree Medical	1012 · Bank of America Gen'l Ckg	
Bill	12/31/2015				60182.4 · Retiree Medical	25.76
TOTAL						25.76
Bill Pmt -Check	12/22/2015	19112	GREAT AMERICA LEASING CORP.	18007645	1012 · Bank of America Gen'l Ckg	
Bill	12/21/2015	18007645		Invoice	6043.1 · Ricoh Lease Fee	3,285.29
TOTAL						3,285.29
Bill Pmt -Check	12/22/2015	19113	LEVEL 3 COMMUNICATIONS	09048625	1012 · Bank of America Gen'l Ckg	
Bill	12/21/2015	09048625		12/10/15-1/09/16	6053 · Internet Expense	1,052.44
TOTAL						1,052.44
Bill Pmt -Check	12/22/2015	19114	VERIZON	012519128144592510	1012 · Bank of America Gen'l Ckg	
Bill	12/21/2015	012519128144592510		012519128144592510	6022 · Telephone	137.23
TOTAL						137.23
Bill Pmt -Check	12/22/2015	19115	VERIZON	9757153331	1012 · Bank of America Gen'l Ckg	
Bill	12/21/2015	9757153331		9757153331	7103.7 · Grdwtr Qual-Computer Svc	100.04
TOTAL						100.04
Bill Pmt -Check	12/22/2015	19116	NAKANO, JUSTIN	Travel Expense Reimbursement	1012 · Bank of America Gen'l Ckg	
Bill	12/22/2015			Expenses for Dec. 15-17, 2015 NGWA Conference	6191 · Conferences - General	271.47
TOTAL						271.47
Bill Pmt -Check	12/24/2015	ACH 122415	PUBLIC EMPLOYEES' RETIREMENT SYSTEM	Payor #3493	1012 · Bank of America Gen'l Ckg	
General Journal	12/19/2015	12/19/2015	PUBLIC EMPLOYEES' RETIREMENT SYSTEM	CalPERS Retirement for 12/06/15-12/19/15	2000 · Accounts Payable	6,045.30
TOTAL						6,045.30

CHINO BASIN WATERMASTER
Cash Disbursements For The Month of
December 2015

Type	Date	Num	Name	Memo	Account	Paid Amount
General Journal	12/31/2015	12/31/2015	Payroll and Taxes for 12/20/15-01/02/16	Payroll and Taxes for 12/20/15-01/02/16	1012 · Bank of America Gen'l Ckg	
				Direct Deposits for 12/20/15-01/02/16	1012 · Bank of America Gen'l Ckg	21,131.21
				Payroll Taxes for 12/20/15-01/02/16	1012 · Bank of America Gen'l Ckg	9,645.90
			ICMA-RC	457(f) Employee Deductions for 12/20/15-01/02/16	1012 · Bank of America Gen'l Ckg	3,643.75
			ICMA-RC	401(a) Employee Deductions for 12/20/15-01/02/16	1012 · Bank of America Gen'l Ckg	1,121.70
TOTAL						35,542.56
General Journal	12/31/2015	12/31/2015	Wage Works FSA Direct Debits - Dec. 2015	Wage Works FSA Direct Debits - Dec. 2015	1012 · Bank of America Gen'l Ckg	
				Wage Works FSA Direct Debits - Dec. 2015	1012 · Bank of America Gen'l Ckg	511.14
				Wage Works FSA Direct Debits - Dec. 2015	1012 · Bank of America Gen'l Ckg	511.14
				Wage Works FSA Direct Debits - Dec. 2015	1012 · Bank of America Gen'l Ckg	76.25
TOTAL						1,098.53
					Total Disbursements:	312,337.27

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CHINO BASIN WATERMASTER

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

STAFF REPORT

DATE: February 11, 2016
TO: Pool Committee Members
SUBJECT: VISA Check Detail Report - Financial Report B2 (December 31, 2015)

SUMMARY

Issue: Record of VISA credit card payment disbursed for the month of December 31, 2015.

Recommendation: Receive and file VISA Check Detail Report for December 31, 2015 as presented.

Financial Impact: Funds disbursed were included in the FY 2015/16 "Amended" Watermaster Budget.

Future Consideration

Appropriative Pool: February 11, 2016; Receive and File
Non-Agricultural Pool: February 11, 2016; Receive and File
Agricultural Pool: February 11, 2016; Receive and File
Advisory Committee: February 18, 2016; Receive and File
Watermaster Board: February 25, 2016; Receive and File (Normal Course of Business)

ACTIONS:

February 11, 2016 – Appropriative Pool –
February 11, 2016 – Non-Agricultural Pool –
February 11, 2016 – Agricultural Pool –
February 18, 2016 – Advisory Committee –
February 25, 2016 – Watermaster Board –

BACKGROUND

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

DISCUSSION

The total cash disbursement during the month of December 2015 was \$2,026.43. The payment was processed by check number 19102 dated December 21, 2015. The monthly charges for December 2015 of \$2,026.43 were for routine and customary expenditures and properly documented with receipts.

ATTACHMENTS

1. Financial Report - B2

CHINO BASIN WATERMASTER
VISA Check Detail Report
December 2015

Type	Num	Date	Name	Memo	Account	Paid Amount
Bill Pmt -Check	12/21/2015	19102	BANK OF AMERICA	XXXX-XXXX-XXXX-9341	1012 · Bank of America Gen'l Ckg	
Bill	11/30/2015	XXXX-XXXX-XXXX-9341		Purchase Logitech mouse and keyboard for GM	6031.7 · Other Office Supplies	33.37
				Purchase miscellaneous office supplies	6031.7 · Other Office Supplies	43.98
				Membership-Society for HR Management-Joswiak	6111 · Membership Dues	190.00
				Renew subscription for Norton Security	6054 · Computer Software	49.99
				Purchase door bell for north side of office	6031.7 · Other Office Supplies	31.60
				Ship package to Sacramento	6042 · Postage - General	60.43
				Purchase certificate frames for office	6031.7 · Other Office Supplies	81.32
				Purchase miscellaneous office supplies	6031.7 · Other Office Supplies	203.21
				Purchase door bell for south side of office	6031.7 · Other Office Supplies	39.06
				Purchase software for org. chart creation	6054 · Computer Software	197.00
				Purchase replacement monitor for IT room	6055 · Computer Hardware	111.99
				Purchase super glue for office	6031.7 · Other Office Supplies	5.39
				Tinting of front office window	6031.7 · Other Office Supplies	200.00
				Subscription for Success Magazine	6112 · Subscriptions/Publications	34.95
				PK meeting w/Hoerning, City of Upland	8312 · Meeting Expenses	24.14
				Registration-Maurizio-ACWA 2015 Fall Conf.	6193.2 · Conference - Registration Fee	720.00
				Total Disbursements:		<u>2,026.43</u>

TOTAL

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CHINO BASIN WATERMASTER

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Tel: 909.484.3888 Fax: 909.484.3890 www.cbwm.org

PETER KAVOUNAS, P.E.
General Manager

STAFF REPORT

DATE: February 11, 2016
TO: Pool Committee Members
SUBJECT: Combining Schedule of Revenue, Expenses and Changes in Net Assets for the Period July 1, 2015 through December 31, 2015 - Financial Report B3 (December 31, 2015)

SUMMARY

Issue: Record of Revenue, Expenses and Changes in Net Assets for the Period July 1, 2015 through December 31, 2015.

Recommendation: Receive and file Combining Schedule of Revenue, Expenses and Changes in Net Assets for the Period July 1, 2015 through December 31, 2015 as presented.

Financial Impact: Funds disbursed were included in the FY 2015/16 "Amended" Watermaster Budget.

Future Consideration

Appropriative Pool: February 11, 2016; Receive and File
Non-Agricultural Pool: February 11, 2016; Receive and File
Agricultural Pool: February 11, 2016; Receive and File
Advisory Committee: February 18, 2016; Receive and File
Watermaster Board: February 25, 2016; Receive and File (Normal Course of Business)

ACTIONS:

February 11, 2016 – Appropriative Pool –
February 11, 2016 – Non-Agricultural Pool –
February 11, 2016 – Agricultural Pool –
February 18, 2016 – Advisory Committee –
February 25, 2016 – Watermaster Board –

BACKGROUND

A Combining Schedule of Revenue, Expenses and Changes in Net Assets for the period July 1, 2015 through December 31, 2015 is provided to keep all members apprised of the FY 2015/16 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 15.0, 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, 2015 THROUGH DECEMBER 31, 2015

Financial Report - B3

WATERMASTER ADMINISTRATION	OPTIMUM BASIN MANAGEMENT	POOL ADMINISTRATION & SPECIAL PROJECTS			GROUNDWATER OPERATIONS		LAIF VALUE ADJ.	GASB 68 BEG. NET POSITION	GRAND TOTALS	AMENDED BUDGET 2015-2016
		APPROPRIATIVE POOL	AG POOL	NON-AG POOL	GROUNDWATER REPLENISHMENT	SB222 FUNDS				
Administrative Revenues:										
Administrative Assessments		3,569,781		151,739					3,721,520	8,934,215
Interest Revenue		9,201	837	60					10,098	22,050
Mutual Agency Project Revenue	157,349								157,349	157,941
Miscellaneous Income									-	0
Total Revenues	157,349	3,578,982	837	151,800	-	-	-	-	3,888,968	9,114,206
Administrative & Project Expenditures:										
Watermaster Administration	669,913								669,913	1,227,268
Watermaster Board-Advisory Committee	77,566								77,566	222,418
Ag Pool Misc. Expense - Ag Fund									-	400
Pool Administration		23,848	201,299	48,114					273,261	595,933
Optimum Basin Mgmt Administration		928,759							928,759	1,473,093
OBMP Project Costs		1,067,568							1,067,568	3,525,355
Debt Service		304,376							304,376	460,200
Basin Recharge Improvements		386,128							386,128	3,472,477
Mutual Agency Project Costs									-	10,000
Total Administrative/OBMP Expenses	747,478	2,686,831	23,848	201,299	48,114	-	-	-	3,707,570	10,987,144
Net Administrative/OBMP Expenses	(590,129)	(2,686,831)								
Allocate Net Admin Expenses To Pools	<u>590,129</u>		427,250	143,484	19,395				-	
Allocate Net OBMP Expenses To Pools		1,996,327	1,445,329	485,389	65,610				-	
Allocate Debt Service to App Pool		304,376	304,376						-	
Allocate Basin Recharge to App Pool		<u>386,128</u>	386,128						-	
Agricultural Expense Transfer*			830,172	(830,172)					-	
Total Expenses			3,417,102	-	133,118	-	-	-	3,707,570	10,987,144
Net Administrative Income			161,880	837	18,681	-	-	-	181,398	(1,872,938)
Other Income/(Expense)										
Replenishment Water Assessments						-			-	0
Non-Ag Stored Water Purchases									-	0
Exhibit "G" Non-Ag Pool Water			-						-	0
Interest Revenue						2,403			2,403	0
MWD Water Purchases									-	0
Non-Ag Stored Water Purchases									-	0
Exhibit "G" Non-Ag Pool Water			-						-	0
MWD Water Purchases									-	0
Groundwater Replenishment									-	0
LAIF - Fair Market Value Adjustment							-	-	-	0
Other Post-Employment Benefits (OPEB)									-	0
Refund-Excess Reserves									-	0
Refund-Recharge Debt									-	0
Net Other Income/(Expense)			-	-	-	2,403	-	-	2,403	0
Net Transfers To/(From) Reserves	183,801		161,880	837	18,681	2,403	-	-	183,801	(1,872,938)
Net Assets, July 1, 2015			6,346,620	481,130	69,774	1,388,080	158,251	3,446	(740,195)	7,707,106
Net Assets, End of Period			6,508,499	481,968	88,455	1,390,482	158,251	3,446	(740,195)	7,890,907
13/14 Assessable Production			100,165,551	33,638,883	4,546,972					138,351,406
13/14 Production Percentages			72.399%	24.314%	3.287%					100.000%

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

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CHINO BASIN WATERMASTER

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

PETER KAVOUNAS, P.E.
General Manager

STAFF REPORT

DATE: February 11, 2016

TO: Pool Committee Members

SUBJECT: Treasurer's Report of Financial Affairs for the Period December 1, 2015 through December 31, 2015 - Financial Report B4 (December 31, 2015)

SUMMARY

Issue: Record of increases or decreases in the cash position, assets and liabilities of Watermaster for the Period of December 1, 2015 through December 31, 2015.

Recommendation: Receive and file Treasurer's Report of Financial Affairs for the Period December 1, 2015 through December 31, 2015 as presented.

Financial Impact: Funds disbursed were included in the FY 2015/16 "Amended" Watermaster Budget.

Future Consideration

Appropriative Pool: February 11, 2016; Receive and File

Non-Agricultural Pool: February 11, 2016; Receive and File

Agricultural Pool: February 11, 2016; Receive and File

Advisory Committee: February 18, 2016; Receive and File

Watermaster Board: February 25, 2016; Receive and File (Normal Course of Business)

ACTIONS:

February 11, 2016 – Appropriative Pool –

February 11, 2016 – Non-Agricultural Pool –

February 11, 2016 – Agricultural Pool –

February 18, 2016 – Advisory Committee –

February 25, 2016 – Watermaster Board –

BACKGROUND

A Treasurer's Report of Financial Affairs for the Period December 1, 2015 through December 31, 2015 is provided to keep all members apprised of the total cash in banks (Bank of America, LAIF, and CalTRUST) and 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 15.0, 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
DECEMBER 1, 2015 THROUGH DECEMBER 31, 2015**

Financial Report - B4

DEPOSITORIES:

Cash on Hand - Petty Cash			\$	500
Bank of America				
Governmental Checking-Demand Deposits	\$	347,863		
Zero Balance Account - Payroll	\$	-		347,863
Local Agency Investment Fund - Sacramento				8,982,757
TOTAL CASH IN BANKS AND ON HAND		12/31/2015	\$	9,331,120
TOTAL CASH IN BANKS AND ON HAND		11/30/2015		5,950,334
PERIOD INCREASE (DECREASE)			\$	3,380,786

CHANGE IN CASH POSITION DUE TO:

Decrease/(Increase) in Assets: Accounts Receivable			\$	(4,338)
Assessments Receivable				3,690,986
Prepaid Expenses, Deposits & Other Current Assets				1,300
(Decrease)/Increase in Liabilities: Accounts Payable				(126,403)
Accrued Payroll, Payroll Taxes & Other Current Liabilities				(26,365)
Long Term Liabilities				1,892
Transfer to/(from) Reserves				(156,285)
PERIOD INCREASE (DECREASE)			\$	3,380,786

SUMMARY OF FINANCIAL TRANSACTIONS:

	Petty Cash	Govt'l Checking Demand	Zero Balance Account Payroll	Local Agency Investment Funds	Totals
Balances as of 11/30/2015	\$ 500	\$ 217,078	\$ -	\$ 5,732,757	\$ 5,950,334
Deposits	-	3,693,123	-	3,250,000	6,943,123
Transfers	-	(3,338,734)	(59,095)	-	(3,397,829)
Withdrawals/Checks	-	(223,603)	59,095	-	(164,509)
Balances as of 12/31/2015	\$ 500	\$ 347,863	\$ -	\$ 8,982,757	\$ 9,331,120
PERIOD INCREASE OR (DECREASE)	\$ -	\$ 130,786	\$ -	\$ 3,250,000	\$ 3,380,786

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**CHINO BASIN WATERMASTER
TREASURER'S REPORT OF FINANCIAL AFFAIRS FOR THE PERIOD
DECEMBER 1, 2015 THROUGH DECEMBER 31, 2015**

INVESTMENT TRANSACTIONS

Effective Date	Transaction	Depository	Activity	Redeemed	Days to Maturity	Interest Rate(*)	Maturity Yield
12/9/2015	Deposit		\$ 750,000				
12/21/2015	Deposit		\$ 2,000,000				
12/22/2015	Deposit		\$ 500,000				
TOTAL INVESTMENT TRANSACTIONS			\$ 3,250,000	-			

* The earnings rate for L.A.I.F. is a daily variable rate; 0.37% was the effective yield rate at the Quarter ended December 31, 2015.

**INVESTMENT STATUS
December 31, 2015**

<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	\$ 8,982,757			
TOTAL INVESTMENTS	\$ 8,982,757			

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: February 11, 2016
TO: Pool Committee Members
SUBJECT: Budget vs. Actual Report for the Period July 1, 2015 through December 31, 2015 -
Financial Report B5 (December 31, 2015)

SUMMARY

Issue: Record of revenues and expenses of Watermaster for the Period of July 1, 2015 through December 31, 2015.

Recommendation: Receive and file Budget vs. Actual Report for the Period July 1, 2015 through December 31, 2015 as presented.

Financial Impact: Funds disbursed were included in the FY 2015/16 "Amended" Watermaster Budget.

Future Consideration

Appropriative Pool: February 11, 2016; Receive and File
Non-Agricultural Pool: February 11, 2016; Receive and File
Agricultural Pool: February 11, 2016; Receive and File
Advisory Committee: February 18, 2016; Receive and File
Watermaster Board: February 25, 2016; Receive and File (Normal Course of Business)

ACTIONS:

February 11, 2016 – Appropriative Pool –
February 11, 2016 – Non-Agricultural Pool –
February 11, 2016 – Agricultural Pool –
February 18, 2016 – Advisory Committee –
February 25, 2016 – Watermaster Board –

BACKGROUND

A Budget vs. Actual Report for the period July 1, 2015 through December 31, 2015 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 15.0, 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 – DECEMBER 2015

Year-To-Date (YTD) for the six months ending December 31, 2015, all but six categories were at or below the projected budget. The categories over budget were Watermaster Legal Services expenses (6070's) which were over budget by \$19,682 or 17.3% as a result of increased miscellaneous legal expenses, additional personnel related expenses, and the unanticipated CCG Motion related legal expenses not budgeted for FY 2015/16; Agricultural Legal Services expenses (8467) which were over budget by \$63,428 or 61.9% as a result of ongoing Safe Yield Redetermination and Reset efforts; Agricultural Pool Meeting Attendance expenses (8470's) which were over budget by \$5,525 or 49.8% as a result of the Agricultural Pool's Special Meetings which were not anticipated when the FY 2015/16 budget was developed; OBMP expenses (6900's) were over budget by \$105,139 or 13.5% as a result of engineering and legal services supporting the ongoing Safe Yield Redetermination and Reset efforts; Production Monitoring expenses (7101's) which were over budget by \$10,860 or 38.1% as a direct result of ongoing efforts of Watermaster staff in production reporting; and Groundwater Quality Monitoring expenses (7103's) which were over budget by \$15,433 or 14.0% as a result of additional laboratory services for water quality testing.

The Watermaster budget for FY 2015/16 is divided into 12-monthly amounts and allocated accordingly. As the fiscal year progresses, categories might level out over time and be within the budget levels.

Overall, the Watermaster (YTD) Actual Expenses were \$2,531,696 or 40.6% below the (YTD) Budgeted Expenses of \$6,239,267.

PREVIOUSLY REPORTED ACTIONS (Descending Order)

July 2015:

During the month of July 2015, the "Carry Over" funding was calculated. The Total "Carry Over" funding amount of \$1,872,937.85 has been posted to the general ledger accounts. The total amount of \$1,872,937.85 consisted of \$1,686,955.86 from Capital Improvement Projects, \$136,696 from Engineering Services, \$29,285.99 from Chino Hills ASR, and \$20,000 from the Administrative section for the Annual Reports. More detailed information is provided regarding this issue under the "Carry Over" Funding section.

The Amended Budget for FY 2015/16 is \$10,987,143.85 which includes \$1,872,937.85 for the prior years "Carry Over" funding. The Original Approved budget for FY 2015/16 of \$9,114,206 was approved by the Watermaster Board on May 28, 2015 ($\$9,114,206 + \$1,872,937.85 = \$10,987,143.85$).

SALARIES EXPENSE

CURRENT MONTH – DECEMBER 2015

As of December 31, 2015, the total (YTD) Watermaster salary expenses were \$60,612 or 7.6% below the (YTD) budgeted amount of \$794,218. The overall staffing budget was developed with a staffing level of nine Full-Time Equivalents (FTE's), and staffing is currently at eight Full-Time Equivalents (FTE's).

Watermaster completed the recruiting process for the position of Field Operations Specialist which became vacant as of August 27, 2015. Rick Zapien has accepted the position and starts on Monday, January 4, 2016. Currently the field activities and functions normally performed by the Field Operations Specialist are being completed by the other two operations staff members. Upon Rick's starting date, the Full-Time Equivalent (FTE's) will increase from eight to nine, a full complement of staff for Watermaster.

On September 16, 2015, Bianca Ruiz, the Office Specialist/Receptionist was placed on Pregnancy Disability Leave (PDL) by her physician. Based upon the PDL leave and concurrently running FMLA leave, Bianca is scheduled to return on Monday, February 22, 2016. Until her return, Watermaster will continue to utilize a temporary employee to perform the duties and responsibilities.

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 2015/16 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 allocations are tracking within budget.

The table summarizes the Year-To-Date (YTD) Actual Watermaster salary costs compared to the Year-To-Date (YTD) Budget as of December 31, 2015. 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 '15 - Dec '15 Actual	Jul '15 - Dec '15 Budget	\$ Over Budget	% of Budget	FY 2015/16 Annual Budget
WM Salary Expense					
6011 · WM Staff Salaries	422,983.23	427,711.00	-4,727.77	98.9%	848,891.00
6017- Temporary Services	0.00	10,500.00	-10,500.00	0.0%	21,000.00
6017.2 · Office Specialist Services	2,845.84	0.00	2,845.84	100.0%	0.00
6201 · Advisory Committee - WM Staff Salaries	7,514.99	11,223.00	-3,708.01	66.96%	22,274.00
6301 · Watermaster Board - WM Staff Salaries	13,982.36	18,581.00	-4,598.64	75.25%	36,879.00
8301 · Appropriative Pool - WM Staff Salaries	15,160.47	14,974.00	186.47	101.25%	29,719.00
8401 · Agricultural Pool - WM Staff Salaries	10,360.24	13,146.00	-2,785.76	78.81%	26,090.00
8501 · Non-Agricultural Pool - WM Staff Salaries	8,931.18	7,847.00	1,084.18	113.82%	15,574.00
6901 · OBMP - WM Staff Salaries	73,391.41	62,834.00	10,557.41	116.8%	124,709.00
7101.1 · Production Monitor - WM Staff Salaries	38,973.14	28,113.00	10,860.14	138.63%	55,797.00
7102.1 · In-line Meter - WM Staff Salaries	2,708.23	4,641.00	-1,932.77	58.35%	9,212.00
7103.1 · Grdwater Quality - WM Staff Salaries	5,008.67	27,465.00	-22,456.33	18.24%	54,511.00
7104.1 · Grdwater Level - WM Staff Salaries	27,986.79	21,387.00	6,599.79	130.86%	42,447.00
7108.1 · Hydraulic Control - WM Staff Salaries	0.00	1,240.00	-1,240.00	0.0%	2,464.00
7108.11 · Prado Basin - WM Staff Salaries	3,457.98	4,184.00	-726.02	82.65%	8,305.00
7201 · Comp Recharge - WM Staff Salaries	26,698.96	22,299.00	4,399.96	119.73%	44,259.00
7301 · PE3&5 - WM Staff Salaries	0.00	7,503.00	-7,503.00	0.0%	14,892.00
7401 · PE4 - WM Staff Salaries	0.00	4,556.00	-4,556.00	0.0%	9,042.00
7501.1 · PE 6&7 - WM Staff Salaries (Plume)	0.00	3,397.00	-3,397.00	0.0%	6,743.00
7501 · PE6&7 - WM Staff Salaries	0.00	2,209.00	-2,209.00	0.0%	4,383.00
7601 · PE8&9 - WM Staff Salaries	0.00	6,162.00	-6,162.00	0.0%	12,231.00
Subtotal WM Staff Costs	660,003.49	699,972.00	-39,968.51	94.29%	1,389,422.00
60185 · Vacation	34,496.32	36,239.00	-1,742.68	95.19%	72,479.00
60186 · Sick Leave	5,718.58	23,203.00	-17,484.42	24.65%	46,405.00
60187 · Holidays	33,387.74	34,804.00	-1,416.26	95.93%	46,405.00
Subtotal WM Paid Leaves	73,602.64	94,246.00	-20,643.36	78.1%	165,289.00
Total WM Salary Costs	733,606.13	794,218.00	-60,611.87	92.37%	1,554,711.00

LEGAL SERVICES
BROWNSTEIN HYATT FARBER SCHRECK EXPENSES

CURRENT MONTH – DECEMBER 2015

As of December 31, 2015, 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 \$112,498 or 22.3% above the (YTD) budgeted amount of \$504,208. 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 2015/16. The "Approved" budget amount was adopted for the amount of \$933,815. The total budget was developed by multiplying the number of hours that would be required to complete the specific tasks by the hourly rate.

WATERMASTER ADMINISTRATIVE LEGAL SERVICES:

Overall, the Watermaster Administrative Legal Services expense (6070's), as of December 31, 2015, was \$19,682 or 17.3% above the budgeted amount of \$113,875. The specific items within the Administrative Legal Services expenses (6070's) which were under budget were the expenses for Court Coordination (6071) under budget by \$12,524 or 61.2%; Annotated Judgment (6072) under budget by \$20,075 or 100.0%; Interagency Issues (6074) under budget by \$15,300 or 100.0%; and the Party Status Maintenance (6077) under budget by \$13,891 or 96.8%. The specific items within the Administrative Legal Services expenses (6070's) which were over budget were the expenses for Personnel Matters (6073) over budget by \$838 or 3.2%; Miscellaneous (6078) over budget by \$77,554 or 438.8%; and CCG Motion (6078.12) over budget by \$3,080 or 100.0%.

Personnel Matters: As reported during the previous monthly meetings, Watermaster's legal counsel filed an appeal with CalPERS regarding CalPERS original determination (from February 2013) which rejected the base salary of the former CEO, Desi Alvarez, with regards to his retirement pension benefit. There

have been several filings of appeal and we are awaiting CalPERS determination. On December 9, 2013 CalPERS notified the attorneys of record that the CalPERS Legal Office received the case on November 22, 2013 and we would be notified when the case has been assigned to an attorney who will represent CalPERS regarding the appeal. On February 27, 2014 the case was assigned to Wesley E. Kennedy, Senior Staff Attorney for CalPERS. On July 17, 2014 a document request from CalPERS was received by Watermaster related to the pending case. On August 22, 2014 the specific documents were provided to CalPERS. On September 9, 2014 Watermaster received the Notice of Hearing from CalPERS and the hearing has been scheduled for March 11-13, 2015 at the Glendale CalPERS Regional office. On October 1, 2014 Watermaster received from CalPERS a discovery request for Case No. 2013-1113. On December 31, 2014 Brownstein Hyatt Farber Schreck provided the information to Mr. Kennedy of CalPERS as requested on October 1, 2014. On January 16, 2015 a Prehearing conference along with a Settlement conference was conducted in Los Angeles. On March 2, 2015 a Motion to Continue was granted and the new Administrative Hearing (OAH Case No. 2014080757) was scheduled for November 16-18, 2015 at the Glendale CalPERS Regional Office. On September 28, 2015 the attorney for Mr. Alvarez (Mr. Jensen), at the suggestion of Mr. Kennedy, requested a short continuance of the OAH hearing because CalPERS has scheduled a full Board hearing on the claims of one of Mr. Jensen's clients for February 11, 2016 which is right in the middle of the three-day hearing scheduled for Mr. Alvarez's case. On October 9, 2015, an Order Granting Continuance; Notice of New Hearing Dates was provided by the State of California, Department of General Services, Office of Administrative Hearings. The administrative hearing was rescheduled for January 4-6, 2016 at the Glendale CalPERS Regional Office. On October 14, 2015 a Notice of Case Reassignment was received from the CalPERS providing notice that OAH Case No. 2014080757 has been reassigned from attorney Wesley Kennedy to Preet Kaur, Staff Attorney. On November 20, 2015, a Request for Continuance was issued from CalPERS to reschedule the hearing to either the period of April 4 through April 6, 2016 or April 11 through April 15, 2016. On December 11, 2015, an Order Granting Continuance; Notice of New Hearing Dates was issued from the State of California, Department of General Services, Office of Administrative Hearings to reschedule the hearing to April 11-13, 2016.

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, 8375, 8475 and 8575). Overall, this category of legal expenses as of December 31, 2015 was \$44,033 or 40.3% below the budgeted amount of \$109,383. 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. The Watermaster parties agreed that during the month of December 2015, the three Pools, the Advisory Committee and the Watermaster Board meetings would not be held, adding additional cost savings to this category.

OBMP LEGAL SERVICES:

The OBMP legal expenses (accounts 6907.31 through 6907.90) were above the budget for the month. As of December 31, 2015 the category of OBMP legal expenses were \$136,848 or 48.7% above the budgeted amount of \$280,950. The majority of expenses within this OBMP category were under budget (Y-T-D), however, the BHFS Safe Yield Redetermination and Reset legal expenses (6907.42) continue to increase and exceed the monthly budget. As of December 31, 2015, the Safe Yield Redetermination and Reset legal expenses were \$301,933 or 292.3% above the budgeted amount of \$103,300. It should be noted that the 12-month annual legal budget for the Safe Yield Redetermination and Reset category was approved at an amount of \$103,300 and anticipated to be allocated within the first six months of the FY 2015/16 (July 2015 – December 2015). The approved BHFS legal budget anticipated 230 labor hours for consolidated legal staff time with regards to the Safe Yield Redetermination and Reset effort.

The table listed below summarizes the Brownstein Hyatt Farber Schreck (BHFS) expenses as of December 31, 2015 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 '15 - Dec '15 Actual	Jul '15 - Dec '15 Budget	\$ Over Budget	% of Budget	FY 2015/16 Annual Budget
6070 · Watermaster Legal Services					
6071 · BHFS Legal - Court Coordination	7,950.60	20,475.00	-12,524.40	38.83%	40,950.00
6072 · BHFS Legal - Annotated Judgment	0.00	20,075.00	-20,075.00	0.0%	40,150.00
6073 · BHFS Legal - Personnel Matters	26,838.45	26,000.00	838.45	103.23%	80,700.00
6074 · BHFS Legal - Interagency Issues	0.00	15,300.00	-15,300.00	0.0%	30,600.00
6076 · BHFS Legal - Storage Issues	0.00	0.00	0.00	0.0%	0.00
6077 · BHFS Legal - Party Status Maintenance	459.00	14,350.00	-13,891.00	3.2%	28,700.00
6078 · BHFS Legal - Miscellaneous (Note 1)	95,229.20	17,675.00	77,554.20	538.78%	35,350.00
6078.12 · BHFS Legal - CCG Motion	3,079.82	0.00	3,079.82	100.0%	0.00
Total 6070 · Watermaster Legal Services	133,557.07	113,875.00	19,682.07	117.28%	256,450.00
6275 · BHFS Legal - Advisory Committee	8,748.68	10,200.00	-1,451.32	85.77%	20,400.00
6375 · BHFS Legal - Board Meeting	32,250.60	53,283.00	-21,032.40	60.53%	106,565.00
8375 · BHFS Legal - Appropriative Pool	8,365.84	15,300.00	-6,934.16	54.68%	30,600.00
8475 · BHFS Legal - Agricultural Pool	7,743.62	15,300.00	-7,556.38	50.61%	30,600.00
8575 · BHFS Legal - Non-Ag Pool	8,241.74	15,300.00	-7,058.26	53.87%	30,600.00
Total BHFS Legal Services	65,350.48	109,383.00	-44,032.52	59.75%	218,765.00
6907.3 · WM Legal Counsel					
6907.31 · Archibald South Plume	0.00	12,250.00	-12,250.00	0.0%	24,500.00
6907.32 · Chino Airport Plume	0.00	12,250.00	-12,250.00	0.0%	24,500.00
6907.33 · Desalter/Hydraulic Control	0.00	24,450.00	-24,450.00	0.0%	48,900.00
6907.34 · Santa Ana River Water Rights	869.85	12,650.00	-11,780.15	6.88%	25,300.00
6907.36 · Santa Ana River Habitat	783.00	9,850.00	-9,067.00	7.95%	19,700.00
6907.38 · Reg. Water Quality Cntrl Board	0.00	7,175.00	-7,175.00	0.0%	14,350.00
6907.39 · Recharge Master Plan	4,671.90	34,050.00	-29,378.10	13.72%	68,100.00
6907.40 · Storage Agreements	535.50	43,050.00	-42,514.50	1.24%	86,100.00
6907.41 · Prado Basin Habitat Sustainability	5,704.65	7,175.00	-1,470.35	79.51%	14,350.00
6907.42 · Safe Yield Recalculation	405,233.14	103,300.00	301,933.14	392.29%	103,300.00
6907.90 · WM Legal Counsel - Unanticipated	0.00	14,750.00	-14,750.00	0.0%	29,500.00
Total 6907 · WM Legal Counsel	417,798.04	280,950.00	136,848.04	148.71%	458,600.00
Total Brownstein, Hyatt, Farber, Schreck Costs	616,705.59	504,208.00	112,497.59	122.31%	933,815.00

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, 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; (7) Review transfer documents; (8) Land Subsidence Committee reports/meetings; (9) Review process and criteria for re-appointment of the Watermaster 9 member Board; (10) Review current California issued drought regulations; (11) Review and comment on Waters of the United States rule making; (12) Review and draft documents for basin boundary regulations; and (13) Miscellaneous legal research on current and pending issues.

OBMP ENGINEERING SERVICES AND LEGAL COSTS

CURRENT MONTH – DECEMBER 2015

Reviewing in total the OBMP Engineering Services and Legal Costs (consolidating the four categories of OBMP Watermaster Staff and SAWPA, OBMP Engineering Services, OBMP Legal Costs, and OBMP Other Expenses) for the six month period ending December 31, 2015, the actual expenses of \$882,294 were above the budgeted amount of \$777,155 by \$105,139 or 13.6%. For a detailed discussion, the following is provided.

For December 31, 2015, the accounts 6901-6903 (Optimum Basin Mgmt Program) section was above the Year-To-Date (YTD) budget by \$10,216 or 27.5%. 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 more time on specific OBMP related areas and less time on administrative related tasks. As a result, Watermaster staff allocated more actual time to the OBMP project as budgeted, which resulted in an over budget variance of \$10,557 or

16.8%. The remaining expense was the Santa Ana Watershed Project Authority (SAWPA) FY 2015/16 Basin Monitoring Program Task Force Contribution which was budgeted at \$12,500 but actual expenses were billed at \$12,159 which was below the budget by \$341 or 2.7% as of December 31, 2015.

For December 31, 2015, the accounts 6906 (Optimum Basin Mgmt Program Engineering Services) section was below the Year-To-Date (YTD) budget by \$36,637 or 8.8%. For FY 2015/16, the OBMP-Safe Yield Redetermination and Reset expenses (6906.73) did not have a budget amount assigned. For the month of December 2015, there were no expenses charged to the OBMP-Safe Yield Redetermination and Reset expenses. As of the Year-To-Date (YTD), this account was over budget by \$79,393 or 100.0%. The OBMP-Watermaster Model Update and the Material Physical Injury Request expenses had a budget provided for the month, but there was a small amount of activity and Engineering expenses recorded for this period. These two expenses, along with several other engineering related line items within the (6906's) assisted in reducing the overall budget variance and is a large factor as to why this expense category was under budget for the month.

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 \$301,933 while some other line item activities were below the budget by \$165,085. Above the budget line items were the Safe Yield Redetermination and Reset of \$301,933. The individual legal projects/activities that were below budget for the Year-To-Date (YTD) period were the Archibald South Plume of \$12,250; the Chino Airport Plume of \$12,250; the Desalter/Hydraulic Control of \$24,450; the Santa Ana River Water Rights of \$11,780; the Santa Ana River Habitat of \$9,067; the Regional Water Quality Control Board of \$7,175; the Recharge Master Plan of \$29,378; Storage Agreements of \$42,515; the Prado Basin Habitat Sustainability of \$1,470; and the WM Unanticipated of \$14,750. For the six months ended December 31, 2015, the overall cumulative (YTD) budget was \$280,950 and the actual (BHFS) legal expenses totaled \$417,798 which resulted in an over budget variance of \$136,848 or 48.7%.

As mentioned in the Brownstein Hyatt Farber Schreck section, the annual legal budget for the Safe Yield Redetermination and Reset was approved at an amount of \$103,300. The approved BHFS legal budget anticipated 230 labor hours for consolidated legal staff time with regards to the Safe Yield Redetermination and Reset effort. The budget assumed these expenses would be recorded during the period of July 2015 through December 2015.

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 December 31, 2015 this category of expenses was \$5,289 or 78.4% below the budgeted amount of \$6,750.

The Integrated Resource Plan expenses (6910's) is billed directly to IEUA on the following month once the payment has been issued to Wildermuth Environmental, Inc. per the contract. As of December 31, 2015 this category of expenses was fully invoiced to IEUA in the amount of \$31,744.

Overall, the Optimum Basin Management Program (OBMP) category was \$882,294 compared to a (YTD) budget of \$777,155 for an over budget of \$105,139 or 13.5% as of December 31, 2015.

The table listed below summarizes the Optimum Basin Management Program (OBMP) expenses as of December 31, 2015 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 '15 - Dec '15 Actual	Jul '15 - Dec '15 Budget	\$ Over Budget	% of Budget	FY 2015/16 Annual Budget
6900 · Optimum Basin Mgmt Plan					
6901 · WM Staff Salaries	73,391.41	62,834.00	10,557.41	116.8%	124,709.00
6903 · OBMP SAWPA Group	12,159.00	12,500.00	-341.00	97.27%	12,500.00
Total 6901-6903 · OBMP WM Staff/SAWPA	85,550.41	75,334.00	10,216.41	113.56%	137,209.00
6906 · OBMP Engineering Services					
6906.1 · OBMP - Watermaster Model Update	144,727.30	186,226.66	-41,499.36	77.72%	279,340.00
6906.21 · State of the Basin Report	0.00	0.00	0.00	0.0%	0.00
6906.22 · Water Rights Compliance Reporting	15,593.75	12,201.98	3,391.77	127.8%	24,404.00
6906.23 · SGMA Reporting Requirements	2,024.25	8,696.02	-6,671.77	23.28%	17,392.00
6906.31 · OBMP - Pool, Advisory, Board Mtgs.	37,074.49	43,829.50	-6,755.01	84.59%	87,659.00
6906.32 · OBMP - Other General Meetings	11,152.62	16,438.50	-5,285.88	67.85%	32,877.00
6906.33 · OBMP - App. Pool Issue Resolution	0.00	27,482.00	-27,482.00	0.0%	54,964.00
6906.71 · OBMP - Data Requests - CBWM Staff	57,912.10	32,032.00	25,880.10	180.8%	64,064.00
6906.72 · OBMP - Data Requests - Non CBWM	7,706.75	19,104.00	-11,397.25	40.34%	38,208.00
6906.73 · OBMP - Safe Yield Recalculation	79,392.89	0.00	79,392.89	100.0%	0.00
6906.74 · OBMP - Mat'l Phy. Injury Requests	1,460.00	55,150.00	-53,690.00	2.65%	110,300.00
6906 · OBMP Engineering Services - Other	20,439.75	12,960.00	7,479.75	157.71%	25,920.00
Total 6906 · OBMP Engineering Services	377,483.90	414,120.66	-36,636.76	91.15%	735,128.00
6907 · OBMP Legal Fees					
6907.3 · WM Legal Counsel					
6907.31 · Archibald South Plume	0.00	12,250.00	-12,250.00	0.0%	24,500.00
6907.32 · Chino Airport Plume	0.00	12,250.00	-12,250.00	0.0%	24,500.00
6907.33 · Desalter/Hydraulic Control	0.00	24,450.00	-24,450.00	0.0%	48,900.00
6907.34 · Santa Ana River Water Rights	869.85	12,650.00	-11,780.15	6.88%	25,300.00
6907.36 · Santa Ana River Habitat	783.00	9,850.00	-9,067.00	7.95%	19,700.00
6907.38 · Reg. Water Quality Cntrl Board	0.00	7,175.00	-7,175.00	0.0%	14,350.00
6907.39 · Recharge Master Plan	4,671.90	34,050.00	-29,378.10	13.72%	68,100.00
6907.40 · Storage Agreements	535.50	43,050.00	-42,514.50	1.24%	86,100.00
6907.41 · Prado Basin Habitat Sustainability	5,704.65	7,175.00	-1,470.35	79.51%	14,350.00
6907.42 · Safe Yield Recalculation	405,233.14	103,300.00	301,933.14	392.29%	103,300.00
6907.90 · WM Legal Counsel - Unanticipated	0.00	14,750.00	-14,750.00	0.0%	29,500.00
Total 6907 · WM Legal Counsel	417,798.04	280,950.00	136,848.04	148.71%	458,600.00
Total 6907 · OBMP Legal Fees	417,798.04	280,950.00	136,848.04	148.71%	458,600.00
6909 · OBMP Other Expenses					
6909.1 · OBMP Meetings	1,461.16	750.00	711.16	194.82%	1,500.00
6909.3 · Other OBMP Expenses	0.00	1,000.00	-1,000.00	0.0%	2,000.00
6909.6 · OBMP Expenses - Miscellaneous	0.00	5,000.00	-5,000.00	0.0%	10,000.00
Total 6909 · OBMP Other Expenses	1,461.16	6,750.00	-5,288.84	21.65%	13,500.00
6910 · Integrated Resource Plan					
6910.1 · IRP Groundwater Modeling - WEI	31,744.00	0.00	31,744.00	100.0%	0.00
6910.15 · IRP Groundwater Modeling - IEUA	-31,744.00	0.00	-31,744.00	100.0%	0.00
Total 6910 · Integrated Resource Plan	0.00	0.00	0.00	0.0%	0.00
Total 6900 · Optimum Basin Mgmt Plan	882,293.51	777,154.66	105,138.85	113.53%	1,344,437.00

ENGINEERING SERVICES - OBMP IMPLEMENTATION PROJECTS COSTS
WILDERMUTH ENVIRONMENTAL, INC.

CURRENT MONTH – DECEMBER 2015

As of December 31, 2015, the total (YTD) Engineering Services expenses were \$515,582 or 34.7% below the (YTD) budget amount of \$1,486,312. The OBMP Implementation Projects (consolidated accounts 7100's – 7700's) were all (Under) budget as of December 31, 2015.

Wildermuth Environmental, Inc. provides Watermaster an 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 ECAC report for the

current fiscal year has been provided for the period ending September 30, 21015 and showed a projected over budget of \$30,411. The second ECAC report is scheduled to be issued in mid-February 2016 for the period July 2015 through December 2015. Watermaster does not plan to present any Budget Transfers or Budget Amendments at this time.

PREVIOUSLY REPORTED ACTIONS (Descending Order)

July 2015:

The breakdown of the total FY 2015/16 Task Order amount of \$2,595,942 includes direct labor costs for Wildermuth Environmental, Inc. (80%) along with other direct charges such as equipment rental, laboratory fees, travel costs, reproduction costs, and outside professional services (20%).

The approved "Original" Engineering Services budget of \$2,595,942 was increased by "Carry Over" funding in the amount of \$136,696 to the "Amended" amount of \$2,732,638 for FY 2015/16 as provided in the Engineering Services Task Order. The "Carry Over" amount of \$136,696 from FY 2014/15 to the FY 2015/16 budget are expenses related to the ongoing long-term pumping test (\$9,813 for account 7107.2 and \$34,770 for account 7107.6), the PBHSP monitoring program (\$12,127 for account 7108.31 and \$35,986 for account 7108.41), the hydraulic control monitoring program Adaptive Management Plan (\$33,000 for account 7107.8), and expenses related to the upload of GeoTracker and EnviroStor data (\$11,000 for account 7502). All of the "Carry Over" funding is for projects or activities that have bridged previous fiscal years and are expected to be completed in the FY 2015/16 timeframe.

The table listed below summarized the Year-To-Date (YTD) Actual Wildermuth Environmental, Inc., (WEI) and other Engineering costs compared to the Year-To-Date (YTD) Budget as of December 31, 2015. 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 '15 - Dec '15	Jul '15 - Dec '15	\$ Over Budget	% of Budget	FY 2015/16
	Actual	Budget			Annual Budget
6906 · OBMP Engineering Services - Other	20,439.75	12,960.00	7,479.75	157.71%	25,920.00
6906.1 · OBMP - Watermaster Model Update	144,727.30	186,226.66	-41,499.36	77.72%	279,340.00
6906.21 · State of the Basin Report	0.00	0.00	0.00	0.0%	0.00
6906.22 · Water Rights Compliance Reporting	15,593.75	12,201.98	3,391.77	127.8%	24,404.00
6906.23 · SGMA Reporting Requirements	2,024.25	8,696.02	-6,671.77	23.28%	17,392.00
6906.31 · OBMP - Pool, Advisory, Board Mtgs.	37,074.49	43,829.50	-6,755.01	84.59%	87,659.00
6906.32 · OBMP - Other General Meetings	11,152.62	16,438.50	-5,285.88	67.85%	32,877.00
6906.33 · OBMP - App. Pool Issue Resolution	0.00	27,482.00	-27,482.00	0.0%	54,964.00
6906.71 · OBMP - Data Requests - CBWM Staff	57,912.10	32,032.00	25,880.10	180.8%	64,064.00
6906.72 · OBMP - Data Requests - Non CBWM	7,706.75	19,104.00	-11,397.25	40.34%	38,208.00
6906.73 · OBMP - Safe Yield Recalculation	79,392.89	0.00	79,392.89	100.0%	0.00
6906.74 · OBMP - Mat'l Physical Injury Requests	1,460.00	55,150.00	-53,690.00	2.65%	110,300.00
7103.3 · Grdwtr Qual-Engineering	71,848.59	60,258.00	11,590.59	119.24%	120,516.00
7103.5 · Grdwtr Qual-Lab Svcs	48,037.00	19,602.50	28,434.50	245.06%	39,205.00
7104.3 · Grdwtr Level-Engineering	88,181.66	88,215.00	-33.34	99.96%	176,430.00
7104.8 · Grdwtr Level-Contracted Services	0.00	5,000.00	-5,000.00	0.0%	10,000.00
7104.9 · Grdwtr Level-Capital Equipment	0.00	3,500.00	-3,500.00	0.0%	7,000.00
7107.2 · Grd Level-Engineering	23,696.64	33,080.00	-9,383.36	71.63%	56,347.00
7107.3 · Grd Level-SAR Imagery	12,000.00	42,500.00	-30,500.00	28.24%	85,000.00
7107.6 · Grd Level-Contract Svcs	399.50	92,914.50	-92,515.00	0.43%	151,059.00
7107.8 · Grd Level-Capital Equipment	0.00	2,800.00	-2,800.00	0.0%	5,600.00
7108.3 · Hydraulic Control-Engineering	10,782.59	24,984.00	-14,201.41	43.16%	49,968.00
7108.31 · Hydraulic Control-PBHSP	60,345.31	70,636.50	-10,291.19	85.43%	129,146.00
7108.32 · Hydraulic Control-Adaptive Mgmt Plan	43,264.47	43,176.00	88.47	100.21%	43,176.00
7108.4 · Hydraulic Control-Lab Svcs	4,464.00	12,540.50	-8,076.50	35.6%	25,081.00
7108.41 · Hydraulic Control-PBHSP	22,930.00	42,541.00	-19,611.00	53.9%	49,096.00
7108.6 · Hydraulic Control-Outside Professionals	0.00	45,000.00	-45,000.00	0.0%	90,000.00
7108.7 · Hydraulic Control-Prado Basin Habitat	4,428.00	0.00	4,428.00	100.0%	0.00
7109.3 · Recharge & Well - Engineering	3,709.75	9,933.50	-6,223.75	0.0%	19,867.00
7202.2 · Comp Recharge-Engineering Services	30,320.86	79,752.00	-49,431.14	38.02%	159,504.00
7303 · PE3&5-Engineering - Other	0.00	11,692.00	-11,692.00	0.0%	23,384.00
7402 · PE4-Engineering	5,718.75	42,354.00	-36,635.25	13.5%	84,708.00
7402.10 · PE4-MZ1 Pomona Project	125,277.94	253,127.50	-127,849.56	49.49%	506,255.00
7403 · PE4-Contract Svcs	0.00	10,000.00	-10,000.00	0.0%	20,000.00
7502 · PE6&7-Engineering	23,304.75	46,420.00	-23,115.25	50.2%	81,840.00
7602 · PE8&9-Engineering	14,536.00	32,164.00	-17,628.00	45.19%	64,328.00
Total Engineering Services Costs	970,729.71	1,486,311.66	-515,581.95	65.31%	2,732,638.00 *

* Wildermuth and Subcontractor Engineering Budget of \$2,595,942 plus Carryover Funds from FY 2014/15 of \$136,696 = \$2,732,638
Carryover Funds from FY 2014/15 = \$9,813 (7107.2); \$34,770 (7107.6); \$12,127 (7108.31); \$35,986 (7108.41); \$33,000 (7108.7); and \$11,000 (7502) = \$136,696

PRADO BASIN HABITAT SUSTAINABILITY PROGRAM

The Prado Basin Habitat Sustainability Program came about as a result of the Peace II Agreement SEIR mitigation measure 4.4-3 and was adopted by IEUA's Board in October, 2010. The purpose of the mitigation measure is to ensure that the Prado Basin riparian habitat will not be impacted by Hydraulic Control. The basic program tasks are to convene a committee that will develop this adaptive management plan, to install necessary monitoring wells, to complete vegetation and aerial surveys, and to implement photo station monitoring. In terms of the financial aspects of this program, there is a cost sharing agreement, which was approved by the Watermaster Board in September, 2012 for a total budget of \$440,000. The cost sharing agreement between IEUA and Watermaster was increased from \$220,000 to \$300,000 effective August 22, 2013 with the approval of the Board. This is a 50/50 cost sharing agreement between Watermaster and IEUA with a not to exceed amount of \$300,000 for each party. Included in that cost is hiring a consultant to develop the adaptive management plan, WEI performing the project management tasks related to the monitoring well installation, hiring a contractor to construct and install up to seventeen monitoring wells at nine separate sites, and United States Bureau of Reclamation

performing vegetation monitoring every three years. Grants have been applied for to offset the cost of this program; however, the Grants were not approved.

The process of invoicing IEUA for their 50% portion of the (WEI) invoices will be completed by Watermaster staff at the end of every quarter. The information listed below is provided for the period of May 1, 2012 through December 31, 2015:

	Wildermuth Environmental, Inc.	50% Billing "TO" IEUA	50% Billing "FROM" IEUA	Costs For Watermaster	Watermaster Staff "Hours"	Watermaster Staff "Costs"
May 2012 - Jun. 2012	\$ 11,143.75	\$ (5,571.88)	\$ -	\$ 5,571.88	4.00	\$ 411.38
Jul. 2012 - Jun. 2013	\$ 120,945.28	\$ (60,472.64)	\$ 6,275.92	\$ 66,748.56	73.00	\$ 7,837.27
Jul. 2013 - Jun. 2014	\$ 21,722.09	\$ (10,861.05)	\$ 474.09	\$ 11,335.14	56.00	\$ 5,719.30
Jul. 2014 - Jun. 2015	\$ 198,138.44	\$ (99,069.22)	\$ -	\$ 99,069.22	9.00	\$ 1,141.63
Jul. 2015 - Dec. 2015	\$ 4,428.00	\$ (2,214.00)	\$ -	\$ 2,214.00	29.00	\$ 3,457.98
Totals	\$ 356,377.56	\$ (178,188.78)	\$ 6,750.01	\$ 184,938.79	171.00	\$ 18,567.56
	7108.7	7108.71, 7108.72	7108.75			7108.11

OTHER INCOME AND EXPENSE

There were no other significant items to report within the category of Other Income and Expenses for the month ending December 31, 2015.

PREVIOUSLY REPORTED ACTIONS (Descending Order)

July 2015:

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 2015/16 annual administrative fee invoice was issued on July 1, 2015 in the amount of \$157,349.47 under invoice number DYY 15-01. On August 3, 2015 payment in the amount of \$157,349.47 was received from The Metropolitan Water District of Southern California.

"CARRY OVER" FUNDING

CURRENT MONTH – NOVEMBER 2015

As of December 31, 2015, the total (YTD) amount remaining of the "Carried Over" funding is \$1,486,063.40 (\$1,872,937.85 - \$386,874.45 = \$1,486,063.40). The following details are provided:

			<u>GL Account</u>		
Printing - Annual Report	\$ 5,000.00	A	6045	FY 2014/15	ADM
Rauch Communication Consultants - Annual Report	\$ 15,000.00	B	6061.3	FY 2014/15	ADM
Ground Level Monitoring - Engineering	\$ 9,813.00	C	7107.2 ¹	FY 2014/15	ENG
Ground Level - Contracted Services	\$ 34,770.00	D	7107.6 ¹	FY 2014/15	ENG
Chino Hills ASR Project	\$ 29,285.99	E	7107.62	FY 2014/15	ASR
Hydraulic Control Engineering - PBHSP	\$ 12,127.00	F	7108.31 ²	FY 2014/15	ENG
Hydraulic Control Monitoring Lab Services - PBHSP	\$ 35,986.00	G	7108.41 ²	FY 2014/15	ENG
Hydraulic Control Monitoring - Adaptive Mgmt Plan	\$ 33,000.00	H	7108.32 ³	FY 2014/15	ENG
Jurupa Pumping Station (TO #5)	\$ 37,981.33	I	7209.1	FY 2014/15	PROJ
Wineville Basin Proof of Concept (TO #6)	\$ 35,397.53	J	7209.2	FY 2014/15	PROJ
PE 6&7 - Engineering Services	\$ 11,000.00	K	7502 ⁴	FY 2014/15	ENG
Hickory Basin Recharge Improvement Project	\$ 3,877.00	L	7690.3	FY 2014/15	PROJ
San Sevaine Recharge Improvement Project (TO #8)	\$ 475,000.00	M	7690.4	FY 2014/15	PROJ
CB20 Turnout Noise Abatement Project	\$ 80,000.00	N	7690.5	FY 2014/15	PROJ
GWR SCADA Upgrades (TO #4)	\$ 383,200.00	O	7690.61	FY 2014/15	PROJ
SCADA Communication Upgrades (TO #3)	\$ 547,500.00	P	7690.62	FY 2014/15	PROJ
Upper Santa Ana River HCP (TO #7)	\$ 75,000.00	Q	7690.7	FY 2014/15	PROJ
Lower Day Basin RMPU (TO #2)	\$ 49,000.00	R	7690.8	FY 2014/15	PROJ
Total Balance, June 30, 2015	\$ 1,872,937.85				

"Carried Over" Balance, July 1, 2015 \$ 1,872,937.85

Less: (Invoices Received To Date FY 2015/16)

Rauch Communication Consultants - Annual Report	\$ (15,000.00)	B	6061.3	FY 2014/15	ADM
Hydraulic Control Monitoring - Adaptive Mgmt Plan	\$ (33,000.00)	H	7108.32 ³	FY 2014/15	ENG
San Sevaine Recharge Improvement Project (TO #8)	\$ (111,118.08)	M	7690.4	FY 2014/15	PROJ
CB20 Turnout Noise Abatement Project	\$ (25,207.74)	N	7690.5	FY 2014/15	PROJ
GWR SCADA Upgrades (TO #4)	\$ (56,514.47)	O	7690.61	FY 2014/15	PROJ
SCADA Communication Upgrades (TO #3)	\$ (97,034.16)	P	7690.62	FY 2014/15	PROJ
Lower Day Basin RMPU (TO #2)	\$ (49,000.00)	R	7690.8	FY 2014/15	PROJ
Updated Balance as of December 31, 2015	\$ 1,486,063.40				

¹ Long-Term Pumping Test

² Prado Basin Habitat Sustainability Program monitoring program

³ Adaptive Management Plan

⁴ Upload GeoTracker and EnviroStor sites

BACKGROUND OF "CARRY OVER" FUNDING

Once the FY 2014/15 period as of June 30, 2015 was closed, the amount of unfinished capital projects and related engineering costs was calculated and the "Carry Over" funding amount was added to the current FY 2015/16 budget. The Total "Carry Over" funding amount of \$1,872,937.852 was posted to the accounts as of December 31, 2015. The total amount of \$1,872,937.85 consisted of \$1,686,955.86 from Capital Improvement Projects; \$136,696.00 from Engineering Services; \$29,285.99 from the Chino Hills ASR Project; and \$20,000.00 from the Administration budget for completion of the Annual Reports.

Several projects were completed during FY 2014/15 and have remaining funds available to be either (1) transferred to other project(s) that need additional funding, (2) keep amounts on reserve for future Capital Improvement Projects, or (3) refunded back to the Appropriative Pool when the Assessment package is

invoiced. The funding amounts available are as follows: Jurupa Pumping Station in the amount of \$37,981.33 (account 7209.1); Wineville Basin Proof of Concept in the amount of \$35,397.53 (account 7209.2); and Hickory Basin Recharge Improvement Project in the amount of \$3,877.00 (account 7690.3). The total amount available is \$77,255.86 ($\$37,981.33 + \$35,397.53 + \$3,877.00 = \$77,255.86$).

The San Sevaine Recharge Improvement Project-Task Order #8 has a remaining funded budget balance of \$475,000 in account (7690.4); the CB 20 Turnout project has a remaining funded budget balance of \$80,000 in account (7690.5); the GWR SCADA Upgrades-Task Order #4 has a remaining funded budget balance of \$383,200 in account (7960.61); the SCADA Communication Upgrades-Task Order #3 has a remaining funded budget balance of \$547,500 in account (7690.62); the Upper Santa Ana River HCP-Task Order #7 has a remaining funded balance of \$75,000 in account (7690.7); and the Lower Day Basin RMPU-Task Order #2 has a remaining funded budget balance of \$49,000 in account (7690.8). The total funded budget for these combined projects is \$1,609,700.

Unspent funds related to ongoing projects and associated activities from the Engineering Services budget from FY 2014/15 in several accounts totaling \$136,696 were "Carried Over" into the current FY 2015/16 budget. These funds were from the Ground Level Monitoring-Engineering (7107.2) in the amount of \$9,813; Ground Level Monitoring-Contracted Services (7107.6) in the amount of \$34,770; Hydraulic Control Monitoring-Engineering-PBHSP (7108.31) in the amount of \$12,127; Hydraulic Control Monitoring-Lab Services-PBHSP (7108.41) in the amount of \$35,986; Hydraulic Control Monitoring-Adaptive Management Plan (7108.7) in the amount of \$33,000; and Cooperative Efforts/Salt Management Engineering Services (7502) in the amount of \$11,000.

The ongoing Chino Hills ASR Project continues into FY 2015/16 and previous years funding of \$29,285.99 has been carried over into account (7107.62).

Unspent funds of \$20,000 related to the ongoing Annual Reports for development, production, and printing from the Administrative budget from FY 2014/15 from two accounts were "Carried Over" into the current FY 2015/16 budget. These funds were from the Printing-Annual Report (6045) in the amount of \$5,000; and Rauch Communication Consultants-Annual Report (6061.3) in the amount of \$15,000.

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 December 31, 2016, any remaining balances of the FY 2015/16 and prior years funding (if any), along with any new FY 2015/16 expenses, will then be "Carried Over" into the FY 2016/17 budget.

AUDIT FIELD WORK

FY 2014/15

Auditors from the audit firm of Fedak & Brown LLP were onsite at the Watermaster offices on August 10 and August 11, 2015. This was the final field work and the start of the development of the audited financial reports and statements for FY 2014/15. The initial field work was completed on June 15 and June 16, 2015. On November 19, 2015, the Senior Manager of Fedak & Brown, LLP presented the Annual Financial and Audit Reports to the Watermaster Board. The Annual Financial and Audit Reports for FY 2014/15 were posted to the Watermaster website on November 23, 2015.

ASSESSMENT INVOICING

CURRENT MONTH – DECEMBER 2015

Due to the Safe Yield Reset process this year, and the effects that it had on the Assessment Package, production of the Assessment Package was delayed. The Assessment Package will not be produced until the Court has considered the Safe Yield Reset Agreement, which is expected in a few months. However, Watermaster cannot wait until that time to collect assessments, as the funds will be needed sooner than that in order to keep Watermaster operational.

On November 19, 2015 the Watermaster Board approved staff's recommendation for collection of an interim partial assessment based upon fifty percent of last year's Appropriative Pool Admin and OBMP assessments, including those paid on behalf of the Agricultural Pool, in addition to fifty percent of last year's Recharge Debt and Recharge Improvement assessments, and to collect fifty percent of last year's Non-Ag Pool Admin and OBMP assessments. The balance, accounting for the interim assessment, would be collected when the Assessment Package is produced, following consideration of the Safe Yield Reset Agreement by the Court. Note that if a Party has an amount due of less than \$500 (including special assessments), collection was deferred until the final assessment invoice later in the fiscal year.

Included as part of the interim assessment invoicing, the Non-Agricultural Pool had a Special Assessment of \$60,000 as approved during a Confidential Session on November 12, 2015. The \$60,000 was allocated to the Non-Agricultural Pool members based upon the tentative actual production numbers from 2014/15 and will be adjusted once all Water Activity Reports (WARs) have been received.

The Watermaster staff issued and emailed the "interim" Assessment invoices on Thursday, November 19, 2015. The Assessment invoices were due 30 days from invoice date, on or before Monday, December 21, 2015. New for this payment cycle is the ability for parties to pay their invoice either by check or by wire transfer.

All "interim" Assessment invoice payments have been received.

ATTACHMENTS

1. Financial Report - B5

	1/12th (8.33%) of the Total Budget				6/12th (50%) of the Total Budget				100% of the Total Budget			
	For The Month of December 2015				Year-To-Date as of December 31, 2015				Fiscal Year End as of June 30, 2016			
	Actual	Budget	\$ Over(Under)	% of Budget	Actual	Budget	\$ Over(Under)	% of Budget	Projected	Budget	\$ Over(Under)	% of Budget
Income												
4010 · Local Agency Subsidies	0.00	0.00	0.00	0.0%	157,349.47	157,941.00	-591.53	99.63%	157,941.00	157,941.00	0.00	100.0%
4110 · Admin Asmnts-Approp Pool	0.00	0.00	0.00	0.0%	3,569,781.01	8,637,418.00	-5,067,636.99	41.33%	8,637,418.00	8,637,418.00	0.00	100.0%
4120 · Admin Asmnts-Non-Agri Pool	0.00	0.00	0.00	0.0%	151,739.47	296,797.00	-145,057.53	51.13%	296,797.00	296,797.00	0.00	100.0%
4700 · Non Operating Revenues	5,002.37	5,513.00	-510.63	90.74%	10,098.46	11,025.00	-926.54	91.6%	22,050.00	22,050.00	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%
Total Income	5,002.37	5,513.00	-510.63	90.74%	3,888,968.41	9,103,181.00	-5,214,212.59	42.72%	9,114,206.00	9,114,206.00	0.00	100.0%
Gross Profit	5,002.37	5,513.00	-510.63	90.74%	3,888,968.41	9,103,181.00	-5,214,212.59	42.72%	9,114,206.00	9,114,206.00	0.00	100.0%
Expense												
6010 · Admin. Salary/Benefit Costs	93,045.46	76,400.00	16,645.46	121.79%	426,265.73	442,860.00	-16,594.27	96.25%	877,531.46	880,591.00	-3,059.54	99.65%
6020 · Office Building Expense	9,028.64	9,640.00	-611.36	93.66%	50,407.04	55,857.00	-5,449.96	90.24%	105,814.08	110,381.00	-4,566.92	95.86%
6030 · Office Supplies & Equip.	1,744.80	2,630.00	-885.20	66.34%	12,569.42	16,280.00	-3,710.58	77.21%	30,638.84	32,560.00	-1,921.16	94.1%
6040 · Postage & Printing Costs	3,506.41	5,753.00	-2,246.59	60.95%	23,472.58	34,016.00	-10,543.42	69.01%	59,445.16	60,032.00	-586.84	99.02%
6050 · Information Services	8,520.42	9,820.00	-1,299.58	86.77%	54,500.77	68,920.00	-14,419.23	79.08%	129,001.54	131,840.00	-2,838.46	97.85%
6060 · Contract Services	16,882.25	7,500.00	9,382.25	225.1%	22,940.75	48,100.00	-25,159.25	47.69%	54,381.50	55,600.00	-1,218.50	97.81%
6070 · Watermaster Legal Services	32,011.20	26,146.00	5,865.20	122.43%	133,557.07	113,875.00	19,682.07	117.28%	267,114.14	256,450.00	10,664.14	104.16%
6080 · Insurance	0.00	0.00	0.00	0.0%	26,083.25	26,776.00	-692.75	97.41%	27,583.25	27,916.00	-332.75	98.81%
6110 · Dues and Subscriptions	141.00	500.00	-359.00	28.2%	9,421.30	15,818.00	-6,396.70	59.56%	20,842.60	21,335.00	-492.40	97.69%
6140 · WM Admin Expenses	390.30	75.00	315.30	520.4%	950.33	1,350.00	-399.67	70.4%	2,400.66	2,700.00	-299.34	88.91%
6150 · Field Supplies	0.00	0.00	0.00	0.0%	183.60	950.00	-766.40	19.33%	1,117.20	1,450.00	-332.80	77.05%
6170 · Travel & Transportation	1,749.20	2,600.00	-850.80	67.28%	10,478.11	12,660.00	-2,181.89	82.77%	22,456.22	25,320.00	-2,863.78	88.69%
6190 · Training, Conferences, Seminars	3,798.14	3,659.00	139.14	103.8%	13,820.03	13,884.00	-63.97	99.54%	27,640.06	22,400.00	5,240.06	123.39%
6200 · Advisory Comm - WM Board	98.80	3,668.00	-3,569.20	2.69%	16,302.28	21,923.00	-5,620.72	74.36%	34,104.56	43,674.00	-9,569.44	78.09%
6300 · Watermaster Board Expenses	574.29	14,942.00	-14,367.71	3.84%	61,263.35	89,514.00	-28,250.65	68.44%	137,526.70	178,744.00	-41,217.30	76.94%
8300 · Appr PI-WM & Pool Admin	1,929.39	11,378.00	-9,448.61	16.96%	23,848.44	68,149.00	-44,300.56	35.0%	122,696.88	136,069.00	-13,372.12	90.17%
8400 · Agri Pool-WM & Pool Admin	394.60	5,008.00	-4,613.40	7.88%	18,746.39	29,946.00	-11,199.61	62.6%	47,492.78	59,690.00	-12,197.22	79.57%
8467 · Ag Legal & Technical Services	15,685.00	17,083.00	-1,398.00	91.82%	165,927.50	102,500.00	63,427.50	161.88%	331,855.00	205,000.00	126,855.00	161.88%
8470 · Ag Meeting Attend -Special	975.00	1,850.00	-875.00	52.7%	16,625.00	11,100.00	5,525.00	149.78%	33,250.00	22,200.00	11,050.00	149.78%
8471 · Ag Pool Expense	0.00	16,250.00	-16,250.00	0.0%	0.00	32,500.00	-32,500.00	0.0%	30,000.00	65,000.00	-35,000.00	46.15%
8485 · Ag Pool - Misc. Exp. - Ag Fund	0.00	0.00	0.00	0.0%	0.00	200.00	-200.00	0.0%	100.00	400.00	-300.00	25.0%
8500 · Non-Ag PI-WM & Pool Admin	3,838.26	9,018.00	-5,179.74	42.56%	48,113.62	54,047.00	-5,933.38	89.02%	97,727.24	107,974.00	-10,246.76	90.51%
9400 · Depreciation Expense	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	5,500.00	0.00	5,500.00	100.0%
9500 · Allocated G&A Expenditures	-10,991.64	-33,443.00	22,451.36	32.87%	-114,737.28	-200,654.00	85,916.72	57.18%	-229,474.56	-401,307.00	171,832.44	57.18%
6900 · Optimum Basin Mgmt Plan	118,820.73	110,305.45	8,515.28	107.72%	882,293.51	777,154.66	105,138.85	113.53%	1,614,587.02	1,344,437.00	270,150.02	120.09%
6950 · Mutual Agency Projects	0.00	0.00	0.00	0.0%	0.00	10,000.00	-10,000.00	0.0%	0.00	10,000.00	-10,000.00	0.0%
9501 · G&A Expenses Allocated-OBMP	1,865.26	10,721.33	-8,856.07	17.4%	46,465.56	64,328.00	-17,862.44	72.23%	92,931.12	128,656.00	-35,724.88	72.23%
7101 · Production Monitoring	7,138.08	4,783.50	2,354.58	149.22%	39,348.14	28,488.00	10,860.14	138.12%	78,696.28	56,547.00	22,149.28	139.17%
7102 · In-line Meter Installation	0.00	5,601.92	-5,601.92	0.0%	4,123.55	33,578.50	-29,454.95	12.28%	33,247.10	67,087.00	-33,839.90	49.56%
7103 · Grdwtr Quality Monitoring	9,100.97	16,931.24	-7,830.27	53.75%	125,813.89	110,380.50	15,433.39	113.98%	251,627.78	220,342.00	31,285.78	114.2%
7104 · Gdwtr Level Monitoring	8,097.11	21,607.00	-13,509.89	37.47%	117,755.32	124,977.00	-7,221.68	94.22%	235,510.64	247,627.00	-12,116.36	95.11%
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%
7107 · Ground Level Monitoring	1,779.35	14,035.25	-12,255.90	12.68%	36,096.14	200,580.49	-164,484.35	18.0%	247,192.28	327,291.99	-80,099.71	75.53%

CHINO BASIN WATERMASTER
Budget vs. Actual
Current Month, Year-To-Date and Fiscal Year-End

	1/12th (8.33%) of the Total Budget				6/12th (50%) of the Total Budget				100% of the Total Budget			
	For The Month of December 2015				Year-To-Date as of December 31, 2015				Fiscal Year End as of June 30, 2016			
	Actual	Budget	\$ Over(Under)	% of Budget	Actual	Budget	\$ Over(Under)	% of Budget	Projected	Budget	\$ Over(Under)	% of Budget
7108 · Hydraulic Control Monitoring	41,741.10	28,053.16	13,687.94	148.79%	149,672.35	244,302.00	-94,629.65	61.27%	374,344.70	397,236.00	-22,891.30	94.24%
7109 · Recharge & Well Monitoring Prtg	0.00	1,655.58	-1,655.58	0.0%	3,709.75	9,933.50	-6,223.75	37.35%	12,419.50	19,867.00	-7,447.50	62.51%
7200 · PE2- Comp Recharge Pgm	-99,830.13	215,179.67	-315,009.80	-46.39%	352,276.00	777,860.86	-425,584.86	45.29%	1,010,552.00	1,078,549.86	-67,997.86	93.7%
7300 · PE3&5-Water Supply/Desalte	0.00	3,792.00	-3,792.00	0.0%	0.00	22,695.00	-22,695.00	0.0%	0.00	45,276.00	-45,276.00	0.0%
7400 · PE4- Mgmt Plan	18,716.86	51,887.92	-33,171.06	36.07%	132,607.52	311,287.50	-178,679.98	42.6%	565,215.04	622,505.00	-57,289.96	90.8%
7500 · PE6&7-CoopEfforts/SaltMgmt	3,868.50	6,844.33	-2,975.83	56.52%	23,304.75	52,026.00	-28,721.25	44.79%	71,609.50	92,966.00	-21,356.50	77.03%
7600 · PE8&9-StorageMgmt/Conj Use	14,536.00	6,424.84	8,111.16	226.25%	14,589.18	38,501.00	-23,911.82	37.89%	49,178.36	76,909.00	-27,730.64	63.94%
7690 · Recharge Improvement Debt Pymt	-155,826.00	0.00	-155,826.00	100.0%	690,503.45	2,236,027.00	-1,545,523.55	30.88%	2,536,006.90	3,932,677.00	-1,396,670.10	64.49%
7700 · Inactive Well Protection Prgm	0.00	41.67	-41.67	0.0%	0.00	250.00	-250.00	0.0%	0.00	500.00	-500.00	0.0%
9502 · G&A Expenses Allocated-Projects	9,126.38	22,720.92	-13,594.54	40.17%	68,271.72	136,325.50	-68,053.78	50.08%	136,543.44	272,651.00	-136,107.56	50.08%
Total Expense	162,455.73	711,062.78	-548,607.05	22.85%	3,707,570.11	6,239,266.51	-2,531,696.40	59.42%	9,546,406.97	10,987,143.85	-1,440,736.88	86.89%
Net Ordinary Income	-157,453.36	-705,549.78	548,096.42	22.32%	181,398.30	2,863,914.49	-2,682,516.19	6.33%	-432,200.97	-1,872,937.85	1,440,736.88	23.08%
Other Income												
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	1,168.12	0.00	1,168.12	100.0%	2,402.77	0.00	2,402.77	100.0%	4,800.00	0.00	4,800.00	100.0%
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%
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%
Total Other Income	1,168.12	0.00	1,168.12	100.0%	2,402.77	0.00	2,402.77	100.0%	4,800.00	0.00	4,800.00	100.0%
Other Expense												
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%
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%
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%
Total Other 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%
Net Other Income	1,168.12	0.00	1,168.12	100.0%	2,402.77	0.00	2,402.77	100.0%	4,800.00	0.00	4,800.00	100.0%
Net Income	-156,285.24	-705,549.78	549,264.54	22.15%	183,801.07	2,863,914.49	-2,680,113.42	6.42%	-427,400.97	-1,872,937.85	1,445,536.88	22.82%

Note: Please see the staff report (Financial Report-B5) for additional detailed information on the account categories.

CHINO BASIN WATERMASTER

I. CONSENT CALENDAR (App and Ag Pool)

C. SAN ANTONIO WATER CO. – APPLICATION FOR RECHARGE

I. BUSINESS ITEM ROUTINE (Non-Ag Pool)

C. SAN ANTONIO WATER CO. – APPLICATION FOR RECHARGE

CHINO BASIN WATERMASTER

NOTICE

OF

APPLICATION(S)

RECEIVED FOR

RECHARGE

Date of Notice:

February 5, 2016

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.

NOTICE OF APPLICATION(S) RECEIVED

Date of Application: **January 22, 2016** Date of this notice: **February 5, 2016**

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

- Notice of Application for Recharge – Notice of Application for Recharge - On January 22, 2016, San Antonio Water Company submitted an Application for Recharge for up to 200,000 acre-feet to be recharged into Montclair 2, 3, and 4, and Brooks recharge basins.

Appropriative Pool: February 11, 2016

Non-Agricultural Pool: February 11, 2016

Agricultural Pool: February 11, 2016

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, 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

NOTICE OF APPLICATION FOR RECHARGE

Notification Dated: February 5, 2016

A party to the Judgment has submitted a proposed Application for Recharge 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 Application. Watermaster staff is not aware of any evidence to suggest that this recharge would cause material physical injury and hereby provides this notice to advise interested persons that this Application 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 Application begins the Watermaster process (comes before Watermaster).

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CHINO BASIN WATERMASTER

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

PETER KAVOUNAS, P.E.
General Manager

STAFF REPORT

DATE: February 11, 2016
TO: Pool Committee Members
SUBJECT: San Antonio Water Company Application for Recharge

SUMMARY

Issue: On January 22, 2016, San Antonio Water Company submitted an Application for Recharge for up to 200,000 acre-feet to be recharged into Montclair 2, 3, and 4, and Brooks recharge basins.

Recommendation: Approve San Antonio Water Company's Application for Recharge and direct Watermaster staff to account for this supplemental water recharged in San Antonio Water Company's existing Local Supplemental Storage account.

Financial Impact: None.

Future Consideration

Appropriative Pool: February 11, 2016 Approval
Non-Agricultural Pool: February 11, 2016 Approval
Agricultural Pool: February 11, 2016 Approval
Advisory Committee: March 17, 2016 Approval
Watermaster Board: March 24, 2016 Approval

ACTIONS:

February 11, 2016 – Appropriative Pool –
February 11, 2016 – Non-Agricultural Pool –
February 11, 2016 – Agricultural Pool
March 17, 2016 – Advisory Committee –
March 24, 2016 – Watermaster Board –

BACKGROUND

The Court approved the Peace Agreement, the OBMP Implementation Plan and the goals and objectives identified in the OBMP Phase I Report on July 13, 2000, and ordered Watermaster to proceed in a manner consistent with the Peace Agreement. 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 application. Where the request for Watermaster approval is submitted by a Party to the Judgment, there is a rebuttable presumption that most of the proposed activities 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).

In December 2011, San Antonio Water Company submitted an Application for a Local Storage Agreement. The Application identified the maximum quantity of the storage account to be 2,000.00 acre-feet to be placed into a Local Supplemental Storage Account. The Application stated the purpose of storing the water is to preserve pumping right for a changed future potential use. The Application stated that the method of placement in storage is via percolation/recharge and an Application for Recharge was included. The Form 2 stated that the Upland and Montclair 1 recharge basins would be utilized, for up to 1,500.000 acre-feet.

The Application for Recharge was approved by the Board in February 2012, and Watermaster was directed to account for this supplemental water recharged in San Antonio Water Company's existing Local Supplemental Storage account. San Antonio Water Company was informed it may begin recharging the water as described in the application. However, San Antonio Water Company is recharging the water at some risk because Watermaster's approval of the storage element of the Local Supplemental Storage Agreement is subject to further Watermaster determinations concerning: (1) the determination of available capacity for Local Supplemental Storage Agreements pursuant to Section 2 of the Second Amendment to the Peace Agreement (100,000 acre-foot cap); (2) the establishment of rules concerning the priority among competing applications for Local Supplemental Storage; and (3) the general terms and conditions applicable to Storage and Preemptive Replenishment in connection with the Recharge Master Plan. Accordingly until these determinations have been made, the storage and recovery of any water recharged by San Antonio Water Company is not guaranteed. Moreover, no Party with a pending application for Local Supplemental Storage Agreements will be prejudiced by Watermaster's conditional action on San Antonio Water Company's application.

DISCUSSION

On January 22, 2016, San Antonio Water Company submitted an Application for Recharge for up to 200.000 acre-feet. The Application states that the method of recharge is percolation into Montclair 2, 3, and 4, and Brooks recharge basins. (See Attachment 1.) The Application identifies the source of water to be diversion of the Company's surface water rights from the San Antonio Creek. Attached to the Application are the Draft 2015 San Antonio Canyon Watershed Sanitary Survey Update, an excerpt from the Opinion of Water Rights, and a surface water supply schematic for Chino Basin Recharge. (See Attachments 2, 3, and 4.) On February 2, 2016, Watermaster received a letter from San Antonio Water Company titled "Application for Recharge – Statement of Water Rights in San Antonio Creek," stating that water stream flows not captured by San Antonio Water Company flow outside of the Chino Basin, therefore making the water supplemental water to the Chino Basin. (See Attachment 5.)

If and when approved, San Antonio Water Company intends to potentially use its pending Local Storage Agreement to store this water. In the meantime, consistent with that of other Parties that have submitted Applications for Recharge that have pending Applications for Local Storage Agreements, the water will be placed in its Local Supplemental Storage account and will be tracked by Watermaster Staff. Per the Peace II Agreement and 2015 Safe Yield Reset Agreement awaiting the Court's determination, losses will

be applied to all water placed into a Local Supplemental Storage Account in a similar manner to all other water in storage. The total volume held in local storage accounts is pending a future determination, and the recommendation as written is intended to be consistent with prior recharge and storage application recommendations.

If this water is placed into storage (rather than produced during the same production year), an Application to Recapture Water in Storage will need to be submitted, prior to recapture. If the method and location of recapture from storage is to exchange with other groundwater producers in the Basin, when such an exchange is proposed, San Antonio Water Company and the other Party will need to submit appropriate water transfer forms, which include the recapture plan.

WEI performed a Material Physical Injury analysis of the Application for Recharge. WEI prepared a letter, dated February 4, 2016, which states that there will be no Material Physical Injury from the proposed Application for the recharge of San Antonio Creek water. (See Attachment 6.) The letter states that Watermaster should require the San Antonio Water Company to monitor the amount of water discharged to the San Antonio Creek, as well as sample and analyze the water quality of the San Antonio Creek water that they discharge. These data should be provided to Watermaster and Inland Empire Utilities Agency, as they are required for Watermaster accounting, regulatory reporting, and other groundwater management purposes. And, as with all water discharged into channels within the Chino Basin, San Antonio Water Company will need to coordinate their proposed diversions for recharge with the Inland Empire Utilities Agency, Chino Basin Water Conservation District, and Watermaster to ensure that their recharge activities do not interfere with other recharge operations, and that their water will be diverted and accounted for as proposed.

ATTACHMENTS

1. Form 2: Application for Recharge
2. Draft 2015 San Antonio Canyon Watershed Sanitary Survey Update
3. Excerpt from Opinion of Water Rights
4. Surface Water Supply Schematic for Chino Basin Recharge
5. February 2, 2016 letter from San Antonio Water Company to Watermaster: "Application for Recharge – Statement of Water Rights in San Antonio Creek"
6. February 4, 2016 letter from WEI to Watermaster: "Analysis of Material Physical Injury for the San Antonio Water Company (SAWC) Recharge Application, as submitted to the Chino Basin Watermaster on January 22, 2016"

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San Antonio Water Company

Incorporated October 25, 1882

Serving the original Ontario Colony lands

January 22, 2016

Ms. Danni Maurizio
Chino Basin Watermaster
9641 San Bernardino Road
Ranch Cucamonga, CA 91730

Subject: Application for Recharge

Dear Danni:

Enclosed are the forms for the San Antonio Water Company's application for recharge into Chino Basin Montclair 2, 3, 4 and Brooks Basin.

Please process our application for approval. If you have any questions, please call me at 909.982.4107.

Sincerely,

Charles Moorrees
General Manager/CEO
/cm

Cc: EUiloa/CBWCD
File

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MATERIAL PHYSICAL INJURY

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 [X]

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?

ADDITIONAL INFORMATION ATTACHED

Yes [X] No []



Applicant

- DRAFT SA CREEK WATERSHED SANITARY SURVEY 2015
- OPINION OF WATER RIGHTS
- CONVEYANCE SCHEMATIC FOR RECHARGE

TO BE COMPLETED BY WATERMASTER:

DATE OF APPROVAL FROM NON-AGRICULTURAL POOL: _____

DATE OF APPROVAL FROM AGRICULTURAL POOL: _____

DATE OF APPROVAL FROM APPROPRIATIVE POOL: _____

HEARING DATE, IF ANY: _____

DATE OF ADVISORY COMMITTEE APPROVAL: _____

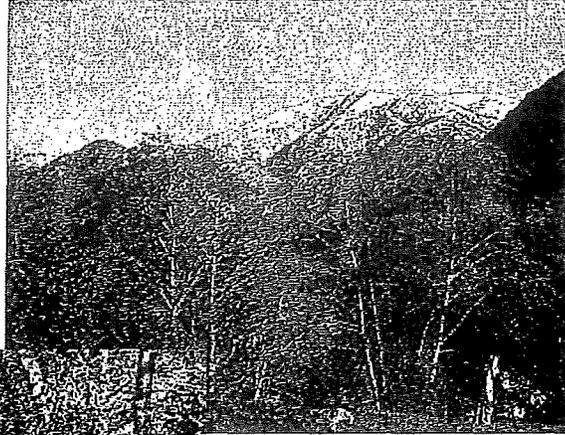
DATE OF BOARD APPROVAL: _____ Agreement # _____

2015

**SAN ANTONIO CANYON
WATERSHED SANITARY SURVEY UPDATE
(covering 2011 through 2015)**

for

San Antonio Water Company
City of Pomona
City of Upland



December
2015



Progress Draft
for Internal
Review

Joseph C. Reichenberger, P.E., BCEE

Consulting Civil and Environmental Engineer
Registered Professional Engineer: CA, NV, NM, AZ, HI
529 LaMont Drive
Monterey Park, CA 91755
Phone (626)-437-2571
Fax (626)-571-6099

Project Number 15-02

2015
SAN ANTONIO CANYON
WATERSHED SANITARY SURVEY UPDATE
(covering 2011 through 2015)
Progress Review Draft



for

San Antonio Water Company
City of Pomona
City of Upland

November 2015

Joseph C. Reichenberger, P.E., BCEE

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Project Number 15-02

ABBREVIATIONS AND ACRONYMS

AWWA	American Water Works Association
AFY	Acre-ft per year
ANF	Angeles National Forest
BOD	5-Day Biochemical Oxygen Demand
CaCO ₃	Calcium Carbonate (standard for expressing alkalinity)
CDPH	California Department of Public Health
cfs	Cubic feet per second
CCR	Consumer Confidence Report
COD	Chemical Oxygen Demand
CT	Concentration*time product (mg-min/L)
DBP	Disinfection by-product
DBPR	Disinfectant and Disinfection by-products Rule
DF&W	California Department of Fish and Wildlife
DWSAP	Drinking Water Source Assessment and Protection
GPS	Global Positioning System
HAA5	Five Regulated Haloacetic Acids
HHS	U. S. Health and Human Services
HP	horsepower
HPC	Heterotrophic Plate Count
IESWTR	Interim Enhanced Surface Water Treatment Rule
kWh	kilowatt hour
LAC	Los Angeles County
LRAA	Locational Running Annual Average
LT2ESWTR	Long Term 2 Enhanced Surface Water Treatment Rule
MBAS	Methylene Blue Active Substances (surfactants)
MBHA	Mount Baldy Homeowners Association
MBRD	Mount Baldy Ranger District
MBSA	Mount Baldy Ski Area
MBV	Mount Baldy Village
MCL	Maximum Contaminant Level
MG	million gallons
mgd	million gallons per day
MSL	Mean sea level
MWDSC	Metropolitan Water District of Southern California
NTU	Nephelometric Turbidity Unit
PBE	Physical Barrier Effectiveness
PCA	Possible Contaminating Activity

ABBREVIATIONS AND ACRONYMS (CONT'D)

PFP	Pedley Filter (Filtration) Plant
PUSD	Pomona Utility Services Department, Water Operations Division
PVPA	Pomona Valley Protective Association
RAA	Running Annual Average
RWQCB	Regional Water Quality Control Board
SACMSC	San Antonio Canyon Mutual Service Company
SACWTF	San Antonio Canyon Water Treatment Facility
SASF	San Antonio Spreading Facility
SAWCO	San Antonio Water Company
SBC	San Bernardino County
SUVA	Specific ultra-violet light absorption
SWTR	Surface Water Treatment Rule
TDS	Total Dissolved Solids
THM	Trihalomethane
TOC	Total Organic Carbon
TTHM	Total Trihalomethanes
TVMWD	Three Valleys Municipal Water District
UPD	Upland Water Department
UV254	Ultraviolet Light Absorption at 254 nm
WFA	Water Facilities Authority
WSS	Watershed Sanitary Survey
USACE	U. S. Army Corps of Engineers
USFS	United States Forest Service
USGS	United States Geological Survey

SECTION 1

INTRODUCTION

BACKGROUND

For water suppliers, using surface water, Title 22, California Code of Regulations Article 7, Sanitary Surveys states:

§64665 Watershed Requirements.

(a) All suppliers shall have a sanitary survey of their watershed(s) completed at least every five years. The first survey shall be completed by January 1, 1996

(b) A report of the survey shall be submitted to the State Board not later than 60 days following completion of the survey.

(c) The survey and report shall include physical and hydrogeologic description of the watershed, a summary of source water quality monitoring data, a description of activities and sources of contamination, a description of any significant changes that have occurred since the last survey which could affect the quality of the source water, a description of the watershed control and management practices, an evaluation of the system's ability to meet requirements of this chapter, and recommendations for corrective actions.

§64665 Additional Requirements.

A supplier shall comply with the sanitary survey requirements specified in §64650(f)(1). [LT2ESWTR]

A Watershed Sanitary Survey (WSS) of San Antonio Canyon was conducted for the City of Pomona, San Antonio Water Company (SAWCO), and the City of Upland (Agencies) in 1995 by Parsons and submitted to the State Department of Health Services – Drinking Water Field Operations Branch, (now the Department of Public Health), on December 19, 1995. The three water suppliers rely on San Antonio Creek as a water source for a portion of their drinking water supply. Preparation and format of the sanitary survey was based on the Watershed Sanitary Survey Guidance Manual, a 1993 publication of the California-Nevada Section of the American Water Works Association (AWWA). The 1995 WSS was updated in 2000, also by Parsons and the update included the EPA-mandated Drinking Water Source Assessment Protection Program (DWSAP) analysis. The California Department of Public Health (CDPH), the current name of the agency, Los Angeles and San Bernardino County offices performed the reviews of the previous documents. The 1995 and 2000 WSSs were prepared by Joseph C. Reichenberger PE while associated with the Parsons Corporation, Pasadena, CA.

The WSS was to be updated again in 2005. Most of the data was compiled by the City of Pomona, but was not submitted. The 2010 Update (completed in August 2011), also prepared under the direction of Joseph C. Reichenberger, PE BCEE, as an

independent consultant, included data generally from 2000 through 2010. This 2015 WSS will include data from 2011 through the end of 2015 and prepared by Joseph C. Reichenberger, PE BCEE.

OBJECTIVES

The WSS serves as a tool in understanding the interaction between physical characteristics of the watershed and the water supply system, any changes in water quality over time, potential contaminant sources in the watershed, and current watershed control and management practices. It provides a basis for development of strategies to monitor and maintain water quality and control potential contamination in future years.

The DWSAP, which was prepared in 2000, included a delineation of the area around a drinking water source through which contaminants might move and reach that drinking water supply; an inventory of possible contaminating activities (PCAs) that might lead to the release of microbiological or chemical contaminants within the delineated area; and a determination of the PCAs to which the drinking water source is most vulnerable. This DWSAP is in the 2000 WSS and will not be updated, or included, in this 2015 WSS update as there is no change in conditions.

CONDUCT OF THE STUDY

Joseph C. Reichenberger, P.E., BCEE conducted the 2015 WSS update of San Antonio Canyon for the Agencies. On May 13, 2015, a kickoff meeting, held in conjunction with the San Antonio Canyon Watershed Committee meeting was held at the City of Pomona Water Utility Department with representatives from Pomona, the San SAWCO and the San Antonio Mutual Services Company. At the kickoff meeting, the recommendations from the 2010 WSS were reviewed and a discussion on a proposed Environmental Impact Report Notice of Preparation (NOP) by Los Angeles County Department of Public Works which would allow hauling of potable water to parcels which otherwise have no access to a public water system or groundwater. There were a number of parcels in San Antonio Canyon that were identified in the NOP that could haul water if the proposal was adopted by the County Board of Supervisors. The Watershed Committee was concerned because this would lead to development of the parcels adjacent to the stream and the installation of more on-site wastewater disposal systems. This proposal would have an adverse effect on future water quality in the area.

The Watershed Committee provided comments on May 25, 2015 to Los Angeles County in response to the NOP and concluded with the following:

Due to the fact that San Antonio Creek is a direct source of drinking water, the threat to water quality is significant, and the fire danger extreme, we strongly urge the County remove the parcels in the south half of the Mount San Antonio and the entire Mount Baldy quadrangle from further consideration under the Hauled Water Initiative

On January 12, 2011, Tommy Hudspeth from San Antonio Water Company (SAWCO) met Mr. Reichenberger at the 60/40 weir box and diversion point into the pipelines leading to SAWCO (City of Upland) and the City of Pomona. On that same day, Mr. Reichenberger was able to drive the watershed from the intake to the Mt. Baldy Ski Lift Parking Lot and to the Ice House Canyon Parking Lot. The stream had significant flow and it was not advisable to take a conventional sedan across the creek to view the cabins in Barrett Canyon and elsewhere. The Mt. Baldy Ranch RV Park

adjacent to Glendora Ridge Road at Cow Canyon Saddle was also driven by. There was little activity at the RV park this time of the year.

On January 12, 2011, Mr. Reichenberger met with Colin Sked of the San Antonio Canyon Mutual Service Company (SACMSC) to discuss the wastewater systems the service company maintains:

On January 19, 2011, Mr. Reichenberger met with Nick Capogni at the City of Pomona's Pedley Water Filtration Plant to discuss plant operational changes and physical changes that have occurred since the plant was upgraded in 1998. On that same day, Mr. Reichenberger met with Mark Wiley and Nate Pendergraft at the Mt. San Antonio Water Treatment Plant and went over plant operation and physical changes.

Mr. Reichenberger contacted the California Department of Public Health (CDPH) Los Angeles, (Jeff O'Keefe), and San Bernardino office (Sean McCarthy) on January 31, 2011 to identify any concerns or issues the CDPH might have.

On March 18, 2011, Mr. Reichenberger met with L'Tanga Watson, District Ranger, and James Garner, Special Uses Administrator, for San Gabriel River District of the Angeles National Forest to solicit their input into the WSS and provide updates on the USFS activities.

On April 6, 2011, Mr. Reichenberger met with the Watershed Committee at their regular meeting at the SAWCO office and discussed the findings of the WSS as of that date.

On June 23, 2011, Mr. Reichenberger had a telephone conference with Ms. Teri Layton and Mr. Charles Moorrees of SAWCO to discuss the pre-final draft.

The products of these discussions are incorporated into the WSS update.

ORGANIZATION OF THE REPORT

This WSS is organized as follows:

Section 2 contains a summary of the 2010 WSS including its findings, conclusions, and recommendations

Section 3 contains a summary of the principal activities/actions/facilities within the watershed and treatment facilities that have occurred since the 2010 WSS

Section 4 presents a summary of the water quality data from year 2011 through 2015 and comments on the changes if any.

Section 5 presents a discussion of principal upcoming regulations and any potential issues meeting those regulations

Section 6 presents a summary of findings, conclusions, and recommendations resulting from this 2015 WSS

AUTHORIZATION AND ACKNOWLEDGEMENTS

The City of Pomona Water Utilities Department authorized Joseph C. Reichenberger P.E. BCEE, Monterey Park, CA, to prepare the WSS update through a professional services agreement dated October 12, 2015 based on a proposal presented to the City by Mr. Reichenberger dated February 8, 2015. The work was prepared under the direction of Joseph C. Reichenberger, P.E. BCEE. The work could not have been

San Antonio Canyon Watershed Sanitary Survey Report

completed without the cooperation of Nick Capogni, Water Treatment Supervisor, and Damian Martinez, Sr. Management Analyst, from the City of Pomona; Ms. Rosemary Hoerning, Public Works Director and Nate Pendergraft, City of Upland; and Charles Moorrees, General Manager, Tommy Hudspeth, and Ms. Teri Layton, Assistant Manager of Administration and Finance, San Antonio Water Company.

SECTION 2

WATERSHED CHARACTERISTICS, WATER SUPPLY SYSTEMS AND SUMMARY OF 2010 SANITARY SURVEY

This section contains a description of the watershed, water supply systems, wastewater disposal systems

WATERSHED AND WATER SUPPLY SYSTEM

Watershed

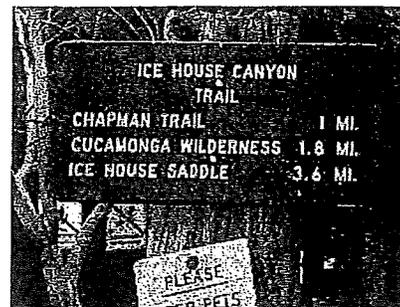
The San Antonio Canyon Watershed, located north and upstream of San Antonio Dam, near Upland, California has a total drainage area of 26.7 sq. mi. Principal features mentioned in this WSS are shown in Figure 2-1. The watershed is within the Mount Baldy Ranger District of the Angeles National Forest and is split between Los Angeles and San Bernardino Counties. The topography of the watershed area is very mountainous and rugged. Elevations in the watershed area range from 10,064 feet above mean sea level on Mount San Antonio in the north to 2,180 feet at San Antonio Dam in the south. Much of the watershed is granitic rock and quartz diorite; alluvium is found in the canyon bottoms.

San Antonio Creek has substantial slope varying from over 40 percent (2,100 ft/mile) at its headwaters on the face of Mt. Baldy to 7 percent (370 ft/mile) at the Lower Intake to the City of Pomona/SAWCO raw water pipeline. The canyon sides are very steep – typically 2.5:1 (H:V) or steeper. The steepness of the watershed results in rapid changes in stream flow and quality in response to rainfall. Residence time in the watershed is very short. Travel time in San Antonio Creek from the upper developed area at the Mt. Baldy Ski Area to the Lower Intake is only on the order of 4 hours (about 1.6 miles/hr). So if something happens in the watershed there is not much time to react to shut off the intake.



Land Use

Major land uses in the watershed include recreation, forestry, and low density urban use. Located near the highly populated Los Angeles Metropolitan Basin, the Angeles National Forest receives the second highest visitor numbers of national forests in California. According to data from the U.S. Department of Agriculture, national visitor monitoring program, Angeles National Forest receives over 3.6 million visits per year, with over 1.4 million using day use facilities.



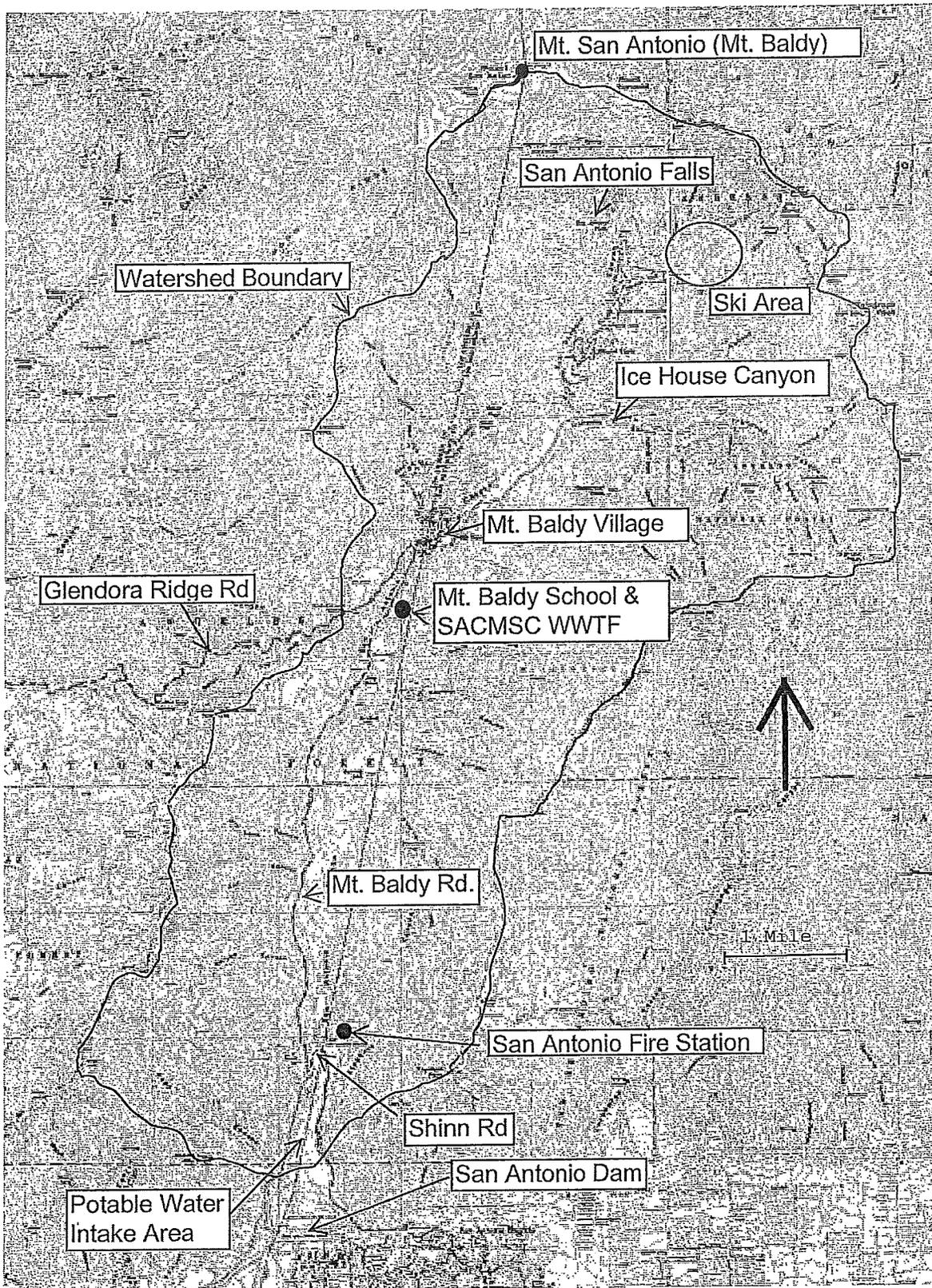


Figure 2-1
Principal Features and Facilities Within San Antonio Creek Watershed

Recreational activities in the watershed vary depending on season and include: skiing, sledding, hiking, backpacking, mountain biking, horseback riding, driving for pleasure, family and group camping, fishing, wading and picnicking. Recreational cabin use is administered by the USFS through special use permits.

Attractions to the area are Mt. Baldy Village, San Antonio Creek, Mt. Baldy Ski Area, the USFS campground at Manker Flats, numerous trails, and the "non-permanent" resident cabins under special use permit from the USFS. Entry into the forest areas of the watershed is unrestricted. One low density urban area, Mt. Baldy Village, is located within the watershed boundaries. The village is the main population center in the watershed, but other smaller communities (cabin tracts) exist in Barrett Canyon, Bear Canyon, Icehouse Canyon, Glacier, Manker Flats, San Antonio Falls, Upper San Antonio Falls and near the Mt. Baldy Ski Area. Mt. Baldy Village includes private residences, two restaurant lodges, a private trout fishing pond facility, a school, a church, and a few small businesses.

The primary land owner in the watershed is the USFS. The percentage of land owned by the USFS is approximately 85 percent of the total watershed area. Except for Mt. Baldy Village, where the land and the cabins are privately owned, all cabins located on USFS property are privately owned by and only allowed to be occupied under a special use permit on a non-permanent basis.

Access to the watershed area is through only two major roadways. Mt. Baldy Road enters from the City of Upland to the south and Glendora Ridge Road enters from the west. Both roads meet at the southern edge of Mt. Baldy Village; Mt. Baldy Road continues north from there to the end at Mt. Baldy Ski Area. Numerous fire roads are located throughout the watershed; access roads lead from Mt. Baldy Road to the canyon floor at a few locations.

The mountains and hills of the San Antonio Canyon Watershed have been formed in recent geological time; shallow, coarse and infertile soils cover most of the steep slopes and surfaces in the canyon. Much of the watershed is prone to erosion and landslides.

Numerous species of wildlife inhabit the watershed area. Near the canyon floor, dense vegetation provides excellent habitat for wildlife and protects the streambeds from erosion. On steeper, and often rocky slopes, vegetation is scarce with trees and brush scattered on the hillsides.

The watershed has cool, wet winters and hot, dry summers. Approximately 95 percent of the rainfall occurs from November through April. Normal precipitation is from 18 inches in the lower elevations to 40 inches in the higher elevations; the latter often in the form of snow. San Antonio Creek maintains year-round flow in years with normal rainfall.



Water Supply Systems

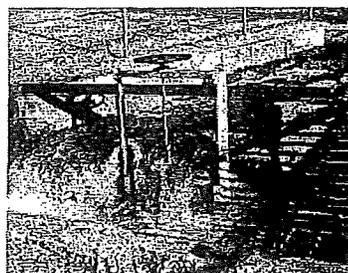
Figure 2-2 shows the principal water supply facilities in watershed.

San Antonio Water Company (SAWCO)

San Antonio Water Company, a shareholder-owned mutual water company, produces and delivers potable water to 1,199 metered accounts (with potable water service to 3,371 people) within the unincorporated San Antonio Heights area located north of the City of Upland (Moorrees and Layton, 2011). It also produces and delivers both potable and untreated water to the Cities of Upland and Ontario, local irrigators, private country clubs, and aggregate plants.

Water from San Antonio Creek is diverted by SAWCO from the stream at three intakes along the San Antonio Creek. The upper and middle intakes, maintained by Southern California Edison Company (SCE), collect the stream flow for use at three hydroelectric generating plants located downhill from the upper intake. Water from the upper intake is first piped to the Edison Ontario No. 2 Hydroelectric Plant, located near the Mt. Baldy Road turnoff to Barrett and Stoddard Canyons. From this plant, the water is then piped to the Edison Sierra Hydroelectric Plant located along the floor of San Antonio Canyon approximately one mile further downstream. At this location, a second intake structure collects additional creek flows to be combined with the upper intake water exiting the Sierra Hydroelectric Power plant. The combined flow then travels in a pipeline to the lowest Edison plant, Ontario No. 1 Hydroelectric Plant, located about one-quarter mile downstream of the Lower San Antonio Ranger Station.

At this point, there is a third intake that collects additional creek water by means of a diversion structure through the "wood gate." This diverted water first enters a settling pond where any sand and similar particles drop out. The settled water then flows into a weir structure where it is combined with the water exiting the Edison Ontario No. 1 Plant (when it is operating). During times when the hydroelectric power facilities are not operated, this surface intake is used. The weir structure serves to combine the flows and then distribute the water for delivery to SAWCO and the City of Pomona. The "60/40 weir" splits the flow between SAWCO (60%) and City of Pomona (40%) into their respective lines. SAWCO has separate water systems for irrigation customers and for domestic (potable) water customers. The irrigation water source is the 60/40 split box; the domestic source is a deep-rock tunnel which follows under San Antonio Creek for some distance up the canyon capturing infiltration beneath San Antonio Creek.



SAWCO transports their irrigation water in a pipe under the creek to the eastern side of the San Antonio Creek wash. The water flows through a V-screen to filter out any debris and then into a forebay structure. Excess flow from the infiltration tunnel can also be taken into the irrigation system supply. SAWCO delivers the water to various irrigators, the City of Upland's San Antonio Canyon Water Treatment Plant, to a groundwater recharge in San Antonio Wash below the San Antonio Dam for spreading, and to Cucamonga Canyon Wash per a stipulated decree.

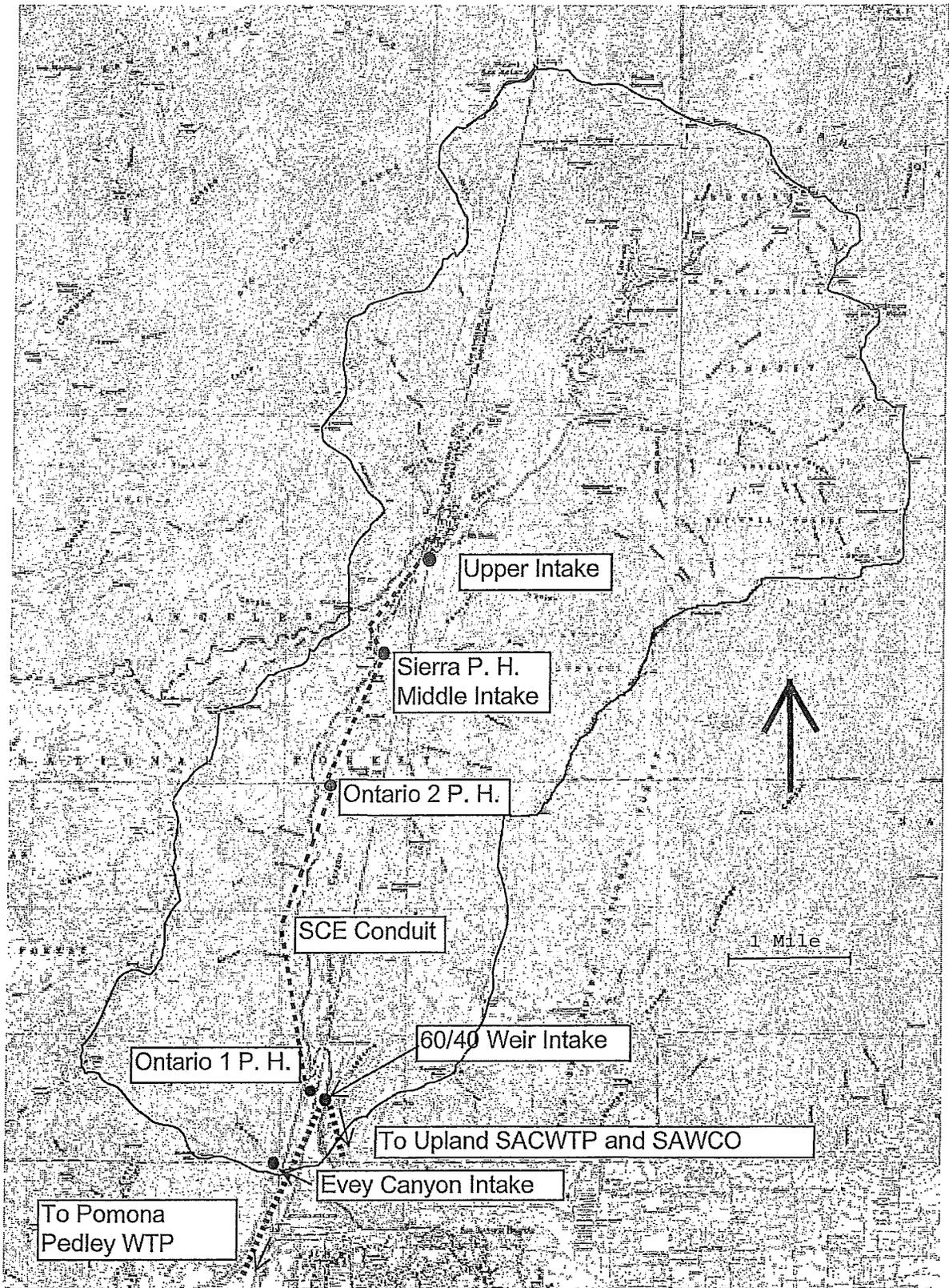


Figure 2-2
Principal Water Supply Facilities Within San Antonio Creek Watershed

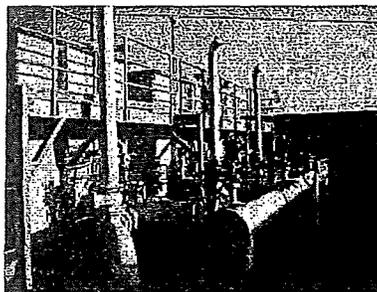
The specific pipeline which carries water from the 60/40 weir structure to SAWCO's forebay structure varies in age from fifteen to fifty-six years old. The current pipeline is a series of replacements over time dating back to the flood damage of 1938. SAWCO's potable water system has 4 reservoirs/tanks, 3 wells, and 6 booster pump stations; the irrigation system has 3 reservoir/tanks, 7 wells and 3 booster pumping stations

The facilities operated by SCE have been actively used since the early 1900's. The piping to the upper Ontario No. 2 plant went into service in 1919. This pipeline is a mix of steel and concrete pipe. The middle Sierra plant began operation in 1901 and the lower Ontario No. 1 plant was built in 1902. According to SCE officials in 1995, the only replacement of pipe in this stretch occurred in 1957, when a 132 foot piece was replaced due to storm damage. Based on the age of the SCE facilities, the SCE system is believed to have a potential for failure.

City of Upland

The City of Upland's San Antonio Canyon Water Treatment Plant (SACWTP) was constructed in 1989 and came on line in March 1990. A plant upgrade was completed in 2008. The plant has three Neptune Microfloc® package water treatment units operated in parallel. When the raw water enters the treatment facility, coagulants (aluminum sulfate [alum] and cationic polymer) and chlorine are added in a static mixer. The coagulated water then flows through a flow splitting structure which divides the flow equally to each of the three package treatment units. On entering the treatment units, the water flows through an upflow clarifier with tube settlers, where flocculation and sedimentation occur, and then downflow through a dual media (sand-antracite) gravity filter. The filtered water then flows to a clearwell. Chlorine can be added to the flow entering the clearwell.

The dual media filter system has both surface wash (rotating) and auxiliary air scour and filter-to-waste provisions. After each filter backwashes, the filter operates in filter-to-waste mode for 25 to 30 minutes to allow the filter to "ripen." The filter media has been replaced twice since the plant was new. The chlorination system is a Miox on-site sodium hypochlorite generation system. The plant has a 5.5 mgd treatment capacity but can provide CT to 6 mgd if necessary. The plant has 1720E low range turbidimeters with SC100 controllers to monitor influent turbidity, individual filter effluent turbidity and combined filter effluent turbidity. These were installed in the 2008 upgrade.



Waste backwash water and filter-to-waste flows to a series of lagoons on site for settling; the overflow is percolated by SAWCO. Waste wash water is not returned to the plant.

An alarm is initiated at 15 NTU influent turbidity and the plant shuts down at 20 NTU. Greater than 0.1 NTU in the filtered water could cause the plant to shut down also.

A standby generator is on-site and can provide emergency power for the entire plant. There is also space and piping to add a fourth package treatment unit to expand plant capacity if desired.

Treated water leaves the SACWTP and is stored in Reservoir No. 2, a 5 MG reservoir located in the upper zone of the Upland's water distribution system.

In addition to the water supply from SAWCO, the City of Upland also uses groundwater and receives treated State Project Water from the Water Facilities Authority (WFA). The State Project enters the City supply system in its Pressure Zone 3 and reportedly will exhibit a bump in the TTHMs (Pendergraft, 2011)

The City of Upland Water Department supplies treated drinking water to 67,000 persons located in the City of Upland and in a small, unincorporated area bordering the southwestern half of the city limits. The facilities maintained by Upland include 10 well pumps, 17 reservoirs, and the SACWTP.

City of Pomona

The City of Pomona conveys their water to the Pedley Filter Plant in a pipeline from the 60/40 box along the western side of the canyon. Before the pipe travels under San Antonio Dam, surface flow from Evey Canyon is diverted into the main pipe and conveyed, with the water from the 60/40 box, to the Pedley Filter Plant for treatment.

Pomona's Pedley Filter Plant was upgraded and modified to comply with the Surface Water Treatment Rule with the upgraded plant coming on line in 1998. Some upgrades and operation changes have been made to the plant since then.

Raw water from the canyon is screened to remove coarse particles and debris. Alum, polymer (optional), and sodium hypochlorite are added in a flash mix basin. The water flows into a "Superpulsator®" solids contact clarifier for removal of turbidity. The settled water flows into a baffled chlorine contact basin designed to provide sufficient retention time to meet the Surface Water Treatment Rule's CT requirements prior to filtration. The filter is a travelling bridge type that was modified as part of the 1998 upgrade to include filter-to-waste provisions. The filtered water is chlorinated and discharged to a 3.5 MG on-site prestressed concrete reservoir. The reservoir was installed with the upgrade in 1998. A second 3.5 MG clearwell was installed sometime after 2000. Hypochlorite can be added to the treated water after the clearwell reservoirs if needed.

Spent filter washwater and sludge from the Superpulsator® mix in a common sump and pumped to a decant tank for separation. The decant overflows to an adjacent spreading basin and recharged to the groundwater. No backwash water is currently recycled as problems were observed by the plant operators when this was done (Capogni, 2011a).

Raw water turbidity is continuously monitored and automatic shutdown of the plant occurs if high raw water turbidity is experienced for a preset time period. The Pedley Filter Plant Operational Permit allows for taking untreated water from the canyon up to 10 NTU before the Filter Plant automatically shuts down (Capogni 2011b). Water which is not treated in the plant is diverted to percolation ponds on site.

Process monitoring includes continuous turbidity measurement and particle counters. The plant has a Hach 1720E low range turbidimeter with SC100 controller, and new particle counters and chlorine residual analyzers which replaced equipment installed with the 1998 upgrade. The plant also monitors pH continuously. Operators perform jar testing about once per month, sometimes more often, depending on water quality.

An emergency standby generator has been installed and operates the plant during power outages. This was added since the 1998 upgrade.

Treated water leaves the Pedley Filter Plant clearwell reservoirs and flows to the rest of Pomona's water system. The City of Pomona provides drinking water to approximately 139,000 persons located in its service area and the City's facilities include 36 active wells and 18 active reservoirs. The City of Pomona supplements its supply with treated water from the Metropolitan Water District of Southern California (MWDSC) which provides a blend of Colorado River Water and State Project Water, as well as treated State Project Water from Three Valleys Municipal Water District (TVMWD) as needed.

Portions of the pipeline which runs from the 60/40 weir structure to Pomona's Pedley Filter Plant are approximately 100 years old. The line still functions properly, although some of the valves near the Pedley Filter Plant are in need of replacement due to the fact they occasionally seize up from infrequent use. Even though the line flows by gravity, the City of Pomona never lets the water back up in the pipeline for fear that the increased pressure would cause breaks in the aging pipeline. Since 2007 the City of Pomona replaced 3,800 ft of the pipeline above San Antonio Dam and repaired/replaced 20 ft of pipeline that is below the dam. The City's plans are to continue to replace portions of the aging pipeline.

Water Sources and Rights

The surface water rights in San Antonio Canyon are based upon a series of adjudications between various water companies. These are described in detail in the 1995 Watershed Sanitary Survey and are not repeated here.

Emergency Plans

The USFS San Gabriel River Ranger District has a Disaster/Emergency Response Plan which describes those actions for the immediate protection of life, property or natural resources which are threatened by major disasters and emergencies.

SAWCO does not have a written emergency plan, but conducts a physical observation of its facilities in the event of an emergency. During reconnaissance for a reported emergency, officials from SAWCO investigate key delivery points in the company's system and make needed corrections to handle the situation. If the water supply to customers or if other agencies are affected by the emergency, then SAWCO notifies them and coordinates appropriate response actions.

The City of Pomona and the City of Upland have developed a Water Quality Emergency Notification Plan per CDPH requirements. To avoid breaches of confidentiality, these Plans are not included in this document.

2.2 POTENTIAL CONTAMINANT SOURCES IN THE WATERSHED

Wastewater is treated in on-site systems with subsurface disposal exclusively. There are two "large" systems. One system is owned by the San Antonio Canyon Mutual Service Company (SACMSC) which serves a portion of the Mt. Baldy Village and the second is owned by Mt. Baldy School. Both are maintained by the SACMSC. Since the 2000 WSS update, each of these disposal systems have been issued discharge permits from the Los Angeles Regional Water Quality Control Board. They were issued

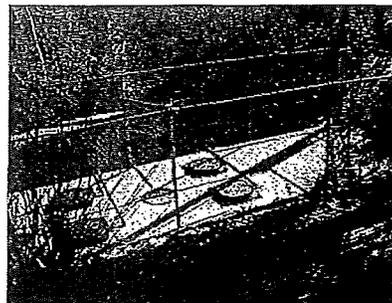
in 2001 under General Order 01-031—"Waste Discharge Requirements for Small Commercial and Multifamily Residential Subsurface Sewage Disposal System." As part of that order quarterly monitoring reports and an annual summary report are to be submitted to the Regional Water Quality Control Board. The quarterly reports must include the monthly average daily flow, population served, and a summary of the latest quarterly observation of the disposal field for overflows or surfacing of wastes. Also an annual operations and maintenance report is required. The Order requires quarterly surface water sampling and analysis of San Antonio Creek upstream and downstream of the system and just upstream of the SCE intake. Sampling and analysis of the creek water is for total and fecal coliform and nitrogen species (Regional Board, 2001). The Regional Board considers the waste treatment system a minor threat to water quality. These reports are public information and are available at the Regional Board's offices in Los Angeles.

All of the other systems are individual systems maintained by the parcel owners and permitted by either Los Angeles County or San Bernardino County Departments of Building and Safety depending on location. Most of the septic tank systems serving the cabins are old and little information exists on the condition of the systems. The USFS does monitor the special permit cabins on a semi-annual basis with its "prevention officer." The prevention officer has two primary responsibilities – fire prevention and water quality protection. A second individual works with the cabin owners to ensure compliance. Based on this vigilance and due diligence by the officers in observing malfunctioning wastewater disposal systems, the water quality concerns from the cabin wastewater disposal systems is minimized.

The water supply agencies want to make sure the individuals from the USFS who do the monitoring are trained in the water quality aspects. The training should be done in cooperation with the Agencies. The Agencies also request the USFS keep records of when the special permit cabins' septic tanks are pumped or otherwise modified or replaced. The latter should only be done under permit from the appropriate County agency. Copies of these records should be provided to the Watershed Committee on an annual basis.

Wastewater from Mt. Baldy Village

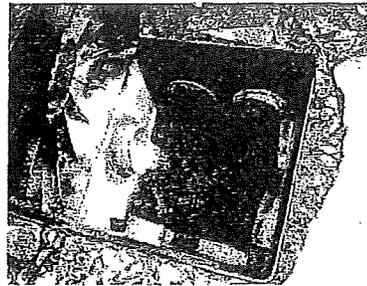
The SACMSC sewer system consists of main collector sewers with individual lateral connections to customers' houses. The system serves 52 homes, generally south of Central Avenue. A gravity trunk sewer runs along the western bank of San Antonio Creek and flows by gravity to a 12,700 gallon, two chamber, septic tank (first tank) installed in 1991. According to SACMC the average daily flow is about 8,000 gallons/day. The location is along Mt. Baldy Rd. about 1,200 ft south of the intersection of Glendora



Ridge Rd. and Mt. Baldy Rd. This tank was recently retrofitted with a Pirana™ Aerobic Bacteria Generation System. The first chamber consists of an aeration system containing five submerged pumps each with a small compressed air blower. The pumps circulate the liquid through sacks of a proprietary blend of bacteria and aspirate air (oxygen) into the liquid. The contents of the chamber are vigorously circulated. The second chamber contains a single Pirana™ unit. The pumps and blowers maintain an

aerobic environment without the customary septic odors. The effluent from the first tank flows about 500 ft downstream, by gravity, in a pipe, to a 500 gallon tank (second tank) located adjacent to Mt. Baldy Road on the Mt. Baldy School site. From there the flow is by gravity, another 500 ft under Mt. Baldy Road to a drop structure located on the north side of the main leach field (leach field #3). From the drop structure, the flow passes through a distribution structure, which has adjustable outlets, to balance the flow to each leach field lateral. Leach field #3 was constructed around 1990 and consists of about 5 laterals, each about 100 ft in length. They were inspected by closed circuit TV a few years ago and found to be in very good condition (Sked, 2011). This leach field is on the west side of Mt. Baldy Road about 400 ft laterally from San Antonio Creek. It is not in any danger of being washed out and is sufficiently far removed from the Creek to have any impact.

The Pirana™ tank was observed on January 12, 2011 and found to be without septic odor and no scum or crust typically found on septic tanks. The contents appeared to well mixed. The effluent quality from the treatment system was observed in the distribution box at leach field #3 and found to be relatively clear (Reichenberger, 2011a).



The SACMSC has 2 other leach fields in addition to the main field; leach field #1 is located just south of the Pirana™ units; leach field #2 is located on the school site. Leach fields #1 and #2 are used only as standby. Leach field #1 is over 150 ft from the nearest watercourse; leach field #2 is at least 220 ft from San Antonio Creek.

The SACMSC still has their original septic tank system, constructed in the mid-1930s, as standby near the 12,700 gallon tank. Although the wastewater flows in by gravity to this old system, it has to be pumped out. This is why it is not used any longer, but kept for emergency purposes. The pumps have gasoline engine drives.

The 12,700 gallon septic tank and the standby septic tank and pump sump are located approximately 100 feet from the creek and directly upstream from the upper Edison intake in a fenced area below Mt. Baldy Road and north of the school playground.

In past sanitary surveys, there was concern for the septic tank systems due to their age and proximity to San Antonio Creek and the SCE intake, which during summer months is the primary source of water at the 60/40 weir box. However the current system appears to have adequately mitigated these concerns primarily with the installation of an "all gravity" system. However it is important the collection system be maintained to prevent any backups and sewage spills from the manholes. The installation of the gravity system for effluent disposal and the location of the third leach field are all positive mitigation measures. The fact that reports of the system operation are required by the Regional Board helps to ensure the systems are properly operated and maintained.

The systems have never leaked or caused contamination of the creek according to SACMSC officials. The potential for wastewater discharge into surface waters in the watershed is a minor problem which could only occur if there were failure in the leach fields serving the facility. This appears remote with the current treatment system.

Wastewater from Mt. Baldy School

The school has an on-site, conventional septic tank system, maintained by SACMSC. The leach field is located under the volley ball court/parking lot about 200 feet west of San Antonio Creek. The system is pumped out about every 5 or 6 years (Sked, 2011). The system is located uphill and approximately 300 ft from the upper Edison intake located on San Antonio Creek. With this system having a waste discharge permit with required monitoring and reporting to the Regional Board, there is some assurance the system will be properly maintained. So wastewater contamination from this system is remote.

Other Septic Tank Systems in the Watershed

Septic tank systems are widespread and divided into four categories (Mt. Baldy Village (those not connected to the SACMSC), private canyon residences, Forest Service general use, and Forest Service special permit cabins for the purpose of this survey. The respective County Health Departments inspect the septic systems and respond, (when called), to failures and complaints in San Antonio Canyon. The USFS has a prevention officer who patrols the area twice a year and looks for brush clearance and water quality issues. It is stated by the USFS that there is follow-up through a second person to ensure compliance. A request was made to the USFS to determine if a record of the patrols, observations, and the compliance orders is available (Reichenberger, 2011b). A follow-up email was sent to the USFS on April 8, 2011; to date, the USFS has not responded.

Mt Baldy Village (not SACMSC) and Along Mt. Baldy Rd.

In Mt. Baldy Village, all houses and businesses, which are not members of SACMSC, have individual septic or graywater systems. Most of the homes in Mt. Baldy Village with septic systems are not located near surface water routes and therefore do not represent possible direct surface contamination sources as a result of overflow. The closest lots are about 150 ft from the creek which provides some protection. However groundwater seepage from leaking septic tanks and overloaded leach fields could be a source of contamination. There are a number of homes located adjacent to the minor tributary, Bear Canyon. Homes which are close to a watercourse present a possible source of contamination should one of the home's septic systems overflow or leak.

Private residences outside of Mt. Baldy Village are located throughout the watershed. Starting from the south, two ranches (Brant and Wingate) are located near the creek and north of the Mt. Baldy Road/Mountain Avenue intersection (the road to Stoddard and Barrett Canyons). The two ranches were visited (in 1995) and found to be located a sufficient distance from the creek to reasonably prevent surface contamination from septic tanks. However, due to the fact that the ground is typically sand and gravel and becomes saturated during periods of heavy rain and high flows in the creek, the possibility for groundwater contamination from a faulty septic system is not ruled out. Future construction (and replacement of existing structures or systems) should not be allowed in close proximity to perennial or ephemeral streams and wastewater disposal systems shall have adequate setback distances per the building codes of the Counties of Los Angeles and San Bernardino. (San Bernardino County requires 100 ft and 50 ft respectively for perennial and ephemeral streams. The septic tank itself needs to have at least a 50 ft separation. Measurement is from the 100-yr flood level (San Bernardino, 2007).)

Directly north of the village on Mt. Baldy Road is the Buckhorn Lodge. The lodge, which opened in 1910, is open year round and includes a motel located across the Mt. Baldy Road. The septic system was reported in the 1995 WSS to be 10 or less years old for the motel, but the lodge has been at that site for many years and the septic tank system condition is unknown. North of the lodge and across the creek bridge is a private fishing pond operation and residence on the east side of the road. The potential for contamination is not likely to occur from the private park because the location is several hundred feet from the creek. Emptying of the ponds could be a water quality concern, but no one was available to discuss the operation of the ponds since the business was closed until the summer.

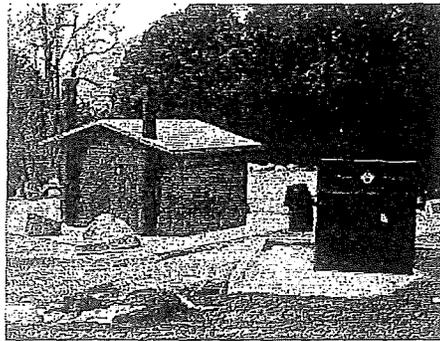
Following Mt. Baldy Road north to Icehouse Canyon, there are numerous homes with septic systems. The back of the houses overlook the canyon creek. Due to the fact the homes are adjacent the stream is a cause of concern and the potential for contamination from these homes should be noted. Refer to the statement above relative to siting facilities near streambeds.

Residences and lodges are also located further north on Mt. Baldy Road up to the Snowcrest area. The Mt. Baldy Zen Center and Snowcrest Lodge both operate cabin rentals, but the stream appeared to be far enough away from the lodges to be impacted by wastewater disposal. Other homes were noted along Mt. Baldy Road between Icehouse Canyon and the ski area. These homes pose little or no threat due to septic tank contamination because generally the creek is located in a deep ravine over 150 feet from the nearest homes.

U.S. Forest Service Facilities

The Forest Service operates several general use facilities which serve recreational visitors in the canyon. See Figure 2-3 for recreational facilities in the Upper San Antonio Canyon area. The lower San Antonio Fire Station at Shinn Road has restroom facilities, but the exact location of the septic system could not be determined. An inquiry was made to the USFS to determine if the location had been ascertained and if there were any records of pumping and maintaining the septic tank system. No clarification has been received (Reichenberger, 2011b). The Mt. Baldy Visitors Center, located in Mt. Baldy Village, has a restroom with leach system with a design capacity to handle the four or more busloads of children which visit the center daily. The center is also located several hundred yards from the creek across Mt. Baldy Road and does not present a likely potential for contamination.

One public restroom facility exists north of the village on Mt. Baldy Road, but it too is located several hundred yards from the creek and is not considered a potential contamination source. Further north on Mt. Baldy Road is Mt. Baldy Wayside Picnic Site, a picnic area with vault toilet facilities located south of the Icehouse Canyon turnoff. This is not believed to be a contamination hazard due to its location several hundred yards from the creek. Manker Flats Campground, located in the upper reaches of the San Antonio Canyon, has restroom facilities (vault toilets). The campground has approximately 21 campsites for overnight camping, but is only opened on a seasonal basis from spring to fall. A dry wash is located behind the campground, but the area is not believed to be a significant threat because it has no normal surface flow. There are restroom facilities (vault toilets) at the Icehouse Canyon Trailhead. At the end of Mt. Baldy Rd., at the ski area parking lot, there some portable toilets available for use.



Approximately 120 recreational special use permit cabins are in the watershed area on federal land operating under a Special Use Permit which limits their use to other than permanent, i.e. weekend or vacation use. However some of the cabins are likely occupied year around. The USFS tries to enforce the "non-permanent" use, but it is difficult to determine if occupied on a full time basis when an "inspection" is made only about twice a year. With the statewide emphasis of water conservation and the mandate to reduce per capita water consumption by 20 percent by 2020, meters should be installed on all water services. Occupancy can be determined based on typical "per capita" water use in the area. The meters only would need to be "read" annually. This would help the USFS with enforcement of the permit provisions.

The cabin tracts are:

- Bear Canyon
- Barrett Canyon
- Glacier
- Icehouse Canyon
- Manker Flats
- San Antonio Falls
- Upper San Antonio Falls

The USFS monitors the cabins and the cabin residents reportedly tend to "self-police" themselves to ensure the conditions of the Special Use Permit are complied with and cabins are kept up, trash is contained etc. (USFS, 2011). As stated previously, the prevention officer walks the cabin tracts twice per year with a follow-up by a second USFS staff person to ensure compliance. If there is a non-compliance issue, the USFS will work with the cabin owner to develop a plan for compliance and if necessary suspend the Special Use Permit. If there is no compliance, the USFS will revoke the Special Use Permit and require the cabin owner to demolish the cabin and remove the debris at the cabin owner's expense.

During the preparation of the 1995 WSS, it was reported the USFS did not intend to renew the Special Use Permits for the cabins. However, in 2008, the USFS did renew the permits for another 20 years. The USFS did state that if a cabin is 50% or more destroyed it cannot be rebuilt. However, if the damage is not due to the cabin owner's negligence, the USFS will try to find an "in lieu" parcel on which the cabin can be reconstructed. The USFS first completes an environmental evaluation of the parcel to ensure there are no endangered or threatened species. All reconstruction must be in conformance to County of Los Angeles or County of San Bernardino building requirements. The new cabins must meet all current building codes (USFS, 2011).

At the time research was being conducted for the 1995 WSS, the USFS was conducting a flood plain study of the Angeles National Forest. As part of the study, the cabins located in San Antonio Canyon Watershed were to be included and more detailed information on the condition of the cabins and their sanitary waste systems would be available upon completion of the study. In meeting with the USFS, they have no recollection of this study (USFS, 2011).

Currently fewer than 20 cabins are located in Barrett Canyon, as compared to 31 cabins under Special Use Permit in the area during 1953. (Sanitary Survey, 1953) It is clear that the number of cabins is declining over time. Most of the cabins are accessible by automobile from the Mountain Avenue turnoff on Mt. Baldy Road. Many of the cabins are only 50-100 feet from the streambeds of tributaries and septic and greywater systems may be a concern as a source of contamination to the streams. Numerous stream crossings were also encountered during the investigation of the canyons, thereby raising the issue of increased turbidity in the streams due to vehicular traffic and the potential for washing oils, vehicle lubricants, and other contamination in the stream at the crossings. These cabins were not inspected in the current WSS (2010) update due to high stream flows. However, as stated previously, the USFS prevention officer visits the cabins semi-annually and monitors for brush clearance and water quality concerns.

Further north in the upper San Antonio Canyon, the Forest Service cabins appear to be less of a hazard. The creek in the northern area is generally farther from the cabins and flows are more seasonal depending on the amount of precipitation and snowfall.

WATERSHED CONTROL AND MANAGEMENT PRACTICES

The management of the USFS lands in the San Antonio Canyon Watershed is the responsibility of the San Gabriel River Ranger District of the Angeles National Forest. The San Gabriel River Ranger District Office is in Glendora. The Angeles National Forest is administered through four Ranger Districts; the supervisor's office for the forest is in Arcadia. All recreation, timber, fire management, mining, and other activities come under the responsibility of the District Ranger.

In addition to the USFS land in the watershed, private land owners are responsible for management of their own lands and conformance to local laws and regulations. While the USFS land is controlled by national policies, both public and private lands in the San Antonio Canyon come under jurisdiction of San Bernardino or Los Angeles County, depending on the location of the property. As a result, County and State of California officials enforce respective regulations and laws in the watershed concerning permits, operation, compliance, and safety of facilities used for drinking water, wastewater disposal, and general building construction. Still other organizations

such as the Agencies, SCE, Mt. Baldy Home Owners Association, and San Antonio Canyon Mutual Service Company play active roles as managers of their own facilities.

The *Land Management Plan, Part 2, Angeles National Forest Strategy* (USDA, 2005) provides management policies and actions for the San Antonio Canyon Watershed.

Two counties divide San Antonio Canyon as well as Mt. Baldy Village. In San Bernardino County (SBC) and Los Angeles County (LAC), the drinking water regulations for the systems used by MBHA and SACMSC are enforced by the California Department of Public Health (CDPH) located in San Bernardino. The San Bernardino District of the DPH regulates water systems that serve 200 or fewer persons and inspections of the canyon systems are made by officials of the CDPH. Regulations governing the City of Pomona are enforced by the Los Angeles District of the CDPH; the City of Upland's Water Treatment Plant by the San Bernardino District of the CDPH. Septic tank permitting in the San Bernardino County portion of the watershed falls under jurisdiction of the city of San Bernardino office of the San Bernardino County Department of Building and Safety. Permits are only issued for construction of new and modifications to existing facilities. Maintenance of septic systems is the homeowner's responsibility, and complaints of noncompliance or health concerns can be made to the San Bernardino County Department of Environmental Health. In the Los Angeles County portion of the watershed, septic tank regulations are handled by the Los Angeles County Department of Environmental Health Services, Rural and Mountain Systems. Septic tanks are inspected only upon construction or when public land is sold to private parties.

The San Antonio Watershed Committee comprises of the following organizations and agencies:

- City of Pomona
- City of Upland
- San Antonio Water Company
- San Antonio Canyon Mutual Services Company
- Snow Crest Heights
- Mt. Baldy Homeowners Association
- Alpine Water
- Southern California Edison
- United States Forest Service

The Watershed Committee's mission statement is:

"The San Antonio Canyon Watershed Committee is committed in developing partnerships both public and private in working together toward common goals involving monitoring of source water quality, protecting the qualities of life and vitality of land users in the watershed and its beneficiaries." (Steering Committee, 2005).

The Committee meets bimonthly to discuss matters of mutual interest.

SUMMARY OF THE WATER QUALITY DATA FROM 2010 WSS

Needs updating

The following was extracted from Section 4 of the 2010 WSS and edited to adjust the “tense” to the past condition. The tables and figures in Section 4 of the 2010 WSS are not repeated.

City of Pomona

General Mineral Analysis

The general mineral parameters of calcium, magnesium, TDS, hardness, alkalinity, chloride, and sulfate has not changed since 1994. Nitrate showed a decrease over time since 1994; nitrite plus nitrate as nitrogen decreased from 1995-2000. MBAS was measured at 0.56 mg/L in 2009 in the raw water; this was the first detection since 1995-99. The heavy metals of significance are all well below MCL or action levels and are not of concern.

Turbidity

A higher-than-normal raw water turbidity was observed December 2003 through March 2004 which was most likely due to the Grand Prix Fire which burned the watershed. The years 2001-2005 had greater raw water turbidity than the previous study periods. A statistical analysis was made comparing the 2001-2005 average turbidity with 1995-99 average raw water turbidity to see if there was statistically significant difference. At the 95% confidence level, there was no difference between 1995-99 and 2001-05 averages.

For the period 2006 -2010, the maximum raw water turbidity was less than in previous study periods;; ninety percent of the time the average raw water turbidity entering the Pedley Filtration Plant was less than 0.50 NTU.

Raw Water Microbials

Table 2-1 taken from the 2010 Watershed Sanitary Survey show the variation in microbials over time. It appears there has been a reduction in average total coliform, however, when compared to fecal coliform and HPC, there is little change over time.

Table 2-1
Pedley Filtration Plant Raw Water Microbial Summary
(from 2010 WSS)

	1995-99	2001-05	2006-10
Average Total Coliform (MPN/100 mL)	1486	323	731
Average Fecal Coliform(MPN/100 mL)	35	34	41
Average E. coli(MPN/100 mL)	Not determined	Not determined	35
Average HPC (CFU/mL)	132	228	164

Evey Canyon Raw Water

Water from Evey Canyon is introduced into the pipeline from the 60/40 weir box to the Pedley Filtration Plant, i.e., downstream of the 60/40 weir box. The water is sampled by the City for Total Coliform, Fecal Coliform, E. coli, and HPC. Analysis in 2010 WSS concluded that a large portion of the E. coli measured at the Pedley Filtration Plant inlet is due to the Evey Canyon intake but this should be confirmed with additional monitoring and investigation.

Giardia & Cryptosporidium Sampling

Water samples are collected and analyzed for Giardia and Cryptosporidium periodically at the inlet to the Pedley Filtration Plant and at the Upper, Middle and Lower (Edison Box) Intakes as well as Ice House Canyon. The data shows that Giardia and Cryptosporidium are not of concern. There is no definite trend showing any increases. The most recent sampling in the 2010 WSS was taken on 7/6/2010, right after the 4th of July weekend, a time when recreational use of the stream and canyon is particularly high. That sample showed no presence of either organism. In 2010 it was concluded that the watershed does not have a Giardia or Cryptosporidium problem.

Ok to here

City of Upland

For the City of Upland, a separate statistical analyses was not performed on the Upland data for turbidity and microbial contaminants. The general mineral content has not changed since the 1995 WSS.

Finished Water Quality

City of Pomona

The Disinfectant/Disinfection by-products (DDBP) Rule puts limits on the concentration of the disinfectant, total THMs, HAA5, bromate and chlorite. There was no sampling data for the City of Pomona available for the 2000 WSS on bromates or chlorite. It was stated that bromates are probably not present in sufficient concentrations to be a problem but chlorites could be present since the Pomona system uses liquid sodium hypochlorite as a disinfectant.

The total trihalomethane (TTHM) concentrations measured at sample points 9-1 through 9-4 in the distribution system were all well below the current 80 µg/L primary MCL. Even using the locational running annual average (LRAA), the TTHMs were still well below the primary MCL. It should be noted that the City of Pomona does use significant amounts of groundwater in the system as well as treated State Project Water from Three Valleys MWD.

Limited data on the five regulated haloacetic acids (HAA5) measured by the City of Pomona at the same locations were under 10 µg/L also well below the primary MCL of 60 µg/L.

In terms of treated water turbidity, a graph in the 2000 WSS (Figure 4-6 in the 2000 WSS) clearly showed the significant improvement in treated water turbidity since the upgraded Pedley Filtration Plant went on line in the late 1990s.

Heterotrophic Plate Count (HPC) data in the finished water from the Pedley Filtration Plant was presented. There were some spikes in HPC which were not identified as being associated with high raw or finished water turbidity spikes, or total or fecal coliform spikes.

Total coliform in the treated water in the 2000 WSS was reported as always less than 2/100 mL. The current requirement is not numeric but Presence/Absent.

Treated Water Organics

The regulated organics in the treated water are all below detection levels.

Treated Water Disinfection by-products

TTHM and HAA5 data for the City's system indicated the system is in compliance with the MCL for both of these DPBs even when considering the locational running annual average.

City of Upland

For the City of Upland, the total THMs was under 20 µg/L and is not a problem with compliance. HAA5 data for 1999 from Upland indicated a maximum value of 9.8 µg/L with the annual average below 2 µg/L. Both were well below the MCL of 80 µg/L 60 µg/L respectively. The residual disinfectant, chlorine, was typically about 2 mg/L; the maximum residual disinfectant level is 4 mg/L for chlorine.

Data for the Upland Treatment Plant indicates the plant consistently provided finished water with a turbidity less than 0.4 NTU and generally always below 0.2 NTU.

Total coliform in the treated water in the 2000 WSS was reported as always less than 2/100 mL. The current requirement is not numeric but Presence/Absence.

Need to Provide Enhanced Coagulation

The DDBP rule also has a treatment requirement to control DBP precursors through enhanced coagulation. However, if certain water quality conditions are met, the need for enhanced coagulation is waived. The conditions are:

1. *Source water TOC < 2.0 mg/L as a quarterly running annual average*
2. *Treated water TOC level < 2.0 mg/L as a quarterly running annual average*
3. *Source water TOC level is < 4.0 mg/L as a quarterly running annual average and the source water alkalinity is greater than 60 mg/L as CaCO₃ and the total THM and HAA5 running annual averages are no greater than 0.040 mg/L and 0.030 mg/L respectively*
4. *The total THM and HAA5 running annual averages are no greater than 0.040 mg/L and 0.030 mg/L respectively and the system uses only chlorine for primary disinfection and maintenance of a residual.*

5. *Source water specific ultraviolet light absorption (SUVA), measured monthly, is less than or equal to 2.0 L/mg-m calculated quarterly as a running average.*
6. *Treated water specific ultraviolet light absorption (SUVA), measured monthly, is less than or equal to 2.0 L/mg-m calculated quarterly as a running average.*

The City of Pomona did not have any data on the Total Organic Carbon (TOC) of San Antonio Creek for the 2000 WSS; however, the City of Upland did quarterly sampling in 1999 at locations within the distribution system. All of the sample results were "Non detect" except for one single sample at 0.88 mg/L. There was no raw water TOC data available. In reviewing the alkalinity, total THM and HAA5 data, neither the Pomona nor Upland water treatment plants need to perform enhanced coagulation as they both comply under option 4 and possibly option 3.

Water Quality Monitoring Program for San Antonio Creek

The 2000 WSS recommended a reduced monitoring program from that recommended in the 1995 WSS for San Antonio Creek due to the costs and the logistics of performing the sampling.

FINDINGS FROM 2000 WSS

1. The monitoring of the watershed as recommended in the 1995 WSS has not been performed. There are many reasons for this but the primary reasons are the costs and the accessibility of some of the sampling locations. The 1995 WSS monitoring requirements were modified as part of the 2000 WSS to make the sites more accessible and to make the monitoring program more practical.
2. The general mineral water quality of San Antonio Creek has not changed measurably. The constituents which are typically associated with contamination, i.e., nitrates, chlorides and sulfates have not changed.
3. Average monthly raw water turbidity in San Antonio Creek as determined by measurements at Pomona's Pedley Filter Plant has not changed significantly from the previous period.
4. Average monthly total coliform levels in San Antonio Creek as determined by measurements at Pomona's Pedley Filter Plant have changed significantly from the previous period. In the 1995 WSS covering the period 1987-1994, 90 percent of the average monthly total coliform levels were less than 1200/100 mL; the recent data (1995-99) indicates that 90 percentile value has increased to 2200/100 mL. This is a measurable deterioration.
5. Average monthly fecal coliform levels in San Antonio Creek as determined by measurements at Pomona's Pedley Filter Plant have not changed significantly from the previous period.
6. Average monthly HPC levels in San Antonio Creek as determined by measurements at Pomona's Pedley Filter Plant have improved significantly from the previous period. In the 1995 WSS covering the period 1987-1994, 90 percent of the average monthly HPC levels were just under 300 cfu/mL; the

recent data (1995-99) indicates that 90 percentile value has decreased to under 200cfu/mL.

7. THM and HAA5 levels in the treated water are well below the Disinfectant and Disinfection by-product rule requirements.
8. Sampling for Giardia cysts and Cryptosporidium oocysts on the day following the Labor Day weekend in September 2000, indicated less than 1 Giardia cyst/L; no Cryptosporidium oocysts were found. This was not appreciably different from the findings in the 1995 WSS.
9. Recreational activities in the watershed continue to be a concern particularly as they relate to disposal of trash.
10. Septic tanks and subsurface wastewater disposal systems continue to exist and still pose a threat to water quality. Some could be impacted by high flood flows.
11. Watershed signage which was recommended in the 1995 WSS has not been installed. The Agencies continue to work with the Forest Service on this issue.
12. The City of Pomona and City of Upland water treatment plants will comply with the new Stage 1 Disinfectant and Disinfection by-products rule and the Interim Enhanced Surface Water Treatment Rule. The requirement to provide continuous turbidity measurement on each filter cell, if actually required for the traveling bridge filter, may not be possible at the Pomona Pedley Filter Plant without extensive modifications.

CONCLUSIONS AND RECOMMENDATIONS FROM THE 2000 WSS

Conclusions

1. Land within the San Antonio Canyon Watershed is primarily controlled by the USFS. The development potential is limited. Urbanization, per se, is not occurring. Current Special User Permits in the watershed will not be extended and existing cabins are being demolished upon lease termination. *(This has since been changed and the USFS has extended these Special Use Permits for another 20 years but development is still limited since waters of San Antonio Creek are fully appropriated.)*
2. Recreational activity is significant in the watershed and the belief is that it will increase in time as other nearby, streamside recreation areas become more crowded. This will adversely impact the water quality over time. *(The USFS indicates that with the increased fuel costs and the state of the economy, people are staying "closer to home." As a result the people are going to nearby recreation areas, like San Antonio Canyon, instead of driving longer distances. The USFS believes that recreational visitors are increasing [USFS, 2011]).*
3. Winter recreation from potential expansion of the ski facilities will bring additional visitors and vehicles into the watershed. Snow and ice control sanding will increase water turbidity during snow melt periods. *(Sand is no longer used; instead a "cinder" product is used which contains no salt. The*

County reports that the roads are swept to minimize any impacts of the "sanding" on water quality. [San Bernardino County Public Works, 2011]).

4. Spills of chemicals or contaminants due to vehicle accidents is not a significant hazard in the watershed. The road traversing the watershed serves only the national forest recreation areas and the small community of Mt. Baldy Village. The road is not a "through road" and does not attract a significant amount of traffic. *(Traffic can be a major problem on the road; the USFS has had to close the road to visitors at times when the traffic is bumper to bumper from Shinn Road to the ski area. A review of accident records from the California Highway Patrol Data Base indicated about 200 accidents on Mount Baldy Road from 2001 through September, 2009. This is about 23 accidents per year. Most are minor and involve passenger cars or light trucks. However, during the period there were 7 accidents with fatalities. About 5 to 6 accidents per year involve a rollover. No hazardous chemical spill was noted.)*
5. Fires pose a hazard to water quality in the San Antonio Canyon Watershed. Over twenty large forest fires have been noted in the watershed since the USFS began keeping records in 1911. Causes of fires have included lightning, sparks from equipment, smoking, campfires, and arson. With the foreseen increase in the recreational use of the watershed, the potential for fires is believed to increase in the future. Impacts of the watershed fires include changes in water quality, loss of vegetation and subsequent erosion, and destruction or damage to facilities. *(In 2004 the Padua Fire burned a large part of the watershed.)*
6. The quality of the water from San Antonio Creek is excellent. The Cities of Pomona and Upland have no problem meeting the current drinking water requirements with respective existing treatment facilities. The facilities have continuous turbidity monitoring of the raw water. During times of high turbidity (during and shortly after storms), water is diverted from the respective water treatment plants to local recharge basins. The City of Pomona has upgraded the Pedley Filter Plant to meet reasonably anticipated future drinking water requirements. The City of Upland's San Antonio Canyon Water Treatment Facility is anticipated to meet future drinking water requirements. *(Both facilities are meeting current drinking water requirements.)*
7. Microbiological water quality data consisting of HPC and total and fecal coliforms is available for the watershed. Occasional spikes of high total and fecal coliform occur, however, there is a consistent pattern. Higher fecal coliform counts are more likely to occur in the summer and fall than other times. High fecal coliform counts are not necessarily associated with high total coliform counts.

Recommendations

1. Additional monitoring of the microbiological water quality was recommended to be performed to provide a baseline for evaluation of potential changes in water quality over time.
2. An aggressive education program should be conducted by the Agencies with the residents of the area to alert them of the need to protect the water quality since it is a drinking water source. The possibility of using local cable television

- should be explored. Programs with the local school and homeowners associations should be developed. (*The USFS has a "Leave No Trace" and "Tread Lightly" program to educate visitors.*)
3. Signs should be placed along the roadway, at streamside vehicle parking areas and overlooks, and at the intakes to inform visitors the water is used as a public drinking water supply. Signage should be placed at the entrance to the canyon reminding visitors not to dispose of used motor oil, other lubricants, or hazardous materials along the road. (*Since the terrorist attacks on 9/11/2001 and the USEPA's mandated vulnerability assessments, calling attention to a water source may not be prudent any longer.*)
 4. The Agencies need to be informed of any modifications to existing wastewater disposal systems. A mechanism is needed to transmit this information from the County Building Departments to the Agencies. (*The two major discharge sources, Mt. Baldy Village and the Mt. Baldy School have waste discharge permits issued by the Regional Water Quality Control Board, so that should mitigate any concerns for these facilities. These are the only two septic tank systems monitored now.*)
 5. A mechanism, including an emergency action plan, needs to be in place to alert the Agencies of vehicle accidents in the Canyon which could threaten to discharge chemicals or petroleum products into the stream.
 6. Regular patrols of the watershed area should be performed during the height of the recreation season to identify potential problems and warn offenders. (*SAWCO states that 4 or 5 times during the summer, personnel monitor the creek. Personnel also check the creek at the intake on a daily basis. USFS reports that a Prevention Officer visits the cabins twice per year and a follow-up staff person works with the cabin owners to ensure compliance with brush clearance and any water quality issues which are observed.*)
 7. The intake pipelines should be regularly inspected and tested for integrity. This should be done on an annual basis, preferably after the heavy spring runoff season. (*The City of Pomona checks the pipelines after a heavy rainfall and has been in the process of replacing old sections of pipe.*)
 8. Sampling for Giardia and Cryptosporidium should be conducted quarterly at various locations in the watershed. One sample should be collected at each location. Samples should be taken during the periods of highest activity in the canyon (e.g. after a major holiday weekend). Test results should be submitted to the Department of Health Services (now CDPH) immediately after they become available. Based on the data, the Department of Health Services will make a determination as to whether or not annual sampling during the peak recreation season is adequate. (*The Agencies have increased their Giardia and Cryptosporidium monitoring but this is not required to be sent to CDPH. This is presented in a later section of this WSS update.*)
 9. Total and fecal coliform sampling should be conducted monthly at the designated locations. Again depending on the results, the sampling frequency could be adjusted to effectively monitor water quality during periods of the year with traditionally heavier than normal or lower than normal coliform levels; however, samples shall be collected and tested bimonthly at the minimum.

(The Agencies have increased their microbiological monitoring. This is presented in a later section of this WSS update.)

RECOMMENDED WATER QUALITY MONITORING PROGRAM FROM THE 2000 WSS

The Agencies monitor water quality at their respective treatment plant sites. At the Pedley Filter Plant (PFP) and San Antonio Canyon Water Treatment Plant (SACWTP), monitoring for turbidity and chlorine residual is conducted on a 24-hour basis using automated test equipment. Turbidity is analyzed at the influent, effluent, and in each step of the treatment process. Total and fecal coliforms, as well as HPC, are monitored weekly. Frequencies of other tests are as listed below in Table 2-1 (Table 6-1 in the 2000 WSS

Table 2-1
Testing Frequencies
Treatment of San Antonio Canyon Surface Flow

Test	Frequency	
	PFP	SACWTP
Chemical Inorganic Nitrate ¹	1 per year	1 per year
General Mineral	Quarterly	N/A
General Physical	1 per year	1 per year
Radiological	1 per year	1 per year
VOC	4 consecutive quarterly samples per 4 years	1 per 4 years
SOC (regulated)	1 per 3 years	1 per year
SOC (unregulated)	1 per 3 years	Waived
	1 per 5 years	Waived

¹After four quarters of nitrate monitoring, the City of Pomona may submit a written request to the Department of Health Services for a reduction of the sampling frequency to annual.

In addition it was recommended in the 2000 WSS that the following additional water quality monitoring be conducted:

Table 2-2 (Table 6-2 in 2000 WSS)
Additional Water Quality Monitoring¹

Location ²	Parameter	Frequency
Evey Canyon Intake	Total Coliform Fecal Coliform	By City of Pomona, weekly anytime water is introduced to pipeline at Evey Intake
Evey Canyon Intake	Giardia Cysts Cryptosporidium Oocysts	By City of Pomona, at least semi-annually anytime water is introduced to pipeline at Evey Intake
Upper Intake, Middle Intake	Giardia Cysts	At least semi-annually ¹

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	Cryptosporidium Oocysts	
Lower Intake	Giardia Cysts Cryptosporidium Oocysts	At least semi-annually; sample could be collected at the PWTP ¹

¹ These monitoring costs should be shared among the three agencies in some equitable cost-sharing arrangement. One of the Agencies should be designated to be responsible to ensure this monitoring is performed. The locations are presented in the 2000 WSS.

REFERENCES

USDA Forest Service National Visitor Use Monitoring.
<http://apps.fs.usda.gov/nrm/nvum/results/A05001.aspx/Round3>

SECTION 3

PROGRESS AND CHANGES SINCE 2010 WSS UPDATE

WATERSHED CHANGES

In general there were few changes in the watershed since the 2010 WSS Update; however there were some important changes which are identified below:

1. On Oct. 10, 2014, President Barack Obama designated 342,177 acres of existing federal lands in the Angeles National Forest and 4,002 acres in the San Bernardino National Forest as the San Gabriel Mountains National Monument. The National Monument eastern boundary appears to follow the N/S section line just west of Mt. Baldy Rd. up to the Glendora Ridge Road and then follows the westerly ridge of Mt. San Antonio Canyon northward and around the Mt. Baldy ski lifts. Since most of the watershed is outside the Monument Boundary, the National Monument designation will have minimal impact on the Creek and watershed.
2. Recreational activity is still a major pastime in the watershed. With the cost of fuel and the state of the economy, visitor use has continued to increase as people look to find recreational activities closer to home. San Antonio Canyon is an ideal location (USFS, 2011). Annual visitors to the ski area and Forest Visitors stopping at the Mt. Baldy Visitor Center are estimated to be 115,000 per year (Garner, 2011). In the past there was significant recreational activity in and adjacent to the Mt. San Antonio Creek streambed as witnessed by trash and debris accumulations in the watercourse. This has been reduced and the past practice of stunning fish with dumped bleach has all but ceased. (San Antonio Canyon Watershed Committee, 2015)
3. Portable chemical toilets have been placed at strategic locations where recreational activity is occurring. During the 2011 "drive through," portable toilets were observed near the end of the road at ski area parking.
4. There vault toilets constructed at the at the Icehouse Canyon trailhead parking area.
5. Mt. Baldy Ranch RV Park, a 272 space recreational vehicle park along Glendora Ridge Road, appeared vacant during the 2011 drive through. It is not known how many sites are occupied in summer. The site is actually in the Cow Canyon Watershed and would not impact the San Antonio Creek Watershed except for the possibility of traffic up Mt. Baldy Rd and the impact on water supply.
6. It is believed the ski area will be expanded. The USFS has stated that there has been no Master Development Plan formally submitted. So any expansion would not expected until some time in the future. The designation of a portion of the "backside" of Mt. Baldy in the National Monument may limit the amount of expansion.

7. The ski area has a 9 million gallon (MG) reservoir for snow making which is fed through the Snow Crest Heights Water Association. However the USFS only permitted 6 MG of storage and has placed a limit on the amount of water than can be stored in the reservoir. The ski area has an agreement (1999) with SAWCO for water from the Falls. Any additional capacity will require concurrence from SAWCO and the USFS.
8. There is a move to designate a section of San Antonio Creek from the Falls north to its source on Mt. San Antonio as "WILD and SCENIC". This designation prohibits the federal government from licensing or permitting new hydroelectric dams or major diversions on protected stream segments. The federal government may license water resource projects upstream of downstream of protected segments as long as the projects do not unreasonably diminish the stream. Public lands within an average quarter-mile wide corridor on both sides of the stream are managed to protect their outstanding scenic, recreational, historical/cultural, fish, wildlife, ecological, geological, and hydrological values. It has no effect on existing water rights. This is still a state authority. There is a federal water right conferred by the designation, but it begins the date of designation and is junior to all other existing rights. To exercise the right the managing federal agency must apply to the state and follow existing procedures and law. (Friends of the River, undated)
9. The US Fish and Wildlife Service (USFW) recently published an undated draft "Recovery Plan for the Santa Ana Sucker (*Catostomas santaanae*) which envisions re-introducing the fish into San Antonio Creek and other rivers and creeks in the Santa Ana, San Gabriel, and Los Angeles River watershed. It is a "threatened species" under the Endangered Species Act of 1973 and as amended. The treat, as stated in the draft report is "ongoing, range-wide, hydrologic modifications which lead to degradation and loss of habitat" (USFW, undated). The goal of the plan is to control or reduce threats to the point where it no longer requires special protection and hence can be "delisted."

Figure 1 of the report clearly shows the Santa Ana Sucker is not currently found in San Antonio Creek but the report states the species is limited by artificial barriers such as dams and drop structures and that is the reason that they may not be found in some of the watersheds compared to historical conditions. Historical data is sketchy, at best, to verify if the fish ever inhabited San Antonio Creek. There is a limit where the fish are likely to occur and that is due to its ability to physically swim upstream in strong currents. The report sets the limits of the stream gradient to 7 degrees ($\approx 12\%$), based on USFW observations in the North and East Forks of the San Gabriel River. San Antonio Creek does not exceed a 12% gradient until a point above Ice House Canyon, so essentially all of the stream below Ice House Canyon and the mouth of the San Antonio Canyon is potential habitat. The report states that adequate water quantity and quality are important for the persistence of the fish in urbanized areas. They need perennial flows with suitable food to support continued life.

The introduction of the fish into San Antonio Creek would not impact the sanitary quality of the water, but very likely could compromise agreements that SAWCO has with Southern California Edison relative to diversions in the Canyon and impact the ability to perform maintenance in the Creek for sediment and debris control. If streamflow must be maintained downstream of the water intakes, that

will impact the amount of water which can be diverted from the Creek. Letters of opposition have been written to USFW by SAWCO, the cities of Upland and Pomona, and the Six Basins Watermaster among others.

10. The San Antonio Canyon Watershed Committee continues to meet on a regular basis. *"The San Antonio Canyon Watershed Committee is committed in developing partnerships both public and private in working together toward common goals involving monitoring of source water quality, protecting the qualities of life and vitality of land users in the watershed and its beneficiaries."* The committee is comprised of the cities of Pomona and Upland, the San Antonio Water Company, San Antonio Canyon Mutual Service Company, Snow Crest Heights, Mt. Baldy Homeowner's Association, Alpine Water, the US Forest Service and Southern California Edison (SCE).
11. In February 2006, the San Antonio Canyon Protection Plan Steering Committee issued a Best Management Practices (BMP) guidebook (Steering Committee, 2006). The BMPs center around watershed management, water quality and education and communications. **Any updates?**
12. The California Highway Patrol Accident Reporting Database was searched for incidents along Mt. Baldy Road and Shinn Road to determine if there were any accidental spills of hazardous material. Spills have not been an issue. During the period January 2001 through September 2009, there were about 200 accidents involving motor vehicles. Most are minor, though there were 7 fatalities in the period. Rollovers, which present the greatest water quality threat, average about 5 or 6 per year.
13. **Any fires?**
14. The Regional Water Quality Control Board, Los Angeles Region issued a waste discharge permit to SACMSC for the Mt. Baldy Village Treatment Facility and the Mt. Baldy School septic tank. This permit requires regular monitoring and reporting.
15. The US Forest Service has renewed cabin Special Use Permits in 2008 for another 20 years. Previous WSS had indicated that these permits were not to be extended. **Anything new?**
16. The City of Pomona's Pedley Filter Plant instrumentation has been upgraded within the past few years to replace the older model turbidimeters and particle counters. Also spent backwash water is no longer recycled back to through the treatment process. Another 3.5 MG prestressed concrete clearwell was added bringing the total clearwell capacity to 7 MG. **Anything new?**
17. The City of Upland's San Antonio Canyon Water Treatment Facility was upgraded in 2007 which included new turbidity instrumentation for influent turbidity, effluent turbidity, and individual filter turbidity. **Anything new? On site generation of bulk liquid type?**
18. The Watershed Committee continues with its annual clean-up program in the watershed and its "keep it clean" logo.
19. Samples for Giardia and Cryptosporidium were taken at regular intervals at the Evey Intake, Middle Intake, Upper Intake and Ice House Canyon. This data is presented herein.

20. It is recommended that the USFS "Leave No Trace" and "Tread Lightly" programs replace the formal signage. **Still OK**
21. SAWCO makes 4 or 5 "walks" of the creek during the summer to observe the condition. The intake at the 60/40 split is monitored daily. **Verify**
22. The USFS makes twice per year inspections of the Special Use Permit cabins for brush clearance and water quality issues. A second staff person works with the cabin owners to develop plans for compliance. There are follow-on inspections. The Special Use Permits can be suspended or revoked. **Verify with USFS**
23. On the day of the site visit to the intake (January 12, 2011), the County of Los Angeles had a contractor cleaning debris and sediment in the creek at the Shinn Road Bridge crossing. This work raised the turbidity in the creek. Apparently the contractors working in the creek, are not aware there is a water intake downstream and their actions could cause the treatment plants to shut down. It is recommended that there be better coordination between construction and maintenance crews and the water agencies.
24. The City of Pomona regularly inspects intake pipelines after a heavy rain and annually.

FOLLOW-UP ON RECOMMENDATIONS IN 2010 WATERSHED SANITARY SURVEY

The 2010 Watershed Sanitary Survey contained a number of recommendations. A follow-up on those recommendations:

1. *The cryptosporidium and giardia monitoring currently carried out at the Upper, Middle, Lower Intake and Ice House Canyon should be reduced to once every 2 years.*

This was not agreed to by CDPH; monitoring is once per year in July.

2. *The City of Pomona should carefully monitor the total coliform and E. coli in the Evey Canyon intake and try to identify the sources if possible.*

Ongoing; intake was cleaned of debris since last sanitary survey.

3. *The USFS should keep the Watershed Committee (and the Agencies) informed of their inspections of the cabins and compliance orders.*

This is not occurring and remains an issue.

4. *The Watershed Committee should receive copies of the reports prepared by the SACMSC for the Regional Water Quality Control Board.*

This has not occurred; SACMSC agrees to furnish copies of the reports.
(Watershed Committee, 2015)

5. *The intake pipelines, including the SCE pipelines should be inspected on an annual basis, preferably after the heavy spring runoff season. (This was one of the recommendations in the 1995 WSS and should be discussed at the Watershed meetings since SCE is a member of the Committee.)*

City of Pomona is doing this on an annual basis. (Watershed Committee, 2015)

6. *A mechanism needs to be put in place, if it is not already in place, to alert the Agencies of vehicle accidents which could discharge chemicals or contaminants into the watercourse. (This was one of the recommendations in the 1995 WSS also.)*

This is not implemented. Passenger vehicles and small trucks could be involved in accidents releasing small amounts of fuel which pose a threat, but there are no fueling stations in the canyon, so the chances of a large spill of a hazardous chemical such as gasoline is very remote. However, there are septic tank pumpers that do travel the canyon and an accident could result in septage being dumped into the creek which could make its way to the water intakes. Some form of rapid notification should be in place so the intakes can be shut off.

7. *The Agencies in conjunction with the USFS should continue and, if possible, expand their public education program of the need to protect the San Antonio Creek watershed. (This was one of the recommendations in the 1995 WSS also.)*

This has not been implemented; the Watershed Committee continues to take the lead in this area.

8. *The County of Los Angeles and the County of San Bernardino Building and Safety Departments should notify the Watershed Committee when there are modifications or replacements of existing septic tank systems or any new systems installed or failure or overflow of existing systems.*

This has not been implemented.

9. *The USFS should locate the septic tank and leach field at the Lower San Antonio Fire Station at Shinn Road and provide the Watershed Committee with a report on when it is pumped.*

This has not been completed.

10. *The USFS should require special use cabin owners (or the septic tank pumpers) to provide records to the USFS when these cabin septic tanks are pumped. These reports should be provided to the Watershed Committee on an annual basis.*

This has not been implemented.

11. *There needs to be communication between the Los Angeles County Department of Public Works Crews and Contractors when they are planning on working in the Creek as the impact on the water supply intakes from the turbidity is significant.*

Still very important and no formal communication process has been implemented.

12. *Water meters should be installed on all water services, including the special use cabins, to monitor water use and enforce conservation.*

There is no plan to install water meters to individual residences.

RECOMMENDED WATER QUALITY MONITORING PROGRAM

1. The Agencies should continue to monitor water quality at the treatment plant sites and in the canyon as required by the CDPH as it relates to their water supply permit.

The Agencies are complying.

2. *Cryptosporidium* and *giardia* sampling should be reduced to once every two years. See Table 6-1

CDPH did not accept the "once every 2 year sampling" and it continues at annual intervals in July.

**Table 6-1
Coliform, Giardia and Cryptosporidium Water Quality Monitoring¹**

Location ²	Parameter	Agency/Frequency
Ice House Canyon	Giardia Cysts Cryptosporidium Oocysts	By SAWCO, Every 2 years, in Spring when flowing
Evey Canyon Intake	Total Coliform Fecal Coliform or E. Coli	By City of Pomona, weekly anytime water is introduced to pipeline at Evey Intake
Evey Canyon Intake	Giardia Cysts Cryptosporidium Oocysts	By City of Pomona every 2 years
Upper Intake, Middle Intake	Giardia Cysts Cryptosporidium Oocysts	By SAWCO, Every2 years
Pedley Filtration Plant Raw Water Inlet ²	Giardia Cysts Cryptosporidium Oocysts	By Pomona, Every 2 years

¹ These monitoring costs should be shared among the three agencies in some equitable cost-sharing arrangement. One of the Agencies should be designated to be responsible to ensure this monitoring is performed.

2. No need to sample at Lower Intake separately. The water quality from a Giardia/Cryptosporidium standpoint at the Lower Intake is expected to be similar to that obtained at the Pedley Filtration Plant inlet.

SECTION 4

WATER QUALITY

Data on various water quality parameters was collected for the period from 2011 through 2015 by the San Antonio Water Company, the City of Pomona and the City of Upland Water Departments. This data is presented graphically in this section. The raw data is included in Appendix A. To avoid “breaking up the text” with numerous tables and figures, all of the figures and tables are included together at the end of this section.

SAN ANTONIO WATER COMPANY DATA

SAWCO provided Giardia and Cryptosporidium sampling and analyses for the Icehouse Canyon and the Upper and Middle Intakes. This data is combined with the City of Pomona Giardia and Cryptosporidium sampling and analyses for the Pedley Filtration Plant Raw Water and Evey Canyon and presented later in this section.

CITY OF POMONA WATER QUALITY DATA

The data from the City of Pomona includes:

- Raw Water Data from Evey Canyon – primarily microbiological
- Raw Water Data from Pedley Filtration Plant consisting of flow, turbidity, microbiological, general mineral, and organics,
- Treated Water Data from Pedley Filtration Plant consisting of turbidity, microbiological, general mineral, and organics.
- Distribution system disinfection by-products

Pedley Filtration Plant Flow

Figure 4-1 presents the average monthly production from the Pedley Filtration Plant for the period 2011 – 2015.

2011 – 2015	Maximum Day	4.08 mgd
	Monthly Average	1.64 mgd
	Monthly Average Maximum	3.65 mgd

Pedley Raw Water Turbidity

Figure 4-2 presents the daily maximum raw water turbidity for the period 2011 to 2015 summarized by month. The figure shows the highest and lowest maximum raw water turbidity experienced during the month along with the monthly average maximum turbidity.

Figure 4-3a and 4-3b presents the 2011-2015 monthly average and maximum raw water turbidity in the form of a cumulative probability plot respectively. Historic data from previous watershed sanitary surveys is also presented for comparison. The data is similar to previous periods; however, in August 2014 there was a period of relatively

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high raw water turbidity, 20 NTU, for several days which pushed the cumulative probability to the right, beyond that experienced in previous periods. Any reasons??? Over 90% of the time the average raw water turbidity was less than 1 NTU.

A statistical analysis was made comparing the 2011-2015 average turbidity with previous average raw water turbidity to see if there was statistically significant difference. An independent t-test was used to compare the means (averages) of the two data sets. In spite of the differences apparent on the cumulative probability plot, within a 95% confidence level, there is no difference between 1995-99 and 2001-05 averages. This needs to be done once all 2015 data is in.

Pedley Treated Water Turbidity

Figure 4-4 presents a summary of daily average treated water turbidity by month for the period 2011-2015. The figure shows the maximum and minimum values recorded during the month along with the average for the month. The treated water turbidity Maximum Contaminant Level (MCL) is 0.3 NTU 95% of the time.

Pedley Raw Water Microbials

Raw water Total Coliform, Fecal Coliform and Heterotrophic Plate Count (HPC) data from the inlet were analyzed for the period 2011 -2015. HPC is a measure of any heterotrophic bacteria present in a sample (Heterotrophic bacteria that use carbon for energy and cell growth.) They are not necessarily harmful bacteria (pathogens), but do provide a general indicator of the water quality condition. It is not unusual to see high counts in raw water.

Figure 4-5a presents the Total Coliform from grab samples generally taken about once per week at the raw water inlet to the treatment plant. The figure shows the maximum, minimum and geometric mean for the samples taken during the month. The geometric mean was used since this is frequently used to determine the averages of bacteria samples due to the large variations in magnitude. The concentrations of coliforms are presented as "Most Probable Number" (MPN) per 100 mL of water.

Figure 4-5b presents the fecal coliform concentrations; Figure 4-5c presents the HPC data for the Pedley Filtration Plant raw water.

Table 4-1 presents a summary of the coliform data for the period 1995-99, 2001-05, 2006-10 and 2011-15. The data in Table 4-1 show that the total coliform vary but the fecal coliform are relatively constant even over the 20 year period. (To be completed when 2015 data available)

Table 4-1
Pedley Filtration Plant
Coliform Summary (MPN/100 mL)

	1995-99	2001-05	2006-10	2011-15
Average Total Coliform (MPN/100 mL)	1486	323	731	
Average Fecal Coliform (MPN/100 mL)	35	34	41	
Average E. coli (MPN/100 mL)	Not determined	Not determined	35	Not determined
Average HPC (CFU/mL)	132	228	164	

Figures 4-6a through 4-c present cumulative probability plots of total coliform, fecal coliform and HPC for 5 study periods from 1987-94 to 2011-15.

Total and fecal coliform for the period 2011 -2015 was as low as the best previous period. HPC counts are very comparable to previous periods..

The only conclusions that can be made are that the watershed is likely not changing much – the fecal coliform concentrations do not vary much for the 20 year period.

Pedley General Physical and Mineral Quality

Table 4-2a presents the General Physical and Mineral Quality Summary for the both the raw and treated water from 2010-2015. For the most part there is little difference between the raw and treated water from a mineral standpoint since the Pedley Filtration Plant is not designed (or intended) to remove minerals or hardness. Table 4-2b presents the raw water quality for the period 2006 – 2010. Table 4-2c presents a side-by-side comparison of the raw water characteristics over time from 1994 through 2015. Reviewing Table 4-2c shows that very little change is occurring in the water quality.

Pedley Treated Water Organics

Table 4-3 presents data on the treated water organics. All of the listed organics are shown to be below detection levels. No data was available for the period before 2006 as it was archived by the City of Pomona.

Evey Canyon Raw Water

Water from Evey Canyon is introduced into the pipeline from the 60/40 weir box to the Pedley Filtration Plant, i.e., downstream of the 60/40 weir box. The water is sampled by the City for Total Coliform, Fecal Coliform, E. coli, and HPC. Figures 4-10a through 4-10d present the maximum, minimum and geometric mean values of the concentration of these microbials based on grab samples collected approximately weekly. It was only since 2005 that the City sampled Evey Canyon.

Figure 4-11a presents a cumulative probability plot of fecal coliform and E. coli geometric means. The figure shows that the fecal coliform at the Evey Canyon inlet is primarily E. coli. Figure 4-11b presents a cumulative plot of the mean of the E. coli measured at Evey Canyon versus the E. coli measured at the Pedley Filtration Plant Inlet. Based on Figure 4-11b, it could be concluded that a large portion of the E. coli measured at the Pedley Filtration Plant inlet is due to the Evey Canyon intake. This should be confirmed with additional monitoring and investigation.

City of Pomona Disinfection By-products

Tables 4-4a and 4-4b present a summary of the quarterly sampling for Total Trihalomethanes (TTHMs) and Haloacetic Acids (HAA5). (The "5" designates there are five individual compounds measured and totalized.) For TTHMs the maximum measured at any location in the system is shown in Table 4-4a. All of the individual values are less than the MCL of 80 µg/L. But it should be pointed out that the MCL is currently based on the system-wide annual average of the last 4 quarterly samples. Since the City of Pomona uses a lot of groundwater, which has a very low potential to form disinfection by-products, compliance is not an issue. In the near future calculation of the concentration will change to a locational running annual average (LRAA) which means that each sample station will need to comply with the MCL based on the average of the last 4 quarterly samples. Again, since the maximum value measured is less than the MCL and knowing that there will be some groundwater blended in with the treated surface water, compliance will not be an issue. The table also shows the results if the LRAA calculation method were used on the historic data.

Table 4-4b shows the haloacetic acids. The MCL is 60 µg/L again based on the same method of calculation as TTHMs. The City will not have an issue complying with the regulations in the future. The table also shows the results if the LRAA calculation method were used on the historic data.

CITY OF UPLAND WATER QUALITY DATA

The data from the City of Upland includes:

- Raw Water Data from San Antonio Canyon Water Treatment Plant (SACWTP) Raw Water—primarily microbiological and turbidity
- Distribution system disinfection by-products

SACWTP Plant Flow

Figures 4-12a presents the average monthly production from the SACWTP for the periods 2001 -2005. (2006 – 2010 was not provided).

2001 – 2005	Maximum	4.36mgd
	Average	1.3 mgd
2006 – 2010	Not Provided	

SACWTP Raw Water Turbidity

Figure 4-13a presents the daily average raw water turbidity for the period 2000 to 2005 summarized by month taken from the monthly CDPH reports. The figure shows the highest and lowest average raw water turbidity experienced during the month along with the monthly average maximum turbidity.

Figure 4-13b presents the greatest and the least maximum raw water turbidity experienced during the month along with the average maximum turbidity for the month based on daily values. Data on the average turbidity was not provided. The maximum value is 20 NTU. Note that data was not available from 2006 to 2008 and 2010.

SACWTP Treated Water Turbidity

Figure 4-14a presents a summary of daily average treated water turbidity by month. There is one “spike” in the turbidity; but that was less than 1 NTU; this is not a “violation.” The treated water turbidity Maximum Contaminant Level (MCL) is 0.3 NTU 95% of the time.

Figure 4-14b shows the monthly average treated water turbidity from 2006 - 2010. Again the plot shows the daily maximum and minimum average turbidity during the month along with the monthly average. The values are all well below the MCL of 0.3 NTU 95% of the time.

SACWTP Raw Water Microbials

Raw water Total Coliform, Fecal Coliform and Heterotrophic Plate Count (HPC) data were analyzed. From 2006 on, E. coli species were analyzed in lieu of generic “Fecal Coliform.” E. coli is a fecal coliform but there are also many other fecal bacteria that are measured as fecal coliform. HPC is a measure of the bacteria present in a sample. They are not necessarily harmful bacteria (pathogens), but do provide a general indicator of the water quality condition. It is not unusual to see high counts in raw water.

Figure 4-15a presents the Total Coliform from grab samples generally taken about once per week at the raw water inlet to the treatment plant for the period 2001-2005. The figure shows the maximum, minimum and mean for the samples taken during the month. The concentrations of coliforms are presented as "Most Probable Number" (MPN) per 100 mL of water. Figure 4-15b shows similar data for 2006 – 2010.

Figure 4-16a present the fecal coliform concentrations for the period 2001-05. Figure 4-16b presents the E.coli concentrations for 2006- 2010. Figure 4-17a and b present the HPC data for 2001-05 and 2006-10 respectively

Table 4-5 presents a summary of the coliform data for the period 2001-05, and 2006-10.

Table 4-5
SACWTPt
Raw Water Microbial Summary

	2001-05	2006-10
Average Total Coliform (MPN/100 mL)	323	97
Average Fecal Coliform(MPN/100 mL)	34	Not determined
Average E. coli(MPN/100 mL)	Not determined	6
Average HPC (CFU/mL)	228	42

Figures 4-18a and 4-18b present cumulative probability plots of total coliform, and fecal coliform or E. Coli to compare 2001—05 with 2006-10. The period 2001-05 showed much higher total and fecal coliform levels in the raw water than the period 2006 -10.

Figures 4-19a and b present a comparison between the raw water total coliform and fecal coliform (or E.coli) respectively as noted at SACWTP, Evey Canyon and the Pedley Filtration Plant. The study period for comparison was 2006 -10. The total coliform concentration in the raw water at the SACWTP is much less than that measured at Evey Canyon and the Pedley Filtration Plant inlet. The same holds true for fecal coliform or E. coli. This tends to support the previous conclusion that the large amounts of the coliform bacteria experienced at the Pedley Filtration Plant come from the Evey Canyon water. This should be evaluated further.

City of Upland Disinfection By-products

Tables 4-6a and 4-6b present a summary of the quarterly sampling for Total Trihalomethanes (TTHMs) for the period 2001 - 05 and 2006 -10 respectively. For the TTHMs the maximum value at any location was at T-1 in pressure zone 5 where a quarterly value was 129.7 µg/L. Although the current MCL is 80 µg/L the City is in compliance, because the MCL is based on the average of 4 quarterly samples taken at all points in the distribution system. Since the City uses some groundwater, the TTHMs are "blended down" because the groundwater does not have much of a TTHM formation potential. The future MCL will be based on using the locational running annual average (LRAA) of the last 4 quarterly samples. Tables 4-6a and b show the LRAA if calculated

using the historical data. For the period 2001 -05, only T-1 would not have been in compliance (86 µg/L vs MCL = 80 µg/L).

It is also worth noting that the maximum quarterly sample concentrations dropped dramatically in the subsequent period from 2006-10 with all values being under the 80 µg/L MCL. The LRAA calculated for this period for all of the sampling locations were also well under the MCL.

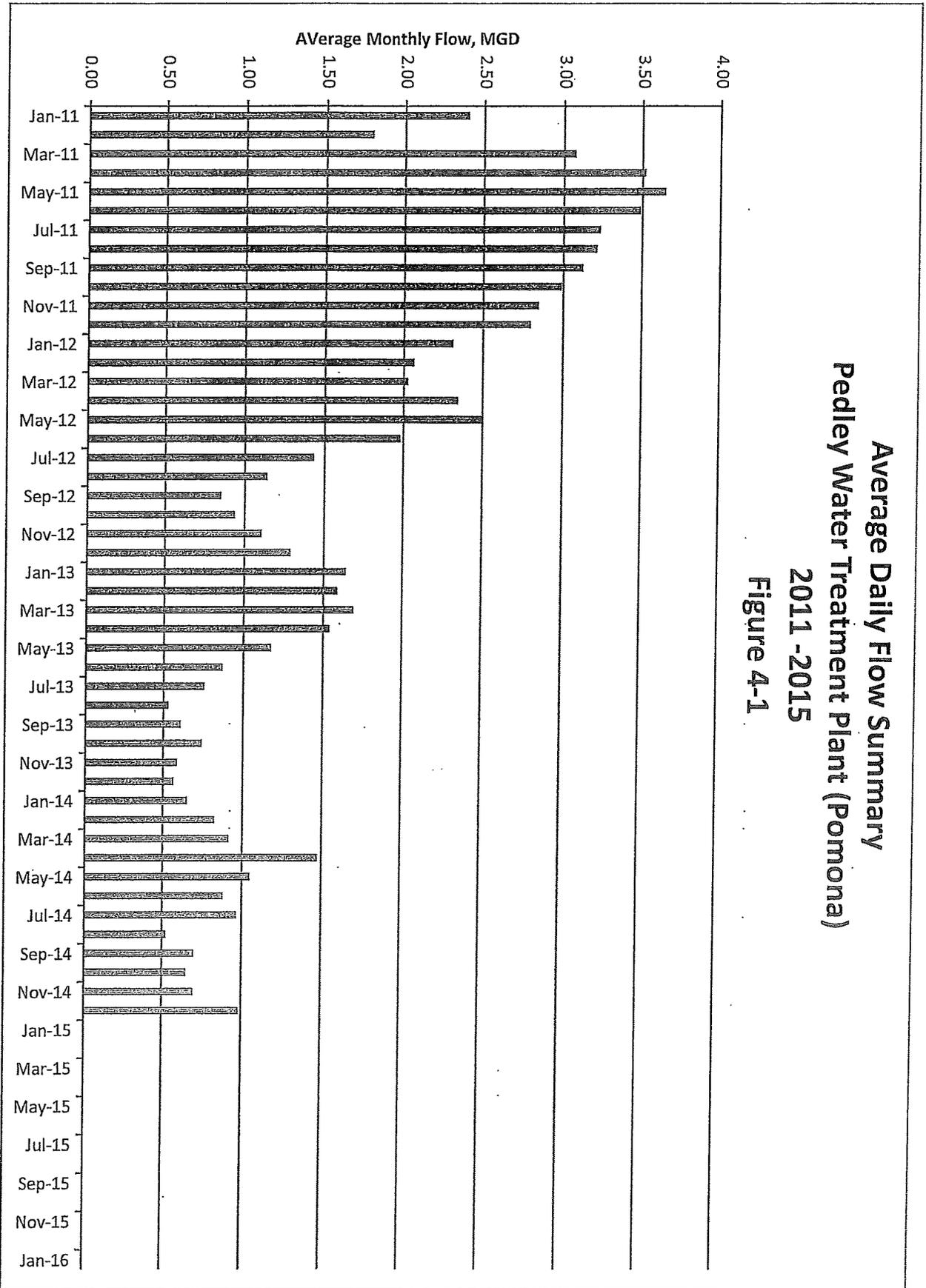
It can be concluded that the City should not have any problems meeting the LRAA for TTHMs in the future if it operates similar to the period 2006 – 10.

Table 4-7a and b present a summary of the haloacetic acids (HAA5). (The "5" designates there are five individual compounds measured and totalized.) The MCL for HAA5 is 60 µg/L again based on the same method of calculation as TTHMs. The City will not have an issue complying with the regulations in the future.

GIARDIA & CRYPTOSPORIDIUM SAMPLING

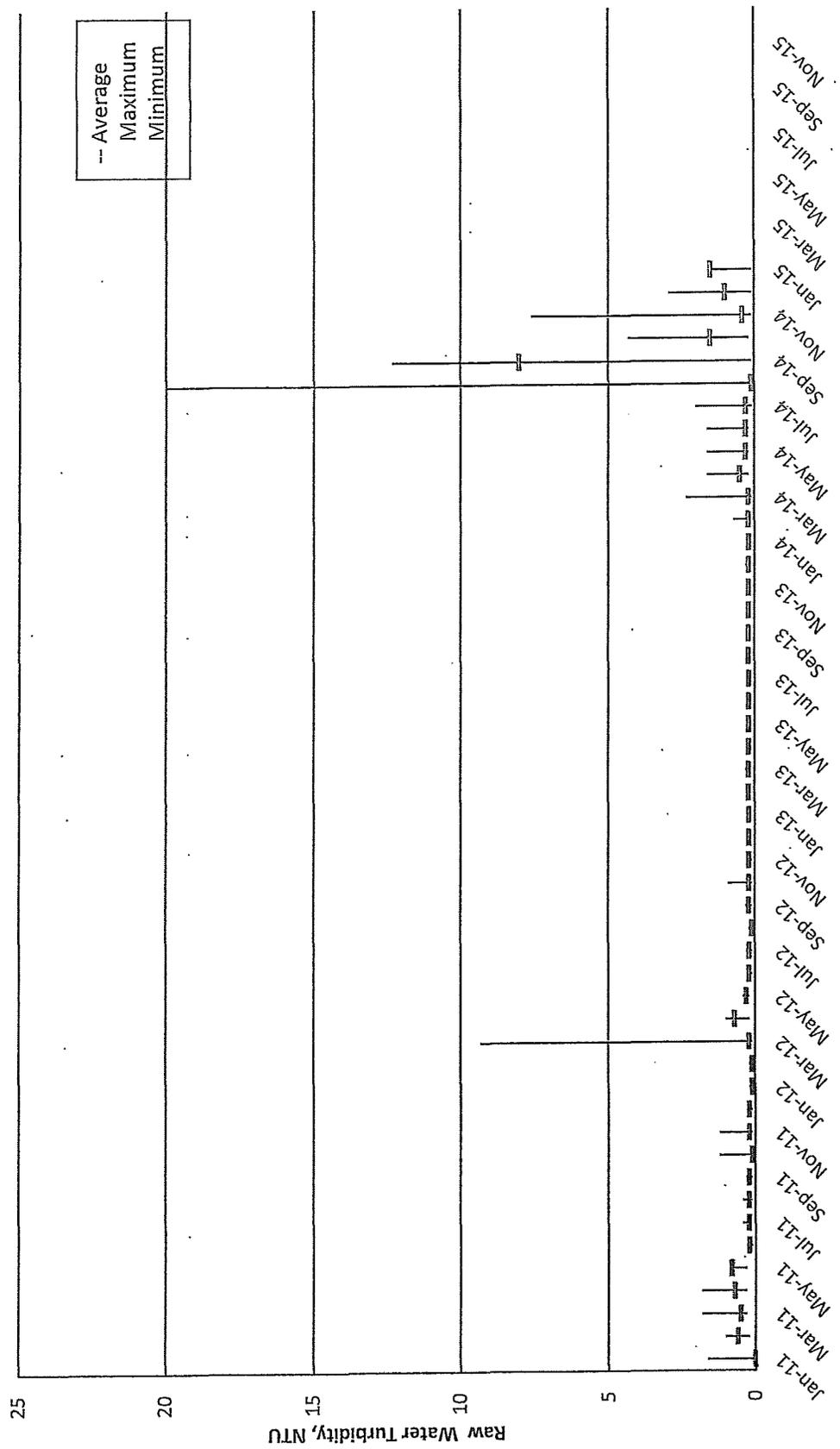
Water samples are collected and analyzed for Giardia and Cryptosporidium periodically at the inlet to the Pedley Filtration Plant and at the Upper, Middle and Lower (Edison Box) Intakes as well as Ice House Canyon. The results are shown in Tables 4-8 and 4-9. The data shows that Giardia and Cryptosporidium are not of concern. There is no definite trend showing any increases. The most recent sampling 7/6/2010 was taken right after the 4th of July weekend, a time when recreational use of the stream and canyon is particularly high. That sample showed no presence of either organism.

At this time that the watershed does not have a Giardia or Cryptosporidium problem.

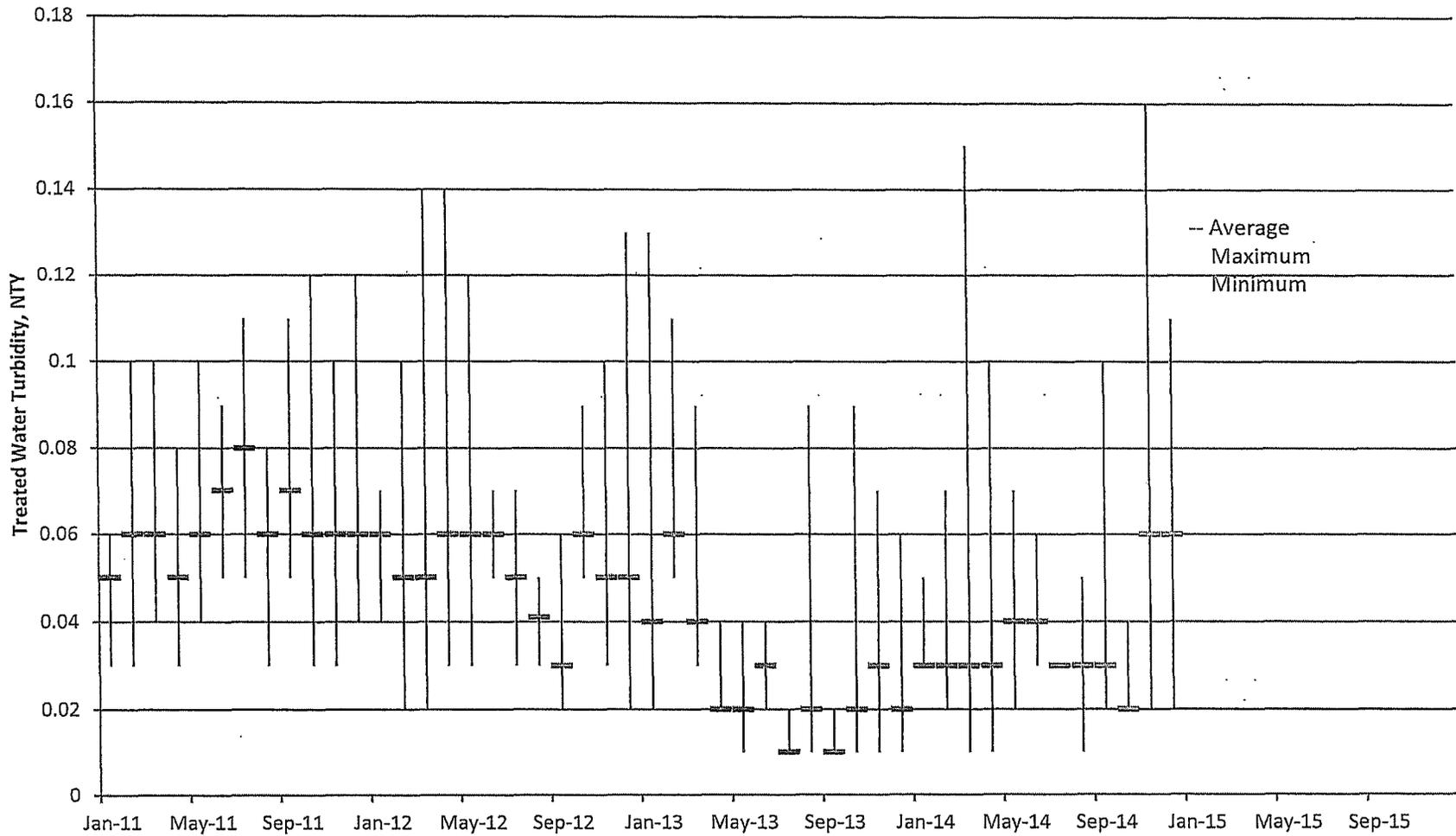


**Average Daily Flow Summary
Pedley Water Treatment Plant (Pomona)
2011 -2015
Figure 4-1**

**Pedley Filter Plant
Monthly Raw Water Turbidity
2011 -2015
Figure 4- 2b**

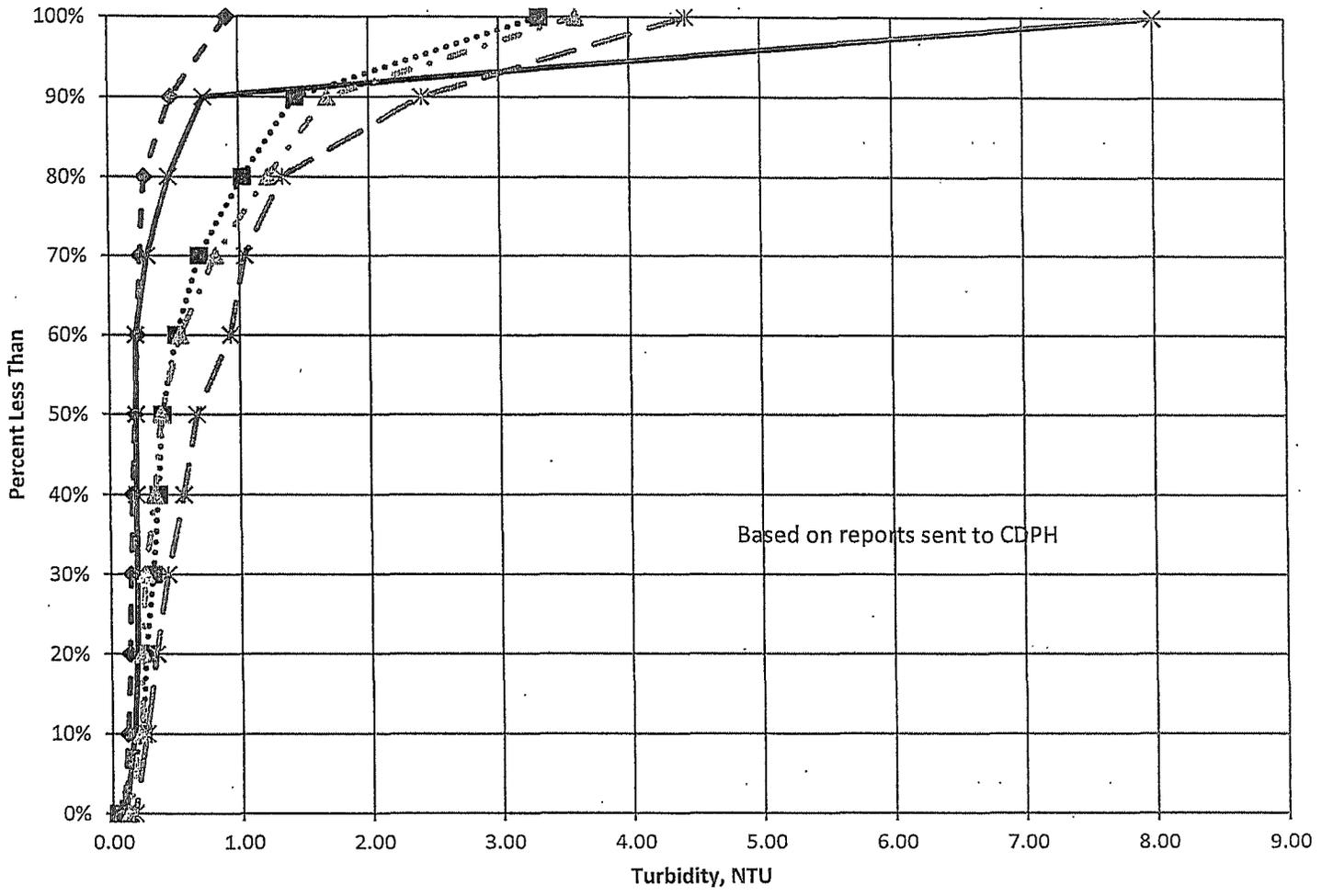


Pedley Water Treatment Plant
Monthly Average Treated Water Turbidity
2011 - 2015
Figure 4-4b



P121

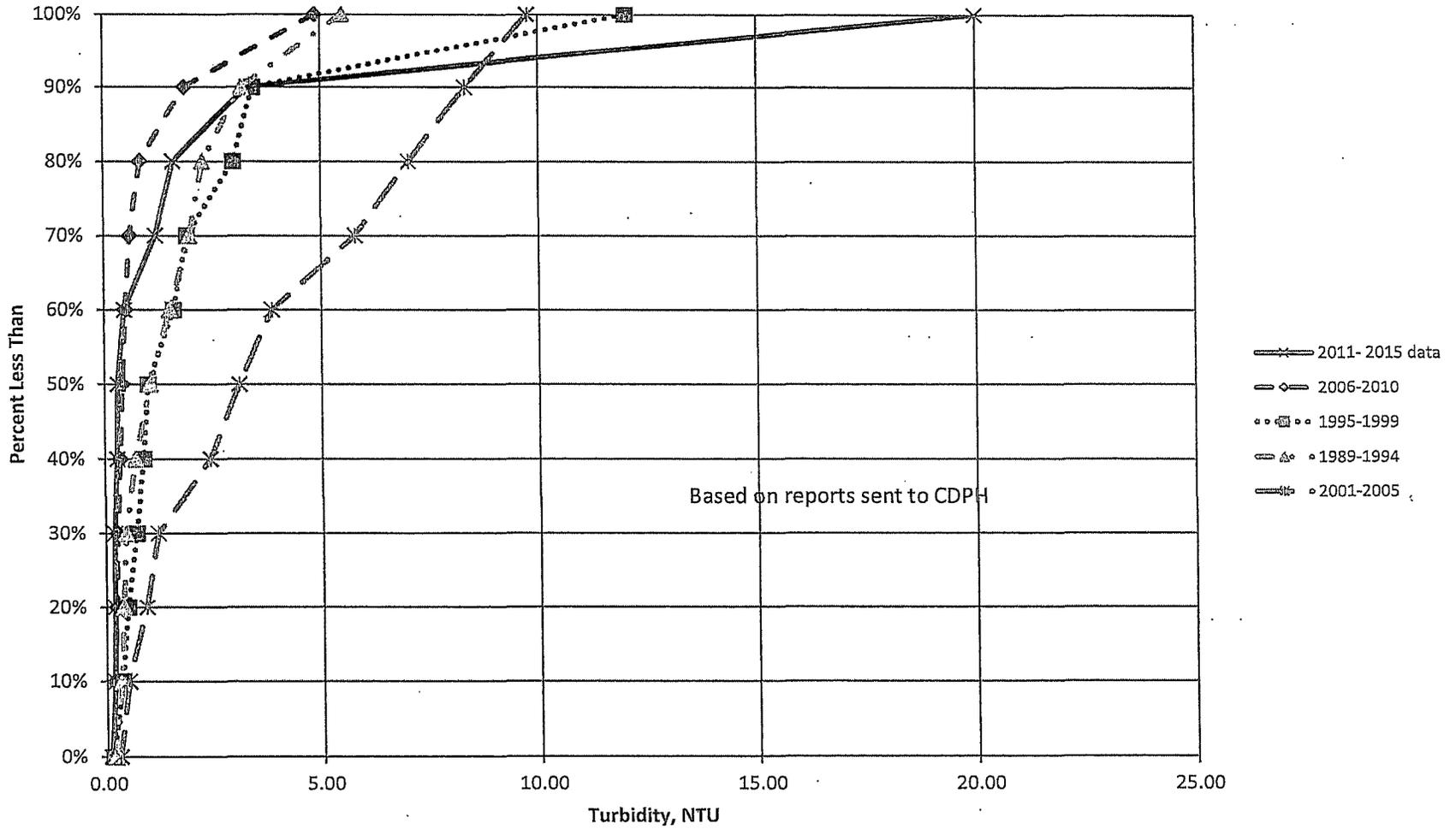
Pedley Filtration Plant
Cumulative Probability of Average Raw Water Turbidity
2011 -2015
Figure 4-3b



- 2011- 2015 data
- 2006-2010
- 1995-1999
- 1989-1994
- 2001-2005

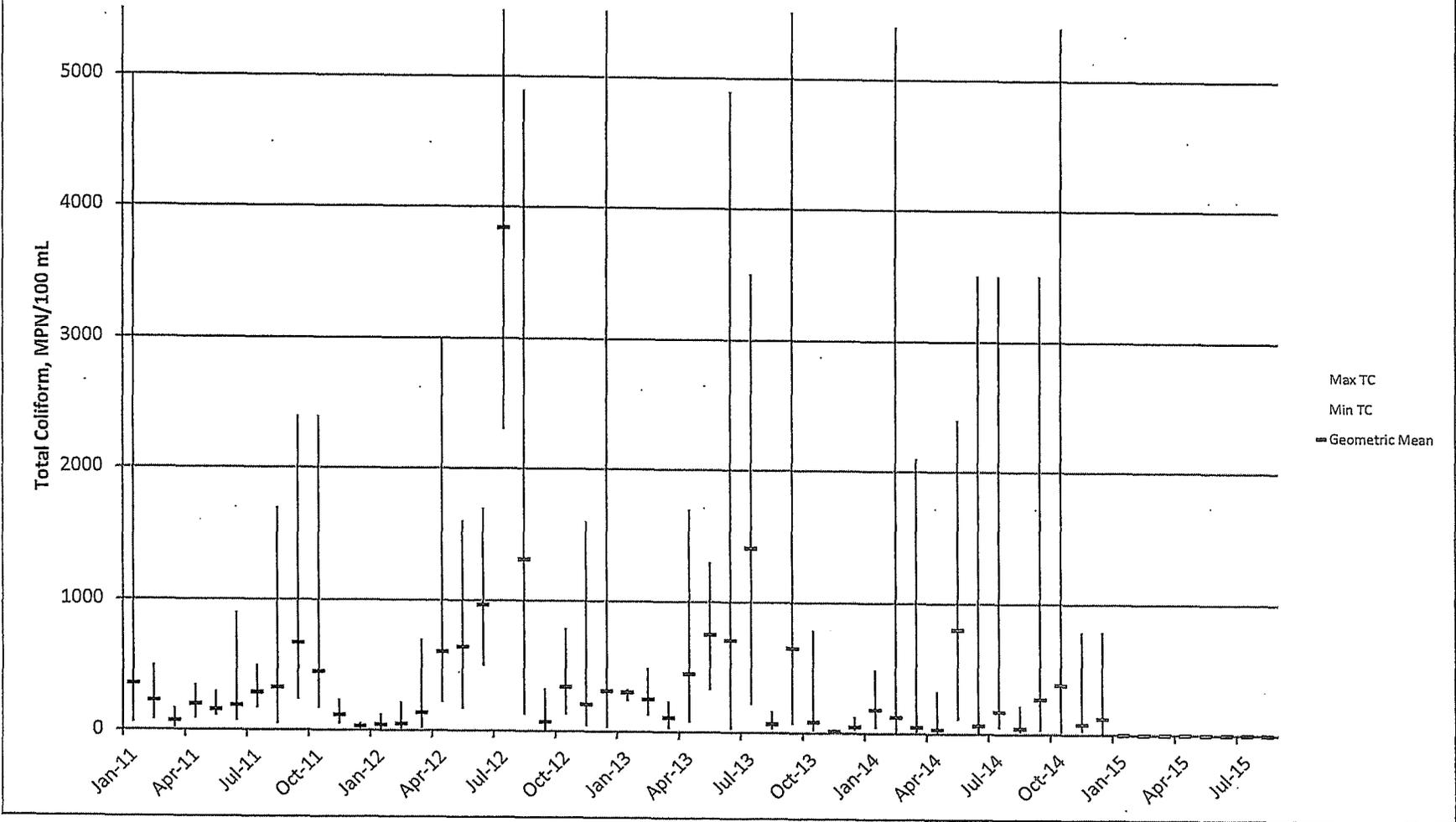
Based on reports sent to CDPH

Pedley Filtration Plant
Cumulative Probability of Maximum Raw Water Turbidity
2011 -2015
Figure 4-3b

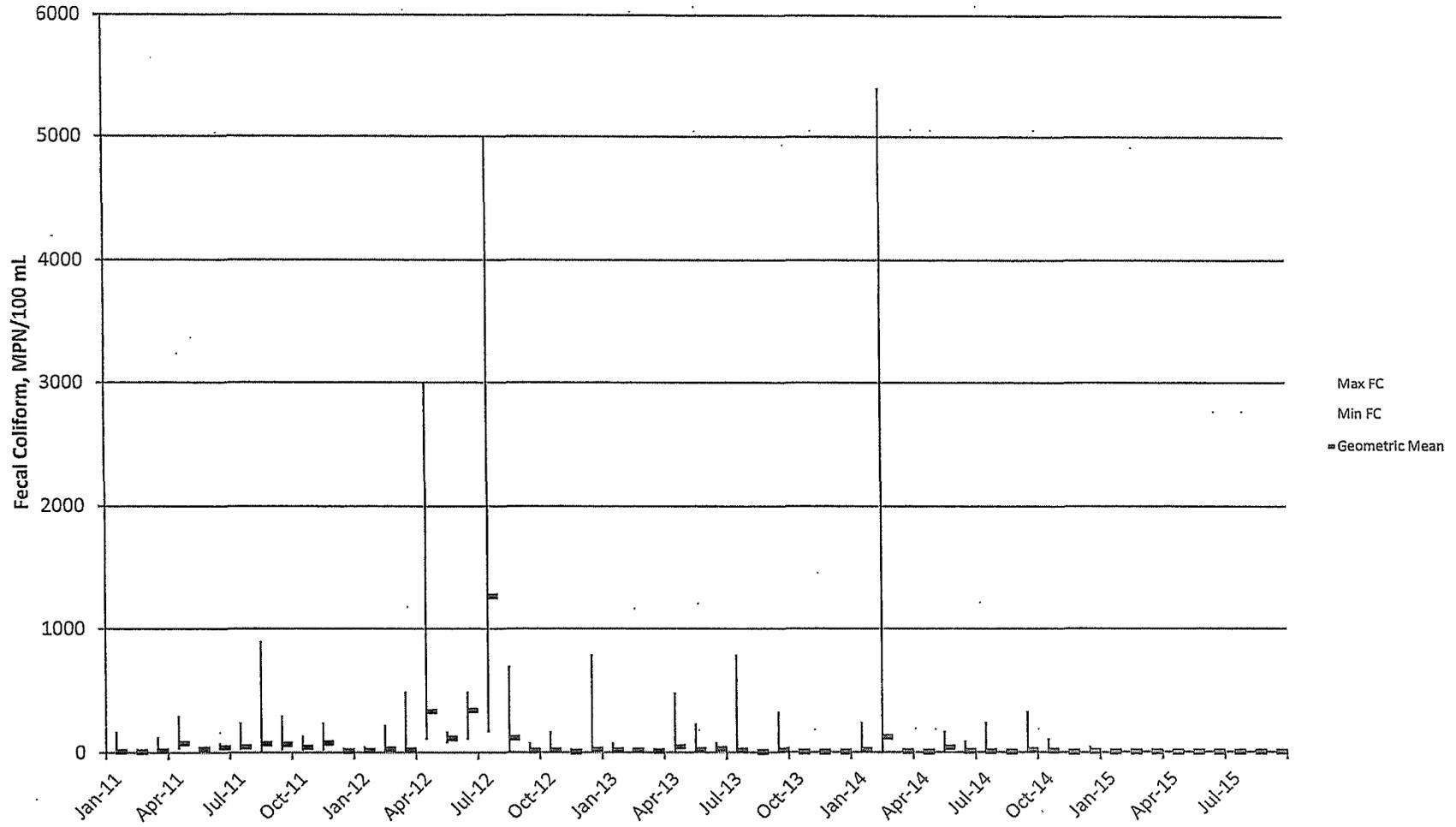


City of Pomona
Evey Canyon Raw Water
Monthly Total Coliform (2011 -2015)

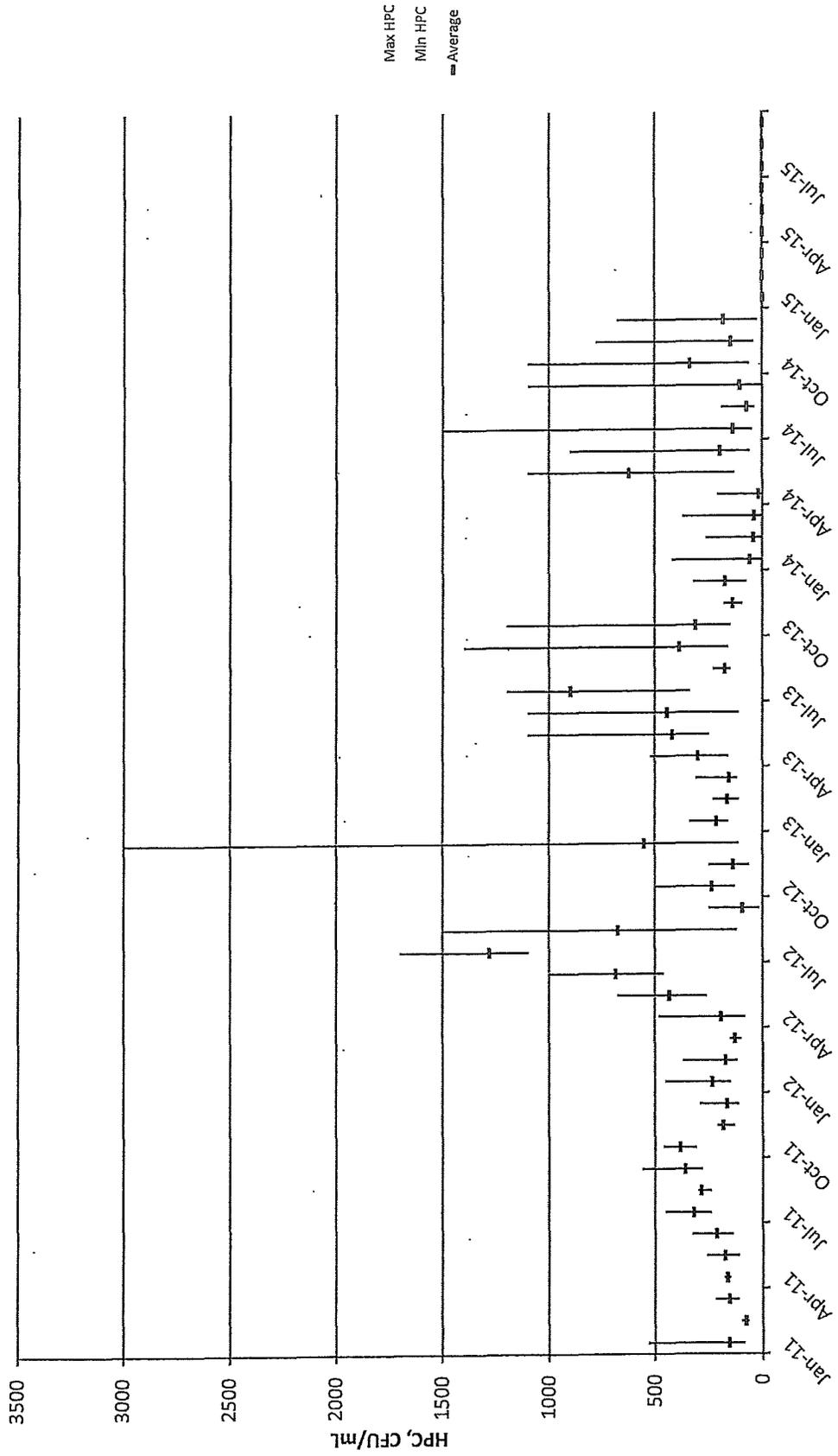
Figure 4-10a



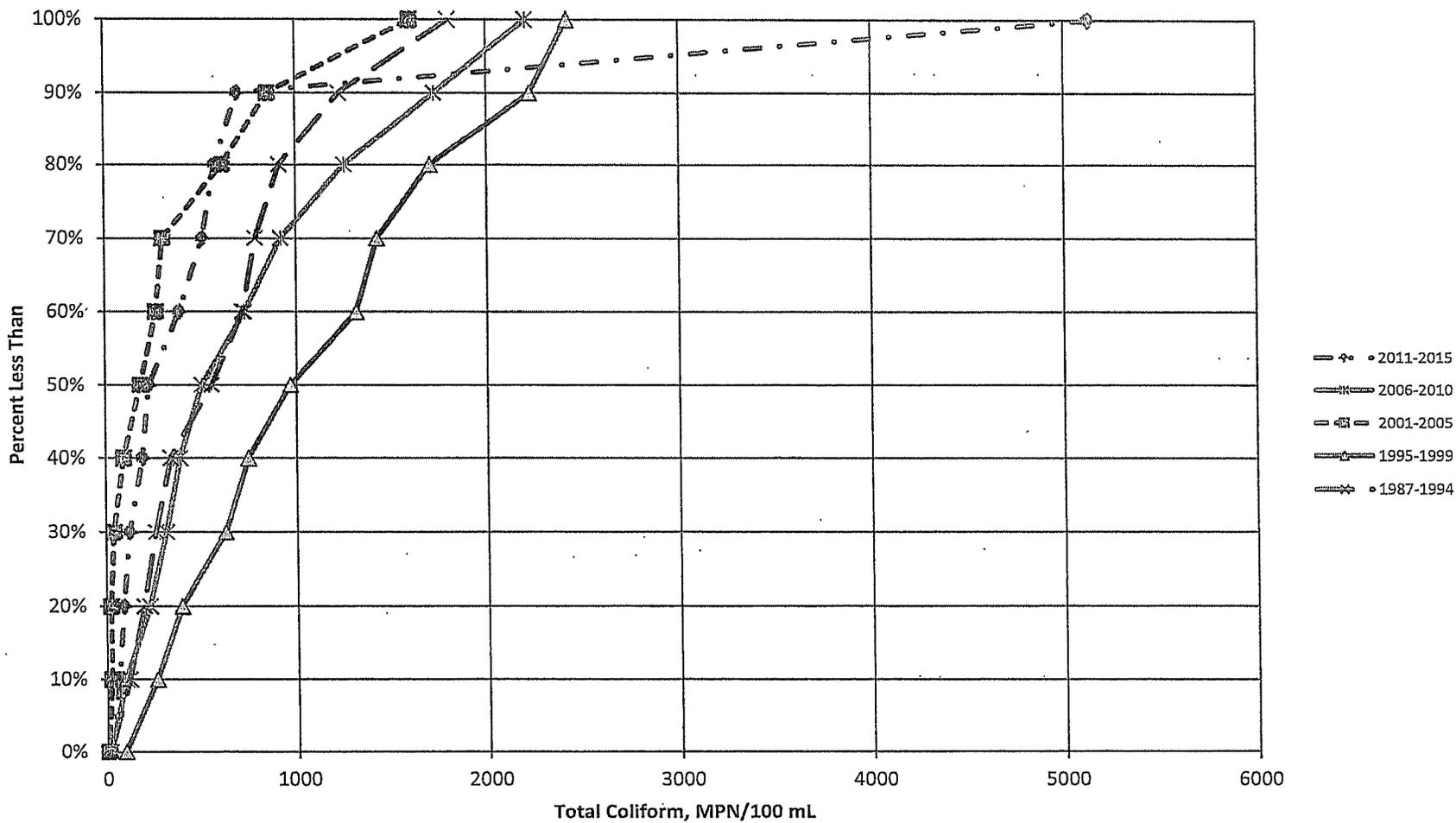
City of Pomona
Evey Canyon Raw Water
Monthly Fecal Coliform (2011 - 2015)
Figure 4-10b



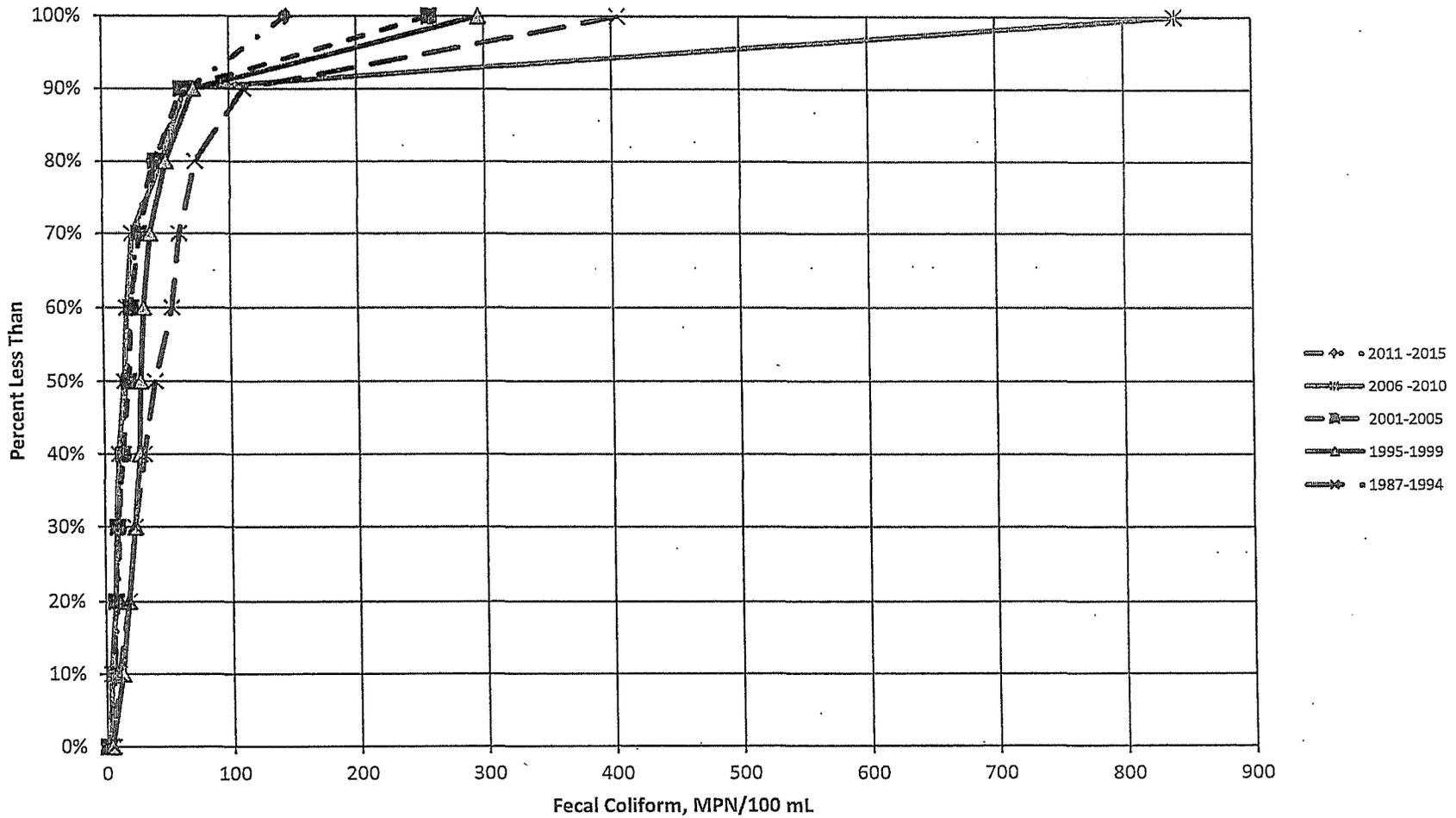
City of Pomona
 Evey Canyon Raw Water
 Monthly HPC (2011-2015)
 Figure 4 -10c



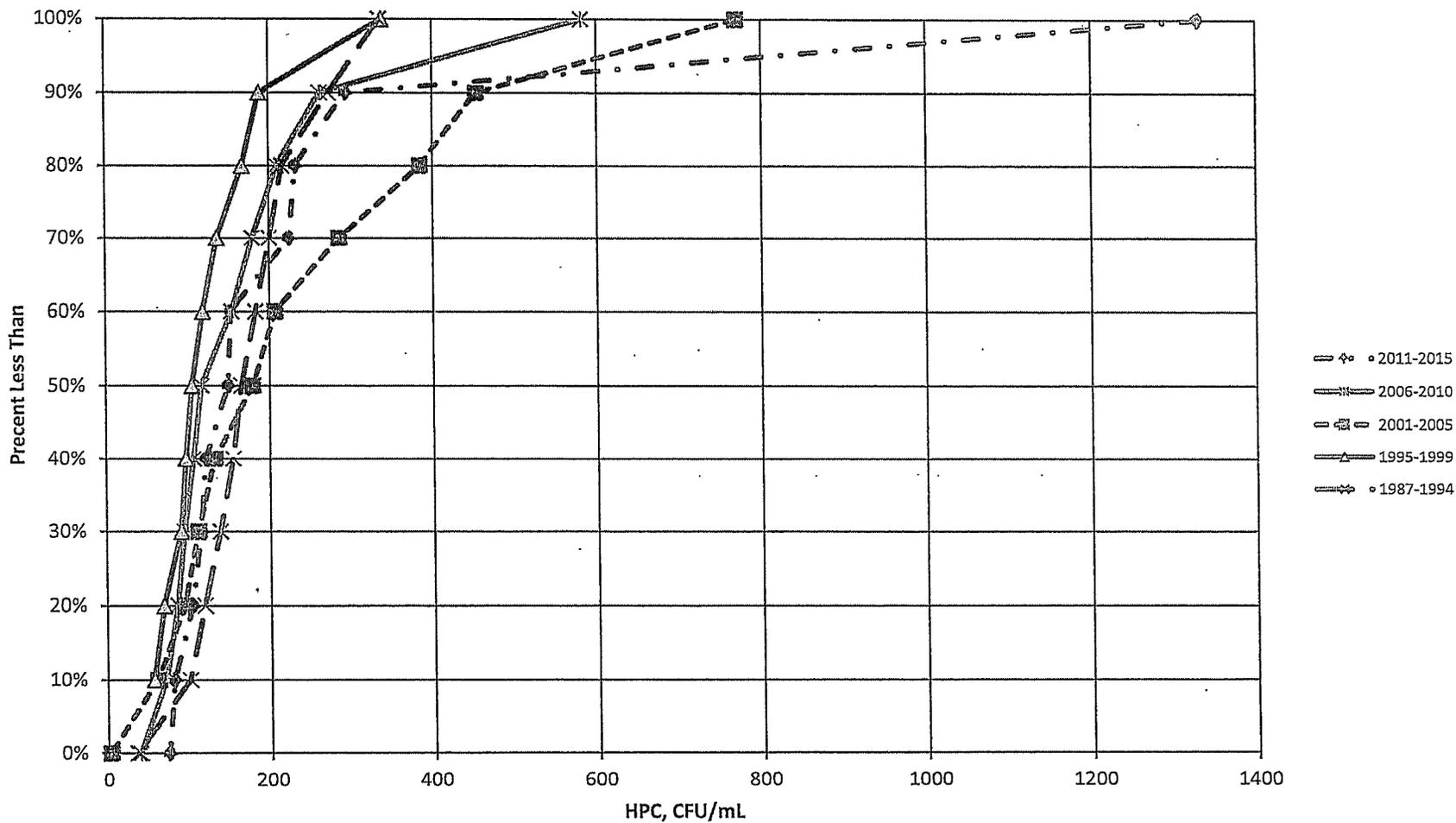
**City of Pomona
Pedley Filtration Plant Raw Water
Current and Historic Total Coliform Percentile
Figure 4-6a**



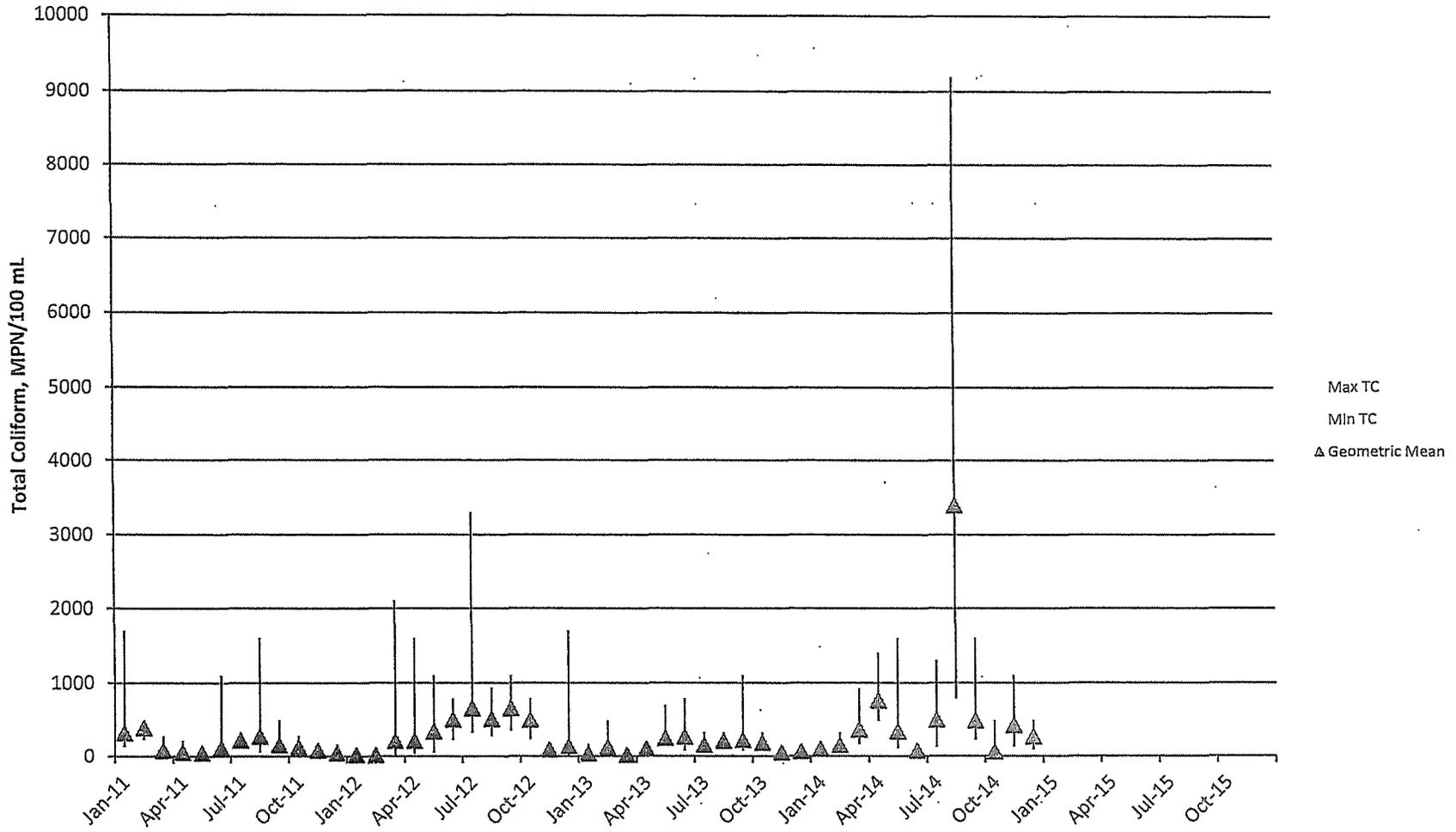
**City of Pomona
Pedley Filtration Plant Raw Water
Current and Historic Fecal Coliform Percentile
Figure 4-6b**

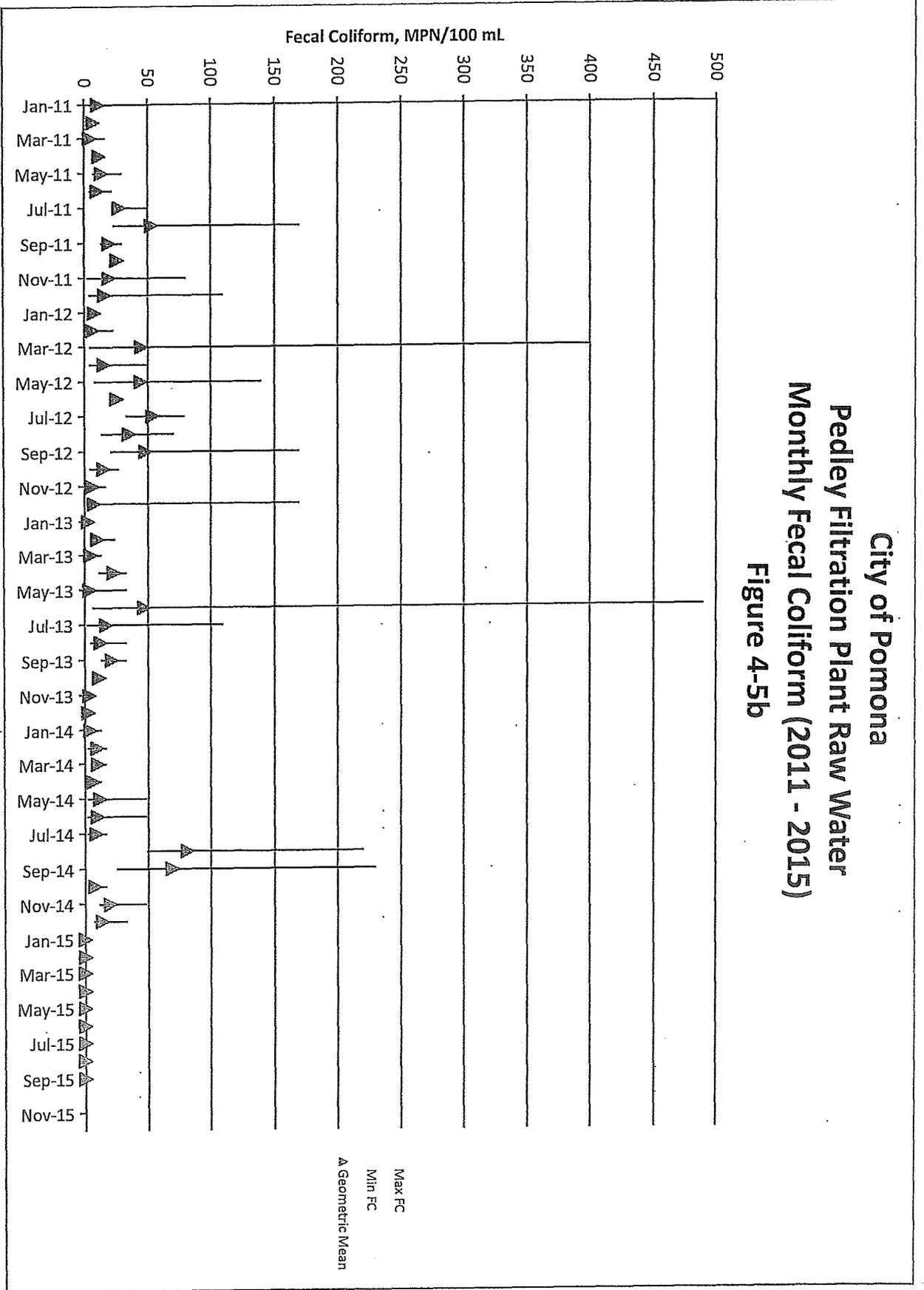


City of Pomona
Pedley Filtration Plant Raw Water
Current and Historic HPC Percentile
Figure 4-6c

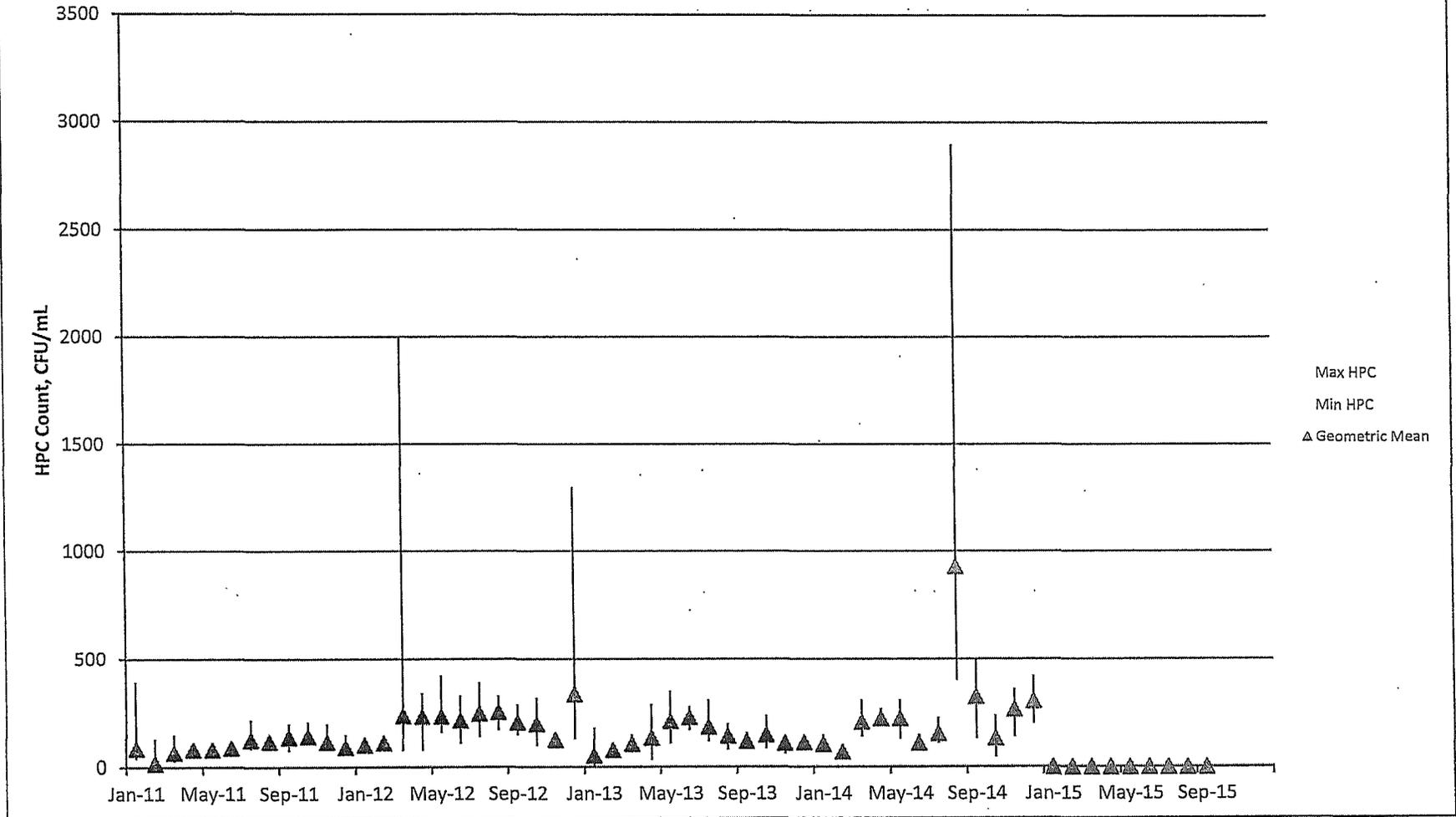


City of Pomona Pedley Filtration Plant Raw Water Monthly Total Coliform (2011 - 2015) Figure 4 -5a





City of Pomona Pedley Filtration Plant Raw Water Monthly HPC Counts (2011 - 2015) Figure 4 - 5c



PPF-R	Crypto (oocyst/L)	Giardia (cyst/L)
10/10/2006	<0.08	<0.08
11/14/2006	<0.1	<0.1
12/12/2006	<0.09	<0.09
1/9/2007	<0.09	<0.09
2/13/2007	<0.09	<0.09
3/13/2007	<0.09	<0.09
4/10/2007	0	0
5/8/2007	0	0
6/12/2007	0	0
7/10/2007	0	0
8/14/2007	0	0
9/11/2007	0	0
10/9/2007	0	0
11/13/2007	0	0.09
12/11/2007	0	0
1/8/2008	0	0
2/12/2008	0.186	0
3/11/2008	0	0
4/8/2008	0	0
5/13/2008	0	0
6/10/2008	0	0.09
7/8/2008	0	0
8/12/2008	0	0
9/9/2008	0	0
8/26/2009	0	0
4/26/2010	0.093	0.093
7/6/2010	<0.09	<0.09
4/20/2011	0.093	<0.09
7/6/2011	<0.09	<0.09
7/9/2012	<0.09	<0.09
7/8/2013	<0.09	<0.09
7/15/2014	<0.09	<0.09

Evey Canyon	Crypto (oocyst/L)	Giardia (cyst/L)
4/26/2010	<0.089	<0.089
7/6/2010	<0.10	<0.10

San Antonio Canyon WSS
Giardia and Crypto Sampling

Location	Sample Date	Sample Time	Lab ID No	Volume Filtered, L	Crypto Cysts		Giardia Cysts	Crypto (oocyst/L)	Giardia (cyst/L)
					Crypto Cysts	Giardia Cysts			
Ice House Canyon	4/26/2005	11:30	2504280584	11	0	0	0	<0.09	<0.09
Ice House Canyon	7/5/2005	10:32	2507070126	10.75	1	0	0	0.09	<0.09
Ice House Canyon	5/17/2006	12:30	2605220156	10.75	0	0	0	<0.09	<0.09
Ice House Canyon	4/23/2009	8:45	2905140107	11	0	0	0	<0.09	<0.09
Ice House Canyon	4/26/2011	10:31	110770-001	11	0	0	0	<0.1	<0.1
Ice House Canyon	7/7/2015	9:05		10.5	0	0	0	10.5	<0.09
Lower Intake	4/23/2009	8:15	2905140109	11	2	0	0	0.182	<0.09
Lower Intake Edison Box	4/16/2003	9:00	2304170069	10.93	0	0	0	<0.09	<0.09
Middle Intake	7/3/2003	12:00	2307310016	11	0	0	0	<0.09	<0.09
Middle Intake	6/1/2004	10:00	2406300351	11	0	0	0	<0.09	<0.09
Middle Intake	7/6/2004	11:00	2408040138	11	0	0	0	<0.09	<0.09
Middle Intake	4/26/2005	11:00	2504280582	11	0	0	0	<0.09	<0.09
Middle Intake	7/5/2005	10:00	2507070127	11	0	1	0	<0.09	0.09
Middle Intake	5/17/2006	11:11	2605240012	11	1	1	0	0.09	0.09
Middle Intake	4/24/2007	9:23	2705020003	10.75	0	0	0	<0.093	<0.093
Middle Intake	7/9/2007	9:20	2707170046	10	1	0	0	0.1	<0.1
Middle Intake	8/11/2009	11:20	092228-002	9.75	0	0	0	<0.1	
Middle Intake	4/27/2010	8:00	101094-001	10.75	0	3	0	<0.1	0.28
Middle Intake	7/6/2010	10:34	101528-001	10.75	0	0	0	<0.1	<0.1
Middle Intake	7/12/2011	9:05	111217-002	9.25	0	1	0	<0.1	0.1
Middle Intake	7/10/2012	9:11	120933-001	11.5	0	0	0	<0.1	<0.1
Middle Intake	7/8/2013	10:13	130955-001	10.75	0	0	0	<0.1	<0.1
Middle Intake	7/15/2014	9:08	141045-001	10.5	0	0	0	<0.1	<0.1
Middle Intake	7/7/2015	9:35		10.5	0	0	0	<0.1	<0.1
Upper Intake	7/3/2003	12:30	2307310015	11	0	1	0	<0.09	0.09
Upper Intake	6/1/2004	10:30	2406300352	10.5	0	0	0	<0.1	<0.1
Upper Intake	7/6/2004	11:30	2408040139	10.5	0	0	0	<0.1	<0.1
Upper Intake	4/26/2005	11:00	2504280580	10.5	0	0	0	<0.1	<0.1
Upper Intake	7/5/2005	10:00	2507070125	11	0	2	0	<0.3	0.5
Upper Intake	5/17/2006	11:20	2605240013	11	0	0	0	<0.09	<0.09
Upper Intake	4/24/2007	9:41	2705020004	10	0	0	0	<0.1	<0.1
Upper Intake	7/9/2007	9:45	2707170047	10	0	1	0	<0.1	0.1
Upper Intake	4/23/2009	8:32	2905140105	11	2	1	0	0.182	0.0909
Upper Intake	8/11/2009	11:00	092228-001	9.75	0	0	0	<0.1	
Upper Intake	4/27/2010	8:30	101094-002	11	0	1	0	<0.1	0.1
Upper Intake	7/6/2010	10:55	101528-002	10.75	0	0	0	<0.1	<0.1
Upper Intake	4/26/2011	10:15	110770-002	11	0	1	0	<0.1	0.1
Upper Intake	7/12/2011	9:25	111217-001	8.5	1	0	0	0.12	<0.12
Upper Intake	7/10/2012	9:45	120933-002	11.25	0	0	0	<0.1	<0.1
Upper Intake	7/8/2013	10:31	130955-002	11	0	0	0	<0.1	<0.1
Upper Intake	7/15/2014	9:27	141045-002	11	0	0	0	<0.1	<0.1

Location	No of Samples	Crypto Positive		Giardia Positive	
		No	Fraction	No	Fraction
Ice House Canyon	5	1	0.2	0	0
Upper Intake	17	2	0.12	6	0.35
Middle Intake	15	2	0.13	5	0.33
Lower Intake	2	1	0.5	0	0

REFERENCES (TO BE EDITED)

1. Pendergraft, Nate. (2011). Personal communication with J. C. Reichenberger, PE., January 19.
2. San Antonio Canyon Protection Plan Steering Committee. (Steering Committee, 2005). San Antonio Canyon Source Water Protection Plan, October
3. Capogni, Nick. (2011a). Personal communication with J. C. Reichenberger, PE., January 19.
4. Sked, Collin. (2011). Personal communication with J. C. Reichenberger, PE., January 12.
5. Reichenberger, P.E. Joseph, (2011a). Personal observation, January 12.
6. Regional Water Quality Control Board, Los Angeles Region, (Regional Board 2001). *Monitoring and Reporting Program No. CI-8351 for San Antonio Canyon Mutual Service Company, (File No. 90-54)*, December 19.
7. U. S. Department of Agriculture (USDA 2005). *Land Management Plan, Part 2 Angeles National Forest Strategy*, Forest Service, Pacific Southwest Region R5-MB-076, September.
8. Hudspeth (SAWCO), Tommy (2011). Personal communication with J. C. Reichenberger, P.E., January 12.
9. San Antonio Canyon Protection Plan Steering Committee (Steering Committee 2006). San Antonio Canyon Watershed Best Management Practices, February.
10. Jerroldfoutz.com (2011) <http://www.jerroldfoutz.com/fire/index.htm>. accessed 1/29/2011.
11. Watson, L' and Garner, J. (USFS 2011). Personal communication with J. C. Reichenberger P.E., March 18.
12. Capogni, Nick. (2011b). Comments on First Draft 2010 WSS update email to J. C. Reichenberger, PE., February 16.
13. Reichenberger, PE. Joseph. (2011b). Email to J. Garner USFS, 4/28/2011.
14. San Bernardino County Public Works (2011). Personal communication with J. C. Reichenberger, P.E., May 19
15. Friends of the River (undated). Potential Wild and Scenic Rivers in the San Gabriel Mountains, Questions and Answers About Wild & Scenic Rivers.
16. O'Keefe, J. (2011). Personal communication with J. C. Reichenberger, P.E., January 11.
17. Federal Register (2006). 40 CFR Parts, 9, 141, and 142, National Primary Drinking Water Regulations: Ground Water Rule; Final Rule, November 8.
18. USEPA (2010). Fact Sheet: Announcement of Proposed Revisions to Total Coliform Rule, Office of Water, EPA EPA 815-F-10-002 , June.
19. Moorrees, C. and Layton, T. (2011). Personal communication with J. C. Reichenberger, P.E., June 23.

20. County of San Bernardino, Department of Public Health, Division of Environmental Health Services (San Bernardino, 2007). Minimum Setbacks List, April
21. USEPA (2006). 40 CFR Parts 9, 141, and 142 National Primary Drinking Water Regulations: Stage 2 Disinfectants and Disinfection Byproducts Rule; Final Rule, Jan 4.
22. Fluoridation by Public Water Systems (CDPH 2011). <http://www.cdph.ca.gov/certlic/drinkingwater/pages/fluoridation.aspx>, accessed 7/8/2011.
23. James Garner (2011). Email to J. C. Reichenberger PE, March 21.
24. San Antonio Canyon Watershed Committee (2015). Personal communication with J. Reichenberger, May 13.
25. USFW (undated). Draft Recovery Plan for the Santa Ana Sucker (*Catostomas santaanae*), US Fish and Wildlife Service, Sacramento, CA

**OPINION RE
WATER RIGHTS OF
SAN ANTONIO WATER COMPANY**

**PREPARED FOR:
SAN ANTONIO WATER COMPANY
UPLAND, CALIFORNIA**

**PREPARED BY:
LAGERLOF, SENECA, DRESCHER & SWIFT
PASADENA, CALIFORNIA**

JUNE 1993

JUNE 93

PRIVILEGED AND CONFIDENTIAL

c) Summary of San Antonio Canyon and Tunnel Rights

By way of summary, the 1913 judgment, as modified by the 1915 stipulation approved by the Supreme Court, provides that after provision is made for compliance with the salvage water suit decree granting to San Antonio Water Company 17% of the flow as salvage water (as successor to Ontario Power Company) and 18 miner's inches as the Gird right, the West Side Owners are entitled to $\frac{1}{2}$ of the flows up to 312 inches when the flow measures 773 $\frac{1}{2}$ inches. After satisfying the right of the West Side Owners, San Antonio Water Company is entitled to up to 740 miner's inches of the surface water reaching the dam naturally or by means of the former Ontario Power Company pipeline, or any other pipeline, during the period from December 31 through April 1 of each year, and entitled to 965 miner's inches of such waters during the remainder of the year.

The Court also declared that San Antonio Water Company is entitled to all water in the Tunnel. It should be noted that the Tunnel rights are limited only by the supplies available and the actual physical capacity of the Tunnel. It should be borne in mind, however, that the Tunnel may not be enlarged or extended under the terms of the judgment.

The rights enumerated above are capable of being exercised for domestic and irrigation purposes or for spreading and the entitlement may be spread in Cucamonga Basin or elsewhere.

Provision is made for additional rights available to San Antonio Water Company when 10,000 miner's inches is flowing at a certain specified point in the Canyon. When this occurs, and during the period of the occurrence, San Antonio Water Company is entitled to divert up to an additional 500 miner's inches which water can also be used for spreading, provided however, that when feasible, the water is to be spread in the Canyon. Finally, San Antonio Water Company is entitled to any excess water which flows over the dike in the Canyon, which excess water may be spread in the Cucamonga Basin or in any other location.

San Antonio Water Company has the right to divert 13,864.61 acre feet per year from the Canyon; 2,855.32 during the period from January through March; 11,009.29 during the period from April through December. These rights include the 30 miner's inches of riparian rights and 25 miner's inches under the decree in the Storm Water suit. These rights exclude the conveyances to Messrs.

Vernon, Chapman, Southern California Edison Company, San Antonio Canyon Mutual Water Company and the U.S. Forest Service.



San Antonio Water Company

Incorporated October 25, 1882

Serving the original Ontario Colony lands

February 2, 2016

Ms. Danni Maurizio
Chino Basin Watermaster
9641 San Bernardino Road
Ranch Cucamonga, CA 91730

Subject: Application for Recharge – Statement of Water Rights in San Antonio Creek

Dear Danni:

The San Antonio Water Company has riparian and appropriative water rights from the San Antonio Creek. These rights are captured at the Water Company's Division Dam by diversion of stream flows below Shin Road.

Remaining stream flows not captured by the Water Company are captured at the San Antonio Dam and utilized for water recharge by Six Basins Watermaster for the benefit of its parities.

Sincerely,

Charles Moorrees
General Manager/CEO
/cm

Cc: File

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FOR PAGINATION



February 4, 2016

Chino Basin Watermaster
Attention: Mr. Peter Kavounas, General Manager
9641 San Bernardino Road
Rancho Cucamonga, CA 91730

Subject: Analysis of Material Physical Injury for the San Antonio Water Company (SAWC) Recharge Application, as submitted to the Chino Basin Watermaster on January 22, 2016

Dear Mr. Kavounas,

Pursuant to your direction, Wildermuth Environmental, Inc. (WEI) conducted a material physical injury (MPI) analysis of the SAWC's January 22, 2016 recharge application. This MPI analysis has been done pursuant to the Watermaster Rules and Regulations and the Peace Agreement. Specifically, Article 10 of Watermaster Rules and Regulations (paragraph 10.10) requires that:

"[...] Watermaster prepare a written summary and analysis (which will include an analysis of the potential for material physical injury) of the Application and provide the Parties with a copy of the written summary and advanced notice of the date of Watermaster's scheduled consideration and possible action on any pending Applications."

Per the Peace Agreement, material physical injury is defined as:

"[...] material injury that is attributable to Recharge, Transfer, storage and recovery, management, movement or Production of water or implementation of the OBMP, including, but not limited to, degradation of water quality, liquefaction, land subsidence, increases in pump lift and adverse impacts associated with rising groundwater" (Peace Agreement, page 8).

The MPI analysis presented herein is based on our professional experience and judgment in the Chino Basin, including the collection and analysis of monitoring data, past evaluation of Chino Basin storage programs, groundwater modeling of various

groundwater management alternatives in the Chino Basin, and prior MPI analyses.

SAWC's Recharge Application of January 22, 2016

WEI contacted Charles Moorrees of the SAWC to review the SAWC recharge application on February 1, 2016. SAWC proposes to recharge 200 afy of San Antonio Creek water into the Chino Basin at a rate not to exceed 500 gallons per minute. SAWC proposes to divert San Antonio Creek water through its existing San Antonio Creek diversion located upstream of San Antonio dam, convey that water through its existing non-potable system and subsequently discharge it to the concrete-lined reach of San Antonio Creek located downstream of the Pomona Valley Protective Association (PVPA) diversion facilities and upstream of the Upland Basin. SAWC proposes to recharge the subject water in Montclair Basins 2, 3 and 4 and Brooks Basin. Diversion into the Montclair Basins will occur through the existing San Antonio Creek diversion into Montclair Basin 1 and subsequently routed downstream through the outlet of Basin 1 to Basin 2 and thence if necessary to Basins 3 and 4. Diversion into the Brooks Basin would be through the existing San Antonio Creek diversion into the Brooks Basin. SAWC would need to coordinate their proposed diversions for recharge with the Inland Empire Utilities Agency (IEUA), Chino Basin Water Conservation District and Watermaster to ensure that their water is diverted as proposed, accounted for, and to ensure that SAWC recharge activities do not interfere with other recharge operations. The proposed recharge will contribute to the Watermaster obligation to recharge 6,500 afy of supplemental water in MZ1. SAWC did not submit a recapture plan in its January 22, 2016 recharge application.

SAWC applied for a local storage agreement (LSA) for 2,000 af in December 2011. The recharge application that accompanied the LSA application identified the source water as San Antonio Creek water that would be recharged into the Upland and Montclair Basin 1 at a rate of 1,500 afy for the period January through June and at an average monthly rate of 250 af per month. SAWC did not submit a recovery plan with its 2011 LSA application. The MPI analysis for the 2011 LSA application indicated that there would be no MPI for the recharge and storage of San Antonio Creek water as then proposed but did not opine on the recovery of the stored water because no recovery plan was provided. The Watermaster board approved the recharge application and directed Watermaster "to account for this supplemental water recharged in SAWCO's existing local supplemental storage account."^{1, 2}

The scope of this MPI analysis is to determine if the recharge of San Antonio Creek water by the SAWC as proposed in its January 22, 2016 recharge application, has the potential to cause MPI. This analysis is limited to the recharge and storage of that water only

¹ See the minutes from the February 23, 2012 Watermaster board meeting.

http://www.cbwm.org/met_board_12.htm

² The 2011 proposed LSA was for 2,000 af and the attached recharge agreement included 1,500 afy. The Watermaster board subsequently approved only the recharge application for 2,000 afy at the February 23, 2012 meeting.

because no recovery plan was provided.

Groundwater Level Impacts (liquefaction, land subsidence, and increases in pump lift)

The proposed project will produce a localized increase in groundwater levels in the vicinity of the recharge basins where the recharge occurs, followed by a return to the groundwater levels that would occur had the water not been recharged. The depth to groundwater beneath Montclair Basins 2, 3 and 4 is presently about 500 feet below ground surface (bgs) and the depth to groundwater beneath the Brooks Basin is about 310 ft bgs. There will be no adverse liquefaction or land subsidence impacts from the groundwater level changes caused by the recharge and storage proposed by SAWC. There may be some diminishing of the current land subsidence in the recharge area if the stored water resulting from the proposed recharge is recovered outside of the Northwest Management Zone 1 subsidence management area (Northwest MZ1 area).

Balance of Recharge and Discharge in Every Area and Subarea

There may be an imbalance if the recovery of the proposed recharge does not occur proximate to the recharge.

- If the proposed recharge is produced in Northwest MZ1 area where the recharge is proposed then there will likely be no imbalance in recharge and discharge attributable to the proposed recharge.
- If the recharged water is recovered outside of the Northwest MZ1 area then there will be an imbalance in recharge and discharge attributable to the proposed recharge and that imbalance will result in higher groundwater levels and greater groundwater storage in the Northwest MZ1 area both of which will benefit the area. There will be a decline in groundwater levels in the area where the groundwater is recovered.

Total Dissolved Solids and Nitrate Concentration of the Recharge Water

The 2004 Regional Water Quality Control Plan (Basin Plan) for the Santa Ana River Watershed has total dissolved solids (TDS) and nitrate (expressed as nitrogen) concentration objectives in the Chino-North Groundwater Management Zone (GMZ) of 430 milligrams per liter (mg/L) and 5 mg/L, respectively. The proposed recharge will occur in the Chino-North GMZ. Pursuant to the Basin Plan, Watermaster and IEUA are required to manage the recharge in spreading basins in the Chino Basin so that the five-year, volume-weighted average TDS and nitrate concentration of the recycled water, imported water, supplemental native water, and new stormwater recharged across all recharge basins will not exceed the Basin Plan objectives. SAWC did not provide a complete characterization of San Antonio Creek water quality in their January 22, 2016 recharge

application. San Antonio Creek water quality data available to WEI from other sources³ indicate that the TDS and nitrate concentrations of the water proposed to be recharged vary and are generally less than 250 mg/L and 1 mg/L, respectively. The current ambient TDS and nitrate concentrations in the Chino-North GMZ are 350 mg/L and 10 mg/L, respectively and therefore the proposed recharge project will not encroach into the current assimilative capacity or interfere with Watermaster and IEUA's regulatory obligations. In fact, the proposed recharge will be helpful in complying with the Basin Plan. There will be no adverse TDS or nitrate concentration impacts caused by the proposed recharge.

Water Quality Impacts on Other Pumpers

The water quality of the proposed recharge is comparable to State Water Project water and the proposed recharge will improve the general water quality in the Basin. The sum of the proposed recharge of 200 afy in the January 22, 2016 recharge application and the 2,000 afy of recharge that was previously approved in February 2012 is not unusually large nor will it create a significant change in the direction and speed of groundwater flow in the area between the recharge basins and the wells owned by the City of Pomona and the Monte Vista Water District (MVWD). These entities will with certainty physically produce the water recharged in the proposed January 22, 2016 recharge application and the water recharged pursuant to the 2012 SAWC recharge application. We reviewed exhibits 29 through 46 in the 2014 State of the Basin Report⁴ that characterize water quality in the Chino Basin to qualitatively assess the impact of San Antonio Creek recharge as proposed January 22, 2016 recharge application and the water recharged pursuant to the 2012 SAWC recharge application, and we conclude that the proposed recharge will not adversely affect the water quality in the groundwater produced by Pomona or the MVWD.

Conclusion and Recommendations

There will be no MPI due to the proposed January 22, 2016 recharge application and the water recharged pursuant to the 2012 SAWC recharge application. A no-MPI determination cannot be made regarding the recovery of the recharged water until a recovery plan is provided to Watermaster for MPI review. The scope of the MPI analysis for the recovery plan should consider the recovery of all water recharged and stored by SAWC.

Watermaster should require the SAWC to monitor the amount of water discharged to San Antonio Creek, sample and analyze the water quality of San Antonio Creek water that they discharge to San Antonio Creek and provide this data to the Watermaster and IEUA in a timely manner. These data are required for Watermaster accounting, regulatory reporting required in the IEUA-Watermaster recharge permit and other groundwater

³ 2011 City of Pomona Consumer Confidence Report (CCR), 20 and 2013 City of Upland CCR and 2014 SAWC CCR

⁴ http://www.cbwm.org/rep_engineering.htm

management purposes.

Please call me if you have any questions or concerns regarding this MPI analysis.

Very truly yours,

Wildermuth Environmental, Inc.

A handwritten signature in black ink, appearing to read "Mark Wildermuth". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Mark Wildermuth, PE
President, Principal Engineer

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CHINO BASIN WATERMASTER

II. BUSINESS ITEM

A. MID-YEAR REVIEW OF FY 2015/16 (INFORMATION ONLY)



CHINO BASIN WATERMASTER

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

PETER KAVOUNAS, P.E.
General Manager

STAFF REPORT

DATE: February 11, 2016
TO: Pool Committee Members
SUBJECT: Mid-Year Review of FY 2015/16

SUMMARY

Issue: Mid-Year Review of the Watermaster revenues and expenses for the period of July 1, 2015 through December 31, 2015.

Recommendation: Receive and file the Mid-Year Review Report for the period of July 1, 2015 through December 31, 2015 as presented.

Financial Impact: None.

Future Consideration

Appropriative Pool: February 11, 2016; Receive and file Mid-Year Review Report
Non-Agricultural Pool: February 11, 2016; Receive and file Mid-Year Review Report
Agricultural Pool: February 11, 2016; Receive and file Mid-Year Review Report
Advisory Committee: February 18, 2016; Receive and file Mid-Year Review Report
Watermaster Board: February 25, 2016; Receive and file Mid-Year Review Report

ACTIONS:

February 11, 2016 – Appropriative Pool –
February 11, 2016 – Non-Agricultural Pool –
February 11, 2016 – Agricultural Pool –
February 18, 2016 – Advisory Committee –
February 25, 2016 – Watermaster Board –

DISCUSSION

Each month, a Budget vs. Actual Report is provided to the Pools, Advisory Committee and Board. This report provides a detailed description and analysis of the monthly Watermaster financials and accounts or activities, if any, that are projected to be under or over budget. The Budget vs. Actual report has been created from QuickBooks Enterprise Solutions 15.0, the Watermaster accounting system. The Budget vs. Actual report balances to the supporting documentation in the Watermaster accounting system, as well as the supporting bank statements. The report titled "Budget vs. Actual Report for the Period July 1, 2015 through December 31, 2015 - Financial Report - B5" can be found in the Consent Calendar, Section B, Report 5. This report (B-5) is provided as support and is the basis of the information discussed in the Mid-Year Report.

A Mid-Year Review for the period July 1, 2015 through December 31, 2015 is provided to keep all Parties apprised of the actual and projected total expenses for the current fiscal year. If needed, it also provides a process for reallocating budget to other expense categories to provide continued funding, or amending the approved budget to ensure the categories are funded properly.

SALARY EXPENSES:

The Watermaster approved budget for FY 2015/16 provided for the salaries budget of \$1,554,711 which was allocated to various General Ledger accounts based upon projected work activities (i.e. Watermaster Administrative, Pool Meetings, OBMP, Various Projects, etc.). The budget was developed with a staffing level of nine Full-Time Equivalents (FTE's).

As of December 31, 2015, the total (YTD) Watermaster salary expenses were \$60,612 or 7.6% below the (YTD) budgeted amount of \$794,218. The staffing is currently at eight Full-Time Equivalents (FTE's). Watermaster completed the recruiting process for the position of Field Operations Specialist which became vacant as of August 27, 2015. Rick Zapien accepted the position and started on Monday, January 4, 2016. The field activities and functions normally performed by the Field Operations Specialist were being completed by the other two operations staff members. As of January 2016, the Full-Time Equivalents (FTE's) will increase from eight to nine, a full complement of staff for Watermaster.

On September 16, 2015, the Office Specialist/Receptionist went on leave and is scheduled to return on Monday, February 22, 2016. Until her return, Watermaster will continue to utilize a temporary employee to perform the duties and responsibilities. These expenses are located within the account category 6017.2 (Office Specialist Services).

During the January 28, 2016 Board meeting, the Watermaster General Manager discussed the plan to fill the vacant position of the Sr. Environmental Engineer position, which has been vacant since the position was eliminated in June, 2012. This position has been included on the Revised Pay Schedule, which was approved by the Board on January 28, 2016 and effective February 1, 2016. It is anticipated that the job search would begin in March, interviews being conducted during the month of April, and the candidate starting in May 2016. Currently, there are no plans to bring a Budget Transfer Form or Budget Amendment Form for approval with regards to the Salary Expenses.

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 2015/16 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 allocations are tracking within budget.

The table summarizes the Year-To-Date (YTD) Actual Watermaster salary costs compared to the Year-To-Date (YTD) Budget as of December 31, 2015. 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 '15 - Dec '15 Actual	Jul '15 - Dec '15 Budget	\$ Over Budget	% of Budget	FY 2015/16 Annual Budget
WM Salary Expense					
6011 · WM Staff Salaries	422,983.23	427,711.00	-4,727.77	98.9%	848,891.00
6017 · Temporary Services	0.00	10,500.00	-10,500.00	0.0%	21,000.00
6017.2 · Office Specialist Services	2,845.84	0.00	2,845.84	100.0%	0.00
6201 · Advisory Committee - WM Staff Salaries	7,514.99	11,223.00	-3,708.01	66.96%	22,274.00
6301 · Watermaster Board - WM Staff Salaries	13,982.36	18,581.00	-4,598.64	75.25%	36,879.00
8301 · Appropriative Pool - WM Staff Salaries	15,160.47	14,974.00	186.47	101.25%	29,719.00
8401 · Agricultural Pool - WM Staff Salaries	10,360.24	13,146.00	-2,785.76	78.81%	26,090.00
8501 · Non-Agricultural Pool - WM Staff Salaries	8,931.18	7,847.00	1,084.18	113.82%	15,574.00
6901 · OBMP - WM Staff Salaries	73,391.41	62,834.00	10,557.41	116.8%	124,709.00
7101.1 · Production Monitor - WM Staff Salaries	38,973.14	28,113.00	10,860.14	138.63%	55,797.00
7102.1 · In-line Meter - WM Staff Salaries	2,708.23	4,641.00	-1,932.77	58.35%	9,212.00
7103.1 · Grdwater Quality - WM Staff Salaries	5,008.67	27,465.00	-22,456.33	18.24%	54,511.00
7104.1 · Grdwater Level - WM Staff Salaries	27,986.79	21,387.00	6,599.79	130.86%	42,447.00
7108.1 · Hydraulic Control - WM Staff Salaries	0.00	1,240.00	-1,240.00	0.0%	2,464.00
7108.11 · Prado Basin - WM Staff Salaries	3,457.98	4,184.00	-726.02	82.65%	8,305.00
7201 · Comp Recharge - WM Staff Salaries	26,698.96	22,299.00	4,399.96	119.73%	44,259.00
7301 · PE3&5 - WM Staff Salaries	0.00	7,503.00	-7,503.00	0.0%	14,892.00
7401 · PE4 - WM Staff Salaries	0.00	4,556.00	-4,556.00	0.0%	9,042.00
7501.1 · PE 6&7 - WM Staff Salaries (Plume)	0.00	3,397.00	-3,397.00	0.0%	6,743.00
7501 · PE6&7 - WM Staff Salaries	0.00	2,209.00	-2,209.00	0.0%	4,383.00
7601 · PE8&9 - WM Staff Salaries	0.00	6,162.00	-6,162.00	0.0%	12,231.00
Subtotal WM Staff Costs	660,003.49	699,972.00	-39,968.51	94.29%	1,389,422.00
60185 · Vacation	34,496.32	36,239.00	-1,742.68	95.19%	72,479.00
60186 · Sick Leave	5,718.58	23,203.00	-17,484.42	24.65%	46,405.00
60187 · Holidays	33,387.74	34,804.00	-1,416.26	95.93%	46,405.00
Subtotal WM Paid Leaves	73,602.64	94,246.00	-20,643.36	78.1%	165,289.00
Total WM Salary Costs	733,606.13	794,218.00	-60,611.87	92.37%	1,554,711.00

Going forward into the next six months (January 1, 2016 through June 30, 2016), the Watermaster salaries expense are projected to be at or slightly below budget when consolidated.

ENGINEERING (WILDERMUTH ENVIRONMENTAL AND OTHER):

Wildermuth Environmental, Inc. Estimated Cost at Completion (ECAC) 2nd quarter report (see Attachment 1a below), details the line by line categories and calculates an under budget variance of \$19,870 within the (WEI) budget for the OBMP and Project related expenses. Continued monitoring of the engineering expenses will be provided through the (ECAC) quarterly reports from WEI.

Attachment 1a
Chino Basin Watermaster: Invoice Projections for Engineering Tasks for Fiscal Year 2015/16
As of December 31, 2015

Acct #	Description	Original Budget	Revised Budget	Billed Jul-14	Billed Aug-14	Billed Sep-14	Billed Oct-14	Billed Nov-14	Billed Dec-14	Projected Jan-15
6906	OBMP Engineering	\$ 455,788	\$ 455,788	\$ 30,408	\$ 19,664	\$ 14,707	\$ 31,324	\$ 32,609	\$ 24,453	\$ 32,500
6906.1	OBMP - Watermaster Model Applications	279,340	279,340	15,621	3,385	-	35,522	41,475	48,324	27,700
6906.73	OBMP-Safe Yield Recale	-	-	21,611	10,271	38,075	7,239	230	-	12,300
7103.3	GW Quality - Engineering Services	120,516	120,516	5,326	8,299	14,600	23,242	18,251	2,191	350
7103.5	GW Quality - Laboratory Services	39,205	39,205	-	-	10,980	15,784	6,745	-	-
7104.3	GW Level - Engineering Services	176,430	176,430	12,299	19,413	16,150	21,368	11,681	6,973	15,981
7104.8	GW Level - Contract Services	10,000	10,000	-	-	-	-	-	-	-
7104.9	GW Level - Capital Services	7,000	7,000	-	-	91	-	-	-	-
7107.2	Ground Level - Engineering Services	46,534	56,347	7,688	4,162	1,191	4,519	4,244	1,779	5,935
7107.3	Ground Level - SAR Imagery	65,000	65,000	12,000	-	-	-	-	-	17,000
7107.6	Ground Level - Contract Services	116,289	151,059	332	-	-	-	68	-	1,400
7107.8	Ground Level - Capital Equipment	5,600	5,600	101	-	-	-	14	-	-
7108.3	HCMP - Engineering Services	49,968	49,968	1,464	1,182	4,280	3,353	503	-	2,973
7108.31	HCMP - Eng. Serv. - PBHSP	117,019	129,146	2,230	4,040	10,605	10,463	5,646	27,363	21,392
7108.32	HCMP - Adaptive Management Plan	10,176	43,176	19,878	9,509	9,028	3,422	-	1,330	5,753
7108.4	HCMP - Laboratory Services	25,081	25,081	2,032	-	14,506	2,452	-	-	2,032
7108.41	HCMP - Lab. Serv. - PBHSP	13,110	49,086	-	-	10,746	-	-	12,184	-
7108.6	HCMP - Eng. Serv. - PBHSP - Outside Pro	90,000	90,000	-	-	-	-	-	-	-
7109.3	Recharge & Well Monitoring - Engineering Serv.	19,867	19,867	-	2,146	-	-	1,584	-	-
7202.2	Comp Recharge - Engineering Services	159,504	159,504	2,581	6,036	3,303	7,430	8,102	2,869	10,600
7303	OBMP - Engineering Services - Desalters	23,384	23,384	-	-	-	-	-	-	-
7402	OBMP - Engineering Services - MZ1	84,708	84,708	2,600	680	1,056	-	688	536	2,650
7402.1	OBMP - Engineering Services - Northwest MZ1	506,255	506,255	15,639	14,198	47,960	19,731	9,767	17,983	42,042
7403	OBMP - Contract Services - MZ1	20,000	20,000	-	-	-	-	-	-	4,600
7502	OBMP - Engineering Services - WQC	70,840	81,840	8,312	6,420	-	3,154	1,550	3,869	1,279
7602	OBMP - Engineering Services - Storage	64,328	64,328	-	-	-	-	-	14,536	-
Totals		\$ 2,595,942	\$ 2,732,638	\$ 160,177	\$ 109,384	\$ 197,327	\$ 189,393	\$ 143,726	\$ 164,329	\$ 206,569

Attachment 1a
Chino Basin Watermaster: Invoice Projections for Engineering Tasks for Fiscal Year 2015/16
As of December 31, 2015

Acct #	Description	Projected Feb-15	Projected Mar-15	Projected Apr-15	Projected May-15	Projected Jun-15	Total Projected	Under / (Over) Rev. Budget	YTD % Billed Rev. Budget	Projected % Rev. Budget
6906	OBMP Engineering	\$ 54,740	\$ 68,140	\$ 36,578	\$ 34,078	\$ 34,078	\$ 413,478	\$ 42,310	34%	91%
6906.1	OBMP - Watermaster Model Applications	35,000	35,000	35,000	-	-	277,427	1,913	52%	99%
6906.73	OBMP-Safe Yield Recale	10,000	15,000	-	-	-	114,727	(114,727)	n/a	n/a
7103.3	GW Quality - Engineering Services	13,600	7,500	5,000	13,000	8,400	119,699	817	60%	99%
7103.5	GW Quality - Laboratory Services	-	-	-	-	-	33,529	5,676	86%	86%
7104.3	GW Level - Engineering Services	17,210	14,560	15,660	15,560	9,260	176,302	128	50%	100%
7104.8	GW Level - Contract Services	-	-	-	10,000	-	10,000	-	0%	100%
7104.9	GW Level - Capital Services	3,500	-	-	-	3,409	7,000	0	1%	100%
7107.2	Ground Level - Engineering Services	7,678	6,584	4,788	2,000	19,261	70,030	(13,683)	42%	124%
7107.3	Ground Level - SAR Imagery	-	56,000	-	-	-	65,000	-	14%	100%
7107.6	Ground Level - Contract Services	-	88,672	-	-	49,710	140,181	10,878	0%	93%
7107.8	Ground Level - Capital Equipment	2,982	-	-	-	3,414	6,511	(911)	2%	116%
7108.3	HCMP - Engineering Services	9,865	11,610	9,733	3,665	700	49,329	639	22%	99%
7108.31	HCMP - Eng. Serv. - PBHSP	13,450	18,000	32,470	22,500	10,613	178,974	(48,825)	47%	139%
7108.32	HCMP - Adaptive Management Plan	7,000	8,000	3,000	2,000	-	69,017	(25,841)	100%	160%
7108.4	HCMP - Laboratory Services	-	-	2,032	-	-	23,036	2,045	76%	92%
7108.41	HCMP - Lab. Serv. - PBHSP	-	12,500	-	-	12,500	47,930	1,166	47%	98%
7108.6	HCMP - Eng. Serv. - PBHSP - Outside Pro	-	-	15,000	-	-	15,000	75,000	0%	17%
7109.3	Recharge & Well Monitoring - Engineering Serv.	2,000	-	-	6,000	1,500	13,210	6,657	19%	66%
7202.2	Comp Recharge - Engineering Services	14,100	18,100	18,100	19,100	18,100	128,421	31,083	19%	81%
7303	OBMP - Engineering Services - Desalters	1,949	1,949	1,949	1,949	1,949	9,744	13,640	0%	42%
7402	OBMP - Engineering Services - MZ1	23,000	27,000	10,875	8,260	6,860	84,264	444	7%	99%
7402.1	OBMP - Engineering Services - Northwest MZ1	28,397	59,597	56,499	62,999	132,632	507,844	(1,589)	25%	100%
7403	OBMP - Contract Services - MZ1	5,200	10,000	-	-	-	20,000	-	0%	100%
7502	OBMP - Engineering Services - WQC	4,800	4,800	4,800	4,800	4,800	48,584	33,257	28%	59%
7602	OBMP - Engineering Services - Storage	-	12,250	12,250	12,250	12,250	63,536	792	23%	98%
Totals		\$ 264,671	\$ 475,661	\$ 263,734	\$ 218,161	\$ 329,636	\$ 2,712,768	\$ 19,670	35%	99%

Note: Billed includes MWH Laboratory Invoices paid directly by Watermaster.

The approved "Original" Engineering Services budget of \$2,595,942 was increased by "Carry Over" funding in the amount of \$136,696 to the "Amended" amount of \$2,732,638 for FY 2015/16 as provided in the Engineering Services Task Order. The "Carry Over" amount of \$136,696 from FY 2014/15 to the FY 2015/16 budget are expenses related to the ongoing long-term pumping test (\$9,813 for account 7107.2 and \$34,770 for account 7107.6), the PBHSP monitoring program (\$12,127 for account 7108.31 and \$35,986 for account 7108.41), the hydraulic control monitoring program Adaptive Management Plan (\$33,000 for account 7107.8), and expenses related to the upload of GeoTracker and EnviroStor data

(\$11,000 for account 7502). All of the "Carry Over" funding is for projects or activities that have bridged previous fiscal years and are expected to be completed in the FY 2015/16 timeframe.

The breakdown of the total FY 2015/16 Task Order amount of \$2,595,942 includes direct labor costs for Wildermuth Environmental, Inc. (80%) along with other direct charges such as equipment rental, laboratory fees, travel costs, reproduction costs, and outside professional services (20%).

The table below summarizes the Year-To-Date (YTD) Actual Engineering (WEI and Other Engineering and Subcontractor) costs 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.

	Jul '15 - Dec '15	Jul '15 - Dec '15	\$ Over Budget	% of Budget	FY 2015/16
	Actual	Budget			Annual Budget
6906 · OBMP Engineering Services - Other	20,439.75	12,960.00	7,479.75	157.71%	25,920.00
6906.1 · OBMP - Watermaster Model Update	144,727.30	186,226.66	-41,499.36	77.72%	279,340.00
6906.21 · State of the Basin Report	0.00	0.00	0.00	0.0%	0.00
6906.22 · Water Rights Compliance Reporting	15,593.75	12,201.98	3,391.77	127.8%	24,404.00
6906.23 · SGMA Reporting Requirements	2,024.25	8,696.02	-6,671.77	23.28%	17,392.00
6906.31 · OBMP - Pool, Advisory, Board Mtgs.	37,074.49	43,829.50	-6,755.01	84.59%	87,659.00
6906.32 · OBMP - Other General Meetings	11,152.62	16,438.50	-5,285.88	67.85%	32,877.00
6906.33 · OBMP - App. Pool Issue Resolution	0.00	27,482.00	-27,482.00	0.0%	54,964.00
6906.71 · OBMP - Data Requests - CBWM Staff	57,912.10	32,032.00	25,880.10	180.8%	64,064.00
6906.72 · OBMP - Data Requests - Non CBWM	7,706.75	19,104.00	-11,397.25	40.34%	38,208.00
6906.73 · OBMP - Safe Yield Recalculation	79,392.89	0.00	79,392.89	100.0%	0.00
6906.74 · OBMP - Mat'l Physical Injury Requests	1,460.00	55,150.00	-53,690.00	2.65%	110,300.00
7103.3 · Grdwtr Qual-Engineering	71,848.59	60,258.00	11,590.59	119.24%	120,516.00
7103.5 · Grdwtr Qual-Lab Svcs	48,037.00	19,602.50	28,434.50	245.06%	39,205.00
7104.3 · Grdwtr Level-Engineering	88,181.66	88,215.00	-33.34	99.96%	176,430.00
7104.8 · Grdwtr Level-Contracted Services	0.00	5,000.00	-5,000.00	0.0%	10,000.00
7104.9 · Grdwtr Level-Capital Equipment	0.00	3,500.00	-3,500.00	0.0%	7,000.00
7107.2 · Grd Level-Engineering	23,696.64	33,080.00	-9,383.36	71.63%	56,347.00
7107.3 · Grd Level-SAR Imagery	12,000.00	42,500.00	-30,500.00	28.24%	85,000.00
7107.6 · Grd Level-Contract Svcs	399.50	92,914.50	-92,515.00	0.43%	151,059.00
7107.8 · Grd Level-Capital Equipment	0.00	2,800.00	-2,800.00	0.0%	5,600.00
7108.3 · Hydraulic Control-Engineering	10,782.59	24,984.00	-14,201.41	43.16%	49,968.00
7108.31 · Hydraulic Control-PBHSP	60,345.31	70,636.50	-10,291.19	85.43%	129,146.00
7108.32 · Hydraulic Control-Adaptive Mgmt Plan	43,264.47	43,176.00	88.47	100.21%	43,176.00
7108.4 · Hydraulic Control-Lab Svcs	4,464.00	12,540.50	-8,076.50	35.6%	25,081.00
7108.41 · Hydraulic Control-PBHSP	22,930.00	42,541.00	-19,611.00	53.9%	49,096.00
7108.6 · Hydraulic Control-Outside Professionals	0.00	45,000.00	-45,000.00	0.0%	90,000.00
7108.7 · Hydraulic Control-Prado Basin Habitat	4,428.00	0.00	4,428.00	100.0%	0.00
7109.3 · Recharge & Well - Engineering	3,709.75	9,933.50	-6,223.75	0.0%	19,867.00
7202.2 · Comp Recharge-Engineering Services	30,320.86	79,752.00	-49,431.14	38.02%	159,504.00
7303 · PE3&5-Engineering - Other	0.00	11,692.00	-11,692.00	0.0%	23,384.00
7402 · PE4-Engineering	5,718.75	42,354.00	-36,635.25	13.5%	84,708.00
7402.10 · PE4-MZ1 Pomona Project	125,277.94	253,127.50	-127,849.56	49.49%	506,255.00
7403 · PE4-Contract Svcs	0.00	10,000.00	-10,000.00	0.0%	20,000.00
7502 · PE6&7-Engineering	23,304.75	46,420.00	-23,115.25	50.2%	81,840.00
7602 · PE8&9-Engineering	14,536.00	32,164.00	-17,628.00	45.19%	64,328.00
Total Engineering Services Costs	970,729.71	1,486,311.66	-515,581.95	65.31%	2,732,638.00 *

* Wildermuth and Subcontractor Engineering Budget of \$2,595,942 plus Carryover Funds from FY 2014/15 of \$136,696 = \$2,732,638
Carryover Funds from FY 2014/15 = \$9,813 (7107.2); \$34,770 (7107.6); \$12,127 (7108.31); \$35,986 (7108.41); \$33,000 (7108.7); and \$11,000 (7502) = \$136,696

LEGAL EXPENSES:

As of December 31, 2015, 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 \$112,498 or 22.3% above the (YTD) budgeted amount of \$504,208. 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 2015/16. The "Approved" budget amount was adopted for the amount of \$933,815. The total budget was developed by multiplying the number of hours that would be required to complete the specific tasks by the hourly rate.

The majority of the legal budget has been allocated at 1/12th of the total line item budget per month. However, the Safe Yield Recalculation (6907.42) legal budget of \$103,300 was not allocated on a 1/12th monthly formula, but budgeted to occur within the first half of the fiscal year. A significant portion of the Personnel Matters legal budget (6073) was also not allocated on a 1/12th monthly formula, but budgeted to occur within the months of March and April 2016. The budget amount of \$45,700 was allocated in total for those months for the CalPERS/Alvarez Administrative Hearing scheduled for April 11-April 13, 2016.

The BHFS legal services are categorized into three distinct expense categories. The first category is the Watermaster Legal Services (account series 6070's) which captures General and Administrative type Watermaster legal expenses. The second category (accounts 6275, 6375, 8375, 8475 and 8575) captures the legal services directly related to the Pools, Advisory Committee and Board meetings and their specific business activities. The third category (6907's) captures the BHFS legal services directly related to OBMP/Project activities.

WATERMASTER ADMINISTRATIVE LEGAL SERVICES:

Overall, the Watermaster Administrative Legal Services expense (6070's), as of December 31, 2015, was \$19,682 or 17.3% above the budgeted amount of \$113,875. The specific items within the Administrative Legal Services expenses (6070's) which were under budget were the expenses for Court Coordination (6071) under budget by \$12,524 or 61.2%; Annotated Judgment (6072) under budget by \$20,075 or 100.0%; Interagency Issues (6074) under budget by \$15,300 or 100.0%; and the Party Status Maintenance (6077) under budget by \$13,891 or 96.8%. The specific items within the Administrative Legal Services expenses (6070's) which were over budget were the expenses for Personnel Matters (6073) over budget by \$838 or 3.2%; Miscellaneous (6078) over budget by \$77,554 or 438.8%; and CCG Motion (6078.12) over budget by \$3,080 or 100.0%.

Personnel Matters:

As reported during the previous monthly meetings, Watermaster's legal counsel filed an appeal with CalPERS regarding CalPERS original determination (from February 2013) which rejected the base salary of the former CEO, Desi Alvarez, with regards to his retirement pension benefit. There have been several filings of appeal and we are awaiting CalPERS determination. On December 9, 2013 CalPERS notified the attorneys of record that the CalPERS Legal Office received the case on November 22, 2013 and we would be notified when the case has been assigned to an attorney who will represent CalPERS regarding the appeal. On February 27, 2014 the case was assigned to Wesley E. Kennedy, Senior Staff Attorney for CalPERS. On July 17, 2014 a document request from CalPERS was received by Watermaster related to the pending case. On August 22, 2014 the specific documents were provided to CalPERS. On September 9, 2014 Watermaster received the Notice of Hearing from CalPERS and the hearing has been scheduled for March 11-13, 2015 at the Glendale CalPERS Regional office. On October 1, 2014 Watermaster received from CalPERS a discovery request for Case No. 2013-1113. On December 31, 2014 Brownstein Hyatt Farber Schreck provided the information to Mr. Kennedy of CalPERS as requested on October 1, 2014. On January 16, 2015 a Prehearing conference along with a Settlement conference was conducted in Los Angeles. On March 2, 2015 a Motion to Continue was granted and the new Administrative Hearing (OAH Case No. 2014080757) was scheduled for November 16-18, 2015 at the Glendale CalPERS Regional Office. On September 28, 2015 the attorney for Mr. Alvarez (Mr. Jensen), at the suggestion of Mr. Kennedy, requested a short continuance of the OAH hearing because CalPERS has scheduled a full Board hearing on the claims of one of Mr. Jensen's clients for February 11,

2016 which is right in the middle of the three-day hearing scheduled for Mr. Alvarez's case. On October 9, 2015, an Order Granting Continuance; Notice of New Hearing Dates was provided by the State of California, Department of General Services, Office of Administrative Hearings. The administrative hearing was rescheduled for January 4-6, 2016 at the Glendale CalPERS Regional Office. On October 14, 2015 a Notice of Case Reassignment was received from the CalPERS providing notice that OAH Case No. 2014080757 has been reassigned from attorney Wesley Kennedy to Preet Kaur, Staff Attorney. On November 20, 2015, a Request for Continuance was issued from CalPERS to reschedule the hearing to either the period of April 4 through April 6, 2016 or April 11 through April 15, 2016. On December 11, 2015, an Order Granting Continuance; Notice of New Hearing Dates was issued from the State of California, Department of General Services, Office of Administrative Hearings to reschedule the hearing to April 11-13, 2016.

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, 8375, 8475 and 8575). Overall, this category of legal expenses as of December 31, 2015 was \$44,033 or 40.3% below the budgeted amount of \$109,383. 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. The Watermaster parties agreed that during the month of December 2015, the three Pools, the Advisory Committee and the Watermaster Board meetings would not be held, adding additional cost savings to this category.

OBMP LEGAL SERVICES:

The OBMP legal expenses (accounts 6907.31 through 6907.90) were above the budget for the month. As of December 31, 2015 the category of OBMP legal expenses were \$136,848 or 48.7% above the budgeted amount of \$280,950. The majority of expenses within this OBMP category were under budget (Y-T-D), however, the BHFS Safe Yield Redetermination and Reset legal expenses (6907.42) continue to increase and exceed the monthly budget. As of December 31, 2015, the Safe Yield Redetermination and Reset legal expenses were \$301,933 or 292.3% above the budgeted amount of \$103,300. It should be noted that the 12-month annual legal budget for the Safe Yield Redetermination and Reset category was approved at an amount of \$103,300 and anticipated to be allocated within the first six months of the FY 2015/16 (July 2015 – December 2015). The approved BHFS legal budget anticipated 230 labor hours for consolidated legal staff time with regards to the Safe Yield Redetermination and Reset effort.

The table listed below summarizes the Brownstein Hyatt Farber Schreck (BHFS) expenses as of December 31, 2015 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 '15 - Dec '15 Actual	Jul '15 - Dec '15 Budget	\$ Over Budget	% of Budget	FY 2015/16 Annual Budget
6070 · Watermaster Legal Services					
6071 · BHFS Legal - Court Coordination	7,950.60	20,475.00	-12,524.40	38.83%	40,950.00
6072 · BHFS Legal - Annotated Judgment	0.00	20,075.00	-20,075.00	0.0%	40,150.00
6073 · BHFS Legal - Personnel Matters	26,838.45	28,000.00	838.45	103.23%	80,700.00
6074 · BHFS Legal - Interagency Issues	0.00	15,300.00	-15,300.00	0.0%	30,600.00
6076 · BHFS Legal - Storage Issues	0.00	0.00	0.00	0.0%	0.00
6077 · BHFS Legal - Party Status Maintenance	459.00	14,350.00	-13,891.00	3.2%	28,700.00
6078 · BHFS Legal - Miscellaneous (Note 1)	95,229.20	17,675.00	77,554.20	538.78%	35,350.00
6078.12 · BHFS Legal - CCG Motion	3,079.82	0.00	3,079.82	100.0%	0.00
Total 6070 · Watermaster Legal Services	133,557.07	113,875.00	19,682.07	117.28%	256,450.00
6275 · BHFS Legal - Advisory Committee	8,748.68	10,200.00	-1,451.32	85.77%	20,400.00
6375 · BHFS Legal - Board Meeting	32,250.60	53,283.00	-21,032.40	60.53%	106,565.00
8375 · BHFS Legal - Appropriative Pool	8,365.84	15,300.00	-6,934.16	54.68%	30,600.00
8475 · BHFS Legal - Agricultural Pool	7,743.62	15,300.00	-7,556.38	50.61%	30,600.00
8575 · BHFS Legal - Non-Ag Pool	8,241.74	15,300.00	-7,058.26	53.87%	30,600.00
Total BHFS Legal Services	65,350.48	109,383.00	-44,032.52	59.75%	218,765.00
6907.3 · WM Legal Counsel					
6907.31 · Archibald South Plume	0.00	12,250.00	-12,250.00	0.0%	24,500.00
6907.32 · Chino Airport Plume	0.00	12,250.00	-12,250.00	0.0%	24,500.00
6907.33 · Desalter/Hydraulic Control	0.00	24,450.00	-24,450.00	0.0%	48,900.00
6907.34 · Santa Ana River Water Rights	869.85	12,650.00	-11,780.15	6.88%	25,300.00
6907.36 · Santa Ana River Habitat	783.00	9,850.00	-9,067.00	7.95%	19,700.00
6907.38 · Reg. Water Quality Cntrl Board	0.00	7,175.00	-7,175.00	0.0%	14,350.00
6907.39 · Recharge Master Plan	4,671.90	34,050.00	-29,378.10	13.72%	68,100.00
6907.40 · Storage Agreements	535.50	43,050.00	-42,514.50	1.24%	86,100.00
6907.41 · Prado Basin Habitat Sustainability	5,704.65	7,175.00	-1,470.35	79.51%	14,350.00
6907.42 · Safe Yield Recalculation	405,233.14	103,300.00	301,933.14	392.29%	103,300.00
6907.90 · WM Legal Counsel - Unanticipated	0.00	14,750.00	-14,750.00	0.0%	29,500.00
Total 6907 · WM Legal Counsel	417,798.04	280,950.00	136,848.04	148.71%	458,600.00
Total Brownstein, Hyatt, Farber, Schreck Costs	616,705.59	504,208.00	112,497.59	122.31%	933,815.00

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, 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; (7) Review transfer documents; (8) Land Subsidence Committee reports/meetings; (9) Review process and criteria for re-appointment of the Watermaster 9 member Board; (10) Review current California issued drought regulations; (11) Review and comment on Waters of the United States rule making; (12) Review and draft documents for basin boundary regulations; and (13) Miscellaneous legal research on current and pending issues.

LEGAL EXPENSE PROJECTION AS OF JUNE 30, 2016:

The Brownstein Hyatt Farber Schreck legal services expense projection as of June 30, 2016 was developed by first using the actual expenses for the period July 1, 2015 through December 31 of \$616,706; then projecting each individual legal activity for the upcoming six months of \$521,700; then combining both amounts to arrive at the estimated year-end legal expenses of \$1,138,406. Comparing the actual budget of \$933,815 to the projected year-end expenses of \$1,138,406 determines Watermaster could be \$204,591 or 21.9% over budget as of June 30, 2016. The chart listed below details the projection.

Actual Costs as of December 31, 2015:		\$	616,706
Add:			
Costs Anticipated for 2nd Half:			
BHFS Legal - Court Coordination (6071)	\$	7,500	
BHFS Legal - Annotated Judgment (6072)	\$	-	
BHFS Legal - Personnel Matters (6073)	\$	54,700	
BHFS Legal - Interagency Issues (6074)	\$	-	
BHFS Legal - Storage Issues (6076)	\$	15,000	
BHFS Legal - Party Status Maintenance (6077)	\$	450	
BHFS Legal - Miscellaneous (6078)	\$	63,000	
BHFS Legal - CCG Motion (6078.12)	\$	-	
BHFS Legal - Advisory Committee (6275)	\$	11,400	
BHFS Legal - Board Meeting (6375)	\$	38,700	
BHFS Legal - Appropriative Pool (8375)	\$	11,400	
BHFS Legal - Agricultural Pool (8475)	\$	11,400	
BHFS Legal - Non-Agricultural Pool (8575)	\$	11,400	
Archibald South Plums (6907.31)	\$	-	
Chino Airport Plume (6907.32)	\$	-	
Desalter/Hydraulic Control (6907.33)	\$	-	
Santa Ana River Water Rights (6907.34)	\$	900	
Santa Ana River Habitat (6907.36)	\$	800	
Reg. Water Quality Control Board (6907.38)	\$	-	
Recharge Master Plan (6907.39)	\$	6,000	
Storage Agreements (6907.40)	\$	43,050	
Prado Basin Habitat Sustainability (6907.41)	\$	6,000	
Safe Yield Recalculation (6907.42)	\$	225,000	
SGMA Compliance (6907.44) *	\$	15,000	
WM Legal Counsel - Unanticipated (6907.90)	\$	-	\$ 521,700
Projected Legal Expenses at June 30, 2016:			<u>\$ 1,138,406</u>
Projected Legal Expenses at June 30, 2016:		\$	1,138,406
Original Approved Budget FY 2015/16:		\$	933,815
Over/(Under) Approved Budget at June 30, 2016:		\$	<u>204,591</u>

* New G/L account as of January 1, 2016

The budget overage of \$204,591 could be funded by using one or more of the following sources: (1) the Administrative Expense Reserves are currently established at \$189,102 which is based upon 10% of the approved Administrative FY 2015/16 budget; (2) the OBMP Expense Reserves are currently established at \$715,363 which is based upon 15% of the approved OBMP FY 2015/16 budget; or (3) a Budget Amendment for \$204,591 which would increase the overall FY 2015/16 budget by \$204,591 and would be reflected in the upcoming FY 2015/16 Assessment invoicing which will be issued upon completion of the Safe Yield Redetermination and Reset process.

CHINO BASIN WATERMASTER ASSESSMENT CALCULATION FISCAL YEAR 2015/16 INCLUDES "10% ADMINISTRATIVE AND 15% OBMP/PROJECT OPERATING RESERVES"									
	FY 2014/15 BUDGET	FY 2015/16 BUDGET	ASSESSMENT	APPROPRIATIVE POOL		AGRICULTURAL POOL		NON-AG POOL	
PRODUCTION BASIS									
2013/14 Production & Exchanges in Acre-Feet (Actuals)			138,351,406	100,165,551	72.399%	33,638,883	24.314%	4,546,972	3.287%
2014/15 Production & Exchanges in Acre-Feet (Actuals)			138,351,406	100,165,551	72.399%	33,638,883	24.314%	4,546,972	3.287%
BUDGET									
Administration, Advisory Committee & Watermaster Board ¹	\$1,832,923	\$1,891,019	\$1,891,019	\$1,369,086		\$459,784		\$62,149	
OBMP & Implementation Projects ²	3,949,719	4,769,087	4,769,087	3,452,789		1,159,560			156,738
General Admin & OBMP Assessments	\$3,782,642	\$6,660,106	6,660,106	1,369,086	3,452,789	459,784	1,159,560	62,149	156,738
TOTAL BUDGET			6,660,106	1,369,086	3,452,789	459,784	1,159,560	62,149	156,738
Less Budgeted Interest Income	(25,800)	(22,050)	(22,050)		(15,964)		(5,361)		(725)
Contributions from Outside Agencies	(155,331)	(157,941)	(157,941)		(114,348)		(38,402)		(5,191)
CASH DEMAND	5,601,511	6,480,116	6,480,115	1,369,086	3,322,477	459,784	1,115,797	62,149	150,822
OPERATING RESERVE									
Administrative (10%)	183,292	189,102	\$189,102	\$136,909		\$45,978		\$6,215	
OBMP (15%)	592,458	715,363	715,363		517,918		173,934		23,511
Less: Cash On Hand Utilized for Assessments ²	(775,750)	(904,465)	(904,465)	(185,926)	(468,901)	(62,440)	(157,472)	(8,440)	(21,286)
FUNDS REQUIRED TO BE ASSESSED	\$5,601,511	\$6,480,116	\$6,480,116	\$1,320,069	\$3,371,495	\$443,322	\$1,132,259	\$59,924	\$153,047
Current Year Assessments									
General Administration/OBMP Assessments (Minimum \$5.00 Per Producer)	A		Per Acre-Foot	\$13.18	\$33.66	\$13.18	\$33.66	\$13.18	\$33.66
Grand Total				\$46.84		\$46.84		\$46.84	
Prior Year Assessments, (Actuals) Information Only									
	B		Per Acre-Foot	\$12.80	\$27.69	\$12.80	\$27.69	\$12.80	\$27.69
Grand Total				\$40.49		\$40.49		\$40.49	
Variance Between Proposed Assessments and Prior Year Assessments									
	A - B			\$0.38	\$5.97	\$0.38	\$5.97	\$0.38	\$5.97
Grand Total				\$6.35		\$6.35		\$6.35	
Estimated Assessment as of "Approved" Budget May 22, 2014, Information Only									
				\$13.48	\$28.40	\$13.48	\$28.40	\$13.48	\$28.40
Grand Total				\$41.88		\$41.88		\$41.88	

¹ Total costs are allocated to Pools by actual production percentages. Does not include Recharge Debt Payment, Recharge Improvement Projects or Replenishment Water purchases.
² June 30th fund balance (estimated) less funds required for Operating Reserves, Agricultural Pool Reserves, Carryover replenishment obligations, and SB 22 funds.

"CARRY OVER" FUNDING:

As of December 31, 2015, the total (YTD) amount remaining of the "Carried Over" funding is \$1,486,063.40 (\$1,872,937.85 - \$386,874.45 = \$1,486,063.40). The following details are provided:

			GL Account		
Printing - Annual Report	\$ 5,000.00	A	6045	FY 2014/15	ADM
Rauch Communication Consultants - Annual Report	\$ 15,000.00	B	6061.3	FY 2014/15	ADM
Ground Level Monitoring - Engineering	\$ 9,813.00	C	7107.2 ¹	FY 2014/15	ENG
Ground Level - Contracted Services	\$ 34,770.00	D	7107.6 ¹	FY 2014/15	ENG
Chino Hills ASR Project	\$ 29,285.99	E	7107.62	FY 2014/15	ASR
Hydraulic Control Engineering - PBHSP	\$ 12,127.00	F	7108.31 ²	FY 2014/15	ENG
Hydraulic Control Monitoring Lab Services - PBHSP	\$ 35,986.00	G	7108.41 ²	FY 2014/15	ENG
Hydraulic Control Monitoring - Adaptive Mgmt Plan	\$ 33,000.00	H	7108.32 ³	FY 2014/15	ENG
Jurupa Pumping Station (TO #5)	\$ 37,981.33	I	7209.1	FY 2014/15	PROJ
Wineville Basin Proof of Concept (TO #6)	\$ 35,397.53	J	7209.2	FY 2014/15	PROJ
PE 6&7 - Engineering Services	\$ 11,000.00	K	7502 ⁴	FY 2014/15	ENG
Hickory Basin Recharge Improvement Project	\$ 3,877.00	L	7690.3	FY 2014/15	PROJ
San Sevaine Recharge Improvement Project (TO #8)	\$ 475,000.00	M	7690.4	FY 2014/15	PROJ
CB20 Turnout Noise Abatement Project	\$ 80,000.00	N	7690.5	FY 2014/15	PROJ
GWR SCADA Upgrades (TO #4)	\$ 383,200.00	O	7690.61	FY 2014/15	PROJ
SCADA Communication Upgrades (TO #3)	\$ 547,500.00	P	7690.62	FY 2014/15	PROJ
Upper Santa Ana River HCP (TO #7)	\$ 75,000.00	Q	7690.7	FY 2014/15	PROJ
Lower Day Basin RMPU (TO #2)	\$ 49,000.00	R	7690.8	FY 2014/15	PROJ
Total Balance, June 30, 2015	\$ 1,872,937.85				
"Carried Over" Balance, July 1, 2015	\$ 1,872,937.85				
Less: (Invoices Received To Date FY 2015/16)					
Rauch Communication Consultants - Annual Report	\$ (15,000.00)	B	6061.3	FY 2014/15	ADM
Hydraulic Control Monitoring - Adaptive Mgmt Plan	\$ (33,000.00)	H	7108.32 ³	FY 2014/15	ENG
San Sevaine Recharge Improvement Project (TO #8)	\$ (111,118.08)	M	7690.4	FY 2014/15	PROJ
CB20 Turnout Noise Abatement Project	\$ (25,207.74)	N	7690.5	FY 2014/15	PROJ
GWR SCADA Upgrades (TO #4)	\$ (56,514.47)	O	7690.61	FY 2014/15	PROJ
SCADA Communication Upgrades (TO #3)	\$ (97,034.16)	P	7690.62	FY 2014/15	PROJ
Lower Day Basin RMPU (TO #2)	\$ (49,000.00)	R	7690.8	FY 2014/15	PROJ
Updated Balance as of December 31, 2015	\$ 1,486,063.40				

¹ Long-Term Pumping Test

² Prado Basin Habitat Sustainability Program monitoring program

³ Adaptive Management Plan

⁴ Upload GeoTracker and EnviroStor sites

BACKGROUND OF "CARRY OVER" FUNDING

Once the FY 2014/15 period as of June 30, 2015 was closed, the amount of unfinished capital projects and related engineering costs was calculated and the "Carry Over" funding amount was added to the current FY 2015/16 budget. The Total "Carry Over" funding amount of \$1,872,937.852 was posted to the accounts as of December 31, 2015. The total amount of \$1,872,937.85 consisted of \$1,686,955.86 from Capital Improvement Projects; \$136,696.00 from Engineering Services; \$29,285.99 from the Chino Hills ASR Project; and \$20,000.00 from the Administration budget for completion of the Annual Reports.

Several projects were completed during FY 2014/15 and have remaining funds available to be either (1) transferred to other project(s) that need additional funding, (2) keep amounts on reserve for future Capital

Improvement Projects, or (3) refunded back to the Appropriative Pool when the Assessment package is invoiced. The funding amounts available are as follows: Jurupa Pumping Station in the amount of \$37,981.33 (account 7209.1); Wineville Basin Proof of Concept in the amount of \$35,397.53 (account 7209.2); and Hickory Basin Recharge Improvement Project in the amount of \$3,877.00 (account 7690.3). The total amount available is \$77,255.86 ($\$37,981.33 + \$35,397.53 + \$3,877.00 = \$77,255.86$).

The San Sevaine Recharge Improvement Project-Task Order #8 has a remaining funded budget balance of \$475,000 in account (7690.4); the CB 20 Turnout project has a remaining funded budget balance of \$80,000 in account (7690.5); the GWR SCADA Upgrades-Task Order #4 has a remaining funded budget balance of \$383,200 in account (7960.61); the SCADA Communication Upgrades-Task Order #3 has a remaining funded budget balance of \$547,500 in account (7690.62); the Upper Santa Ana River HCP-Task Order #7 has a remaining funded balance of \$75,000 in account (7690.7); and the Lower Day Basin RMPU-Task Order #2 has a remaining funded budget balance of \$49,000 in account (7690.8). The total funded budget for these combined projects is \$1,609,700.

Unspent funds related to ongoing projects and associated activities from the Engineering Services budget from FY 2014/15 in several accounts totaling \$136,696 were "Carried Over" into the current FY 2015/16 budget. These funds were from the Ground Level Monitoring-Engineering (7107.2) in the amount of \$9,813; Ground Level Monitoring-Contracted Services (7107.6) in the amount of \$34,770; Hydraulic Control Monitoring-Engineering-PBHSP (7108.31) in the amount of \$12,127; Hydraulic Control Monitoring-Lab Services-PBHSP (7108.41) in the amount of \$35,986; Hydraulic Control Monitoring-Adaptive Management Plan (7108.7) in the amount of \$33,000; and Cooperative Efforts/Salt Management Engineering Services (7502) in the amount of \$11,000.

The ongoing Chino Hills ASR Project continues into FY 2015/16 and previous years funding of \$29,285.99 has been carried over into account (7107.62).

Unspent funds of \$20,000 related to the ongoing Annual Reports for development, production, and printing from the Administrative budget from FY 2014/15 from two accounts were "Carried Over" into the current FY 2015/16 budget. These funds were from the Printing-Annual Report (6045) in the amount of \$5,000; and Rauch Communication Consultants-Annual Report (6061.3) in the amount of \$15,000.

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, 2016, any remaining balances of the FY 2015/16 and prior years funding (if any), along with any new FY 2015/16 expenses, will then be "Carried Over" into the FY 2016/17 budget.

CASH FLOW PROJECTION:

Normally, Watermaster would issue the Assessment invoices during the month of November, collect the payments during the month of December, and this receipt of funds would provide the cash flow to pay the expenses of the Watermaster for the next twelve months. Due to the Safe Yield Reset process this year, and the effects that it had on the Assessment Package, production of the Assessment Package was delayed. The Assessment Package will now not be produced until the Court has considered the Safe Yield Reset Agreement, which has been rescheduled for April 2016.

On November 19, 2015 the Watermaster Board approved staff's recommendation for collection of an interim partial assessment based upon fifty percent of last year's Appropriative Pool Admin and OBMP assessments, including those paid on behalf of the Agricultural Pool, in addition to fifty percent of last year's Recharge Debt and Recharge Improvement assessments, and to collect fifty percent of last year's Non-Ag Pool Admin and OBMP assessments. The balance, accounting for the interim assessment, would be collected when the Assessment Package is produced, following consideration of the Safe Yield Reset Agreement by the Court. Note that if a Party had an amount due of less than \$500 (including special assessments), collection was deferred until the final assessment invoice later in the fiscal year.

Included as part of the interim assessment invoicing, the Non-Agricultural Pool had a Special Assessment of \$60,000 as approved during a Confidential Session on November 12, 2015. The \$60,000 was allocated to the Non-Agricultural Pool members based upon the tentative actual production numbers from 2014/15 and will be adjusted once all Water Activity Reports (WARs) have been received.

The Watermaster staff issued and emailed the "interim" Assessment invoices on Thursday, November 19, 2015. The Assessment invoices were due 30 days from invoice date, and all "interim" Assessment invoice payments have been received.

The "interim" Assessment invoices only collected funding for a partial year. To estimate how long Watermaster could continue to operate without additional new funding, the following chart is provided. Please note the data is provided as of January 31, 2016:

	<u>Jan. 31, 2016</u>
Petty Cash	\$ 500
BofA Checking Account	\$ 73,377
LAIIF Account	<u>\$ 8,988,927</u>
Estimated Cash Balances	\$ 9,062,804
Accounts Receivable as of Jan. 31, 2016	\$ 230
Accounts Payable as of Jan. 31, 2016	\$ (399,276)
Estimated Cash as of Jan. 31, 2016:	<u>\$ 8,663,758</u>
Funds Currently Allocated:	
Ag Pool	\$ (481,968)
Non-Ag Pool	\$ (88,455)
Groundwater Replenishment	\$ (1,390,482)
SB 222 Funds	\$ (158,251)
"Carried Over" Expenses	<u>\$ (1,486,063)</u>
Subtotal Allocated Funds:	<u>\$ (3,605,219)</u>
Subtotal Available Cash:	<u>\$ 5,058,539</u>
Available Cash For Operations:	\$ 5,058,539
Estimated Monthly Expenses:	\$ 629,848
Estimated Number of Months:	8.0
Estimated Cash Balance = \$0	Sep. 30, 2016

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CHINO BASIN WATERMASTER

IV. INFORMATION

1. Cash Disbursements for January 2016

CHINO BASIN WATERMASTER
Cash Disbursements For The Month of
January 2016

For Informational Purposes Only

Type	Date	Num	Name	Memo	Account	Paid Amount	
Bill Pmt -Check	01/08/2016	ACH 010816	PUBLIC EMPLOYEES' RETIREMENT SYSTEM	Payor #3493	1012 · Bank of America Gen'l Ckg		
General Journal	12/31/2015	12/31/2015	PUBLIC EMPLOYEES' RETIREMENT SYSTEM	CalPERS Retirement for 12/20/15-01/02/16	2000 · Accounts Payable	6,045.30	
TOTAL						6,045.30	
Bill Pmt -Check	01/12/2016	19117	CHARTER COMMUNICATIONS	8245100651455350	1012 · Bank of America Gen'l Ckg		
Bill	01/01/2016	8245100651455350		1/06/16-2/05/16	6053 · Internet Expense	68.97	
TOTAL						68.97	
Bill Pmt -Check	01/12/2016	19118	COSTCO WHOLESALE	7003-7309-1000-2744	1012 · Bank of America Gen'l Ckg		
Bill	12/31/2015	7003730910002744		Miscellaneous office supplies	6031.7 · Other Office Supplies	34.99	
				Toner for various office printers	6031.7 · Other Office Supplies	657.89	
TOTAL						692.88	
Bill Pmt -Check	01/12/2016	19119	DE BOOM, NATHAN	Ag Pool Member Compensation	1012 · Bank of America Gen'l Ckg		
Bill	12/08/2015	12/08 Ag Pool Mtg		12/08/15 Ag Pool Meeting held at MPC	8470 · Ag Meeting Attend -Special	125.00	
TOTAL						125.00	
P163	Bill Pmt -Check	01/12/2016	19120	DE HAAN, HENRY	Ag Pool Member Compensation	1012 · Bank of America Gen'l Ckg	
	Bill	12/08/2015	12/08 Ag Pool Mtg		Ag Pool Member Compensation	8411 · Compensation	25.00
					12/08/15 Ag Pool Meeting held at MPC	8470 · Ag Meeting Attend -Special	100.00
TOTAL						125.00	
Bill Pmt -Check	01/12/2016	19121	DIRECTV	019447404	1012 · Bank of America Gen'l Ckg		
Bill	12/31/2015	019447404		12/19/15 - 1/18/16	6031.7 · Other Office Supplies	110.98	
TOTAL						110.98	
Bill Pmt -Check	01/12/2016	19122	EGOSCUE LAW GROUP	11113	1012 · Bank of America Gen'l Ckg		
Bill	12/31/2015	11113		Ag Pool Legal Services - December 2015	8467 · Ag Legal & Technical Services	15,685.00	
TOTAL						15,685.00	
Bill Pmt -Check	01/12/2016	19123	FEENSTRA, BOB	Ag Pool Member Compensation	1012 · Bank of America Gen'l Ckg		
Bill	12/08/2015	12/08 Ag Pool Mtg		12/08/15 Ag Pool Special Meeting held at MPC	8470 · Ag Meeting Attend -Special	125.00	
TOTAL						125.00	
Bill Pmt -Check	01/12/2016	19124	HALL, PETE*	Ag Pool Member Compensation	1012 · Bank of America Gen'l Ckg		
Bill	12/08/2015	12/08 Ag Pool Mtg		12/08/15 Ag Pool Meeting held at MPC	8470 · Ag Meeting Attend -Special	125.00	
TOTAL						125.00	
Bill Pmt -Check	01/12/2016	19125	HOGAN LOVELLS	2952391	1012 · Bank of America Gen'l Ckg		

CHINO BASIN WATERMASTER
Cash Disbursements For The Month of
January 2016

For Informational Purposes Only

Type	Date	Num	Name	Memo	Account	Paid Amount
Bill	12/01/2015	2952391		Non-Ag Pool Legal Services - November 2015	8567 · Non-Ag Legal Service	2,761.37
TOTAL						2,761.37
Bill Pmt -Check	01/12/2016	19126	HUITSING, JOHN	Ag Pool Member Compensation	1012 · Bank of America Gen'l Ckg	
Bill	12/08/2015	12/08 Ag Pool Mtg		12/08/15 Ag Pool Meeting held at MPC	8470 · Ag Meeting Attend -Special	125.00
TOTAL						125.00
Bill Pmt -Check	01/12/2016	19127	KOOPMAN, GENE	Ag Pool Member Meeting Compensation	1012 · Bank of America Gen'l Ckg	
Bill	12/08/2015	12/08 Ag Pool Mtg		12/08/15 Ag Pool Meeting held at MPC	8470 · Ag Meeting Attend -Special	125.00
TOTAL						125.00
Bill Pmt -Check	01/12/2016	19128	OFFICE TEAM		1012 · Bank of America Gen'l Ckg	
Bill	12/18/2015	44709042		Week ending 12/18/15	6017.2 · Office Specialist Services	1,108.00
Bill	12/28/2015	44714703		Week ending 12/25/15	6017.2 · Office Specialist Services	443.20
TOTAL						1,551.20
Bill Pmt -Check	01/12/2016	19129	PARK PLACE COMPUTER SOLUTIONS, INC.	506	1012 · Bank of America Gen'l Ckg	
Bill	12/31/2015	506		IT Consulting Services - December 2015	6052.1 · Park Place Comp Solutn	1,950.00
TOTAL						1,950.00
Bill Pmt -Check	01/12/2016	19130	PAYCHEX	2015122400	1012 · Bank of America Gen'l Ckg	
Bill	12/31/2015	2015122400		December 2015	6012 · Payroll Services	260.90
TOTAL						260.90
Bill Pmt -Check	01/12/2016	19131	PIERSON, JEFFREY	Ag Pool Member Compensation	1012 · Bank of America Gen'l Ckg	
Bill	12/08/2015	12/08 Ag Pool Mtg		12/08/15 Ag Pool Meeting held at MPC	8470 · Ag Meeting Attend -Special	125.00
TOTAL						125.00
Bill Pmt -Check	01/12/2016	19132	PUBLIC EMPLOYEES' RETIREMENT SYSTEM	Payor #3493	1012 · Bank of America Gen'l Ckg	
Bill	01/01/2016	100000014683177		Annual unfunded accrued liability	60180 · Employers PERS Expense	3,077.00
TOTAL						3,077.00
Bill Pmt -Check	01/12/2016	19133	PURCHASE POWER	8000909000168851	1012 · Bank of America Gen'l Ckg	
Bill	12/31/2015	8000909000168851		New postage machine installed on 12/10/15	6042 · Postage - General	160.84
TOTAL						160.84
Bill Pmt -Check	01/12/2016	19134	READY REFRESH BY NESTLE	0023230253	1012 · Bank of America Gen'l Ckg	
Bill	12/31/2015	0023230253		Office Water Bottle - December 2015	6031.7 · Other Office Supplies	71.89
TOTAL						71.89

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CHINO BASIN WATERMASTER
Cash Disbursements For The Month of
January 2016

For Informational Purposes Only

Type	Date	Num	Name	Memo	Account	Paid Amount
Bill Pmt -Check	01/12/2016	19135	RR FRANCHISING, INC.	15732	1012 · Bank of America Gen'l Ckg	
Bill	01/04/2016	15732		Janitorial Services - January 2016	6024 · Building Repair & Maintenance	740.00
TOTAL						740.00
Bill Pmt -Check	01/12/2016	19136	SANTA ANA RIVER WATER COMPANY		1012 · Bank of America Gen'l Ckg	
Bill	12/04/2015	12/04 Admin Mtg		12/04/15 Admin. Meeting - Arnold Rodriguez	6311 · Board Member Compensation	125.00
Bill	12/21/2015	12/21 Admin Mtg		12/21/15 Admin. Meeting - Arnold Rodriguez	6311 · Board Member Compensation	125.00
TOTAL						250.00
Bill Pmt -Check	01/12/2016	19137	SOUTHERN CALIFORNIA WATER COMMITTEE	26770	1012 · Bank of America Gen'l Ckg	
Bill	01/04/2016	26770		Stormwater Task Force	6111 · Membership Dues	1,000.00
TOTAL						1,000.00
Bill Pmt -Check	01/12/2016	19138	STANDARD INSURANCE CO.	Policy # 00-649299-0009	1012 · Bank of America Gen'l Ckg	
Bill	12/31/2015	006492990009		Policy # 00-649299-0009	60191 · Life & Disab.Ins Benefits	689.35
TOTAL						689.35
Bill Pmt -Check	01/12/2016	19139	STAPLES BUSINESS ADVANTAGE		1012 · Bank of America Gen'l Ckg	
Bill	12/31/2015	8037294210		Miscellaneous office supplies	6031.7 · Other Office Supplies	242.19
Bill	12/31/2015	8037202444		Toner for office printers	6031.7 · Other Office Supplies	125.67
TOTAL						367.86
Bill Pmt -Check	01/12/2016	19140	STATE COMPENSATION INSURANCE FUND	1970970-15	1012 · Bank of America Gen'l Ckg	
Bill	01/01/2016	1970970-15		1970970-15	60183 · Worker's Comp Insurance	961.58
TOTAL						961.58
Bill Pmt -Check	01/12/2016	19141	UNION 76	7076-2245-3035-5049	1012 · Bank of America Gen'l Ckg	
Bill	12/31/2015	7076224530355049		Fuel - December 2015	6175 · Vehicle Fuel	69.20
TOTAL						69.20
Bill Pmt -Check	01/12/2016	19142	UNITED HEALTHCARE	0039374721	1012 · Bank of America Gen'l Ckg	
Bill	12/31/2015	0039374721		Dental Insurance Premium - January 2016	60182.2 · Dental & Vision Ins	712.68
TOTAL						712.68
Bill Pmt -Check	01/12/2016	19143	UNITED PARCEL SERVICE	2x81x0	1012 · Bank of America Gen'l Ckg	
Bill	12/31/2015	2x81x0		Ship package, schedule a pickup	6042 · Postage - General	25.10
TOTAL						25.10
Bill Pmt -Check	01/12/2016	19144	VANDEN HEUVEL, GEOFFREY	Board Member Compensation	1012 · Bank of America Gen'l Ckg	
Bill	12/08/2015	12/08 Ag Pool Mtg		12/08/15 Ag Pool Special Meeting at MPC	6311 · Board Member Compensation	125.00

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CHINO BASIN WATERMASTER
Cash Disbursements For The Month of
January 2016

For Informational Purposes Only

	<u>Type</u>	<u>Date</u>	<u>Num</u>	<u>Name</u>	<u>Memo</u>	<u>Account</u>	<u>Paid Amount</u>
TOTAL							125.00
	Bill Pmt -Check	01/12/2016	19145	VANDEN HEUVEL, ROB	Ag Pool Member Compensation	1012 · Bank of America Gen'l Ckg	
	Bill	12/08/2015	12/08 Ag Pool Mtg		12/08/15 Ag Pool Meeting held at MPC	8470 · Ag Meeting Attend -Special	125.00
TOTAL							125.00
	Bill Pmt -Check	01/12/2016	19146	VISION SERVICE PLAN	00-101789-0001	1012 · Bank of America Gen'l Ckg	
	Bill	12/31/2015	00-101789-0001		Vision Insurance Premium - January 2016	60182.2 · Dental & Vision Ins	73.46
TOTAL							73.46
	Bill Pmt -Check	01/12/2016	19147	YUKON DISPOSAL SERVICE	08-K2 213849	1012 · Bank of America Gen'l Ckg	
	Bill	01/01/2016	08-k2 213849		Disposal Service - January 2016	6024 · Building Repair & Maintenance	111.57
TOTAL							111.57
	Bill Pmt -Check	01/13/2016	19148	WILDERMUTH ENVIRONMENTAL INC		1012 · Bank of America Gen'l Ckg	
	Bill	11/30/2015	2015348		2015348	6906.31 · OBMP-Pool, Adv. Board Mtgs	8,844.65
	Bill	11/30/2015	2015349		2015349	6906.32 · OBMP-Other General Meetings	215.00
	Bill	11/30/2015	2015350		2015350	6906.71 · OBMP-Data Req.-CBWM Staff	19,295.50
	Bill	11/30/2015	2015351		2015351	6906.72 · OBMP-Data Req.-Non CBWM Staff	333.75
	Bill	11/30/2015	2015352		2015352	6906.23 · SGMA Reporting Requirements	608.75
	Bill	11/30/2015	2015353		2015353	6906 · OBMP Engineering Services	3,511.25
	Bill	11/30/2015	2015354		2015354	6906.1 · OBMP-Watermaster Model Update	41,475.30
	Bill	11/30/2015	2015355		2015355	7103.3 · Grdwtr Qual-Engineering	18,250.60
	Bill	11/30/2015	2015356		2015356	7104.3 · Grdwtr Level-Engineering	11,891.06
	Bill	11/30/2015	2015357		2015357	7107.2 · Grd Level-Engineering	4,258.40
					Zumasys	7107.6 · Grd Level-Contract Svcs	68.00
	Bill	11/30/2015	2015358		2015358	7108.3 · Hydraulic Control-Engineering	186.25
	Bill	11/30/2015	2015359		2015359	7108.3 · Hydraulic Control-Engineering	316.90
	Bill	11/30/2015	2015360		2015360	7108.31 · Hydraulic Control - PBHSP	5,645.65
	Bill	11/30/2015	2015361		2015361	7109.3 · Recharge & Well - Engineering	1,564.25
	Bill	11/30/2015	2015362		2015362	7202.2 · Engineering Svc	8,102.12
	Bill	11/30/2015	2015363		2015363	7402 · PE4-Engineering	866.25
	Bill	11/30/2015	2015364		2015364	7402.10 · PE4 - MZ1 Pomona Project	9,767.28
	Bill	11/30/2015	2015365		2015365	7502 · PE6&7-Engineering	1,550.00
	Bill	11/30/2015	2015366		2015366	6906.73 · OBMP-Safe Yield Recalculation	230.00
	Bill	11/30/2015	2015367		2015367	6910.1 · IRP Groundwater Modeling - WEI	1,084.00
TOTAL							138,064.96
	General Journal	01/16/2016	01/16/2016	Payroll and Taxes for 01/03/16-01/16/16	Payroll and Taxes for 01/03/16-01/16/16	1012 · Bank of America Gen'l Ckg	
					Direct Deposits for 01/03/16-01/16/16	1012 · Bank of America Gen'l Ckg	23,662.84

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CHINO BASIN WATERMASTER
Cash Disbursements For The Month of
January 2016

For Informational Purposes Only

<u>Type</u>	<u>Date</u>	<u>Num</u>	<u>Name</u>	<u>Memo</u>	<u>Account</u>	<u>Paid Amount</u>	
				Payroll Taxes for 01/03/16-01/16/16	1012 · Bank of America Gen'l Ckg	9,711.00	
			ICMA-RC	457(f) Employee Deductions for 01/03/16-01/16/16	1012 · Bank of America Gen'l Ckg	3,643.75	
			ICMA-RC	401(a) Employee Deductions for 01/03/16-01/16/16	1012 · Bank of America Gen'l Ckg	1,189.58	
TOTAL						<u>38,207.17</u>	
Bill Pmt -Check	01/20/2016	19149	APPLIED COMPUTER TECHNOLOGIES	2642	1012 · Bank of America Gen'l Ckg		
Bill	12/31/2015	2642		Database Consulting Services - December 2015	6052.2 · Applied Computer Technol	3,319.00	
TOTAL						<u>3,319.00</u>	
Bill Pmt -Check	01/20/2016	19150	CORELOGIC INFORMATION SOLUTIONS	81630319	1012 · Bank of America Gen'l Ckg		
Bill	12/31/2015	81630319		81630319	7103.7 · Grdwtr Qual-Computer Svc	62.50	
				81630319	7101.4 · Prod Monitor-Computer	62.50	
TOTAL						<u>125.00</u>	
Bill Pmt -Check	01/20/2016	19151	RAUCH COMMUNICATION CONSULTANTS, LLC Dec-1504		1012 · Bank of America Gen'l Ckg		
Bill	12/31/2015	Dec-1504		Annual Report work completed-November 30, 2015	6061.3 · Rauch	4,971.00	
TOTAL						<u>4,971.00</u>	
P167	Bill Pmt -Check	01/26/2016	19152	ACWA JOINT POWERS INSURANCE AUTHORITY	0389559	1012 · Bank of America Gen'l Ckg	
	Bill	01/13/2016	0389559	Prepayment - February 2016	1409 · Prepaid Life, BAD&D & LTD	131.09	
				January 2016	60191 · Life & Disab.Ins Benefits	126.66	
TOTAL						<u>257.75</u>	
Bill Pmt -Check	01/26/2016	19153	BANK OF AMERICA	XXXX-XXXX-XXXX-9341	1012 · Bank of America Gen'l Ckg		
Bill	12/31/2015	XXXX-XXXX-XXXX-9341		Overnight payment to Great America-copier lease	6043.1 · Ricoh Lease Fee	35.18	
				Lunch provided to staff for basin tour	7204 · Comp Recharge-Supplies	122.46	
				Phone case for AGM's work cell	6031.7 · Other Office Supplies	14.99	
				Registration-Joswiak-ACWA/JPIA HR training	6193.2 · Conference - Registration Fee	30.00	
				Registration-Wilson-01/28/16 IAAP mtg at CVWD	6193.2 · Conference - Registration Fee	10.00	
				Registration-Wilson-01/09/16 IAAP Adobe Acrobat	6193.2 · Conference - Registration Fee	35.00	
				Registration-Truong-01/09/16 IAAP Adobe Acrobat	6193.2 · Conference - Registration Fee	35.00	
				Purchase Annual Quickbooks Service Plan	6054 · Computer Software	1,799.00	
				Renewal-Go To Meeting Annual Plan-conferencing	6022 · Telephone	374.40	
				Hotel-PK-December 2015 ACWA Fall Conference	6191 · Conferences - General	723.79	
				Meal-PK-December 2015 ACWA Fall Conference	6191 · Conferences - General	42.80	
				Meal-PK-December 2015 ACWA Fall Conference	6191 · Conferences - General	27.68	
				Internet expense for GM-invoice lost in mail	6053 · Internet Expense	64.99	
				Holiday staff luncheon	6141.3 · Admin Meetings	302.03	
				Registration-PK-Feb. 8-9, 2016 SGMA Workshop	6193.2 · Conference - Registration Fee	430.00	
				PK meeting w/Poulsen, City of Pomona	8312 · Meeting Expenses	41.67	

CHINO BASIN WATERMASTER
Cash Disbursements For The Month of
January 2016

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Type	Date	Num	Name	Memo	Account	Paid Amount
				Flight-PK-Feb. 8-9, 2016 GRA SGMA Workshop	6191 · Conferences - General	148.46
				Early bird check-in for above flight	6191 · Conferences - General	25.00
				Registration-PK-Feb. 2016 AGWA-AGWT Conf.	6193.2 · Conference - Registration Fee	295.00
				PK meeting w/Zvirbulis, CVWD	8312 · Meeting Expenses	27.07
				PK meeting w/Bowcock	6312 · Meeting Expenses	20.87
				Flight-PK-Jan. 8, 2016 mtg w/Iris Priestaf	6909.1 · OBMP Meetings	459.46
				Early bird check-in for above flight	6909.1 · OBMP Meetings	25.00
				Hotel-Maurizio-December 2015 ACWA Fall Conf.	6191 · Conferences - General	423.94
				Lunch for field staff interviews	6141.3 · Admin Meetings	70.26
TOTAL						5,584.05
Bill Pmt -Check	01/26/2016	19154	CALPERS	1394905143	1012 · Bank of America Gen'l Ckg	
Bill	01/15/2016	1394905143		Medical Insurance Premium - 1394905143	60182.1 · Medical Insurance	7,533.91
TOTAL						7,533.91
Bill Pmt -Check	01/26/2016	19155	COMPUTER NETWORK		1012 · Bank of America Gen'l Ckg	
Bill	12/30/2015	100393		USB portable hard drive	6055 · Computer Hardware	270.00
Bill	01/06/2016	100422		(3) Hard drives - Seagate 32mb buffer	6055 · Computer Hardware	275.40
Bill	01/06/2016	100423		(1) Video card XFX AMD Radeon HD 5450	6055 · Computer Hardware	70.20
Bill	01/06/2016	100426		(2) Power supplies	6055 · Computer Hardware	97.20
Bill	01/06/2016	100427		(3) Portable external hard drive	6055 · Computer Hardware	405.00
Bill	01/07/2016	100430		(6) APC uninterruptible power supply	6055 · Computer Hardware	939.60
Bill	01/08/2016	100436		Replacement battery for Lenovo laptop	6055 · Computer Hardware	64.80
TOTAL						2,122.20
Bill Pmt -Check	01/26/2016	19156	CORELOGIC INFORMATION SOLUTIONS	81647756	1012 · Bank of America Gen'l Ckg	
Bill	12/31/2015	84647756		81647756	7103.7 · Grdwtr Qual-Computer Svc	62.50
				81647756	7101.4 · Prod Monitor-Computer	62.50
TOTAL						125.00
Bill Pmt -Check	01/26/2016	19157	CUCAMONGA VALLEY WATER DISTRICT	Lease due February 1, 2016	1012 · Bank of America Gen'l Ckg	
Bill	01/18/2016			Lease due February 1, 2016	1422 · Prepaid Rent	6,371.16
TOTAL						6,371.16
Bill Pmt -Check	01/26/2016	19158	GREAT AMERICA LEASING CORP.	18159935	1012 · Bank of America Gen'l Ckg	
Bill	01/18/2016	18159935		Invoice	6043.1 · Ricoh Lease Fee	3,285.29
TOTAL						3,285.29
Bill Pmt -Check	01/26/2016	19159	HR DIRECT / GNEIL	INV3544354	1012 · Bank of America Gen'l Ckg	
Bill	01/13/2016	INV3544354		2016 Poster guard protection-Federal HR Posters	6031.7 · Other Office Supplies	75.59

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CHINO BASIN WATERMASTER
Cash Disbursements For The Month of
January 2016

For Informational Purposes Only

Type	Date	Num	Name	Memo	Account	Paid Amount
TOTAL						75.59
Bill Pmt -Check	01/26/2016	19160	LEGAL SHIELD	0111802	1012 · Bank of America Gen'l Ckg	
Bill	01/21/2016	0111802		Employee deductions - January 2016	60194 · Other Employee Insurance	51.80
TOTAL						51.80
Bill Pmt -Check	01/26/2016	19161	LEVEL 3 COMMUNICATIONS	09470254	1012 · Bank of America Gen'l Ckg	
Bill	01/21/2016	09470254		1/10/16-2/09/16	6053 · Internet Expense	1,055.23
TOTAL						1,055.23
Bill Pmt -Check	01/26/2016	19162	MAURIZIO, DANIELLE	Employee Reimbursement of Expenses	1012 · Bank of America Gen'l Ckg	
Bill	01/22/2016			Field staff interviews/lunch	6016 · New Employee Search Costs	185.16
				Meal for 2015 ACWA Fall Conference	6191 · Conferences - General	3.78
				Purchase supplies for w/q	7103.6 · Grdwtr Qual-Supplies	20.70
TOTAL						209.64
Bill Pmt -Check	01/26/2016	19163	OFFICE TEAM	44838557	1012 · Bank of America Gen'l Ckg	
Bill	01/21/2016	44838557		Week ending 1/08/16	6017.2 · Office Specialist Services	1,108.00
TOTAL						1,108.00
Bill Pmt -Check	01/26/2016	19164	PREMIERE GLOBAL SERVICES	20131141	1012 · Bank of America Gen'l Ckg	
Bill	12/31/2015	20131141		WM coordination call on 11/30	6909.1 · OBMP Meetings	16.54
				WM coordination call on 12/07	6909.1 · OBMP Meetings	18.46
				WM coordination call on 12/07	6909.1 · OBMP Meetings	12.96
				WM coordination call on 12/07	6909.1 · OBMP Meetings	19.62
				San Sevaine Basin call on 12/08	6909.1 · OBMP Meetings	13.35
				San Sevaine Basin call on 12/08	6909.1 · OBMP Meetings	22.92
				Administrative call on 12/11	6141.3 · Admin Meetings	18.01
				WM coordination call on 12/14	6909.1 · OBMP Meetings	5.48
				WM coordination call on 12/14	6909.1 · OBMP Meetings	10.38
				WM coordination call on 12/14	6909.1 · OBMP Meetings	5.06
				WM coordination call on 12/14	6909.1 · OBMP Meetings	24.03
				Fee - Confidential Line	6022 · Telephone	49.00
				Fee - General line	6022 · Telephone	49.00
				Service fee	6022 · Telephone	5.97
TOTAL						270.78
Bill Pmt -Check	01/26/2016	19165	PUBLIC EMPLOYEES' RETIREMENT SYSTEM	Payor #3493	1012 · Bank of America Gen'l Ckg	
Bill	01/13/2016	1394905143		1959 Survivor Benefit - PEPR staff	60180 · Employers PERS Expense	84.00
Bill	01/14/2016	1394905143		1959 Survivor Benefit - Classic staff	60180 · Employers PERS Expense	252.00

CHINO BASIN WATERMASTER
Cash Disbursements For The Month of
January 2016

For Informational Purposes Only

	<u>Type</u>	<u>Date</u>	<u>Num</u>	<u>Name</u>	<u>Memo</u>	<u>Account</u>	<u>Paid Amount</u>
TOTAL							336.00
	Bill Pmt -Check	01/26/2016	19166	R&D PEST SERVICES	0197483	1012 · Bank of America Gen'l Ckg	
	Bill	01/13/2016	0197483		Pest control-ants and fleas	6024 · Building Repair & Maintenance	100.00
TOTAL							100.00
	Bill Pmt -Check	01/26/2016	19167	RR FRANCHISING, INC.	16767	1012 · Bank of America Gen'l Ckg	
	Bill	01/13/2016	16767		Carpet cleaning on 1/09/16	6024 · Building Repair & Maintenance	600.00
TOTAL							600.00
	Bill Pmt -Check	01/26/2016	19168	SAN BERNARDINO COUNTY FLOOD CONTROL	P-11998284, File No. 1-801/2.04	1012 · Bank of America Gen'l Ckg	
	Bill	01/22/2016	Permit P-11998284		Annual Inspection Fee for San Sevaine Channel	6909.3 · Other OBMP Expenses	1,315.00
TOTAL							1,315.00
	Bill Pmt -Check	01/26/2016	19169	STANDARD INSURANCE CO.	Policy # 00-649299-0009	1012 · Bank of America Gen'l Ckg	
	Bill	01/18/2016	006492990009		Policy # 00-649299-0009	60191 · Life & Disab.Ins Benefits	736.72
TOTAL							736.72
P170	Bill Pmt -Check	01/26/2016	19170	STAPLES BUSINESS ADVANTAGE	8037539615	1012 · Bank of America Gen'l Ckg	
TOTAL	Bill	01/21/2016	8037539615		Miscellaneous office supplies	6031.7 · Other Office Supplies	167.92
							167.92
	Bill Pmt -Check	01/26/2016	19171	STAULA, MARY L	Retiree Medical	1012 · Bank of America Gen'l Ckg	
	Bill	01/31/2016			Amount effective January 2016	60182.4 · Retiree Medical	23.62
TOTAL							23.62
	Bill Pmt -Check	01/26/2016	19172	THREE VALLEYS MUNICIPAL WATER DIST	2/18/16 Leadership Breakfast	1012 · Bank of America Gen'l Ckg	
	Bill	01/15/2016			2/18/16 Leadership Breakfast for Peter Kavounas	6192 · Seminars - General	20.00
TOTAL							20.00
	Bill Pmt -Check	01/26/2016	19173	UNITED HEALTHCARE	039622701	1012 · Bank of America Gen'l Ckg	
	Bill	01/21/2016	0039622701		Dental Insurance Premium - February 2016	60182.2 · Dental & Vision Ins	833.15
TOTAL							833.15
	Bill Pmt -Check	01/26/2016	19174	VERIZON	012519128144592510	1012 · Bank of America Gen'l Ckg	
	Bill	01/21/2016	012519128144592510		012519128144592510	6022 · Telephone	145.29
TOTAL							145.29
	Bill Pmt -Check	01/26/2016	19175	VERIZON WIRELESS	642073270-00001	1012 · Bank of America Gen'l Ckg	
	Bill	01/24/2016	642073270-00001		642073270-00001	7103.7 · Grdwtr Qual-Computer Svc	100.04

CHINO BASIN WATERMASTER
Cash Disbursements For The Month of
January 2016

For Informational Purposes Only

Type	Date	Num	Name	Memo	Account	Paid Amount
TOTAL						100.04
Bill Pmt -Check	01/26/2016	19176	ZAPIEN, ENRIQUE	Employee Reimbursement	1012 - Bank of America Gen'l Ckg	
Bill	01/18/2016			Reimburse for purchase-safety shoes for field work	6154 - Uniforms	168.93
TOTAL						168.93
Bill Pmt -Check	01/26/2016	19177	VERIZON WIRELESS	470810953-00001	1012 - Bank of America Gen'l Ckg	
Bill	01/15/2016	470810953-00001		470810953-00001	6022 - Telephone	299.61
TOTAL						299.61
Bill Pmt -Check	01/26/2016	ACH 012616	PUBLIC EMPLOYEES' RETIREMENT SYSTEM	Payor #3493	1012 - Bank of America Gen'l Ckg	
General Journal	01/16/2016	01/16/2016	PUBLIC EMPLOYEES' RETIREMENT SYSTEM	CalPERS Retirement for 01/03/16-01/16/16	2000 - Accounts Payable	6,437.65
TOTAL						6,437.65
Bill Pmt -Check	01/27/2016	19178	APPLIED COMPUTER TECHNOLOGIES	2657	1012 - Bank of America Gen'l Ckg	
Bill	01/25/2016	2657		Database Consulting Services - January 2016	6052.2 - Applied Computer Technol	3,319.00
TOTAL						3,319.00
P171 Bill Pmt -Check	01/27/2016	19179	DIRECTV	019447404	1012 - Bank of America Gen'l Ckg	
Bill	01/26/2016	019447404		1/19/16 - 2/18/16	6031.7 - Other Office Supplies	110.98
TOTAL						110.98
Bill Pmt -Check	01/27/2016	19180	OFFICE TEAM	44898604	1012 - Bank of America Gen'l Ckg	
Bill	01/26/2016	44898604		Week ending 1/15/16	6017.2 - Office Specialist Services	1,153.29
TOTAL						1,153.29
Bill Pmt -Check	01/27/2016	19181	PARK PLACE COMPUTER SOLUTIONS, INC.	507	1012 - Bank of America Gen'l Ckg	
Bill	01/26/2016	507		IT Consulting Services - January 2016	6052.1 - Park Place Comp Solutn	1,575.00
TOTAL						1,575.00
Bill Pmt -Check	01/27/2016	19182	RAUCH COMMUNICATION CONSULTANTS, LLC	Jan-1616	1012 - Bank of America Gen'l Ckg	
Bill	12/31/2015	Jan-1616		Annual Report work through December 31, 2015	6061.3 - Rauch	11,911.25
TOTAL						11,911.25
Bill Pmt -Check	01/27/2016	19183	READY REFRESH BY NESTLE	0023230253	1012 - Bank of America Gen'l Ckg	
Bill	01/26/2016	0023230253		Office Water Bottle - January 2016	6031.7 - Other Office Supplies	53.93
TOTAL						53.93
Bill Pmt -Check	01/27/2016	19184	SANDERS, LAURA		1012 - Bank of America Gen'l Ckg	
Bill	01/26/2016			Transcript for 1/22/16 Court Hearing	6046 - Legal Publications/Services	228.00

CHINO BASIN WATERMASTER
Cash Disbursements For The Month of
January 2016

For Informational Purposes Only

	<u>Type</u>	<u>Date</u>	<u>Num</u>	<u>Name</u>	<u>Memo</u>	<u>Account</u>	<u>Paid Amount</u>
TOTAL							228.00
	Bill Pmt -Check	01/27/2016	19185	STAPLES BUSINESS ADVANTAGE	8037638222	1012 · Bank of America Gen'l Ckg	
	Bill	01/26/2016	8037638222		Miscellaneous office supplies	6031.7 · Other Office Supplies	194.34
TOTAL							194.34
	Bill Pmt -Check	01/27/2016	19186	STATE COMPENSATION INSURANCE FUND	1970970-15	1012 · Bank of America Gen'l Ckg	
	Bill	02/01/2016	1970970-15		1970970-15	60183 · Worker's Comp Insurance	961.58
TOTAL							961.58
	General Journal	01/29/2016	01/29/16	Payroll and Taxes for 01/29/16	Payroll and Taxes for 01/29/16	1012 · Bank of America Gen'l Ckg	
					Direct Deposit for 01/29/16	1012 · Bank of America Gen'l Ckg	1,320.42
					Payroll Taxes for 01/29/16	1012 · Bank of America Gen'l Ckg	293.33
				ICMA-RC	401(a) Employee Deduction for 01/29/16	1012 · Bank of America Gen'l Ckg	66.24
TOTAL							1,679.99
	General Journal	01/31/2016	01/31/2016	Wage Works FSA Direct Debits - Jan. 2016	Wage Works FSA Direct Debits - Jan. 2016	1012 · Bank of America Gen'l Ckg	
					Wage Works FSA Direct Debits - Jan. 2016	1012 · Bank of America Gen'l Ckg	511.14
					Wage Works FSA Direct Debits - Jan. 2016	1012 · Bank of America Gen'l Ckg	692.14
					Wage Works FSA Direct Debits - Jan. 2016	1012 · Bank of America Gen'l Ckg	76.25
TOTAL							1,279.53
						Total Disbursements:	285,050.48

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TOTAL

CHINO BASIN WATERMASTER

IV. INFORMATION

2. Recharge Investigations and Projects Committee (RIPCom)

Recharge Investigations and Projects

Committee Meeting

Agenda

When: Thursday, January 21, 2016 @ 9:30 a.m.

Where: Chino Basin Watermaster
9641 San Bernardino Rd.
Rancho Cucamonga, CA 91730

Topics:

1. Introductions
2. New Project consideration
 - a) Open forum for potential new projects
3. IEUA/CBWM joint projects
 - a) Status updates
 - b) Budget updates
4. RMPU Financing Plan
 - a) Status updates
5. RMPU Implementation updates
 - a) Sustainability projects
 - i. Vulcan Pit
 - b) Contact with sand and gravel companies
 - c) AP New Yield and cost allocation agreement
 - d) Flood Control and water conservation agreement
 - e) Agreement with property owners
 - f) MS4

Next Meeting Date: Thursday, February 18, 2016 @ 9:30 A.M.

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Recharge Investigation and Projects Committee, PAGE 1 OF 2

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Project Name	Project Status	Percent Completion on Overall Schedule	Anticipated (Or Actual) Completion Date	Project Cost To Date	TOTAL PROJECT BUDGET			PERCENT COST SHARE		Lifetime of Project BUDGET ALLOCATION			IEUA PROJECT COSTS		CBWM PROJECT COSTS		
					Original Budget	Proposed Revised Budget	Approved Revised Budget	IEUA	CBWM	Grant Funding	IEUA	CBWM	Actual Cost To Date	Remaining Balance Available (Based on Project Budget)	Actual Share (Based on Actual Cost To Date)	Invoices Paid To Date	Remaining Balance Available (Based on Project Budget)
Pre-RMPU Ongoing Projects																	
GWR SCADA Upgrades (Task No. 4)	Design	13%	12/28/2016	\$ 136,884	\$ 892,000	\$ -	\$ 892,000	50%	50%	\$ 139,650	\$ 376,175	\$ 376,175	\$ 57,727	\$ 318,448	\$ 57,727	\$ 56,514	\$ 365,361
COMMUNICATION Upgrades (Task No. 3)	Construction	73%	12/31/2015	\$ 1,096,537	\$ 1,245,000	\$ -	\$ 1,245,000	50%	50%	\$ 192,850	\$ 526,075	\$ 526,075	\$ 463,342	\$ 62,733	\$ 463,342	\$ 97,034	\$ 429,041
CB20 Noise Mitigation (CBFIP Phase II Agreement)	Construction	79%	11/30/2015	\$ 106,198	\$ 160,000	\$ -	\$ 160,000	50%	50%	\$ -	\$ 80,000	\$ 80,000	\$ 53,099	\$ 26,901	\$ 53,099	\$ 25,208	\$ 54,792
Upper Santa Ana River Habitat Conservation Plan (Task No. 7)	Evaluation	30%	6/30/2017	\$ 35,548	\$ 160,000	\$ -	\$ 160,000	50%	50%	\$ -	\$ 80,000	\$ 80,000	\$ 17,774	\$ 62,226	\$ 17,774	\$ -	\$ 80,000
East Declez Basin (Task No. 1)	Pre-Design	20%	2/1/2016	\$ 78,316	\$ -	\$ -	\$ 3,665,000	-	100%	\$ -	\$ -	\$ 3,665,000	\$ -	\$ -	\$ 3,665,000	\$ -	\$ 3,665,000
SUBTOTAL PRE-RMPU PROJECTS	---	---	---	\$ 1,453,483	\$ 2,457,000	\$ -	\$ 6,122,000	---	---	\$ 332,500	\$ 1,062,250	\$ 4,727,250	\$ 591,942	\$ 470,308	\$ 4,256,942	\$ 178,756	\$ 4,594,194
RMPU Projects																	
San Sevaine Improvements (Task No. 8)	Design	8%	7/5/2017	\$ 326,311	\$ 2,500,000	\$ -	\$ 6,460,000 *	50%	50%	\$ 750,000	\$ 2,855,000	\$ 2,855,000	\$ 144,213	\$ 2,710,787	\$ 144,213	\$ 111,118	\$ 2,743,882
2013 RMPU Amendment Yield Enhancement Projects (Task No. 1)	Pre-Design	9%	12/29/2017	\$ 78,689	\$ 8,122,500	\$ -	\$ 3,825,500 **	7%	93%	\$ -	\$ 250,250	\$ 3,575,250	\$ 5,148	\$ 245,102	\$ 73,541	\$ -	\$ 3,575,250
Lower Day Basin RMPU Improvement Project (Task No. 2)	Pre-Design	7%	10/3/2017	\$ 142,244	\$ 2,480,000	\$ -	\$ 2,480,000	0%	100%	\$ 750,000	\$ -	\$ 1,730,000	\$ -	\$ -	\$ 99,227	\$ 96,254	\$ 1,633,746
2013 RMPU Amendment Yield Enhancement Projects Construction	Pending - Note 1	0%	6/30/2020	\$ -	\$ -	\$ 38,622,500	\$ -	0%	100%	\$ -	\$ -	\$ 38,622,500	\$ -	\$ -	\$ -	\$ -	\$ 38,622,500
2013 RMPU Amendment - Victoria Basin Construction	Pending - Note 2	0%	6/30/2019	\$ -	\$ -	\$ 130,000	\$ -	50%	50%	\$ -	\$ 65,000	\$ 65,000	\$ -	\$ 65,000	\$ -	\$ -	\$ 65,000
2013 RMPU Amendment - RP-3 Construction	Pending - Note 2	0%	6/30/2020	\$ -	\$ -	\$ 3,300,000	\$ -	50%	50%	\$ -	\$ 1,650,000	\$ 1,650,000	\$ -	\$ 1,650,000	\$ -	\$ -	\$ 1,650,000
SUBTOTAL RMPU PROJECTS	---	---	---	\$ 547,244	\$ 13,102,500	\$ 42,052,500	\$ 12,765,500	---	---	\$ 1,500,000	\$ 4,820,250	\$ 48,497,750	\$ 149,361	\$ 4,670,889	\$ 316,981	\$ 207,372	\$ 48,290,378
GRAND TOTALS	---	---	---	\$ 2,000,727	\$ 15,559,500	\$ 42,052,500	\$ 18,887,500	---	---	\$ 1,832,500	\$ 5,882,500	\$ 53,225,000	\$ 741,303	\$ 5,141,197	\$ 4,573,923	\$ 386,128	\$ 52,884,572

NOTES:

* The total design cost of \$3,665,000 is part of the total approved budget as stated within the first amendment to Task Order No. 1. However the full design for East Declez will not be implemented until the initial pre-design report is completed and accepted by both IEUA and CBWM.

** The total design cost of \$3,825,500 is a part of the total approved budget as stated within the first amendment to Task Order No. 1.

¹ Pending project awaiting evaluation by IEUA. Project has not been funded by an approved Task Order or approved by the Watermaster Board. 100% of construction costs are allocated to Watermaster.

² Project(s) are under review by IEUA. Projects have not been funded by an approved Task Order or approved by the Watermaster Board. Project construction costs are allocated 50% to IEUA and 50% to Watermaster.

Updated on: 1/8/2016

Recharge Investigation and Projects Committee, PAGE 2 OF 2

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Project Name	CBWM Fiscal Year 2015/16										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 ¹	CBWM Remaining Projected Costs	Budget Amendment Required? (Yes/No)	Projected CarryOver Funds FY 2016/17	Fiscal Year 2016/17	Fiscal Year 2017/18	Fiscal Year 2018/19	Fiscal Year 2019/20	
Pre RMPU Ongoing Projects															
GWR SCADA Upgrades (7690.61) (Task No. 4)	\$ 383,200	\$ 38,675	\$ -	\$ 421,875	\$ 56,514	\$ 365,361	\$ -	\$ 365,361	No	\$ -	\$ -	\$ -	\$ -	\$ -	
COMMUNICATION Upgrades (7690.62) (Task No. 3)	\$ 547,500	\$ (21,425)	\$ -	\$ 526,075	\$ 97,034	\$ 429,041	\$ -	\$ 429,041	No	\$ -	\$ -	\$ -	\$ -	\$ -	
CB20 Noise Mitigation (7690.5)	\$ 80,000	\$ -	\$ -	\$ 80,000	\$ 25,208	\$ 54,792	\$ -	\$ 54,792	No	\$ -	\$ -	\$ -	\$ -	\$ -	
Upper Santa Ana River Habitat Conservation Plan (7690.7) (Task No. 7)	\$ 75,000	\$ 5,000	\$ -	\$ 80,000	\$ -	\$ 80,000	\$ -	\$ 80,000	No	\$ -	\$ -	\$ -	\$ -	\$ -	
East Decler Basin (Task No. 1)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No	\$ -	\$ 1,550,000	\$ 2,115,000	\$ -	\$ -	
Wineville Proof of Concept (7209.2) (Task No. 6) COMPLETED	\$ 35,398	\$ -	\$ -	\$ 35,398	\$ -	\$ -	\$ 35,398	\$ -	No	\$ -	\$ -	\$ -	\$ -	\$ -	
Jurupa Pump Station (7209.1) (Task No. 5) COMPLETED	\$ 37,981	\$ -	\$ -	\$ 37,981	\$ -	\$ -	\$ 37,981	\$ -	No	\$ -	\$ -	\$ -	\$ -	\$ -	
Hickory Basin (7690.3) COMPLETED	\$ 3,877	\$ -	\$ -	\$ 3,877	\$ -	\$ -	\$ 3,877	\$ -	No	\$ -	\$ -	\$ -	\$ -	\$ -	
SUBTOTAL PRE-RMPU PROJECTS	\$ 1,162,956	\$ 22,250	\$ -	\$ 1,185,206	\$ 178,756	\$ 929,194	\$ 77,256	\$ 929,194	No	\$ -	\$ 1,550,000	\$ 2,115,000	\$ -	\$ -	
RMPU Projects															
San Seavine Improvements (7690.4) (Task No. 8)	\$ 475,000	\$ 1,126,900	\$ -	\$ 1,601,900	\$ 111,118	\$ 1,490,782	\$ -	\$ 1,490,782	No	\$ -	\$ 1,253,100	\$ -	\$ -	\$ -	
2013 RMPU Amendment Yield Enhancement Projects (7690.15) (Task No. 1)	\$ -	\$ 569,750	\$ -	\$ 569,750	\$ -	\$ 569,750	\$ -	\$ 569,750	No	\$ -	\$ 1,550,000	\$ 1,455,500	\$ -	\$ -	
Lower Day Basin RMPU Improvement Project (7690.8) (Task No. 2)	\$ 49,000	\$ 140,000	\$ -	\$ 189,000	\$ 96,254	\$ 92,746	\$ -	\$ 92,746	No	\$ -	\$ 140,000	\$ 1,401,000	\$ -	\$ -	
2013 RMPU Amendment Yield Enhancement Projects	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No	\$ -	\$ -	\$ 8,300,000	\$ 22,022,500	\$ 8,300,000	
Victoria Basin Construction	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No	\$ -	\$ -	\$ 32,500	\$ 32,500	\$ -	
RP-3 Construction	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No	\$ -	\$ -	\$ 325,000	\$ 825,000	\$ 500,000	
SUBTOTAL RMPU PROJECTS	\$ 524,000	\$ 1,836,650	\$ -	\$ 2,360,650	\$ 207,372	\$ 2,153,278	\$ -	\$ 2,153,278	---	\$ -	\$ 2,943,100	\$ 11,514,000	\$ 22,880,000	\$ 8,800,000	
GRAND TOTALS	\$ 1,686,956	\$ 1,858,900	\$ -	\$ 3,545,856	\$ 386,128	\$ 3,082,472	\$ 77,256	\$ 3,082,472	---	\$ -	\$ 4,493,100	\$ 13,629,000	\$ 22,880,000	\$ 8,800,000	

NOTES:
¹ \$77,256 of the Carry-Over funds could be (1) allocated to other projects; (2) kept in reserve; or (3) refunded to the Appropriators on the next Assessment. Wineville Project of \$35,398; Jurupa Pump Station of \$37,981; and Hickory Basin of \$3,877 = \$77,256.

Non-RMP Ongoing Projects



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**GWR SCADA UPGRADES
PROJECT NO. EN14047
STATUS UPDATE: January 04, 2016**

During Inland Empire Utilities Agency’s asset review of the existing Supervisory Control & Data Acquisition (SCADA) system, a thorough and comprehensive evaluation of the recycled water and groundwater recharge control system was conducted. A Master Plan was developed, and it recommended critical upgrades to the RW and GWR SCADA systems. The purpose of this project is to provide control system improvements to sustain and support the continued growth of the RW and GWR programs. Under this project, five recharge basins which operate a rubber dam system will be replaced with newer, reliable and fully supported programmable logic controllers (PLCs). The current PLCs are outdated and lack critical product and technical support. The upgrade will extend the site’s reliability by 10 years and provide the initial development model when transitioning other sites to newer controllers.

Schedule:

<u>Project Budget</u>	<u>Actual Cost to Date</u>
\$892,000	\$136,884

<u>Phase</u>	<u>Start</u>	<u>Finish</u>	<u>Status</u>	<u>Projected Cost</u>	<u>Actual Cost</u>
Project Development	11/11/11	02/24/14	Completed	\$505	\$422
Design	02/26/14	01/15/16	In Progress	\$139,405	\$136,462
Permits	09/12/14	01/15/16	In Progress	\$1,000	-
Bid and Award	01/18/16	03/16/16	Not Started	\$428	-
Construction	03/17/16	01/03/17	Not Started	\$750,745	-
				\$892,000	\$136,884

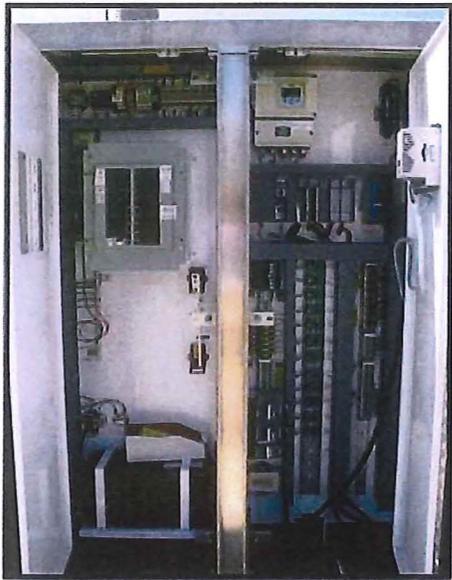
This project qualified for a \$139,650 grant and a 1% interest 30-year loan at \$740,145 from the Santa Ana Project Water Authority and Clean Water State Revolving Fund loan program respectively.

Cost Sharing Document: Task Order No. 4 of the Master Agreement of 2014

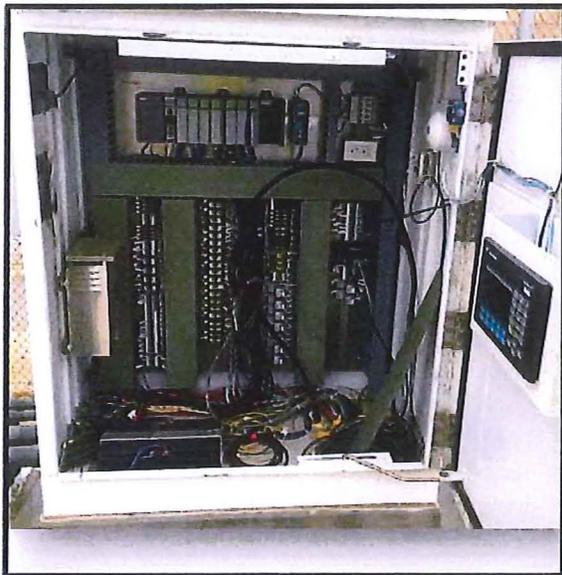
Project Update:

MSO Technologies recently completed the final construction bid documents to replace the aged Siemen controller at five (5) rubber dam basins with a new Allen Bradley CompactLogix system. This document will also include upgrading the control interface software from RSView32 to FactoryTalk SE to improve and upgrade monitoring and controlling of remote recharge basins and recycled water facilities. Construction bidding will begin on January 14, 2016 and close on February 18, 2016. The construction is scheduled to begin in March and complete by December 2016. The projected construction estimate is within the project budget.

Project Photos:



San Sevaine Turnout control panel



Turner Basin control panel



**COMMUNICATION UPGRADES
PROJECT NO. EN12019
STATUS UPDATE: January 04, 2016**

This project will transition the communication equipment within the remote GWR and RW sites (totaling over 20 sites) onto the new, faster and more reliable communication network. The upgrade will replace the radio equipment for each site and add several new communication towers to send all communication onto the Agency's new 18GHz Motorola network back-haul. The Communication System Upgrades Project proposes to upgrade all GWR remote sites to the new communication radio systems. Each site will be equipped with new antennas and radios. The proposed plan to include new towers at select sites will be deferred and planned for later capital projects because these sites do not require immediate remote communication and control.

Schedule:

	<u>Project Budget</u>		<u>Actual Cost to Date</u>		
	\$1,245,000		\$1,096,537		
<u>Phase</u>	<u>Start</u>	<u>Finish</u>	<u>Status</u>	<u>Projected Cost</u>	<u>Actual Cost</u>
Project Development	11/11/11	01/17/14	Completed	\$5,771	\$5,771
Pre-Design	01/20/14	11/27/14	Completed	\$130,000	\$130,000
RFP/Solicitation	11/30/14	03/18/15	Completed	\$44,000	\$44,000
Design/Construction	03/19/15	02/12/16	In Progress	\$1,065,229	\$916,766
				<u>\$1,245,000</u>	<u>\$1,096,537</u>

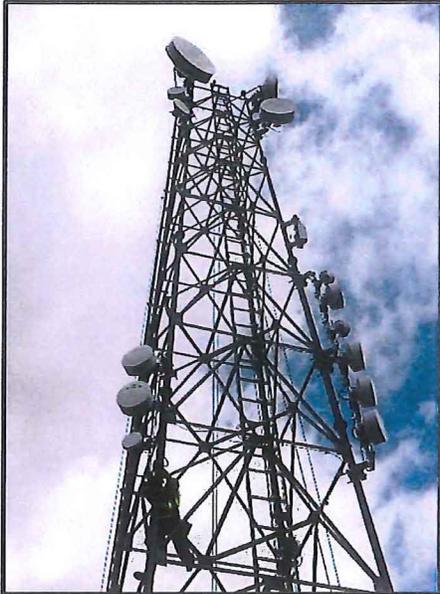
This project qualified for a \$192,850 grant and a 1% interest 30-year loan at \$1,022,105 from the Clean Water State Revolving Fund loan program, as part of the Proposition 50 grant program, and a Department of Water Resources Proposition 84 grant program through The Santa Ana Project Water Authority.

Cost Sharing Document: Task Order No. 3 of the Master Agreement of 2014

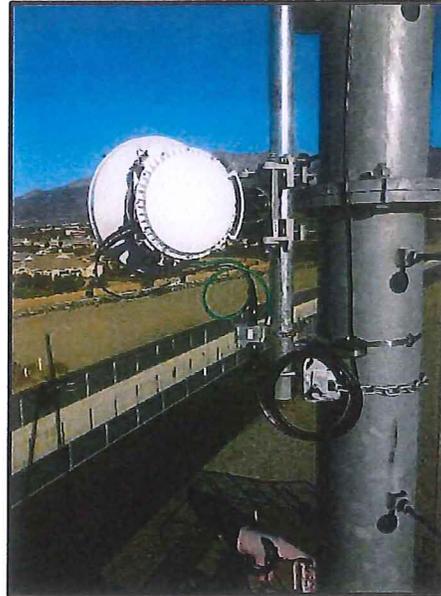
Project Update:

On January 4, 2016 Sun Wireless, the design/build contractor, completed all installation and testing of the new radios. Construction phase is completed and work is currently in the project acceptance and closeout phase. Construction Management staff is coordinating the final closeout documents and addressing minor performance issues with a single radio site. The Brooks Basin site is experiencing signal losses which the contractor and the manufacturer are addressing.

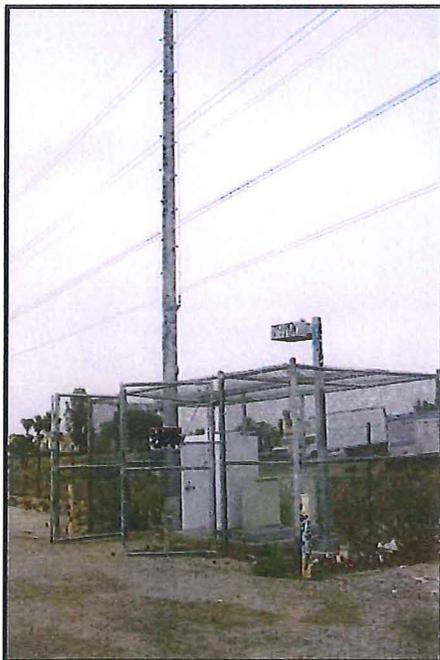
Project Photos:



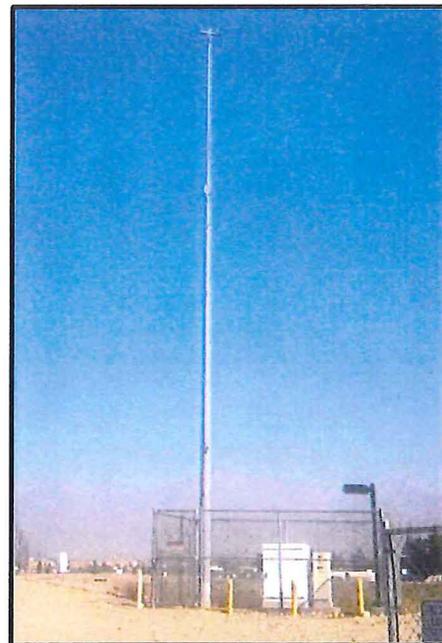
6B Tower – New Receiving Dishes



San Sevaine Basin – New Radio Dish



Declaz Basin – Pole and Control Panel



Montclair Basin – Pole and Control Panel



**CB20 NOISE MITIGATION
PROJECT NO. EN14038
STATUS UPDATE: January 04, 2016**

In 2010, a recharge basin turnout structure was constructed within the Metropolitan Water District's right-of-way in the residential area of the City of Upland. The turnout was to provide immediate access to available raw water for the purpose of groundwater storage. The purpose of the Noise Mitigation Project is to reduce the impact of operating noise to the surrounding residences. Current sound studies reveal the facility generates noise levels above the allowable limits permitted by Upland's Ordinances. As a public service effort, IEUA and Chino Basin Watermaster initiated a capital project to design and build a sound enclosure by a qualified sound specialist. The objective is to maintain compliance with the City Ordinance and reduce the impact of noise to nearby residents.

Schedule:

	<u>Project Budget</u>	<u>Actual Cost to Date</u>			
	\$160,000	\$106,198			
<u>Phase</u>	<u>Start</u>	<u>Finish</u>	<u>Status</u>	<u>Projected Cost</u>	<u>Actual Cost</u>
Project Development	09/25/13	01/23/14	Completed	\$200	\$182
Design	01/24/14	11/26/14	Completed	\$29,000	\$28,850
Construction	11/30/14	02/15/16	In Progress	\$130,800	\$77,166
				<u>\$160,000</u>	<u>\$106,198</u>

Cost Sharing Document: CBFIP, Phase II Cost Sharing Agreement of 2006

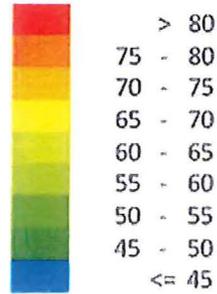
Project Update:

The installation of the sound enclosure is completed. IEUA staff is scheduling a date to operate the turnout so that Engineering and the Contractors can perform a final sound test to confirm performance of the new enclosures. Testing will occur when major rain events are not expected.

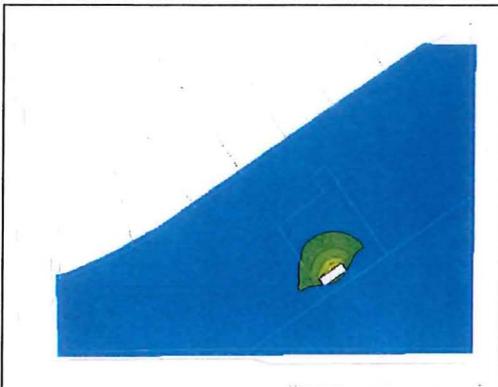
Results of sound modeling to confirm the proposed enclosure will meet project goal:



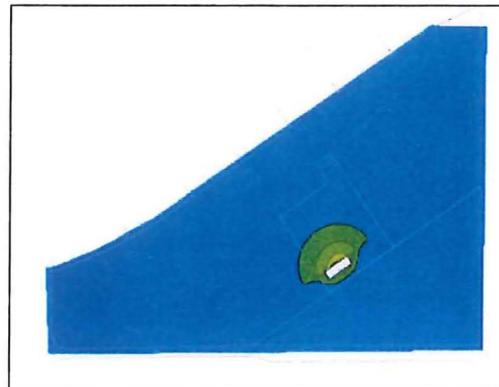
Noise Level, dBA



Noise level at 1st level without mitigation



Noise level at 1st level with mitigation



Noise level at 2nd level with mitigation

Project Photo:



Completed installation of sound enclosure (facing south)



**UPPER SANTA ANA RIVER WATERSHED HABITAT CONSERVATION PLAN
PROJECT NO. RW15002
STATUS UPDATE: January 04, 2016**

The purpose of the Habitat Conservation Plan is to investigate and develop a plan to offset the biological impact of future water and recharge improvement projects in the Chino Basin area that have the potential to affect federally-listed endangered, threatened or special status species. This project will be a part of a regional plan with other proposed projects within the Upper Santa Ana River Region. The goal of the project is to identify, in advance, sites that may require biological offset/mitigation and avoid permitting delays on future RMPU projects or other identified recharge improvement projects.

Schedule:

<u>Project Budget</u>	<u>Actual Cost to Date</u>
\$160,000	\$35,548

<u>Phase</u>	<u>Start</u>	<u>Finish</u>	<u>Status</u>	<u>Projected Cost</u>	<u>Actual Cost</u>
Investigate/Plan	07/01/14	06/30/17	In Progress	\$160,000	\$35,548
				\$160,000	\$35,548

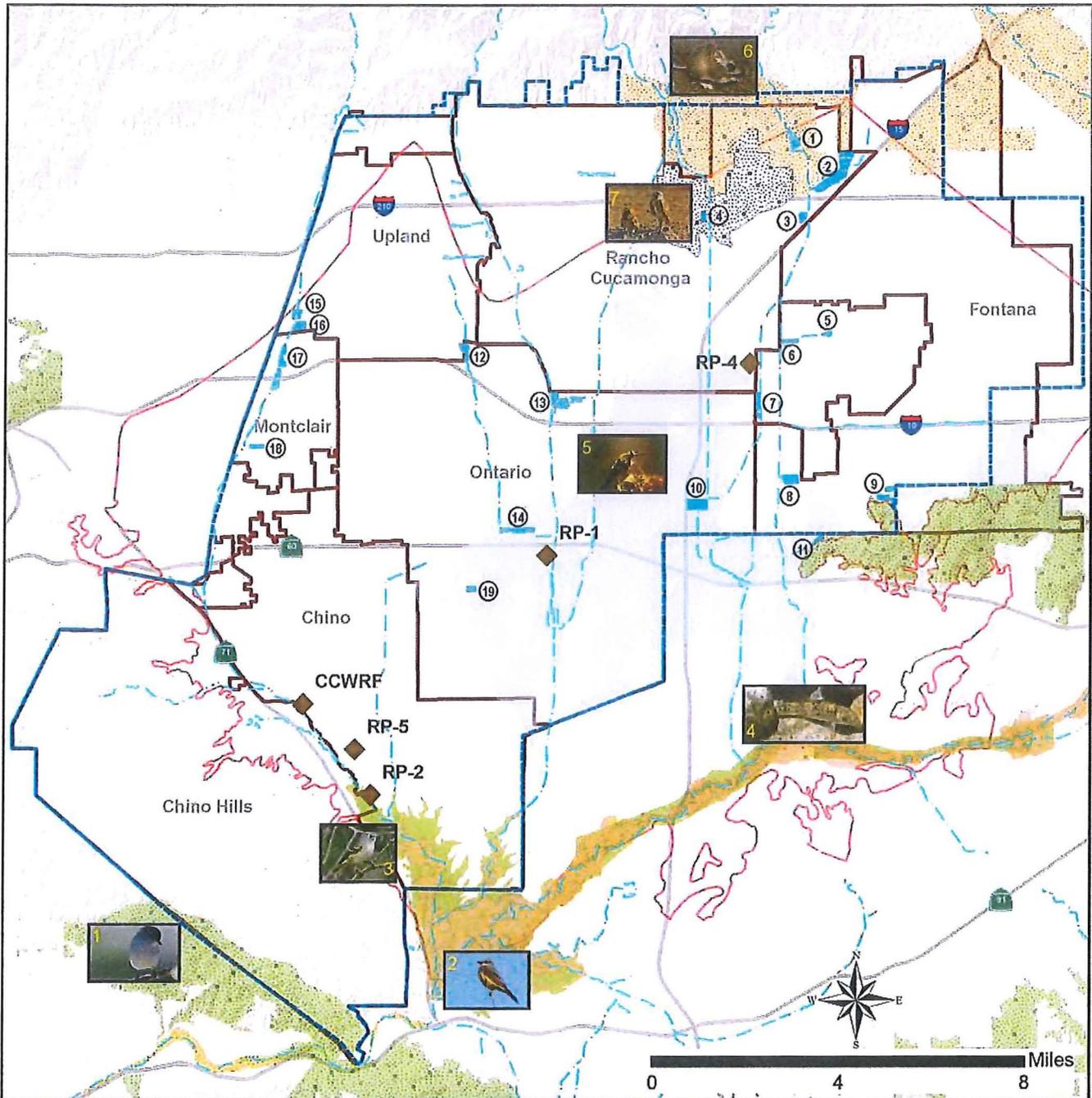
Cost Sharing Document: Task Order No. 7 of the Master Agreement of 2014

Project Update:

The HCP team has completed Phase 1. Phase 2 which is the hydraulic impact modeling is in progress. The expected completion of this phase will be in February 2016. Engineering staff is currently supporting the team to outline temporary and permanent impacts due to design. This will be used within the model. The following table is a part of the list of considered project that are part of the RMPU:

<u>RMPU Projects</u>	<u>Location</u>	<u>Potential Species</u>
PID - 19a	Wineville Basin	DSF
PID - 12	Lower Day Basin	SBKR,CAGN,BUOW
PID - 7	San Sevaine Basins (1-5)	SBKR
PID - 11	Victoria Basin	SBKR
PID - 2	Montclair Basins (1-3)	CAGN

DSF=Delhi Sands Flower-Loving Fly; SBKR=Merriam's San Bernardino Kangaroo Rat; CAGN=California Gnatcatcher; BUOW=Burrowing Owl



Legend		Endangered Species Habitat Ranges		Recharge Basins	
	Regional Plants		1. California Gnatcatcher		Eliwanda Debris Basin - (SBCFCD)
	Rivers/Channels		2. Southwestern Willow Flycatcher		San Sevaine Basins - (SBCFCD)
	CBWM Service Area		3. Least Bell's Vireo		Victoria Basin - (SBCFCD)
	IEUA Service Area		4. Santa Ana Sucker		Lower Day Basin - (SBCFCD)
	Cities Boundary		5. Delhi Sands Flower-Loving Fly		Banana Basin - (SBCFCD)
	Freeways		6. Merriam's San Bernardino Kangaroo Rat		Hickory Basin - (SBCFCD)
			7. Borrowing Owl		Eliwanda Conservation Basins - (SCE)
					Jurupa Basin - (SBCFCD)
					RP-3 Basin - (IEUA)
					Wineville Basin - (SBCFCD)
					Declez Basin - (SBCFCD)
					8th Street Basin - (SBCFCD)
					Turner Basins - (SBCFCD/CBWCD)
					Ely Basins 1,2 and 3 - (SBCFCD/CBWCD)
					College Heights Basins - (CBWCD)
					Upland Basin - (Upland)
					Montclair Basins - (CBWCD)
					Brooks Street Basins - (CBWCD)
					Grove Basin - (SBCFCD)



**EAST DECLEZ BASIN IMPROVEMENTS
PROJECT NO. RW15003.01
STATUS UPDATE: January 04, 2016**

In 2014 Watermaster members proposed the utilization of the available land east of the existing Declez Basins. This project proposes to expand the Declez Recharge Facility with an added basin. It also includes upstream improvements to divert and convey additional stormwater to the new basin. The potential increase in recharge capacity is 913 acre-feet per year. Project improvements include the following:

- Excavating and hauling offsite over 1,030,000 cubic yards of soil material to develop the new east basin.
- Constructing a diversion structure from the Declez Channel into the new basin with approximately 2,700 linear feet of new piping.
- Constructing a new spillway structure and outlet between the new and existing basins.
- Constructing a rubber dam system to divert flow from the San Sevaine Channel into the Jurupa Basin. The Jurupa Basin will act as a flow through basin to Declez Basin.
- Increasing the flow capacity to over 100 cfs on an existing pump station within Jurupa Basin.
- Construct approximately 2,800 linear feet of new conveyance piping from Jurupa to the Declez Channel.

Schedule:

<u>Project Budget</u>	<u>Actual Cost to Date</u>
\$3,665,000	\$78,316

<u>Soft Cost Phases</u>	<u>Start</u>	<u>Finish</u>	<u>Status</u>	<u>Projected Cost</u>	<u>Actual Cost</u>
Project Development	07/01/15	07/21/15	Completed	\$26,000	-
Feasibility Study (PDR)	07/22/15	02/01/16	In Progress	\$103,000	\$78,316
Pre-Environmental	07/22/15	02/01/16	In Progress	\$11,000	-
Preliminary Design	02/02/16	08/29/16	Not Started	\$511,000	-
Environmental	02/02/16	08/29/16	Not Started	\$197,000	-
Design	08/30/16	12/29/17	Not Started	\$2,534,200	-
Permits	08/30/16	12/29/17	Not Started	\$275,000	-
				\$3,665,000	\$78,316

Cost Sharing Document: Task Order No. 1 of the Master Agreement of 2014

Project Update:

Under the amended Task Order No. 1, staff was given a conditional approval to proceed with the Declez Basin expansion design by first providing a detailed preliminary report to confirm, through further field investigations, whether the proposed basin expansion site will meet the

expected yield of 913 AFY of stormwater. The projected cost for this initial effort is approximately \$114,000. Currently, Thomas Harder & Co is conducting the above feasibility study and Tom Dodson & Associates is providing environmental services.

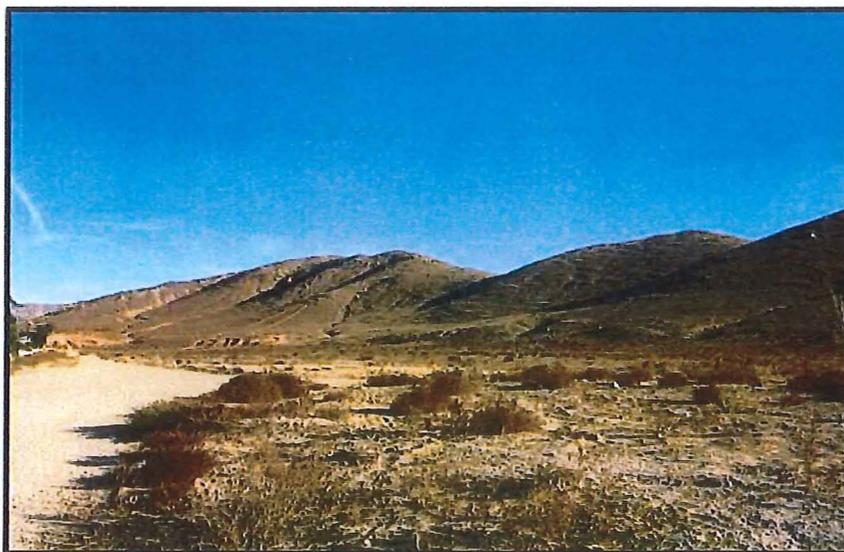
Harder completed a draft report on December 13, 2015 where staff provided the initial review. This draft revealed that additional basin layouts are required to better complete the evaluation. Wildermuth Environmental is currently providing additional support to calculate estimated stormwater flows for two conceptual basin configurations in order to estimate accurately the sites potential recharge capacity.

Meanwhile Dodson completed its review of the property owner’s Biological Habitat Clearance document to confirm its conclusion. No further actions are pending until a proposed design is accepted.

The following is a summarized schedule for the feasibility study (PDR) and preliminary environmental assessment efforts:

Item	Feasibility Study/Preliminary Environmental Assessment	Status/Finish Date
1	Submit Proposed Work Plan	Completed/Aug. 14, 2015
2	Approve Proposed Work Plan	Completed/Aug. 19, 2015
3	Conduct Field Review with Staff and Environmentalist	Completed/Aug. 24, 2015
4	Conduct Cone Penetrometer Test	Completed/Sep. 25, 2015
5	Conduct Borehole Drilling/Sampling	Completed/Oct. 29, 2015
6	Draft Report – Feasibility Study	Completed /Nov. 13, 2015
7	Finalize Report	Not Started/Feb. 18, 2016
8	Review the Biological Habitat Clearance Document	Completed/Nov. 5, 2015

Project Photo:



Field photo showing the location of proposed improvement east of Declez Basin

RMPU PROJECTS



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**SAN SEVAINE IMPROVEMENTS PROJECT
PROJECT NO. EN13001
STATUS UPDATE: January 04, 2016**

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 tie 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 purposed 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>		<u>Actual Cost to Date</u>		
	\$6,460,000		\$326,311		
<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	\$159,596
Environmental Impact	06/26/13	01/20/16	In Progress	\$30,000	\$22,518
Design	05/15/15	03/18/16	In Progress	\$400,000	\$119,197
Permits	05/15/13	03/18/16	In Progress	\$25,000	\$25,000
Bid and Award	03/21/16	05/18/16	Not Started	\$5,000	-
Construction	05/19/16	07/05/17	Not Started	\$5,840,000	-
				<hr/>	
				\$6,460,000	\$326,311

The project was approved for a \$750,000 grant from the Department of Water Resources through the Santa Ana Watershed Project authority as part of Proposition 84.

Cost Sharing Document: Task Order No. 8 of the Master Agreement of 2014 (Amended in April 2015)

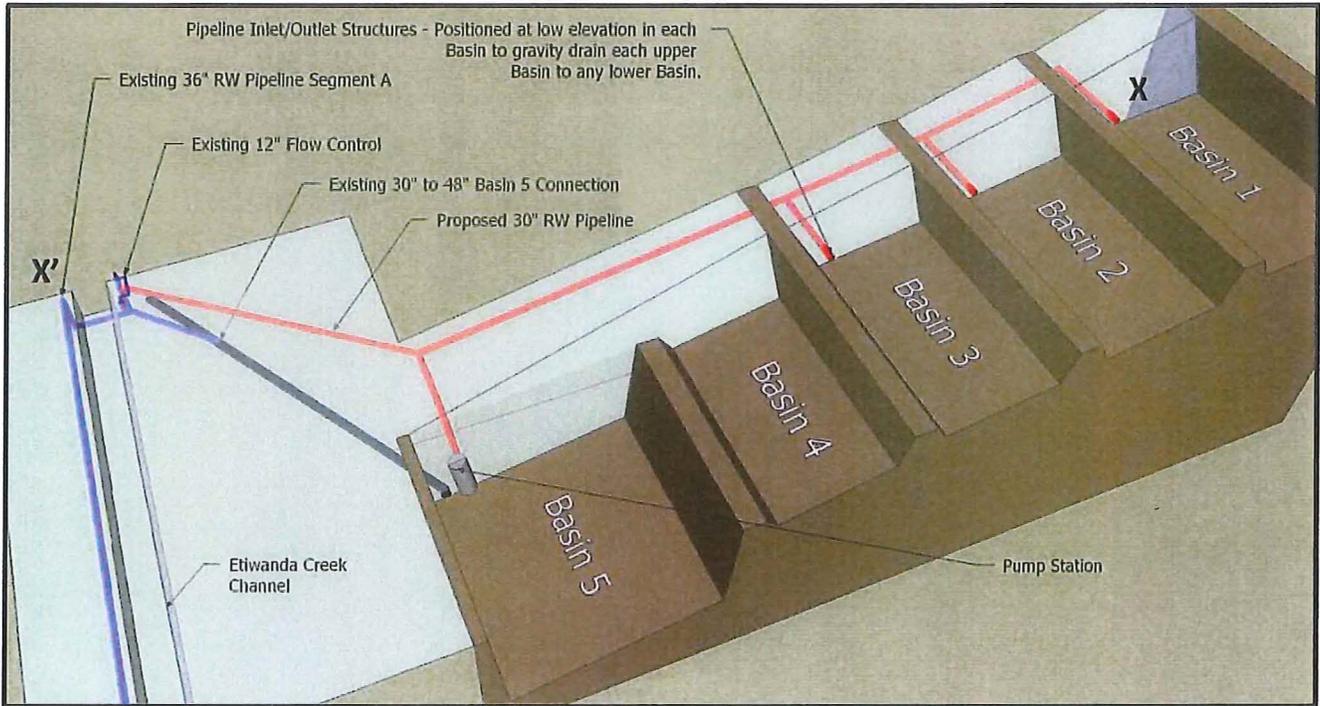
Project Update:

Recently staff received a copy of the 50-percent design submittal from Dudek. A meeting is currently being scheduled for the week on January 25 to provide staff's comments. The construction plans for the monitoring well is scheduled to be completed in February.

Tom Dodson & Associates finalized its environmental Initial Study and released the document for the required 30-day public review period. Five comments were received which range from tribal to midge fly concerns. A response was prepared and they will be returned to agencies and

cities who provided comments. IEUA's Board is scheduled to adopt the final environmental documents on January 29, 2016.

Conceptual Design:



Isometric View of the Recommended Basin Improvement
Pump Station in Basin 5 and Extension of the Recycled Water Pipeline to Basins 1, 2, and 3



2013 RMPU AMENDMENT YIELD ENHANCEMENT PROJECTS
PROJECT NO. RW15003.00
STATUS UPDATE: January 04, 2016

The 2013 Amendment to the 2010 Recharge Master Plan Update recommended that the yield enhancement projects listed below be implemented for preliminary-design, environmental review, permitting, and final design.

ID	Basin Projects	Key Project Improvements	Original RMPU Yield		Adjusted Yield	
			SW	RW	SW	RW
			acre-feet per year			
18a	CSI Storm Water Basin	New storage and recharge facility by deepening/removing 36,000 CY	81	-	81	-
23a	Wineville, Jurupa, and RP3	Improve storage and recharge capacity with pumps/conveyance systems between basins and provide new diversion structures	3,166	2,905	3,166	2,905
27	Declez Basin	Improve capacity by modifying existing/adding new structures	241	-	241	-
11	Victoria Basin	Improve the infiltration rate and increase storage by removing settled deposits	43	120	43	120
14	Turner Basin	Increase storage and recharge by raising the spillway height	66	-	66	-
15a	Ely Basin	Improve storage and recharge by removing 470,000 CY	221	-	221	-
2	Montclair Basins	Increase storage and recharge capacity by directing more channel flow	248	-	248	-
25a	Sierra	Improve storage and recharge by removing 40,000 CY (Removed-no longer feasible)	64	-		
17a	Lower San Sevine Basin	Construct a new storage flow through basin (Removed-no longer feasible)	1,221	-		
			5,351	3,025	4,066	3,025

Schedule:

	<u>Original Soft Cost</u>		<u>Adjusted Soft Cost*</u>		<u>Actual Cost to Date</u>	
	\$8,122,500		\$3,825,500		\$78,689	
<u>Soft Cost Phases</u>	<u>Start</u>	<u>Finish</u>	<u>Status</u>	<u>Projected Cost</u>	<u>Actual Cost</u>	
Project Development	07/01/14	06/17/15	Completed	\$27,000	\$1,678	
Preliminary Design	06/25/15	08/17/16	In Progress	\$735,000	\$76,880	
Environmental	02/19/15	08/17/16	In Progress	\$325,000	\$131	
Design	08/18/16	12/29/17	Not Started	\$2,638,500	-	
Permits	08/18/16	12/29/17	Not Started	\$100,000	-	
				\$3,825,500	\$78,689	

*PID 25a and PID 17a are removed from the design and not included within the total soft cost.

Cost Sharing Document: Task Order No. 1 of the Master Agreement of 2014 (Amended in April 2015)

Project Update:

Stantec recently completed basin surveys of each basin. They are currently reviewing each site to establish the required electrical plan to implement and support the proposed basin improvements. IEUA is coordinating with Stantec to provide an initial findings meeting to go over progress and discuss potential design alternatives. In the meantime, Dodson & Associates is working to develop a Programmatic Environmental Impact Report for the proposed RMPU project. The scheduled completion date for both preliminary design report and the environmental study is August 2016.

Project Photos:



Aerial of Victoria Basin



**LOWER DAY RMPU IMPROVEMENTS
PROJECT NO. RW15004
STATUS UPDATE: January 04, 2016**

This project will modify the existing intake structure and install pneumatic gates in the channel. The pneumatic gates will monitor and self-adjust to maintain a water level or rate of discharge over the gate structure in accordance with an established programmable logic controller. The basin’s existing embankment will be evaluated and reconstructed to meet the requirements of a dam embankment with the Division of Safety of Dams. Improvement to the embankment may include excavation and keying to prevent piping and seepage.

The potential increase in recharge with the inlet is 789 acre-feet per year as per 2010 RMPU.

Schedule:

	<u>Project Budget</u>		<u>Actual Cost to Date</u>		
	\$2,480,000		\$142,244		
<u>Phase</u>	<u>Start</u>	<u>Finish</u>	<u>Status</u>	<u>Projected Cost</u>	<u>Actual Cost</u>
Project Development	07/01/14	12/17/14	Completed	\$25,000	\$24,790
Pre-Design	12/18/14	04/20/16	In Progress	\$85,000	\$84,433
Environmental Impact	02/02/15	04/20/16	In Progress	\$25,000	\$22,727
Permits	05/04/15	10/05/16	In Progress	\$25,000	\$10,294
Design	04/21/16	10/05/16	Not Started	\$183,000	-
Bid and Award	10/06/16	12/21/16	Not Started	8,000	-
Construction	12/22/16	01/05/18	Not Started	\$2,129,000	-
				<u>\$2,480,000</u>	<u>\$142,244</u>

The project was approved for a \$750,000 grant from the Department of Water Resources through the Santa Ana Watershed Project authority as part of Proposition 84.

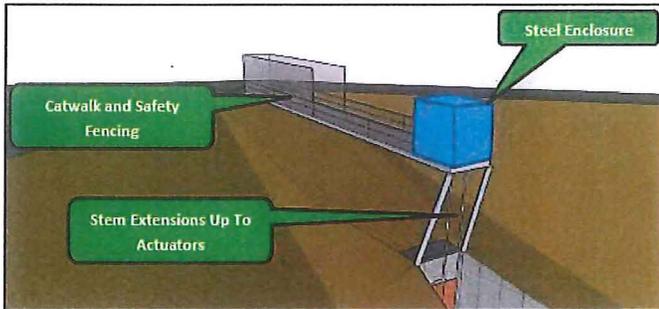
Cost Sharing Document: Task Order No. 2 of the Master Agreement of 2014

Project Update:

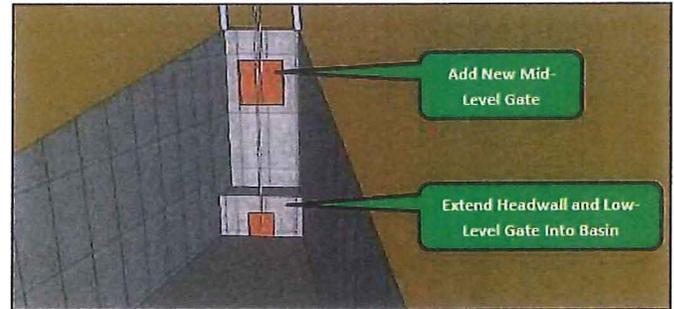
On November 5th, the San Bernardino County Flood Control District provided its comments to the conceptual design improvement at Lower Day Basin. Within their comments they requested to review an analysis of the design improvement’s water flow within their basin and channels. In discussions with IEUA’s pre-design consultant and Watermaster’s engineer, a decision was made to extend the preliminary design phase to develop a detailed flow analysis before proceeding with the design phase. The recommend approach in developing and analyzing flow is through the use of a three dimensional computational fluid dynamic model. This approach is versatile and cost effective in providing the detailed data to reveal any potentially significant impacts to District’s flood control facility prior to committing to a design and construction approach.

On November 2, 2015 Tom Dodson & Associates completed the CEQA documentation which is currently under public review. After the required 30-day public review period is completed, all comments will be reviewed and responded before the CEQA documentation is taken to IEUA's Board for final adoption.

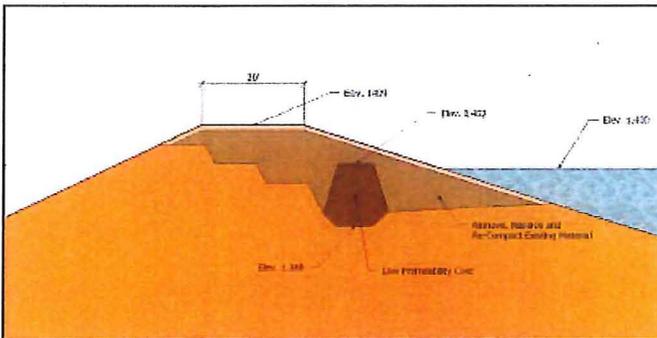
Conceptual Design of the Proposed Improvements:



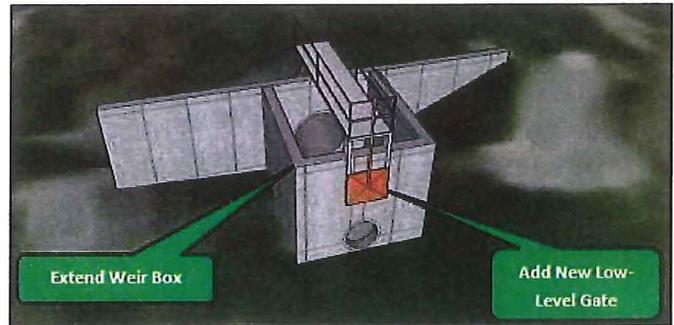
Mid-level Outlet Modifications – Increase Storage to the Lower Basin



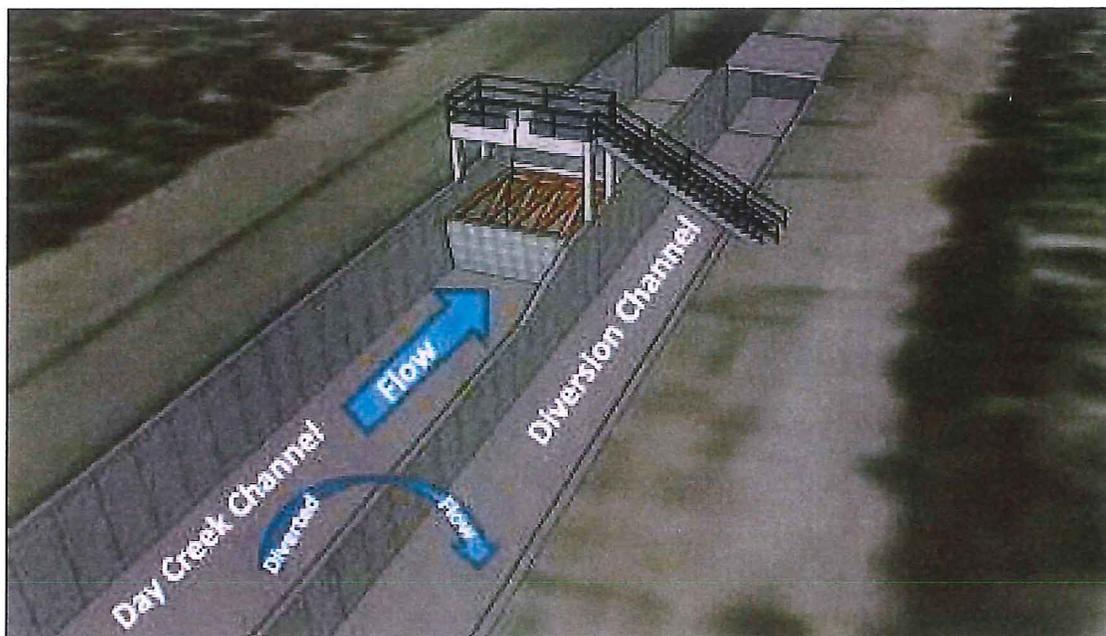
Coating Existing 36" & 72" Outlet Pipes – Maintain Flood Control requirements of immediate dewatering



Reconstruction of Southern Berm – Prevent Seepage



Modifications to Upper Basin Outlet – Increase Storage to the Upper Basin



Single Radial Gate on the Channel – Divert non flood flows for added groundwater storage