# **CHINO BASIN WATERMASTER**



# NOTICE OF MEETINGS

# Thursday, December 12, 2013

9:00 a.m. – Appropriative Pool Meeting 11:00 a.m. – Non-Agricultural Pool Conference Call 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, December 12, 2013

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

# **POOL AGENDAS**

### CHINO BASIN WATERMASTER APPROPRIATIVE POOL MEETING

9:00 a.m. – December 12, 2013 WITH

Mr. Marty Zvirbulis, Chair Mr. Scott Burton, Vice-Chair At The Offices Of Chino Basin Watermaster 9641 San Bernardino Road Rancho Cucamonga, CA 91730

## <u>AGENDA</u>

### 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 Appropriative Pool Meeting held November 14, 2013 (Page 1)

### **B. FINANCIAL REPORTS**

- 1. Cash Disbursements for the Month of October 2013 (Page 13)
- 2. Watermaster VISA Check Detail for the Month of October, 2013 (Page 27)
- 3. Combining Schedule for the Period July 1, 2013 through October 31, 2013 (Page 31)
- 4. Treasurer's Report of Financial Affairs for the Period October 1, 2013 through October 31, 2013 (*Page 35*)
- 5. Budget vs. Actual Report for the Period July 1, 2013 through October 31, 2013 (Page 39)

### C. 2012 ANNUAL REPORT OF THE LAND SUBSIDENCE COMMITTEE (Page 53)

Recommend that the Advisory Committee recommend to the Watermaster Board to adopt the 2012 Annual Report of the Land Subsidence Committee, along with filing a copy with the Court.

### D. ANNUAL FINDING OF SUBSTANTIAL COMPLIANCE WITH THE RECHARGE MASTER PLAN (Page 107)

Recommend that the Advisory Committee recommend to the Watermaster Board to adopt the finding in the Wildermuth Report that Watermaster is in substantial compliance with the Recharge Master Plan.

### II. BUSINESS ITEMS

A. MINOR APPROPRIATORS ELECTION FOR WATERMASTER BOARD APPOINTMENT Appoint a representative to the Watermaster Board. (*Page 115*)

### III. <u>REPORTS/UPDATES</u>

### A. LEGAL COUNSEL REPORT

- 1. November 22<sup>nd</sup> Hearing on Ex Parte Application
- 2. City of Fontana Resolution Discussion
- 3. CDA Request

### **B. CFO REPORT**

- 1. Assessment Invoices
- 2. Audit Report

### C. GM REPORT

- 1. Request for Overlying (Non-Agricultural) Pool Available Water Per Judgment Exhibit "G"
- 2. Revised Hydraulic Control Monitoring Plan
- 3. Update on Safe Yield Recalculation

### IV. INFORMATION

1. Cash Disbursements for November 2013 (Page 119)

### 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. Safe Yield Recalculation

### VIII. FUTURE MEETINGS AT WATERMASTER

Tuesday, December 10, 2013	9:00 a.m.	GRCC Meeting
Tuesday, December 10, 2013	2:30 p.m.	City of Fontana Motion – Resolution Discussion
Thursday, December 12, 2013	9:00 a.m.	Appropriative Pool Committee Meeting
Thursday, December 12, 2013	11:00 a.m.	Non-Agricultural Pool Committee Meeting
Thursday, December 12, 2013	1:30 p.m.	Agricultural Pool Committee Meeting
Wednesday, December 18, 2013	1:30 p.m.	Safe Yield Recalculation Workshop #3
Thursday, December 19, 2013	8:00 a.m.	IEUA DYY Meeting
Thursday, December 19, 2013	9:00 a.m.	Advisory Committee Meeting
Thursday, December 19, 2013	10:00 a.m.*	Joint IEUA/CBWM Projects Update Meeting
	44.00	
Thursday, December 19, 2013	11:00 a.m.	Watermaster Board Meeting (Rescheduled)
Friday, December 20, 2013		City of Fontana Motion – Resolution Discussion
	1:00 p.m.	• •
Friday, December 20, 2013	1:00 p.m. 9:00 a.m.	City of Fontana Motion – Resolution Discussion
Friday, December 20, 2013 Thursday, January 9, 2014	1:00 p.m. 9:00 a.m. 11:00 a.m.	City of Fontana Motion – Resolution Discussion Annual & Election Appropriative Pool Committee Meeting
Friday, December 20, 2013 Thursday, January 9, 2014 Thursday, January 9, 2014	1:00 p.m. 9:00 a.m. 11:00 a.m. 1:30 p.m.	City of Fontana Motion – Resolution Discussion Annual & Election Appropriative Pool Committee Meeting Annual & Election Non-Agricultural Pool Committee Meeting
Friday, December 20, 2013 Thursday, January 9, 2014 Thursday, January 9, 2014 Thursday, January 9, 2014	1:00 p.m. 9:00 a.m. 11:00 a.m. 1:30 p.m. 8:00 a.m.	City of Fontana Motion – Resolution Discussion Annual & Election Appropriative Pool Committee Meeting Annual & Election Non-Agricultural Pool Committee Meeting Annual & Election Agricultural Pool Committee Meeting
Friday, December 20, 2013 Thursday, January 9, 2014 Thursday, January 9, 2014 Thursday, January 9, 2014 Thursday, January 9, 2014	1:00 p.m. 9:00 a.m. 11:00 a.m. 1:30 p.m. 8:00 a.m. 9:00 a.m.	City of Fontana Motion – Resolution Discussion Annual & Election Appropriative Pool Committee Meeting Annual & Election Non-Agricultural Pool Committee Meeting Annual & Election Agricultural Pool Committee Meeting IEUA DYY Meeting
Friday, December 20, 2013 Thursday, January 9, 2014 Thursday, January 9, 2014 Thursday, January 9, 2014 Thursday, January 16, 2014 Thursday, January 16, 2014	1:00 p.m. 9:00 a.m. 11:00 a.m. 1:30 p.m. 8:00 a.m. 9:00 a.m. 10:00 a.m.*	City of Fontana Motion – Resolution Discussion Annual & Election Appropriative Pool Committee Meeting Annual & Election Non-Agricultural Pool Committee Meeting Annual & Election Agricultural Pool Committee Meeting IEUA DYY Meeting Annual Advisory Committee Meeting

**\*Note:** The Joint IEUA/CBWM Projects Update Meeting will take place immediately following the Advisory Committee Meeting.

### ADJOURNMENT

### CHINO BASIN WATERMASTER NON-AGRICULTURAL POOL CONFERENCE CALL MEETING

11:00 a.m. - December 12, 2013

WITH

Mr. Brian Geye, Chair Mr. Bob Bowcock, Vice-Chair

### 1-800-930-9525 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 Non-Agricultural Pool Meeting held November 14, 2013 (Page 5)

### **B. FINANCIAL REPORTS**

- 1. Cash Disbursements for the Month of October 2013 (Page 13)
- 2. Watermaster VISA Check Detail for the Month of October 2013 (Page 27)
- 3. Combining Schedule for the Period July 1, 2013 through October 31, 2013 (Page 31)
- 4. Treasurer's Report of Financial Affairs for the Period October 1, 2013 through October 31, 2013 (*Page 35*)
- 5. Budget vs. Actual Report for the Period July 1, 2013 through October 31, 2013 (Page 39)

## C. 2012 ANNUAL REPORT OF THE LAND SUBSIDENCE COMMITTEE (Page 53)

Recommend that the Advisory Committee recommend to the Watermaster Board to adopt the 2012 Annual Report of the Land Subsidence Committee, along with filing a copy with the Court.

### D. ANNUAL FINDING OF SUBSTANTIAL COMPLIANCE WITH THE RECHARGE MASTER PLAN (Page 107)

Recommend that the Advisory Committee recommend to the Watermaster Board to adopt the finding in the Wildermuth Report that Watermaster is in substantial compliance with the Recharge Master Plan.

### II. BUSINESS ITEMS

### III. <u>REPORTS/UPDATES</u>

### A. LEGAL COUNSEL REPORT

- 1. November 22<sup>nd</sup> Hearing on Ex Parte Application
- 2. City of Fontana Motion Resolution Discussion
- 3. CDA Request

## **B. CFO REPORT**

- 1. Assessment Invoices
- 2. Audit Report

### C. GM REPORT

- 1. Request for Overlying (Non-Agricultural) Pool Available Water Per Judgment Exhibit "G"
- 2. Revised Hydraulic Control Monitoring Plan
- 3. Update on Safe Yield Recalculation
- 4. Minor Appropriators Election For Watermaster Board Appointment

### IV. INFORMATION

1. Cash Disbursements for November 2013 (Page 119)

### 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.

### VIII. FUTURE MEETINGS AT WATERMASTER

Tuesday, December 10, 2013	9:00 a.m. GRCC Meeting
Tuesday, December 10, 2013	2:30 p.m. City of Fontana Motion – Resolution Discussion
Thursday, December 12, 2013	9:00 a.m. Appropriative Pool Committee Meeting
Thursday, December 12, 2013	11:00 a.m. Non-Agricultural Pool Committee Meeting
Thursday, December 12, 2013	1:30 p.m. Agricultural Pool Committee Meeting
Wednesday, December 18, 2013	1:30 p.m. Safe Yield Recalculation Workshop #3
Thursday, December 19, 2013	8:00 a.m. IEUA DYY Meeting
Thursday, December 19, 2013	9:00 a.m. Advisory Committee Meeting
Thursday, December 19, 2013	10:00 a.m.* Joint IEUA/CBWM Projects Update Meeting
Thursday, December 19, 2013	11:00 a.m.Watermaster Board Meeting (Rescheduled)
Friday, December 20, 2013	1:00 p.m. City of Fontana Motion – Resolution Discussion
Thursday, January 9, 2014	9:00 a.m. Annual & Election Appropriative Pool Committee Meeting
Thursday, January 9, 2014	11:00 a.m. Annual & Election Non-Agricultural Pool Committee Meeting
Thursday, January 9, 2014	1:30 p.m. Annual & Election Agricultural Pool Committee Meeting
Thursday, January 16, 2014	8:00 a.m. IEUA DYY Meeting
Thursday, January 16, 2014	9:00 a.m. Annual Advisory Committee Meeting
Thursday, January 16, 2014	10:00 a.m.* Joint IEUA/CBWM Projects Update Meeting
Thursday, January 23, 2014	11:00 a.m. Annual & Election Watermaster Board Meeting

**\*Note:** The Joint IEUA/CBWM Projects Update Meeting will take place immediately following the Advisory Committee Meeting.

### ADJOURNMENT

### CHINO BASIN WATERMASTER AGRICULTURAL POOL MEETING

1:30 p.m. – December 12, 2013 **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

## <u>AGENDA</u>

## 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 Agricultural Pool Meeting held November 14, 2013 (Page 9)

### **B. FINANCIAL REPORTS**

- 1. Cash Disbursements for the Month of October 2013 (Page 13)
- 2. Watermaster VISA Check Detail for the Month of October 2013 (Page 27)
- 3. Combining Schedule for the Period July 1, 2013 through October 30, 2013 (Page 31)
- 4. Treasurer's Report of Financial Affairs for the Period October 1, 2013 through October 31, 2013 (*Page 35*)
- 5. Budget vs. Actual Report for the Period July 1, 2013 through October 31, 2013 (Page 39)

### C. 2012 ANNUAL REPORT OF THE LAND SUBSIDENCE COMMITTEE (Page 53)

Recommend that the Advisory Committee recommend to the Watermaster Board to adopt the 2012 Annual Report of the Land Subsidence Committee, along with filing a copy with the Court.

### D. ANNUAL FINDING OF SUBSTANTIAL COMPLIANCE WITH THE RECHARGE MASTER PLAN (Page 107)

Recommend that the Advisory Committee recommend to the Watermaster Board to adopt the finding in the Wildermuth Report that Watermaster is in substantial compliance with the Recharge Master Plan.

### II. BUSINESS ITEMS

### A. OLD BUSINESS

### III. REPORTS/UPDATES

### A. LEGAL COUNSEL REPORT

- 1. November 22<sup>nd</sup> Hearing on Ex Parte Application
- 2. City of Fontana Motion Resolution Discussion
- 3. CDA Request

### **B. CFO REPORT**

- 1. Assessment Invoices
- 2. Audit Report

### C. GM REPORT

- 1. Request for Overlying (Non-Agricultural) Pool Available Water Per Judgment Exhibit "G"
- 2. Revised Hydraulic Control Monitoring Plan
- 3. Update on Safe Yield Recalculation
- 4. Minor Appropriators Election For Watermaster Board Appointment

### D. AGRICULTURAL POOL LEGAL COUNSEL REPORT

### IV. INFORMATION

1. Cash Disbursements for November 2013 (Page 119)

### 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

Tuesday, December 10, 2013	9:00 a.m. GRCC Meeting
Tuesday, December 10, 2013	2:30 p.m. City of Fontana Motion – Resolution Discussion
Thursday, December 12, 2013	9:00 a.m. Appropriative Pool Committee Meeting
Thursday, December 12, 2013	11:00 a.m. Non-Agricultural Pool Committee Meeting
Thursday, December 12, 2013	1:30 p.m. Agricultural Pool Committee Meeting
Wednesday, December 18, 2013	1:30 p.m. Safe Yield Recalculation Workshop #3
Thursday, December 19, 2013	8:00 a.m. IEUA DYY Meeting
Thursday, December 19, 2013	9:00 a.m. Advisory Committee Meeting
Thursday, December 19, 2013	10:00 a.m.* Joint IEUA/CBWM Projects Update Meeting
Thursday, December 19, 2013	11:00 a.m.Watermaster Board Meeting (Rescheduled)
Friday, December 20, 2013	1:00 p.m. City of Fontana Motion – Resolution Discussion
Thursday, January 9, 2014	9:00 a.m. Annual & Election Appropriative Pool Committee Meeting
Thursday, January 9, 2014	11:00 a.m. Annual & Election Non-Agricultural Pool Committee Meeting
Thursday, January 9, 2014	1:30 p.m. Annual & Election Agricultural Pool Committee Meeting
Thursday, January 16, 2014	8:00 a.m. IEUA DYY Meeting
Thursday, January 16, 2014	9:00 a.m. Annual Advisory Committee Meeting
Thursday, January 16, 2014	10:00 a.m.* Joint IEUA/CBWM Projects Update Meeting
Thursday, January 23, 2014	11:00 a.m. Annual & Election Watermaster Board Meeting

\*Note: The Joint IEUA/CBWM Projects Update Meeting will take place immediately following the Advisory Committee Meeting.

### **ADJOURNMENT**

# **CHINO BASIN WATERMASTER**

# I. CONSENT CALENDAR

## A. MINUTES

1. Appropriative Pool Meeting held on November 14, 2013

### DRAFT MINUTES CHINO BASIN WATERMASTER APPROPRIATIVE POOL MEETING

November 14, 2013

The Appropriative Pool Meeting was held at the offices of Chino Basin Watermaster, 9641 San Bernardino Road, Rancho Cucamonga, CA on November 14, 2013.

### **APPROPRIATIVE POOL MEMBERS PRESENT**

Marty Zvirbulis, Chair Mark Kinsey Teri Layton Robert Young Ron Craig Seth Zielke Rosemary Hoerning Justin Scott-Coe Dave Crosley Dennis Mejia

### WATERMASTER BOARD MEMBERS PRESENT

Bob Kuhn Robert "Bob" Craig

### WATERMASTER STAFF PRESENT

Peter Kavounas Danielle Maurizio Joseph Joswiak Anna Truong

### WATERMASTER CONSULTANTS PRESENT

Brad Herrema

### **OTHERS PRESENT**

Ryan Shaw John Bosler Marsha Westropp Sheri Rojo Curtis Paxton Sandra Rose Jo Lynne Russo-Pereyra David DeJesus Manny Martinez Raul Garibay Pete Hall Dan Chadwick Cucamonga Valley Water District Monte Vista Water District San Antonio Water Company Fontana Union Water Company City of Chino Hills Fontana Water Company City of Upland Monte Vista Irrigation Company City of Chino City of Ontario

Three Valleys Municipal Water District Jurupa Community Services District

General Manager Assistant General Manager Chief Financial Officer Recording Secretary

Brownstein Hyatt Farber Schreck, LLP

Inland Empire Utilities Agency Cucamonga Valley Water District Orange County Water District Fontana Water Company Chino Desalter Authority Monte Vista Water District Cucamonga Valley Water District Cucamonga Valley Water District Three Valleys Municipal Water District Monte Vista Water District City of Pomona State of California – CIM City of Fontana

### CALL TO ORDER

Chair Marty Zvirbulis called the Appropriative Pool meeting to order at 9:01 a.m.

### **AGENDA - ADDITIONS/REORDER**

There were no additions or reorders.

### I. <u>CONSENT CALENDAR</u>

### A. MINUTES

1. Minutes of the Appropriative Pool Meeting held October 10, 2013

### **B. FINANCIAL REPORTS**

- 1. Cash Disbursements for the Month of September 2013
- 2. Watermaster VISA Check Detail for the Month of September 2013
- 3. Combining Schedule for the Period July 1, 2013 through September 30, 2013
- 4. Treasurer's Report of Financial Affairs for the Period September 1, 2013 through September 30, 2013
- 5. Budget vs. Actual Report for the Period July 1, 2013 through September 30, 2013

### C. WESTERN MUNICIPAL WATER DISTRICT ASSIGNMENT OF DESALTER PRODUCTION

(0:00:30)

Motion by Mr. Robert Young, second by Mr. Ron Craig, and by unanimous vote Moved to approve the Consent Calendar as presented

### II. BUSINESS ITEMS A. CHINO BASIN WATERMASTER 2013-2014 ASSESSMENT PACKAGE

(0:01:16) Ms. Maurizio gave a presentation and a discussion ensued.

Motion by Mr. Mark Kinsey, second by Ms. Teri Layton, and by unanimous vote Move to recommend Advisory Committee approval of the Fiscal Year 2013-2014 Assessment Package as presented.

### **B. LEVYING REPLENISHMENT AND ADMINISTRATIVE ASSESSMENTS**

(0:19:14) Mr. Kavounas gave a report.

Motion by Mr. Mark Kinsey, second by Mr. Robert Young, and by unanimous vote

Move to recommend Advisory Committee approval of Resolution 13-07 as presented.

(0:20:30) The first closed session began at 9:22 a.m. and concluded at 9:33 a.m. with no reportable action

### C. PHYSICAL SOLUTION TRANSFER RATE SUBSTITUTION

### (0:20:47)

Motion by Mr. Robert Young, second by Mr. Raul Garibay, and by unanimous vote

Move to recommend Advisory Committee approval of the proposed FY 2013-14 substitute Physical Solution Transfer rate, and approve Watermaster legal counsel's filing of motion for Court approval of the same and authorize the Pool's legal counsel to sign the agreement on behalf of the Pool.

### III. <u>REPORTS/UPDATES</u>

### A. LEGAL COUNSEL REPORT

- 1. Watermaster RMPU Amendment Motion
- 2. City of Fontana Motion
- 3. CDA Request

(0:21:45) Mr. Herrema gave a report.

### **B. CFO REPORT**

### C. GM REPORT

- 1. Joint IEUA-Watermaster Recharge Projects
- 2. Update on Safe Yield Recalculation
- 3. Wineville POC Project Update
- 4. Pool and Board Representation
- 5. Minors Board Representative Election

(0:24:34) Mr. Kavounas gave a report on each of the five items listed. He announced that the Joint IEUA-Watermaster Recharge Projects monthly meetings now have designees to represent each Pool and are as follows: Todd Corbin and Van Jew for the Appropriative Pool, Ken Jeske for the Non-Ag Pool and Pete Hall and Jeff Pierson for the Ag Pool.

Mr. Kavounas reported that according to the approved Board Rotation schedule, the Minor Appropriators will occupy a seat during 2014 and 2015. Accordingly, Watermaster will send a letter to each Minor Appropriator to notify them, and will plan to facilitate the appointment during the December Appropriative Pool meeting.

### IV. INFORMATION

1. Cash Disbursements for October 2013

### V. POOL MEMBER COMMENTS

### VI. OTHER BUSINESS

### VII. CONFIDENTIAL SESSION - POSSIBLE ACTION

- 1. Safe Yield Recalculation
- 2. New Yield Allocation Discussion

The second closed session began at 9:44 a.m. and concluded at 10:54 a.m. with no reportable action.

### **VIII. FUTURE MEETINGS AT WATERMASTER**

Tuesday, November 12, 2013	9:00 a.m.	IEUA DYY Meeting
Thursday, November 14, 2013	9:00 a.m.	Appropriative Pool Meeting
Thursday, November 14, 2013	11:00 a.m.	Non-Agricultural Pool Meeting
Thursday, November 14, 2013	1:30 p.m.	Agricultural Pool Meeting
Thursday, November 21, 2013	8:00 a.m.	IEUA DYY Meeting
Thursday, November 21, 2013	9:00 a.m.	Advisory Committee Meeting
Thursday, November 21, 2013	10:00 a.m.*	Joint IEUA/CBWM Projects Update Meeting
Thursday, November 21, 2013	11:00 a.m.	Watermaster Board Meeting

\*Note: The Joint IEUA/CBWM Projects Update Meeting will take place immediately following the Advisory Committee Meeting.

Minutes Appropriative Pool Meeting

### ADJOURNMENT

Chair Zvirbulis adjourned the Appropriative Pool meeting at 10:54 a.m.

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

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

# **CHINO BASIN WATERMASTER**

## I. BUSINESS ITEM ROUTINE

## A. MINUTES

1. Non-Agricultural Pool Conference Call Meeting held on November 14, 2013

### DRAFT MINUTES CHINO BASIN WATERMASTER <u>NON-AGRICULTURAL POOL CONFERENCE CALL MEETING</u>

November 14, 2013

The Non-Agricultural Pool conference call meeting was held via conference call using the Chino Basin Watermaster conference call number on November 14, 2013.

### NON-AGRICULTURAL POOL MEMBERS PRESENT AT WATERMASTER

Brian Geye

Auto Club Speedway

### NON-AGRICULTURAL POOL MEMBERS PRESENT ON CALL

Tom O'Neill

Ontario City Non-Agricultural

## WATERMASTER STAFF PRESENT AT WATERMASTER

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

### WATERMASTER BOARD MEMBERS PRESENT AT WATERMASTER

Robert "Bob" Craig

Jurupa Community Services District

WATERMASTER CONSULTANTS PRESENT AT WATERMASTER Brad Herrema Brownstein Hyatt Farber Schreck, LLP

NON-AGRICULTURAL POOL COUNSEL PRESENT ON CALL Allen Hubsch Hogan Lovells US, LLP

## OTHERS PRESENT AT WATERMASTER

Dave Crosley

City of Chino

## CALL TO ORDER

Chair Geye called the Non-Agricultural Pool Conference Call meeting to order at 11:03 a.m.

### ROLL CALL

Ms. Truong conducted the roll call.

### AGENDA - ADDITIONS/REORDER

There were no additions or reorders.

### I. BUSINESS ITEMS - ROUTINE

### A. MINUTES

1. Minutes of the Non-Agricultural Pool Meeting held October 10, 2013

(0:01:55)

Motion by Mr. Tom O'Neil, second by Mr. Brian Geye, and by unanimous vote Moved to receive and file Business Item A as presented

### **B. FINANCIAL REPORTS**

- 1. Cash Disbursements for the Month of September 2013
- 2. Watermaster VISA Check Detail for the Month of September 2013
- 3. Combining Schedule for the Period July 1, 2013 through September 30, 2013
- 4. Treasurer's Report of Financial Affairs for the Period September 1, 2013 through September 30, 2013
- 5. Budget vs. Actual Report for the Period July 1, 2013 through September 30, 2013

### (0:02:15)

Motion by Mr. Tom O'Neil, second by Mr. Brian Geye, and by unanimous vote Moved to receive and file Business Item B as presented, without approval

### C. WESTERN MUNICIPAL WATER DISTRICT ASSIGNMENT OF DESALTER PRODUCTION

### (0:03:51)

Motion by Mr. Tom O'Neil, second by Mr. Brian Geye, and by unanimous vote Moved to receive and file Business Item C as presented, without approval

### II. BUSINESS ITEMS

### A. CHINO BASIN WATERMASTER 2013-2014 ASSESSMENT PACKAGE

(0:05:13)

Motion by Mr. Tom O'Neil, second by Mr. Brian Geye, and by unanimous vote

Moved to approve staff recommendation and to direct the Pool representatives to support at the Advisory Committee and Watermaster Board meetings subject to changes which they deem appropriate and subject to further consultation with Pool counsel.

### B. LEVYING REPLENISHMENT AND ADMINISTRATIVE ASSESSMENTS

Recommend to the Advisory Committee to approve Resolution 13-07 as presented.

(0:07:06)

Motion by Mr. Tom O'Neil, second by Mr. Brian Geye, and by unanimous vote

Moved to approve staff recommendation and to direct the Pool representatives to support at the Advisory Committee and Watermaster Board meetings subject to changes which they deem appropriate and subject to further consultation with Pool counsel.

### C. PHYSICAL SOLUTION TRANSFER RATE SUBSTITUTION

(0:09:44)

Motion by Mr. Tom O'Neil, second by Mr. Brian Geye, and by unanimous vote

Moved to approve staff recommendation and to direct the Pool representatives to support at the Advisory Committee and Watermaster Board meetings subject to changes which they deem appropriate and authorize the Pool's legal counsel to sign the agreement on behalf of the Pool.

### III. <u>REPORTS/UPDATES</u>

### A. LEGAL COUNSEL REPORT

- 1. Watermaster RMPU Amendment Motion
- 2. City of Fontana Motion
- 3. CDA Request

(0:09:58) Mr. Herrema gave a report.

### **B. CFO REPORT**

There was no report given.

### C. GM REPORT

- 1. Joint IEUA-Watermaster Recharge Projects
- 2. Update on Safe Yield Recalculation
- 3. Wineville POC Project Update
- 4. Pool and Board Representation

(0:16:34) Mr. Kavounas gave a report.

### IV. INFORMATION

1. Cash Disbursements for October 2013

### V. POOL MEMBER COMMENTS

There were no comments.

### VI. OTHER BUSINESS

There was no 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.

### **VIII. FUTURE MEETINGS AT WATERMASTER**

Tuesday, November 12, 2013	9:00 a.m.	IEUA DYY Meeting
Thursday, November 14, 2013	9:00 a.m.	Appropriative Pool Meeting
Thursday, November 14, 2013	11:00 a.m.	Non-Agricultural Pool Meeting
Thursday, November 14, 2013	1:30 p.m.	Agricultural Pool Meeting
Thursday, November 21, 2013	8:00 a.m.	IEUA DYY Meeting
Thursday, November 21, 2013	9:00 a.m.	Advisory Committee Meeting
Thursday, November 21, 2013	10:00 a.m.*	Joint IEUA/CBWM Projects Update Meeting
Thursday, November 21, 2013	11:00 a.m.	Watermaster Board Meeting

\*Note: The Joint IEUA/CBWM Projects Update Meeting will take place immediately following the Advisory Committee Meeting.

Minutes Non-Agricultural Pool Meeting

## ADJOURNMENT

Chair Geye adjourned the Non-Agricultural Pool meeting at 11:25 a.m.

Secretary:\_\_\_\_

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

# **CHINO BASIN WATERMASTER**

## I. CONSENT CALENDAR

## A. MINUTES

1. Agricultural Pool Meeting held on November 14, 2013

### DRAFT MINUTES CHINO BASIN WATERMASTER AGRICULTURAL POOL MEETING

November 14, 2013

The Agricultural Pool meeting was held at the offices of Chino Basin Watermaster, 9641 San Bernardino Road, Rancho Cucamonga, CA, on November 14, 2013.

### AGRICULTURAL POOL MEMBERS PRESENT

Bob Feenstra, Chair Glen Durrington Pete Hall Gene Koopman Jeff Pierson Nathan deBoom Carol Boyd John Huitsing Rob Vanden Heuvel

### WATERMASTER BOARD MEMBER PRESENT

Geoff Vanden Heuvel

### WATERMASTER STAFF PRESENT

Peter Kavounas Danielle Maurizio Joseph Joswiak Anna Truong

### WATERMASTER CONSULTANTS PRESENT

Mark Wildermuth Brad Herrema

### **OTHERS PRESENT**

Tracy Egoscue Dave Crosley Larry Dimock Rick Rees Dairy Crops State of California, CIM Milk Producers Council Crops Dairy State of California, Department of Justice Dairy Dairy

Dairy

General Manager Assistant General Manager Chief Financial Officer Recording Secretary

Wildermuth Environmental, Inc. Brownstein Hyatt Farber Schreck, LLP

Egoscue Law Group City of Chino California Department of Corrections State of California, CIM

### CALL TO ORDER

Chair Feenstra called the Agricultural Pool meeting to order at 1:35 p.m.

### **AGENDA - ADDITIONS/REORDER**

There were no additions or reorders.

### I. CONSENT CALENDAR

### A. MINUTES

1. Minutes of the Agricultural Pool Meeting held October 10, 2013

### **B. FINANCIAL REPORTS**

- 1. Cash Disbursements for the Month of September 2013
- 2. Watermaster VISA Check Detail for the Month of September 2013
- 3. Combining Schedule for the Period July 1, 2013 through September 30, 2013
- 4. Treasurer's Report of Financial Affairs for the Period September 1, 2013 through September 30, 2013
- 5. Budget vs. Actual Report for the Period July 1, 2013 through September 30, 2013

### C. WESTERN MUNICIPAL WATER DISTRICT ASSIGNMENT OF DESALTER PRODUCTION

(0:00:41)

Motion by Mr. Jeff Pierson, second by Mr. Glen Durrington, and by unanimous vote Moved to approve Consent Calendar as presented

### II. BUSINESS ITEMS

### A. CHINO BASIN WATERMASTER 2013-2014 ASSESSMENT PACKAGE

(0:01:46)

Motion by Mr. Jeff Pierson, second by Mr. Rob Vanden Heuvel, and by unanimous vote Moved to recommend to the Advisory Committee to approve the Fiscal Year 2013-2014 Assessment Package as presented.

### B. LEVYING REPLENISHMENT AND ADMINISTRATIVE ASSESSMENTS

(0:02:27)

Motion by Mr. Jeff Pierson, second by Mr. Gene Koopman, and by unanimous vote Moved to recommend to the Advisory Committee to approve Resolution 13-07 as presented.

### C. PHYSICAL SOLUTION TRANSFER RATE SUBSTITUTION

(0:03:24)

Motion by Mr. Jeff Pierson, second by Mr. Gene Koopman, and by unanimous vote

Moved to recommend to the Advisory Committee to approve the proposed Fiscal Year 2013-14 substitute Physical Solution Transfer rate, and approve Watermaster legal counsel's filing of motion for Court approval of the same.

### III. <u>REPORTS/UPDATES</u>

### A. LEGAL COUNSEL REPORT

- 1. Watermaster RMPU Amendment Motion
- 2. City of Fontana Motion
- 3. CDA Request

(0:07:59) Mr. Herrema gave a report.

### **B. CFO REPORT**

### C. GM REPORT

- 1. Joint IEUA-Watermaster Recharge Projects
- 2. Update on Safe Yield Recalculation
- 3. Wineville POC Project Update
- 4. Pool and Board Representation
- 5. Watermaster Business Plan Presentation (carry over from last month)

(0:16:05) Mr. Kavounas gave a report and asked if the Pool wanted to hear the Business Plan presentation. The Pool declined to hear the presentation and deferred to the opinion of the Pool's Board representatives. Mr. Kavounas mentioned that there is no action to be taken and that the item is to be received and filed by the Board.

### D. AGRICULTURAL POOL LEGAL COUNSEL REPORT

### IV. INFORMATION

1. Cash Disbursements for October 2013

### V. POOL MEMBER COMMENTS

### VI. OTHER BUSINESS

### VII. CONFIDENTIAL SESSION - POSSIBLE ACTION

Chair Feenstra called for a closed session at 1:36 p.m.

The Confidential Session concluded at 2:55 p.m. with no reportable action.

### VIII. FUTURE MEETINGS AT WATERMASTER

Tuesday, November 12, 2013	9:00 a.m.	IEUA DYY Meeting
Thursday, November 14, 2013	9:00 a.m.	Appropriative Pool Meeting
Thursday, November 14, 2013	11:00 a.m.	Non-Agricultural Pool Meeting
Thursday, November 14, 2013	1:30 p.m.	Agricultural Pool Meeting
Thursday, November 21, 2013	8:00 a.m.	IEUA DYY Meeting
Thursday, November 21, 2013	9:00 a.m.	Advisory Committee Meeting
Thursday, November 21, 2013	10:00 a.m.*	Joint IEUA/CBWM Projects Update Meeting
Thursday, November 21, 2013	11:00 a.m.	Watermaster Board Meeting

\*Note: The Joint IEUA/CBWM Projects Update Meeting will take place immediately following the Advisory Committee Meeting.

### ADJOURNMENT

Chair Feenstra adjourned the Agricultural Pool meeting at 3:35 p.m.

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

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

THIS PAGE HAS INTENTIONALLY BEEN LEFT BLANK FOR PAGINATION

# **CHINO BASIN WATERMASTER**

## I. <u>CONSENT CALENDAR</u> (App & Ag Pool)

## **B. FINANCIAL REPORTS**

- 1. Cash Disbursements for the Month of October 2013
- 2. Watermaster VISA Check Detail for the Month of October 2013
- 3. Combining Schedule for the Period July 1, 2013 through October 31, 2013
- 4. Treasurer's Report of Financial Affairs for the Period October 1, 2013 through October 31, 2013
- 5. Budget vs. Actual Report for the Period July 1, 2013 through October 31, 2013

# I. <u>BUSINESS ITEM ROUTINE</u> (Non-Ag Pool)

## B. FINANCIAL REPORTS

- 1. Cash Disbursements for the Month of October 2013
- 2. Watermaster VISA Check Detail for the Month of October 2013
- 3. Combining Schedule for the Period July 1, 2013 through October 31, 2013
- 4. Treasurer's Report of Financial Affairs for the Period October 1, 2013 through October 31, 2013
- 5. Budget vs. Actual Report for the Period July 1, 2013 through October 31, 2013



# 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: December 12, 2013

TO: Pool Committee Members

SUBJECT: Cash Disbursement Report - Financial Report B1 (October 31, 2013)

### SUMMARY

Issue: Record of cash disbursements for the month of October 31, 2013.

Recommendation: Receive and file Cash Disbursements for October 31, 2013 as presented.

Financial Impact: Funds disbursed were included in the FY 2013-2014 Watermaster Budget.

<u>Future Consideration</u> Appropriative Pool: December 12, 2013; Receive and File Non-Agricultural Pool: December 12, 2013; Receive and File Agricultural Pool: December 12, 2013; Receive and File Advisory Committee: December 19, 2013; Receive and File Watermaster Board: December 19, 2013; Receive and File (Normal Course of Business)

### ACTIONS:

December 12, 2013 – Appropriative Pool – December 12, 2013 – Non-Agricultural Pool – December 12, 2013 – Agricultural Pool – December 19, 2013 – Advisory Committee – December 19, 2013 – 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 October 2013 were \$400,960.13. The most significant expenditures during the month were to Wildermuth Environmental, Inc. in the amount of \$89,206.65 (check number 17317 dated October 23, 2013); Brownstein Hyatt Farber Schreck in the amount of \$86,554.90 (check number 17278 dated October 11, 2013); and Inland Empire Utilities Agency in the amounts of \$32,352.18 and \$30,900.00 (check numbers 17263 and 17306 dated October 3, 2013 and October 17, 2013).

ATTACHMENTS

1. Financial Report - B1

	Туре	Date	Num	Name	Мето	Account	Paid Amount
	Bill Pmt -Check	10/03/2013	17255	APPLIED COMPUTER TECHNOLOGIES	2412	1012 · Bank of America Gen'l Ckg	
	Bill	09/30/2013	2412		Database Consulting - September 2013	6052.2 · Applied Computer Technol	3,057.80
ΤΟΤΑ	L						3,057.80
	Bill Pmt -Check	10/03/2013	17256	ARROWHEAD MOUNTAIN SPRING WATER	0023230253	1012 · Bank of America Gen'l Ckg	
	Bill	09/30/2013	0023230253		Office Water Bottle - September 2013	6031.7 · Other Office Supplies	134.65
ΤΟΤΑ	L						134.65
	Bill Pmt -Check	10/03/2013	17257	CHEF DAVE'S CAFE & CATERING	1227	1012 · Bank of America Gen'l Ckg	
	Bill	09/26/2013	1227		Lunch for 9/26/2013 Board Meeting	6312 · Meeting Expenses	431.90
ΤΟΤΑ	L						431.90
	Bill Pmt -Check	10/03/2013	17258	DGO AUTO DETAILING		1012 · Bank of America Gen'l Ckg	
	Bill	09/30/2013			Wash 4 trucks on 9/11/13 and 9/25/13	6177 · Vehicle Repairs & Maintenance	200.00
ΤΟΤΑ	L						200.00
_	Bill Pmt -Check	10/03/2013	17259	DIRECTV	019447404	1012 · Bank of America Gen'l Ckg	
P	Bill	09/30/2013	019447404		9/19/13 -10/18/13	6031.7 · Other Office Supplies	94.99
TOTA	-			i -			94.99
	Bill Pmt -Check	10/03/2013	17260	GUARANTEED JANITORIAL SERVICE, INC.	6-29817	1012 · Bank of America Gen'l Ckg	
	Bill	09/30/2013	6-29817		Janitorial - September 2013	6024 · Building Repair & Maintenance	865.00
TOTAI	-						865.00
	Bill Pmt -Check	10/03/2013	17261	HOGAN LOVELLS	2166444	1012 · Bank of America Gen'l Ckg	
	Bill	09/30/2013	2766444		Non-Ag Pool Legal Services - September 2013	8567 · Non-Ag Legal Service	4,156.07
TOTAL							4,156.07
	Bill Pmt -Check	10/03/2013	17262	HSBC BUSINESS SOLUTIONS	7003-7309-1000-2744	1012 · Bank of America Gen'l Ckg	
	Bill	09/30/2013	7003730910002744		Miscellaneous meeting & office supplies	6031.7 · Other Office Supplies	519.05
TOTAL							519.05
	Bill Pmt -Check	10/03/2013	17263	INLAND EMPIRE UTILITIES AGENCY		1012 · Bank of America Gen'l Ckg	
	Bill	09/30/2013	1800002248		Wineville Basin Cost Share Project	7209.2 · Wineville Basin	32,332.18
	Bill	10/02/2013			Registration fee-Kavounas-Leadership Breakfast	6192 · Training & Seminars	20.00
TOTAL							32,352.18
	Bill Pmt -Check	10/03/2013	17264	MATHIS CONSULTING GROUP	153895	1012 · Bank of America Gen'l Ckg	
	Bill	09/30/2013	153895	•	Field Operations Specialist	6013 · Human Resources Services	1,942,50

	Туре	Date	Num	Name	Memo	Account	Paid Amount
TOTA	AL						1,942.50
	Bill Pmt -Check	10/03/2013	17265	PARK PLACE COMPUTER SOLUTIONS, INC.	479	1012 · Bank of America Gen'l Ckg	
	Bill	09/30/2013	479		IT Consulting - September 2013	6052.1 · Park Place Comp Solutn	2,325.00
TOTA	۱L						2,325.00
	Bill Pmt -Check	10/03/2013	17266	PAYCHEX	2013092600	1012 · Bank of America Gen'l Ckg	
	Bill	09/30/2013	2013092600		September 2013	6012 · Payroll Services	236.53
ΤΟΤΑ	L						236.53
	Bill Pmt -Check	10/03/2013	17267	SANDERS, LAURA		1012 · Bank of America Gen'l Ckg	
	Bill	09/30/2013			Transcript for 8/30/13 Court Hearing	6046 · Legal Publications/Services	240.00
τοτα	L						240.00
	Bill Pmt -Check	10/03/2013	17268	STANDARD INSURANCE CO.	Policy # 00-649299-0009	1012 · Bank of America Gen'l Ckg	
	Bill	09/30/2013	00644-92990009		Policy # 00-649299-0009	60191 · Life & Disab.Ins Benefits	456.73
ΤΟΤΑ							456.73
P16	Bill Pmt -Check	10/03/2013	17269	STAPLES BUSINESS ADVANTAGE	8026990403	1012 - Bank of America Gen'l Ckg	
	Bill	09/30/2013	8026990403		Miscellaneous office supplies	6031.7 · Other Office Supplies	98.58
ΤΟΤΑ	L.						98.58
	Bill Pmt -Check	10/03/2013	17270	STATE COMPENSATION INSURANCE FUND	1970970-13	1012 · Bank of America Gen'l Ckg	
	Bill	10/01/2013	1970970-13		Premium on account 9/26/13-10/26/13	60183 · Worker's Comp Insurance	786.42
τοτα	L						786.42
	Bill Pmt -Check	10/03/2013	17271	THE LAWTON GROUP	6017	1012 · Bank of America Gen'l Ckg	
	Bill	09/30/2013	20487		Week ending 9/22/13	6017 · Temporary Services	659.20
					Week ending 9/22/13	6017.1 Executive Assistant Services	1,811.20
	D.II	00/00/0040	20400		Week ending 9/22/13	6017.1 · Executive Assistant Services	520.80
	Bill	09/30/2013	20466		Week ending 9/15/13 Week ending 9/1513	6017 · Temporary Services 6017.1 · Executive Assistant Services	494.40 1,811.20
					Week ending 9/15/13	6017.1 · Executive Assistant Services	369.60
ΤΟΤΑΙ	-				,		5,666.40
	Bill Pmt -Check	10/03/2013	17272	THREE VALLEYS MUNICIPAL WATER DIST	October 31, 2013 Leadership Breakfast	1012 · Bank of America Gen'l Ckg	
	Bill	09/30/2013			Leadership Breakfast for Peter Kavounas	6191 · Conferences - General	15.00
TOTAL	-						15.00
	Bill Pmt -Check	10/03/2013	17273	UNITED HEALTHCARE	0032608160	1012 · Bank of America Gen'l Ckg	

	Туре	Date	Num	Name	Memo	Account	Paid Amount
	Bill	09/30/2013	0032608160		Dental premium - October 2013	60182.2 · Dental & Vision Ins	481.05
ΤΟΤΑ	L						481.05
	Bill Pmt -Check	10/03/2013	17274	VERIZON		1012 ⋅ Bank of America Gen'l Ckg	
	Bill	09/30/2013	01256121521714508		012561121521714508	7405 · PE4-Other Expense	184.09
	Bill	09/30/2013	012519116950792103		012519116950792103	6022 · Telephone	520.47
ΤΟΤΑ	L						704.56
	Bill Pmt -Check	10/03/2013	17275	VISION SERVICE PLAN	00-101789-0001	1012 · Bank of America Gen'l Ckg	
	Bill	09/30/2013	0010178900010		Vision premium - October 2013	60182.2 · Dental & Vision Ins	57.81
ΤΟΤΑ	L						57.81
	Bill Pmt -Check	10/03/2013	17276	YUKON DISPOSAL SERVICE	08-K2 213849	1012 · Bank of America Gen'l Ckg	
	Bill	10/02/2013	08-k2 213849		Disposal service for October 2013	6024 · Building Repair & Maintenance	106.53
TOTA							106.53
1017.	-						100.00
	Bill Pmt -Check	10/11/2013	17277	BOWCOCK, ROBERT	9/26/13 Board Meeting	1012 · Bank of America Gen'l Ckg	
-	Bill	09/26/2013	9/26 Board Mtg		9/26/13 Board Meeting	6311 · Board Member Compensation	125.00
	-						125.00
	Bill Pmt -Check	10/11/2013	17278	BROWNSTEIN HYATT FARBER SCHRECK		1012 · Bank of America Gen'l Ckg	
	Bill	09/30/2013	545178		GM Contract Extension	6073 · BHFS Legal - Personnel Matters	94.50
					Mediation Reservation Fee	6073 · BHFS Legal - Personnel Matters	4,000.00
					Employment	6073 · BHFS Legal - Personnel Matters	3,956.08
	Bill	09/30/2013	545179		Audit Response	6078 · BHFS Legal - Miscellaneous	463.05
	Bill	09/30/2013	545180		545180	6907.34 - Santa Ana River Water Rights	910.80
	Bill	09/30/2013	545181		545181	6907.33 · Desalter/Hydraulic Control	157.50
	Bill	09/30/2013	545182		545182	6275 · BHFS Legal - Advisory Committee	1,732.07
	Bill	09/30/2013	545183		545183	6375 · BHFS Legal - Board Meeting	7,609.64
	Bill	09/30/2013	545184		545184	8375 · BHFS Legai - Appropriative Pool	1,701.45
	Bill	09/30/2013	545185		545185	8475 · BHFS Legal - Agricultural Pool	1,701.45
	Bill	09/30/2013	545186		545186	8575 - BHFS Legal - Non-Ag Pool	6,980.16
	Bill	09/30/2013	545187		545187	6071 · BHFS Legal - Court Coordination	913.54
	Bill	09/30/2013	545188		545188	6907.39 · Recharge Master Plan	32,153.95
	Bill	09/30/2013	545189	·	545189	6078.11 · Safe Yield Recalculation	2,605.74
	Bill	09/30/2013	545190		545190	6078.12 - CCG Motion	2,883.84
	Bill	09/30/2013	545191		545191	6907.42 · RMPU - Fontana Motion	11,815.92
	Bill	09/30/2013	545193		545193	6078 · BHFS Legal - Miscellaneous	6,875.21
TOTAL.							86,554.90

Page 3 of 11

٠.

	Туре	Date	Num	Name	Memo	Account	Paid Amount
	Bill Pmt -Check	10/11/2013	17279	CRAIG, ROBERT		1012 · Bank of America Gen'l Ckg	
	Bill	09/12/2013	9/12 Appro Pool Mtg		9/12/13 Appropriative Pool Meeting	6311 · Board Member Compensation	125.00
	Bill	09/19/2013	9/19 Advisory Comm		9/19/13 Advisory Committee Meeting	6311 · Board Member Compensation	125,00
	Bill	09/26/2013	9/26 Board Mtg		9/26/13 Board Meeting	6311 · Board Member Compensation	125.00
ΤΟΤΑ	λL						375.00
	Bill Pmt -Check	10/11/2013	17280	CURATALO, JAMES	9/16/13 Administrative Meeting	1012 · Bank of America Gen'l Ckg	
	Bill	09/16/2013	9/16 Admin Mtg		9/16/13 Administrative Meeting	6311 · Board Member Compensation	125.00
ΤΟΤΑ	· ·						125.00
	Bill Pmt -Check	10/11/2013	17281	DE BOOM, NATHAN	Ag Pool Member Meeting Compensation	1012 · Bank of America Gen'l Ckg	
	Bill	09/12/2013	9/12 Ag Pool Mtg		9/12/13 Ag Pool Meeting	8411 · Compensation	25.00
					Ag Pool Member Meeting Compensation	8470 · Ag Meeting Attend -Special	100.00
ΤΟΤΑ	L						125.00
	Bill Pmt -Check	10/11/2013	17282	DURRINGTON, GLEN	Ag Pool Member Compensation	1012 · Bank of America Gen'l Ckg	
	Bill	09/12/2013	9/12 Ag Pool Mtg		9/12/13 Ag Pool Meeting	8411 · Compensation	25.00
σ	I				Ag Pool Member Compensation	8470 · Ag Meeting Attend -Special	100.00
то <del>тА</del> <b>СО</b>	<u>.</u>						125.00
	Bill Pmt -Check	10/11/2013	17283	FEENSTRA, BOB		1012 · Bank of America Gen'l Ckg	
	Bill	09/12/2013	9/12 Ag Pool Mtg		9/12/13 Ag Pool Meeting	8470 - Ag Meeting Attend -Special	125.00
	Bill	09/26/2013	9/26 Board Meeting		9/26/13 Board Meeting	8470 - Ag Meeting Attend -Special	125.00
ΤΟΤΑΙ	L						250.00
	Bill Pmt -Check	10/11/2013	17284	GALAXY AUDIO VISUAL	22134	1012 · Bank of America Gen'l Ckg	
	Bill	10/07/2013	22134		Adjustment of projector in Board room	6057 · Computer Maintenance	250.00
ΤΟΤΑΙ	L						250.00
	Bill Pmt -Check	10/11/2013	17285	GREAT AMERICA LEASING CORP.	14285039	1012 · Bank of America Gen'l Ckg	
	Bill	09/29/2013	14285039		Usage for Black Copies	6043.2 · Ricoh Usage & Maintenance Fee	310.42
					Usage for Color Copies	6043.2 · Ricoh Usage & Maintenance Fee	635.14
TOTAL	a.						945.56
	Bill Pmt -Check	10/11/2013	17286	HALL, PETE*		1012 · Bank of America Gen'l Ckg	
	Bill	09/05/2013	9/05 RMPU Mtg		9/05/13 RMPU Steering Committee Meeting	8470 · Ag Meeting Attend -Special	125.00
	Bill	09/10/2013	9/10 RMPU Mtg		9/10/13 RMPU Steering Committee Meeting	8470 · Ag Meeting Attend -Special	125.00
	Bill	09/12/2013	9/12 Ag Pool Mtg		9/12/13 Ag Pool Meeting	8470 · Ag Meeting Attend -Special	125.00
	Bill	09/19/2013	9/19 Advisory Comm		9/19/13 Advisory Committee Meeting	8470 - Ag Meeting AttendSpecial	125.00
	Bill	09/26/2013	9/26 Board Mtg		9/26/13 Board Meeting	8470 · Ag Meeting Attend -Special	125.00

	Туре	Date	Num	Name	Memo	Account	Paid Amount
тоти	\L						625.00
	Bill Pmt -Check	10/11/2013	17287	HUITSING, JOHN	Ag Pool Member Compensation	1012 - Bank of America Gen'l Ckg	
	Bill	09/12/2013	9/12 Ag Pool Mtg		9/12/13 Ag Pool Meeting	8411 · Compensation	25.00
					Ag Pool Member Compensation	8470 · Ag Meeting Attend -Special	
TOTA	NL.						125.00
	Bill Pmt -Check	10/11/2013	17288	KOOPMAN, GENE	Ag Pool Member Meeting Compensation	1012 · Bank of America Gen'l Ckg	
	Bill	09/12/2013	9/13 Ag Pool Mtg		9/12/13 Ag Pool Meeting	8411 · Compensation	25.00
					Ag Pool Member Meeting Compensation	8470 · Ag Meeting Attend -Special	100.00
ΤΟΤΑ	Ĺ						125.00
	Bill Pmt -Check	10/11/2013	17289	KUHN, BOB		1012 · Bank of America Gen'l Ckg	
	Bill	09/04/2013	9/04 Admin Mtg		9/04/13 Administrative Meeting	6311 · Board Member Compensation	125.00
	Bill	09/12/2013	9/12 Appro Pool Mtg		9/12/13 Appropriative Pool Meeting	6311 · Board Member Compensation	125.00
	Bill	09/26/2013	9/26 Board Mtg		9/26/13 Board Meeting	6311 · Board Member Compensation	125.00
	Bill	09/27/2013	9/27 Admin Mtg		9/27/13 Administrative Meeting	6311 - Board Member Compensation	125.00
							500.00
19	Bill Pmt -Check	10/11/2013	17290	PIERSON, JEFFREY		1012 · Bank of America Gen'l Ckg	
	Bill	09/05/2013	9/15 RMPU Mtg		9/15/13 RMPU Steering Committee Meeting	8470 · Ag Meeting Attend -Special	125.00
	Bill	09/12/2013	9/12 Ag Pool Mtg		9/12/13 Ag Pool Meeting	8470 - Ag Meeting Attend -Special	125.00
	Bill	09/19/2013	9/19 Advisory Comm		9/19/13 Advisory Committee Meeting	8470 - Ag Meeting Attend -Special	125.00
ΤΟΤΑ	wei						375.00
	Bill Pmt -Check	10/11/2013	17291	PUBLIC EMPLOYEES' RETIREMENT SYSTEM	Payor #3493	1012 - Bank of America Gen'l Ckg	
	General Journal	09/28/2013	09/28/2013	PUBLIC EMPLOYEES' RETIREMENT SYSTEM	CalPERS Retirement for 09/15/13-09/28/13	2000 · Accounts Payable	6,602.94
TOTA	-						6,602.94
	Bill Pmt -Check	10/11/2013	17292	ROGERS, PETER	9/26/13 Board Meeting	1012 · Bank of America Gen'l Ckg	
	Bill	09/26/2013	9/26 Board Mtg		9/26/13 Board Meeting	6311 - Board Member Compensation	125.00
τοται							125.00
	Bill Pmt -Check	10/11/2013	17293	STAPLES BUSINESS ADVANTAGE	8027142923	1012 · Bank of America Gen'l Ckg	
	Bill	09/28/2013	8027142923		Miscellaneous meeting & office supplies	6031.7 · Other Office Supplies	268.21
ΤΟΤΑΙ							268.21
	Bill Pmt -Check	10/11/2013	17294	TELECOM SERVICES	5809	1012 · Bank of America Gen'l Ckg	
	Bill	10/03/2013	5809		Install software after power surge-reprogram pho	. –	507.50
TOTAL							507.50

	Bill Pmt -Check	10/11/2013	17295	THE LAWTON GROUP	6017	1012 - Bank of America Gen'l Ckg	
	Bill	09/29/2013	20509		Week ending 9/29/13	6017 · Temporary Services	824.00
					Week ending 9/29/13	6017.1 Executive Assistant Services	1,811.20
					Week ending 9/29/13	6017.1 · Executive Assistant Services	168.00
TOTAL							2,803.20
	Bill Pmt -Check	10/11/2013	17296	UNION 76	300-732-989	1012 · Bank of America Gen'l Ckg	
I	Bill	09/29/2013	300732989		Fuel - September 2013	6175 · Vehicle Fuel	76.82
TOTAL							76.82
I	Bill Pmt -Check	10/11/2013	17297	VANDEN HEUVEL, GEOFFREY	6311	1012 · Bank of America Gen'l Ckg	
1	Bill	09/12/2013	9/12 Ag Pool Mtg		9/12/13 Ag Pool Meeting	6311 · Board Member Compensation	125.00
ł	Bill	09/26/2013	9/26 Board Mtg		9/26/13 Board Meeting	6311 · Board Member Compensation	125.00
TOTAL							250.00
)	Bill Pmt -Check	10/11/2013	17298	VANDEN HEUVEL, ROB	Ag Pool Member Compensation	1012 · Bank of America Gen'l Ckg	
F	Bill	09/19/2013	9/19 Advisory Comm		9/19/13 Advisory Committee Meeting	8411 · Compensation	25.00
P2					Ag Pool Member Compensation	8470 · Ag Meeting Attend -Special	100.00
TOTAL							125.00
(	General Journal	10/12/2013	10/12/2013	Payroll and Taxes for 09/29/13-10/12/13	Payroll and Taxes for 09/29/13-10/12/13	1012 · Bank of America Gen'l Ckg	
					Direct Deposist for 09/29/13-10/12/13	1012 · Bank of America Gen'l Ckg	19,780.43
					Payroll Taxes for 09/29/13-10/12/13	1012 · Bank of America Gen'l Ckg	6,308.69
					Payroll Check for 09/29/13-10/12/13	1014 · Bank of America P/R Ckg	555.71
				ICMA-RC	457 Employee Deductions for 09/29/13-10/12/13	1012 · Bank of America Gen'l Ckg	3,293.42
				ICMA-RC	401(a) Employee Deductions for 09/29/13-10/12/13	1012 · Bank of America Gen'l Ckg	923.03
TOTAL							30,861.28
с	Check	10/15/2013	10/15/2013	Service Charge	Service Charge	1012 · Bank of America Gen'i Ckg	
					Service Charge	6039.1 · Banking Service Charges	759.28
TOTAL							759.28
E	3ill Pmt -Check	10/17/2013	17299	ACWA JOINT POWERS INSURANCE AUTHORIT	00198	1012 · Bank of America Gen'l Ckg	
В	Bill	10/07/2013	00198		Prepayment - November	1409 · Prepaid Life, BAD&D & LTD	96.90
					October 2013	60191 · Life & Disab.Ins Benefits	96,90
TOTAL							193.80
В	Bill Pmt -Check	10/17/2013	17300	CALPERS	1394905143	1012 · Bank of America Gen'l Ckg	
В	Sill	10/15/2013	1394905143			60182.1 · Medical Insurance	5,581.56

	Туре	Date	Num	Name	Memo	Account	Paid Amount
ΤΟΤΑ	L						5,581.56
	Bill Pmt -Check	10/17/2013	17301	CHINO HILLS, CITY OF*	11	1012 · Bank of America Gen'i Ckg	
	Bill	09/30/2013	11		July-September 2013	7107.61 · Grd Level-Chino Hills ASR	524.50
ΤΟΤΑΙ	-						524.50
	Bill Pmt -Check	10/17/2013	17302	COMPUTER NETWORK		1012 - Bank of America Gen'l Ckg	
	Bill	10/09/2013	88618		Replacement Video card	6055 · Computer Hardware	302.40
	Bill	10/11/2013	88647		Speakers for PC	6055 · Computer Hardware	27.00
ΤΟΤΑΙ	-						329.40
	Bill Pmt -Check	10/17/2013	17303	CORELOGIC INFORMATION SOLUTIONS	80982783	1012 · Bank of America Gen'l Ckg	
	Bill	09/30/2013	80982783		80982783	7103.7 · Grdwtr Qual-Computer Svc	62.50
					80982783	7101.4 · Prod Monitor-Computer	62.50
TOTAL							125.00
	Bill Pmt -Check	10/17/2013	17304	CUCAMONGA VALLEY WATER DISTRICT	Lease due November 1, 2013	1012 · Bank of America Gen'l Ckg	
ס-	Bill	10/15/2013			Lease due November 1, 2013	1422 - Prepaid Rent	6,160.00
то <b>ња</b>							6,160.00
	Bill Pmt -Check	10/17/2013	17305	EGOSCUE LAW GROUP		1012 · Bank of America Gen'l Ckg	
	Bill	09/30/2013	10465		Ag Pool Legal Services - September 2013	8467 · Ag Legal & Technical Services	4,537.50
	Bill	09/30/2013	10439		Ag Pool Legal Services - August 2013	8467 · Ag Legal & Technical Services	12,375.00
TOTAL							16,912.50
	Bill Pmt -Check	10/17/2013	17306	INLAND EMPIRE UTILITIES AGENCY	1800002259	1012 · Bank of America Gen'l Ckg	
	Bill	10/11/2013	1800002259		Hickory Basin Arizona Crossing Cost Share Projec	ct 7690.3 · Hickory Basin Recharge Imprvmnt	30,900.00
TOTAL							30,900.00
	Bill Pmt -Check	10/17/2013	17307	OFFICE TEAM	38891695	1012 · Bank of America Gen'l Ckg	
	Bill	10/04/2013	38891695		Week ending 10/04/13	6017.1 · Executive Assistant Services	1,824.80
TOTAL							1,824.80
	Bill Pmt -Check	10/17/2013	17308	PREMIERE GLOBAL SERVICES	14681647	1012 · Bank of America Gen'l Ckg	
	Bill	09/30/2013	14681647		Pool agenda/meeting preparation on 9/03 & 9/11	8412 Meeting Expenses	47.34
					Pool agenda/meeting preparation on 9/03 & 9/11	8512 · Meeting Expense	47.34
					Pool agenda/meeting preparation on 9/03 & 9/11	8312 · Meeting Expenses	47.34
					PK call w/auditors on 9/04	6062 - Audit Services	56.38
					Non-Ag pool meeting call on 9/12	8512 · Meeting Expense	113.83
					Call on pending litigation on 9/17	6073 · BHFS Legal - Personnel Matters	38.67

	Туре	Date	Num	Name	Memo	Account	Paid Amount
					Calls on 9/25 re RMPU Presentation dry run	7204 · Comp Recharge-Supplies	123,57
					Monthly fee	6022 · Telephone	17.05
					Monthly fee	6022 · Telephone	19.95
ΤΟΤΑ	۱L.						511.47
	Bill Pmt -Check	10/17/2013	17309	RON SHELLEY'S AUTOMOTIVE	3852	1012 · Bank of America Gen'l Ckg	
	Bill	10/10/2013	3852		Tire repair	6177 · Vehicle Repairs & Maintenance	40.00
τοτα	L						40.00
	Bill Pmt -Check	10/17/2013	17310	STAPLES BUSINESS ADVANTAGE	8027226963	1012 · Bank of America Gen'l Ckg	
	Bill	10/05/2013	8027226963		Miscellaneous office supplies	6031.7 · Other Office Supplies	222.33
					Copier paper	6031.1 · Copy Paper	374.56
ΤΟΤΑΙ	L						596.89
	Bill Pmt -Check	10/17/2013	17311	STAULA, MARY L	Oct. 2013	1012 · Bank of America Gen'l Ckg	
	Bill	10/15/2013	Oct. 2013		Oct. 2013	60182.4 · Retiree Medical	29.19
ΤΟΤΑΙ	L						29.19
P2:	Bill Pmt -Check	10/17/2013	17312	THE LAWTON GROUP	6017	1012 · Bank of America Gen'l Ckg	
N	Bill	10/11/2013	20533		Week ending 10/06/13	6017 · Temporary Services	659.20
ΤΟΤΑΙ	L						659,20
	Bill Pmt -Check	10/17/2013	17313	UNITED HEALTHCARE	0032855151	1012 · Bank of America Gen'l Ckg	
	Bill	10/14/2013	0032855151		Dental Premium - November 2013	60182.2 · Dental & Vision Ins	588.27
TOTAL	-						588.27
	Bill Pmt -Check	10/17/2013	17314	VERIZON BUSINESS		1012 - Bank of America Gen'l Ckg	
	Bill	09/30/2013	07551316		07551316 - August	6053 · Internet Expense	1,509.28
	Bill	09/30/2013	08493275		08493275 - September	6053 · Internet Expense	1,518.49
	Bill	10/10/2013	66435497		66435497 - October	6053 · Internet Expense	1,522.63
TOTAL	-						4,550.40
	Bill Pmt -Check	10/17/2013	17315	VERIZON WIRELESS	9712689236	1012 · Bank of America Gen'l Ckg	
	Bill	10/15/2013	9712689236		Monthly service	6022 · Telephone	295.57
TOTAL							295.57
	Bill Pmt -Check	10/17/2013	17316	· WESTERN DENTAL SERVICES, INC.	11882	1012 · Bank of America Gen'l Ckg	
	Bill	10/09/2013	11882		Dental Premium - October 2013	60182.2 · Dental & Vision Ins	30.00
TOTAL							30.00

Туре	Date	Num	Name	Мето	Account	Paid Amount
Bill Pmt -Check	10/23/2013	17317	WILDERMUTH ENVIRONMENTAL INC		1012 · Bank of America Gen'l Ckg	
Bill	09/30/2013	2013275		2013275	6906 · OBMP Engineering Services	4,164.23
Bill	09/30/2013	2013276		2013276	6906.71 · OBMP - Misc. GM Requests	3,690.16
Bill	09/30/2013	2013277		2013277	6906 · OBMP Engineering Services	2,088.75
Bill	09/30/2013	2013278		2013278	6906 · OBMP Engineering Services	813.75
Bill	09/30/2013	2013279		2013279	6906.1 · OBMP - Watermaster Model Update	12,875.00
Bill	09/30/2013	2013280		2013280	7103.3 · Grdwtr Qual-Engineering	6,743.75
Bill	09/30/2013	2013281		2013281	7104.3 · Grdwtr Level-Engineering	7,752.40
Bill	09/30/2013	2013282		2013282	7107.61 · Grd Level-Chino Hills ASR	2,731.25
Bill	09/30/2013	2013283		Neva Ridge	7107.3 · Grd Level-SAR Imagery	14,000.00
Bill	09/30/2013	2013284		2013284	7107.2 · Grd Level-Engineering	5,869.45
Bill	09/30/2013	2013285		2013285	7108.3 · Hydraulic Control-Engineering	3,424.10
Bill	09/30/2013	2013286		2013286	7108.7 · Hydraulic Control - Prado Basin	1,871.84
Bill	09/30/2013	2013287		2013287	7202.3 · Comp Recharge-Implementation	17,854.47
Bill	09/30/2013	2013288		2013288	7402 · PE4-Engineering	1,387.50
Bill	09/30/2013	2013289		2013289	7502 · PE6&7-Engineering	852,50
Bill	09/30/2013	2013290		2013290	7108.3 · Hydraulic Control-Engineering	3,087.50
						89,206.65
General Journal	10/26/2013	10/26/2013	Payroll and Taxes for 10/13/13-10/26/13	Payroll and Taxes for 10/13/13-10/26/13	1012 · Bank of America Gen'l Ckg	
				Direct Deposist for 10/13/13-10/26/13	1012 · Bank of America Gen'i Ckg	19,635.55
				Payroll Taxes for 10/13/13-10/26/13	1012 · Bank of America Gen'l Ckg	7,360.34
				Payroll Checks for 10/13/13-10/26/13	1014 · Bank of America P/R Ckg	1,154.60
			ICMA-RC	457 Employee Deductions for 10/13/13-10/26/13	1012 · Bank of America Gen'l Ckg	3,127.22
			ICMA-RC	401(a) Employee Deductions for 10/13/13-10/26/13	3 1012 · Bank of America Gen'l Ckg	923.03
					_	32,200.74
Bill Pmt -Check	10/28/2013	17318	BANK OF AMERICA	XXXX-XXXX-XXXX-9341	1012 · Bank of America Gen'l Ckg	
Bill	09/30/2013	XXXX-XXXX-XXXX-9341		PK Lunch w/Doug Headrick @ SBVMWD	6909,1 · OBMP Meetings	18.19
				GRA Membership for PK	6111 · Membership Dues	92.91
				RegPK-attend GRA Collaborative Leadership	6193.2 · Conference - Registration Fee	256.62
				RegPK-attend GRA 29th Groundwater Conf.	6193.2 · Conference - Registration Fee	358,38
				PK flight to Sacramento	6191 · Conferences - General	175.91
				Car rental fee	6191 · Conferences - General	225.36
				PK meeting w/Rick Hansen - TVMWD	8312 · Meeting Expenses	20.18
				Reg. fee-PK-attend the SCWC 29th Annual Dinner	6193.2 · Conference - Registration Fee	176.98
				Working lunch for PK and JJ re Human Resources	6141.3 · Admin Meetings	30.22
				Flash card/mini card reader for recorder-boardroom	6031.7 - Other Office Supplies	37.39
				Lunch for completion of RMPU	7204 · Comp Recharge-Supplies	181.22

1,573.36

	Туре	Date	Num	Name	Memo	Account	Paid Amount
	Bill Pmt -Check	10/28/2013	17319	GEOSCIENCE SUPPORT SERVICES, INC.	4555-11-13	1012 · Bank of America Gen'l Ckg	
	Bill	09/30/2013	4555-11-13		August 1 - September 30, 2013	7107.61 · Grd Level-Chino Hills ASR	4,090.00
ΤΟΤΑ	L						4,090.00
	Bill Pmt -Check	10/28/2013	17320	GRAINGER		1012 · Bank of America Gen'l Ckg	
	Bill	10/14/2013	9268436327		Storage clipboards	6151 · Small Tools & Equipment	191.25
	Bill	10/14/2013	9268512747		High visibility vest, safety glasses, hard hat	6151 · Small Tools & Equipment	123.07
ΤΟΤΑΙ	L						314.32
	Bill Pmt -Check	10/28/2013	17321	GREAT AMERICA LEASING CORP.	14346941	1012 · Bank of America Gen'l Ckg	
	Bill	10/16/2013	14346941		Invoice	6043.1 · Ricoh Lease Fee	3,221.64
					One-time documentation fee	6043.1 · Ricoh Lease Fee	109,50
					Transitional billing fee for 9/26-10/10	6043.1 · Ricoh Lease Fee	1,503.43
ΤΟΤΑΙ	-						4,834.57
	Bill Pmt -Check	10/28/2013	17322	LEGAL SHIELD	111802	1012 · Bank of America Gen'l Ckg	
-0	Bill	10/21/2013	0111802		Employee deductions - October 2013	60194 · Other Employee Insurance	51,80
נא <b>ר</b> ס⊺ 4-	L						51.80
	Bill Pmt -Check	10/28/2013	17323	OFFICE TEAM	38932219	1012 · Bank of America Gen'l Ckg	
	Bill	10/11/2013	38932219		Week ending 10/11/13	6017.1 · Executive Assistant Services	1,779.18
					Overtime week ending 10/11/13	6017.1 · Executive Assistant Services	153.97
TOTAL							1,933.15
	Bill Pmt -Check	10/28/2013	17324	PITNEY BOWES CREDIT CORPORATION	6684246	1012 · Bank of America Gen'l Ckg	
	Bill	10/21/2013	6684246		Leasing charge	6044 · Postage Meter Lease	548.64
TOTAL							548.64
	Bill Pmt -Check	10/28/2013	17325	PRINTING RESOURCES		1012 · Bank of America Gen'l Ckg	
	Bill	10/18/2013	60234		Business cards: Bill McLaughlin	6031.7 · Other Office Supplies	146.13
	Bill	10/19/2013	60235		Nameplates: Anna Truong and Please Sign In	6031.7 · Other Office Supplies	59.16
TOTAL							205.29
	Bill Pmt -Check	10/28/2013	17326	PUBLIC EMPLOYEES' RETIREMENT SYSTEM	Payor #3493	1012 · Bank of America Gen'l Ckg	
	General Journai	10/12/2013	10/12/2013	PUBLIC EMPLOYEES' RETIREMENT SYSTEM	CalPERS Retirement for 09/29/13-10/12/13	2000 · Accounts Payable	6,693.19
TOTAL							6,693.19
	Bill Pmt -Check	10/28/2013	17327	STANDARD INSURANCE CO.	Policy # 00-649299-0009	1012 · Bank of America Gen'l Ckg	
	Bill	10/24/2013	006492990009		Policy # 00-649299-0009	60191 · Life & Disab.Ins Benefits	482,28
						•	482.2

#### CHINO BASIN WATERMASTER Cash Disbursements For The Month of October 2013

	Туре	Date	Num	Name	Memo	Account	Paid Amount
TOTA	_						482.28
	Bill Pmt -Check	10/28/2013	17328	STAPLES BUSINESS ADVANTAGE	8027324440	1012 · Bank of America Gen'l Ckg	
	Bill	10/12/2013	8027324440		Miscellaneous office supplies	6031.7 · Other Office Supplies	12.94
ΤΟΤΑΙ	-						12.94
		10/00/00140	17000		684 <b>7</b>	4040 Dauly of America Courth Olym	
	Bill Pmt -Check	10/28/2013	17329	THE LAWTON GROUP	6017	1012 · Bank of America Gen'l Ckg	101.00
	Bill	10/13/2013	20575		Week ending 10/13/13	6017 · Temporary Services	164.80
TOTAL	-						164.80
	General Journal	10/31/2013	10/31/2013	Wage Works FSA Direct Debits - October 2013	Wage Works FSA Direct Debits - October 2013	1012 · Bank of America Gen'l Ckg	
					Wage Works FSA Direct Debits - October 2013	1012 - Bank of America Gen'l Ckg	393.08
					Wage Works FSA Direct Debits - October 2013	1012 · Bank of America Gen'l Ckg	393.08
					Wage Works FSA Direct Debits - October 2013	1012 · Bank of America Gen'l Ckg	76.25
TOTAL							862.41
						Total Disbursements:	400,960.13

P25

THIS PAGE HAS INTENTIONALLY BEEN LEFT BLANK FOR PAGINATION



# CHINO BASIN WATERMASTER

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

PETER KAVOUNAS, P.E. General Manager

## STAFF REPORT

DATE: December 12, 2013

TO: Pool Committee Members

SUBJECT: VISA Check Detail Report - Financial Report B2 (October 31, 2013)

#### SUMMARY

Issue: Record of VISA credit card payment disbursed for the month of October 31, 2013.

Recommendation: Receive and file VISA Check Detail Report for October 31, 2013 as presented.

Financial Impact: Funds disbursed were included in the FY 2013-2014 Watermaster Budget.

<u>Future Consideration</u> Appropriative Pool: December 12, 2013; Receive and File Non-Agricultural Pool: December 12, 2013; Receive and File Agricultural Pool: December 12, 2013; Receive and File Advisory Committee: December 19, 2013; Receive and File Watermaster Board: December 19, 2013; Receive and File (Normal Course of Business)

ACTIONS:

December 12, 2013 – Appropriative Pool – December 12, 2013 – Non-Agricultural Pool – December 12, 2013 – Agricultural Pool – December 19, 2013 – Advisory Committee – December 19, 2013 – 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

Total cash disbursement during the month of October 2013 was \$1,573.36. This payment was processed by check number 17318 dated October 28, 2013. The monthly charges for October 2013 were for routine and customary expenditures and properly documented with receipts.

#### ATTACHMENTS

1. Financial Report - B2

.

,

#### CHINO BASIN WATERMASTER VISA Check Detail Report October 2013

Туре	Num	Date	Name	Memo	Account	Paid Amount
Bill Pmt -Check	10/28/2013	17318	BANK OF AMERICA	XXXX-XXXX-XXXX-9341	1012 · Bank of America Gen'l Ckg	
Bill	09/30/2013	XXXX-XXXX-XXX	X-9341	PK Lunch w/Doug Headrick @ SBVMWD	6909.1 · OBMP Meetings	18.19
				GRA Membership for PK	6111 · Membership Dues	92.91
				RegPK-attend GRA Collaborative Leadership	6193.2 · Conference - Registration Fee	256.62
				RegPK-attend GRA 29th Groundwater Conf.	6193.2 - Conference - Registration Fee	358.38
				PK flight to Sacramento	6191 · Conferences - General	175.91
				Car rental fee	6191 · Conferences - General	225,36
				PK meeting w/Rick Hansen - TVMWD	8312 · Meeting Expenses	20.18
				Reg. fee-PK-attend the SCWC 29th Annual Dinner	6193.2 · Conference - Registration Fee	176.98
				Working lunch for PK and JJ re Human Resources	6141.3 · Admin Meetings	30.22
				Flash card/mini card reader for recorder-boardroom	6031.7 · Other Office Supplies	37.39
				Lunch for completion of RMPU	7204 · Comp Recharge-Supplies	181.22
DTAL					Total Disbursements:	1,573.36

THIS PAGE HAS INTENTIONALLY BEEN LEFT BLANK FOR PAGINATION



# 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: December 12, 2013

TO: Pool Committee Members

SUBJECT: Combining Schedule of Revenue, Expenses and Changes in Working Capital for the Period July 1, 2013 through October 31, 2013 - Financial Report B3 (October 31, 2013)

#### SUMMARY

<u>Issue</u>: Record of Revenue, Expenses and Changes in Working Capital for the Period July 1, 2013 through October 31, 2013.

<u>Recommendation</u>: Receive and file Combining Schedule of Revenue, Expenses and Changes in Working Capital for the Period July 1, 2013 through October 31, 2013 as presented.

Financial Impact: Funds disbursed were included in the FY 2013-2014 Watermaster Budget.

<u>Future Consideration</u> Appropriative Pool: December 12, 2013; Receive and File Non-Agricultural Pool: December 12, 2013; Receive and File Agricultural Pool: December 12, 2013; Receive and File Advisory Committee: December 19, 2013; Receive and File Watermaster Board: December 19, 2013; Receive and File (Normal Course of Business)

ACTIONS:

December 12, 2013 - Appropriative Pool -

December 12, 2013 - Non-Agricultural Pool -

December 12, 2013 - Agricultural Pool -

December 19, 2013 - Advisory Committee -

December 19, 2013 - Watermaster Board -

#### BACKGROUND

A Combining Schedule of Revenue, Expenses and Changes in Working Capital for the period July 1, 2013 through October 31, 2013 is provided to keep all members apprised of the FY 2013-2014 cumulative Watermaster revenues, expenditures and changes in working capital for the period listed.

#### DISCUSSION

The Combining Schedule of Revenue, Expenses and Changes in Working Capital has been created from various financial reports and statements created from QuickBooks Enterprise Solutions 13.0, 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 WORKING CAPITAL FOR THE PERIOD JULY 1, 2013 THROUGH OCTOBER 31, 2013

	[]	OPTIMUM	POOL ADMINISTR	ATION & SPECIA	L PROJECTS	GROUNDWATER C	PERATION	s		ŗ
	WATERMASTER		APPROPRIATIVE	AG	NON-AG	GROUNDWATER	SB222		GRAND	BUDGET
	ADMINISTRATION	MANAGEMENT	POOL	POOL	POOL	REPLENISHMENT	FUNDS	VALUE ADJ.	TOTALS	2013-2014
Administrative Revenues:										
Administrative Assessments			-		-				-	6,602,605
Interest Revenue			2,724	314	83				3,121	29,700
Mutual Agency Project Revenue	153,036								153,036	154,581
Grant Income									-	0
Miscellaneous Income									-	0
Total Revenues	153,036	-	2,724	314	83				156,156	6,786,886
Administrative & Project Expenditures:										
Watermaster Administration	504,449								504,449	705,399
Watermaster Board-Advisory Committee	53,081								53,081	205,657
Ag Pool Misc. Expense - Ag Fund	00,001			94					94	400
Pool Administration			41,034	61,069	32,278				134,381	599,649
Optimum Basin Mgmt Administration		465,704							465,704	1,237,798
OBMP Project Costs		814,957							814,957	3,723,076
Debt Service		406,127							406,127	456,093
Basin Recharge Improvements		30,900							30,900	655,544
Education Funds Use									-	0
Mutual Agency Project Costs										10,000
Total Administrative/OBMP Expenses	557,529	1,717,687	41,034	61,069	32,278	-	-		2,409,691	7,593,616
Net Administrative/OBMP Expenses	(404,494)	(1,717,687)								
Allocate Net Admin Expenses To Pools	404,494		287,602	102,767	14,125				-	
Abocate Net OBMP Expenses To Pools		1,311,561	932,541	333,218	45,802				-	
Allocate Debt Service to App Pool		406,127	406,127						-	
Agricultural Expense Transfer*			497,054	(497,054)					-	_
Total Expenses			2,164,356	94	92,205	-	-		2,409,691	7,593,616
Net Administrative Income		_	(2,161,632)	220	(92,122)				(2,253,535)	(806,730)
Other Income/(Expense)										
Replenishment Water Assessments			_		_	_				D
Non-Ag Stored Water Purchases			-		-	-			-	0
Interest Revenue						441			441	0
MWD Water Purchases						-			-	õ
Non-Ag Stored Water Purchases			***						-	õ
MWD Water Purchases						-			-	0
Groundwater Replenishment						-			-	0
Interest Expense - CalPERS Side Fund			-		-				-	0
Refund-Excess Reserves			-		-				~	0
Refund-Recharge Debt								· .		0
Net Other Income/(Expense)		_				441	_		441	0
Net Transfers To/(From) Reserves		(2,253,093)	(2,161,632)	220	(92,122)	441			(2,253,093)	(806,730)
Working Capital, July 1, 2013		-	4,759,923	478,917	156,647	667,399	158,251	1,763	6,222,901	
Working Capital, End Of Period		_	2,598,291	479,137	64,525	667,840	158,251	1,763	3,969,807	3,969,807
creating capital and of 1 offour					01,020				0,000,007	2,000,001
12/13 Assessable Production			96,433.754	34,458.009	4,736.325				135,628.088	
12/13 Production Percentages			71.102%	25.406%	3.492%				100.000%	

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

N:\Administration\Meetings - Agendas & Minutes\2013\Staff Letters\20131212 - B3 Combining Schedule\_Oct 2D13 xis)Jul2013-Oct2013

THIS PAGE HAS INTENTIONALLY BEEN LEFT BLANK FOR PAGINATION



# 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: December 12, 2013

TO: **Pool Committee Members** 

SUBJECT: Treasurer's Report of Financial Affairs for the Period September 1, 2013 through October 31, 2013 - Financial Report B4 (October 31, 2013)

#### SUMMARY

Issue: Record of increases or decreases in the cash position, assets and liabilities of Watermaster for the Period of September 1, 2013 through October 31, 2013.

Recommendation: Receive and file Treasurer's Report of Financial Affairs for the Period September 1, 2013 through October 31, 2013 as presented.

Financial Impact: Funds disbursed were included in the FY 2013-2014 Watermaster Budget.

**Future Consideration** Appropriative Pool: December 12, 2013; Receive and File Non-Agricultural Pool: December 12, 2013; Receive and File Agricultural Pool: December 12, 2013; Receive and File Advisory Committee: December 19, 2013; Receive and File Watermaster Board: December 19, 2013; Receive and File (Normal Course of Business)

ACTIONS: December 12, 2013 - Appropriative Pool -

December 12, 2013 - Non-Agricultural Pool -

December 12, 2013 - Agricultural Pool -

December 19, 2013 – Advisory Committee – December 19, 2013 – Watermaster Board –

#### BACKGROUND

A Treasurer's Report of Financial Affairs for the Period September 1, 2013 through October 31, 2013 is provided to keep all members apprised of the total cash in banks (Bank of America, LAIF, and CaITRUST) 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 CaITRUST, 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 QuickBooks Enterprise Solutions 13.0, 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 Fi TREASURER'S REPORT OF FINANCIAL AFFAIRS FOR THE PERIOD OCTOBER 1, 2013 THROUGH OCTOBER 31, 2013								
	DEPOSITORIES: Cash on Hand - Petty Cash Bank of America Governmental Checking-Demand Deposits		\$	586,225	\$	500		
	Zero Balance Account - Payroll Local Agency Investment Fund - Sacramento		\$	-		586,225 3,789,444		
	TOTAL CASH IN BANKS AND ON HAND TOTAL CASH IN BANKS AND ON HAND	10/31/2013 9/30/2013			\$	<b>4,376,169</b> 4,773,567		
	PERIOD INCREASE (DECREASE)					(397,398)		
CHANGE IN CASH POSITION DUE TO:								
Decrease/(Increase) in Assets	: Accounts Receivable Assessments Receivable Prepaid Expenses, Deposits & Other Current Assets				\$	3,517		
(Decrease)/Increase in Liabilities						179,443 12,557 (592,915)		
	PERIOD INCREASE (DECREASE)				\$	(397,398)		

				Ze	ero Balance			
	Petty	Ģ	Sovt'l Checking		Account		Local Agency	
	 Cash		Demand		Payroll	In	vestment Funds	 Totals
SUMMARY OF FINANCIAL TRANSACTIONS:								
Balances as of 9/30/2013	\$ 500	\$	(12,815)	\$	-	\$	4,785,882	\$ 4,773,567
Deposits	-		1,000,000		-		3,562	1,003,562
Transfers	-		(82,206)		72,393		(1,000,000)	(1,009,813)
Withdrawals/Checks	 		(318,754)		(72,393)			(391,148)
Balances as of 10/31/2013	\$ 500	\$	586,225	\$		\$	3,789,444	\$ 4,376,169
PERIOD INCREASE OR (DECREASE)	\$ 	\$	<u>599,</u> 040	\$		\$	(996,438)	\$ (397,398)

#### CHINO BASIN WATERMASTER TREASURER'S REPORT OF FINANCIAL AFFAIRS FOR THE PERIOD OCTOBER 1, 2013 THROUGH OCTOBER 31, 2013

#### INVESTMENT TRANSACTIONS

Effective Date	Transaction	Depository	Activity	Redeemed	Days to Maturity	Interest Rate(*)	Maturity Yield
10/4/2013	Withdrawal	L.A.I.F	\$ (400,000)		· · · · · · · · · · · · · · · · · · ·		
10/15/2013	Interest	L.A.1.F	\$ 3,562				
10/23/2013	Withdrawal	L.A.1.F	\$ (600,000)				
TOTAL INVEST	MENT TRANSAC	TIONS	\$ (996,438)		=		

\* The earnings rate for L.A.I.F. is a daily variable rate; 0.26% was the effective yield rate at the Quarter ended September 30, 2013.

#### INVESTMENT STATUS October 31, 2013

Financial Institution	Principal Amount	Number of Days	Interest Rate	Maturity Date
Local Agency Investment Fund	\$ 3,789,444			
TOTAL INVESTMENTS	<u>\$ 3,789,444</u>			

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

N:\Administration\Meetings - Agendas & Minutes\2013\Staff Letters\[20131212 - B4 Treasurers Report\_Oct 2013.xls]Sep2013



# 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: December 12, 2013

TO: Pool Committee Members

SUBJECT: Budget vs. Actual Report for the Period July 1, 2013 through October 31, 2013 - Financial Report B5 (October 31, 2013)

#### SUMMARY

<u>Issue</u>: Record of revenues and expenses of Watermaster for the Period of July 1, 2013 through October 31, 2013.

<u>Recommendation</u>: Receive and file Budget vs. Actual Report for the Period July 1, 2013 through October 31, 2013 as presented.

Financial Impact: Funds disbursed were included in the FY 2013-2014 Watermaster Budget.

<u>Future Consideration</u> Appropriative Pool: December 12, 2013; Receive and File Non-Agricultural Pool: December 12, 2013; Receive and File Agricultural Pool: December 12, 2013; Receive and File Advisory Committee: December 19, 2013; Receive and File Watermaster Board: December 19, 2013; Receive and File (Normal Course of Business)

ACTIONS:

December 12, 2013 – Appropriative Pool – December 12, 2013 – Non-Agricultural Pool – December 12, 2013 – Agricultural Pool – December 19, 2013 – Advisory Committee – December 19, 2013 – Watermaster Board –

#### BACKGROUND

A Budget vs. Actual Report for the period July 1, 2013 through October 31, 2013 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.

#### DISCUSSION

The Budget vs. Actual report has been created from QuickBooks Enterprise Solutions 13.0, 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.

There was a Budget Amendment approved during the October 2013 meetings as a result of increased costs related to the Wineville Proof of Concept Project. Budget Amendment Form (A-13-10-01) in the amount of \$62,150 increased the Amended FY 2013/14 budget from \$7,531,466 to \$7,593,616. Budget Amendment Form (A-13-10-01) was recorded to the accounting records for the accounting period ending October 31, 2013, and is included in this financial report. The amount of \$62,150 was included in account (7209.2) Wineville Basin.

Year-To-Date (YTD) for the four months ending October 31, 2013, all but four categories were at or below the projected budget. Overall, the (YTD) Actual Expenses were \$1,401,049 or 36.8% below the (YTD) Budgeted Expenses of \$3,810,741. The four categories above budget were the Watermaster Administrative Salary/Benefits Costs (6010's) over budget by the amount of \$27,771; Watermaster Legal Services (6070's) over budget by the amount of \$69,603; Insurance expenses (6080's) over budget by the amount of \$7,397; and Optimum Basin Management Plan expenses (6900's) over budget by the amount of \$12,321. Please note that the Watermaster Administrative Salary/Benefits Costs (6010's) are not the grand total of all Watermaster salary costs. The category (6010's) captures the portion of the total Watermaster Salary/Benefits Costs allocated to specific Administrative tasks. The consolidated Watermaster Salaries expenses, Watermaster Legal Services, and Optimum Basin Management Plan expenses are discussed in greater detail within their specific sections.

The Insurance budget was developed by Watermaster staff with the assumption of maintaining the existing levels of business insurance coverage as the previous fiscal years. There was no intent to add any new coverage(s). However, it was decided that Watermaster should apply and purchase Directors and Officers Liability Insurance, which had not been part of the Watermaster insurance policies in the past. The application for coverage was submitted by our insurance broker to approximately ten to fifteen insurance carriers in June 2013 and Watermaster was accepted and approved for coverage. The cost of the D&O coverage was approximately \$7,500 which included the annual broker fee. Within the next few months, as the current fiscal year progresses, a Budget Transfer Form could be submitted to adjust this budget category shortfall.

#### SALARIES EXPENSE

Watermaster utilizes an in-house database time and attendance system to allocate staff's actual hours worked and also allocates the hours to a specific project or activity. Watermaster staff time could be charged to Administrative, OBMP, or Implementation Project categories. Recently, some Watermaster staff spent more time on administrative related tasks and less time on specific OBMP or project related areas. When the FY 2013/14 budget was developed, basic assumptions were used in allocating how staff's time would be spent and on which 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. This is what is currently occurring within the Administrative Salary/Benefit costs category.

# Budget vs. Actual Report for the Period Page 3 of 11

As of October 31, 2013, the total (YTD) Watermaster salary expenses are \$40,847 or 8.8% below the (YTD) budgeted amount of \$466,544. The budget was developed with a staffing level of nine Full-Time Equivalents (FTE's). As of October 31, 2013, the actual staffing level was eight Full-Time Equivalents (FTE's). The single vacant position was the Executive Assistant position which is currently being filled by a temporary employee from an Employment Agency. Those temporary employee costs are not included as part of the Salaries expenses listed below. Regarding the Executive Assistant, the position has been filled and the new hire started on Wednesday, December 4, 2013.

The table summarizes the Year-To-Date (YTD) Actual Watermaster salary costs compared to the Year-To-Date (YTD) Budget as of October 31, 2013. 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 table listed below shows how on a consolidated basis, the Watermaster employee activity compares with the budgeted activity. In some cases, the activity is above the budget, and in most cases, the activity is below the budget. The following details are provided:

	Jul '13 - Oct '13	Budget	\$ Over Budget	% of Budget	Annual Budget
WM Salary Expense			<u> </u>		
6011 · WM Staff Salaries	236,861.01	198,210.85	38,650,16	119.5%	585,623.00
6011.2 · WM Staff - Admin. Paid Leave	0.00	0,00	0.00	0.0%	0.00
6201 · Advisory Committee - WM Staff Salaries	4,029.07	6,690.68	-2,661.61	60.22%	19,768.00
6301 · Watermaster Board - WM Staff Salaries	5,982.62	11,270.44	-5,287.82	53.08%	33,299.00
8301 · Appropriative Pool - WM Staff Salaries	6,086.21	9,197.03	-3,110.82	66,18%	27,173.00
8401 · Agricultural Pool - WM Staff Salaries	5,602.48	7,907.15	-2,304.67	70.85%	23,362.00
8501 · Non-Agricultural Pool - WM Staff Salaries	1,848.14	4,810.92	-2,962.78	38.42%	14,214.00
6901 · OBMP - WM Staff Salaries	60,964.26	71,716.63	-10,752.37	85.01%	211,890.00
7101.1 · Production Monitor - WM Staff Salaries	19,840.70	27,381.20	-7,540.50	72.46%	80,899.00
7102.1 · In-line Meter - WM Staff Salaries	740.23	3,601.56	-2,861.33	20.55%	10,641.00
7103.1 · Grdwater Quality - WM Staff Salaries	6,820.82	21,502.72	-14,681.90	31.72%	64,261.00
7104.1 · Grdwater Level - WM Staff Salaries	22,227.67	20,143.55	2,084.12	110.35%	59,515.00
7105.1 · Sur Wtr Qual - WM Staff Salaries	0.00	0.00	0.00	0.0%	0,00
7107.1 · Grd Level Monitoring - WM Staff Salaries	0.00	0.00	0.00	0.0%	0.00
7108.1 · Hydraulic Control - WM Staff Salaries	0.00	597.81	-597.81	0.0%	2,355.00
7108.11 · Prado Basin - WM Staff Salaries	2,354.99	2,548.64	-193.65	92.4%	7,646.00
7201 · Comp Recharge - WM Staff Salaries	8,040.25	17,685.32	-9,645.07	45.46%	52,252.00
7301 · PE3&5 - WM Staff Salaries	182.76	4,760.45	-4,577.69	3,84%	14,065.00
7401 · PE4 - WM Staff Salaries	1,345.70	2,897.88	-1,552.18	46.44%	8,562.00
7501.1 · PE 6&7 - WM Staff Salaries (Plume)	0.00	2,089.65	-2,089.65	0.0%	6,174.00
7501 · PE6&7 - WM Staff Salaries	224.28	1,357.87	-1,133.59	16.52%	4,058.00
7601 · PE8&9 - WM Staff Salaries	1,061.79	6,413.16	-5,351.37	16.56%	18,948.00
7701 · Inactive Well - WM Staff Salaries	0.00	0.00	0.00	0.0%	0.00
Subtotal WM Staff Costs	384,212.98	420,783.51	-36,570.53	91.31%	1,244,705.00
60185 · Vacation	27,711.78	24,106.64	3,605.14	114.96%	60,320.00
60185.2 · Comp Time Accrual Adjustment	0.00	0.00	0.00	0.0%	0.00
60185.3 · Vacation Accrual Adjustment	0.00	0.00	0.00	0.0%	0.00
60186 · Sick Leave	4,211.37	14,436.00	-10,224.63	29.17%	43,308.00
60186.1 · Sick Leave Accrual Adjustment	0.00	0.00	0.00	0.0%	0.00
60187 · Holidays	9,561.20	7,218.00	2,343.20	132.46%	43,308.00
Subtotal WM Paid Leaves	41,484.35	45,760.64	-4,276.29	90.66%	146,936.00
Total WM Salary Costs	425,697.33	466,544.15	-40,846.82	91.25%	1,391,641.00

#### BROWNSTEIN HYATT FARBER SCHRECK EXPENSES

As of October 31, 2013, the total (YTD) BHFS legal expenses are \$105,720 or 35.7% above the (YTD) budgeted amount of \$295,747. Some of the specific legal categories were under budget for the month, while other categories were over the budget. At the present time, there is no proposal to complete a

Budget Transfer Form to adjust the existing BHFS legal services budget of \$757,490.

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 2013/14. The total budget was developed by multiplying the number of hours that would be required to complete the specific tasks by the hourly rate. Unfortunately, three specific activities were never included as part of the budget when initially developed and approved, and while another activity was anticipated and budgeted for, it was not budgeted at the level of legal support required. These activities were Personnel Matters (6073), CCG Motion (6078.12), Safe Yield Recalculation (6907.42), and RMPU-City of Fontana Motion (6907.43). Over the next few months, as the current fiscal year progresses, a Budget Transfer Form could be submitted to adjust this budget category shortfall.

<u>CCG Motion, Safe Yield Recalculation and RMPU-City of Fontana Motion</u>: As new legal activities are established, an account code is developed and assigned to capture the costs. To date, there have been three new accounts created. As of October 31, 2013 the CCG Motion (6078.12) has cumulative year-to-date costs of \$64,772; Safe Yield Recalculation (6907.42) has cumulative year-to-date costs of \$46,461; and RMPU-City of Fontana Motion (6907.43) has cumulative year-to-date costs of \$36,061. Please note these costs were not anticipated or expected when the FY 2013/14 legal services budget was developed and approved.

Personnel Matters: As reported during the current monthly meetings, Watermaster's legal counsel filed an appeal with CaIPERS regarding CaIPERS 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 CaIPERS determination. Aside from the Alvarez appeal and a separate issue, a former employee's attorney has recently informed Watermaster of a potential wrongful termination suit against Watermaster. As of October 31, 2013 both activities totaled \$43,772 and these activities were not part of the original fiscal year budget amount of \$757,490. These two separate legal activities will continue until a resolution is reached. These activities are recorded under Personnel Matters (6073). The anticipated activity for this category was the General Manager's annual evaluation, along with the development of the General Manager's employment contract. All of the ongoing employment related costs for the General Manager was budgeted at \$7,000. The cost to date for this activity is \$6,084.

As approved during the June 2013 meetings, the Pools, Advisory Committee and the Board meeting for the month of July 2013 were not held. However, there were several other special and confidential meetings held during the month of July for the Appropriative Pool, Agricultural Pool and Board. As a result, the related meeting expenses from (BHFS) within the accounts (6275, 6375, 8375, 8475 and 8575) were lower than budgeted. Overall, this category of legal expenses as of October 31, 2013 was \$9,089 or 12.5% below the budgeted amount of \$72,880.

The OBMP legal expenses were above the budget for the month. As mentioned above, there were two new accounts added to the OBMP section. The accounts were the Safe Yield Recalculation (6907.42) and the RMPU-City of Fontana Motion (6907.43). Both accounts do not have budget dollars allocated. The Recharge Master Plan legal expenses were \$31,744 or 80.0% above the budget of \$39,700. As of October 31, 2013 this category of legal expenses was \$45,205 or 35.3% above the budgeted amount of \$128,050.

The table listed below summarizes the Brownstein Hyatt Farber Schreck (BHFS) expenses as of October 31, 2013 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:

P42

	Jul '13 - Oct '13	Budget	\$ Over Budget	% of Budget	Annual Budget
6070 · Watermaster Legal Services	<u>Jui 13-00, 13</u>	Duuget	a over bluger	7a of Budger	Annual Duuget
6071 · BHFS Legal - Court Coordination	3,869,59	12,508.36	-8,638,77	30.94%	37,525.00
6072 · BHFS Legal - Annotated Judgment	17,122.47	24,233.32	-7,110.85	70,66%	36,350.00
6072 · BHFS Legal - Personnel Matters	49,855,98	7,000.00	42,855,98	712.23%	7,000,00
6074 · BHFS Legal - Interagency issues	-0.00	16,800.00	-16,800.00	0.0%	50,400,00
6075 · BHFS Legal - Replenishment Water	0.00	0.00	-10,000.00	0.0%	0.00
6076 · BHFS Legal - Storage Issues	0.00	0.00	0.00	0.0%	0.00
6077 · BHFS Legal - Party Status Maintenance	0.00	8,566.64	-8,566.64	0.0%	25,700.00
6078 · BHFS Legal - Miscellaneous (Note 1)	28,799,66	10,908.36	17,891.30	264.02%	32,725.00
6078.10 · BHFS Legal - Refresh, Recharge, Reunite	20,735,00	0.00	0.00	0,0%	0.00
6078.11 · BHFS Legal - Safe Yield Recalculation	0.00	0.00	0.00	0.0%	0,00
6078.12 · BHFS Legal - CCG Motion	64,772,44	0.00	64,772,44	100.0%	0.00
6078.20 · BHFS Legal - Approp. Pool Issue Resolution	0.00	14,800.00	-14,800.00	0.0%	44,400.00
Total 6070 · Watermaster Legal Services	164,420,14	94,816,68	69,603,46	173,41%	234,100.00
Total 0010 Watermaster Legal Services	104,420,14	04,010.00	00,000.40	170,4170	2.04, 100.00
6275 · BHFS Legal - Advisory Committee	3,691.42	11,200.00	-7,508.58	32,96%	33,600,00
6375 · BHFS Legal - Board Meeting	28,364.58	28,080.00	284.58	101.01%	84,240.00
8375 · BHFS Legal - Appropriative Pool	7,070.38	11,200.00	-4,129.62	63,13%	33,600.00
8475 · BHFS Legal - Agricultural Pool	6,837.85	11,200.00	-4,362.15	61.05%	33,600.00
8575 · BHFS Legal - Non-Ag Pool	17,826.61	11,200.00	6,626.61	159.17%	33,600.00
Total BHFS Legal Services	63,790.84	72,880.00	-9,089.16	87.53%	218,640.00
-			P		
6907.3 · WM Legal Counsel					
6907.30 · Peace II - CEQA	0,00	0.00	0,00	0.0%	0.00
6907.31 · Archibald South Plume	0.00	9,491.64	-9,491.64	0.0%	28,475.00
6907.32 · Chino Airport Plume	8,381,69	20,400.00	-12,018.31	41.09%	61,200.00
6907.33 · Desalter/Hydraulic Control	7,789.95	16,366.64	-8,576.69	47.6%	49,100.00
6907.34 · Santa Ana River Water Rights	1,150.45	9,466.64	-8,316.19	12.15%	28,400.00
6907.35 - Paragraph 31 Motion	0.00	0.00	0.00	0.0%	0.00
6907.36 · Santa Ana River Habitat	684.45	7,500.00	-6,815.55	9.13%	22,500.00
6907.37 · Water Auction	0.00	0,00	0.00	0.0%	0.00
6907.38 · Reg. Water Quality Cntrl Board	0,00	4,283.36	-4,283.36	0.0%	12,850.00
6907.39 · Recharge Master Plan	71,443.98	39,700,00	31,743.98	179.96%	39,700.00
6907.40 - Storage Agreements	1,283.40	6,233.36	-4,949.96	20.59%	18,700.00
6907.41 · Prado Basin Habitat Sustainability	0,00	6,233,36	-6,233.36	0.0%	18,700.00
6907.42 · Safe Yield Recalculation	46,460.68	0.00	46,460.68	100.0%	0,00
6907.43 · RMPU - City of Fontana Motion	36,060,75	0,00	36,060.75	100.0%	0.00
6907.90 · WM Legal Counsel - Unanticipated	0.00	8,375.00	-8,375.00	0.0%	25,125.00
Total 6907 · WM Legal Counsel	173,255.35	128,050.00	45,205.35	135.3%	304,750.00
Total Brownstein, Hyatt, Farber, Schreck Costs	401,466.33	295,746.68	105,719.65	135.75%	757,490.00

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; and (7) Miscellaneous legal research on current and pending issues.

#### OBMP ENGINEERING SERVICES AND LEGAL COSTS

For October 31, 2013, the accounts 6901-6906 (Optimum Basin Mgmt Program) section was below the Year-To-Date (YTD) budget by \$21,132 or 10.2%.

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 \$114,266 while some other line item activities were below the budget by \$69,061. Above the budget line items were the Recharge Master Plan of \$31,744; the Safe Yield Recalculation of \$46,461; and the RMPU-City of Fontana Motion of \$36,061. The individual legal projects/activities that were below budget for the Year-To-Date (YTD) period were the Archibald South Plume of \$9,492; the Chino Airport Plume of \$12,018; the Desalter/Hydraulic Control of

Budget vs. Actual Report for the Period Page 6 of 11

\$8,577; the Santa Ana River Water Rights of \$8,316; the Santa Ana River Habitat of \$6,816; the Regional Water Quality Control Board of \$4,283; Storage Agreements of \$4,950; the Prado Basin Habitat Sustainability of \$6,234; and the WM Unanticipated of \$8,375. For the four months ended October 31, 2013, the overall cumulative (YTD) budget was \$128,050 and the actual (BHFS) legal expenses totaled \$173,255 which resulted in an over budget variance of \$45,205 or 35.3%.

The OBMP Other Expenses (6909's) were below the budget for the month. As of October 31, 2013 this category of expenses was \$2,460 or 73.8% below the budgeted amount of \$3,333.

Overall, the Optimum Basin Management Program (OBMP) category was \$433,670 compared to a (YTD) budget of \$421,349 for an over budget of \$12,321 or 2.9% as of October 31, 2013.

The table listed below summarizes the Optimum Basin Management Program (OBMP) expenses as of October 31, 2013 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:

	1.1140 O-4142	Dudaat	t Ourse Dudgest	N/ of Declarat	Annesel Developet
COOL Outlinear Desire Manut Dise	Jul '13 - Oct '13	Budget	\$ Over Budget	% of Budget	Annual Budget
6900 · Optimum Basin Mgmt Plan	60.064.06	71 716 60	10 750 07	05 040/	244 200 00
6901 · WM Staff Salaries	60,964.26 12,460,00	71,716.63 11,000.00	-10,752.37 1,460.00	85.01% 113.27%	211,890.00 11,000.00
6903 · OBMP SAWPA Group	12,400,00	11,000.00	1,460.00	113.27%	11,000.00
6906 · OBMP Engineering Services	04 505 35	401.000.00	C 404 75	09 570/	101 000 00
6906.1 · OBMP - Watermaster Model Update	94,505.25	101,000.00	-6,494.75 852,50	93.57%	101,000.00 0.00
6906.7 · OBMP - Data Requests	852.50 36,731.65	0.00	36,731.65	100.0%	0.00
6906.71 · OBMP - Misc. GM Requests	•	0.00	•	100.0%	0.00
6906.72 · OBMP - Data Requests - Non CBWM	4,444.25	0.00	4,444.25	100.0%	0.00
6906.73 · OBMP - Safe Yield	14,787.79	0.00	14,787.79	100.0%	
6906.8 · OBMP - Reports 6906 · OBMP Engineering Services - Other	0.00 34,796.07	0.00 106,249.36	0.00 -71,453,29	0,0% 32.75%	50,000.00 318,748.00
÷ •	186,117.51	207,249.36	-21,131.85	<u> </u>	469,748.00
Total 6906 · OBMP Engineering Services	100,117.01	207,249.30	-2.1,131.00	09.070	403,140.00
6907 · OBMP Legal Fees 6907.3 · WM Legal Counsel					
6907.30 · Peace II - CEQA	0.00	0.00	0.00	0.0%	0.00
6907.31 · Archibald South Plume	0.00	9,491.64	-9,491.64	0.0%	28,475.00
6907.32 - Chino Airport Plume	8,381.69	20,400.00	-12,018.31	41.09%	61,200.00
6907.33 · Desalter/Hydraulic Control	7,789.95	16,366,64	-8,576.69	47.6%	49,100.00
6907.34 · Santa Ana River Water Rights	1,150.45	9,466.64	-8,316.19	12.15%	28,400.00
6907.35 · Paragraph 31 Motion	0.00	0.00	-0,010.19	0.0%	20,400,00
6907.36 · Santa Ana River Habitat	684.45	7.500.00	-6,815.55	9.13%	22,500.00
6907.37 · Water Auction	0.00	0.00	0,010.00	0.0%	0,00
6907.38 · Reg. Water Quality Cntrl Board	0,00	4,283.36	-4,283,36	0.0%	12,850.00
6907.39 · Recharge Master Plan	71,443.98	39,700.00	31,743.98	179.96%	39,700.00
6907.40 · Storage Agreements	1,283.40	6,233.36	-4,949.96	20.59%	18,700.00
6907.41 · Prado Basin Habitat Sustainability	0.00	6,233.36	-6,233,36	0.0%	18,700.00
6907.42 · Safe Yield Recalculation	46,460.68	0.00	46,460.68	100.0%	0.00
6907.42 · RMPU - City of Fontana Motion	36,060.75	0.00	36,060,75	100.0%	0.00
6907.90 · WM Legal Counsel - Unanticipated	0.00	8,375.00	-8,375.00	0.0%	25,125.00
Total 6907 · WM Legal Counsel	173,255.35	128,050.00	45,205.35	135.3%	304,750.00
Total 6907 · OBMP Legal Fees	173,255.35	128,050.00	45,205.35	135,3%	304,750.00
6909 · OBMP Other Expenses					
6909.1 · OBMP Meetings	873.10	0,00	873.10	100.0%	0.00
6909.3 · Other OBMP Expenses	0.00	0,00	0,00	0.0%	1,977.00
6909.4 · Printing	0,00	0.00	0.00	0.0%	0.00
6909.5 · Ad Hoc Litigation Committee	0,00	0,00	0.00	0.0%	0.00
6909.6 · OBMP Expenses - Miscellaneous	0,00	3,333,36	-3,333.36	0.0%	10,000.00
Total 6909 · OBMP Other Expenses	873,10	3,333.36	-2,460.26	26.19%	11,977.00
Total 6900 · Optimum Basin Mgmt Plan	433,670.22	421,349.35	12,320.87	102.92%	1,009,365.00

Budget vs. Actual Report for the Period Page 7 of 11

#### OBMP IMPLEMENTATION PROJECTS COSTS

As of October 31, 2013, the total (YTD) Engineering Services expenses are \$459,527 or 44.5% below the (YTD) budget amount of \$827,847. The OBMP Implementation Projects (accounts 7100's – 7700's) were all (Under) budget as of October 31, 2013.

The approved original Engineering Services budget of \$1,825,362 was increased by \$107,406 to the final amended amount of \$1,932,768 for FY 2013/14 as provided in the Task Order. The amount of \$107,406 is comprised of \$19,508 from account (7107.2) and \$87,898 from account (7108.7), both amounts from FY 2012/13 which have been "Carried Over" into the current FY 2013/14 budget. The breakdown of the total Task Order amount of \$1,932,768 includes direct labor costs for Wildermuth Environmental, Inc. (69%) along with other direct charges such as equipment rental, laboratory fees, travel costs, reproduction costs, and outside professional services (31%).

While the year-to-date actual expenses as of October 31, 2013 are currently under budget, there are no immediate plans to rearrange or adjust the overall Engineering Services budget to reflect any anticipated savings. The latest Wildermuth Environmental, Inc. projection for the Engineering Services budget anticipates the full amount of budgeted funds being used in the upcoming months.

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 October 31, 2013. 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 '13 - Oct '13	Budget	\$ Over Budget	% of Budget	Annual Budget
6906 · OBMP Engineering Services - Other	34,796.07	106,249,36	-71,453.29	32.75%	318,748.00
6906.1 · OBMP - Watermaster Model Update	94,505.25	101,000.00	-6,494.75	93,57%	101,000.00
6906.7 · OBMP - Data Requests	852.50	0.00	852.50	100.0%	0.00
6906.71 · OBMP - Misc. GM Requests	36,731.65	0,00	36,731.65	100.0%	0.00
6906.72 · OBMP - Data Requests - Non CBWM	4,444.25	0,00	4,444.25	100.0%	0.00
6906.73 · OBMP - Safe Yield	14,787.79	0.00	14,787.79	100.0%	0.00
7103.3 · Grdwtr Qual-Engineering	36,836.25	33,293,36	3,542.89	110.64%	90,880.00
7103.5 · Grdwtr Qual-Lab Svcs	0.00	12,929.36	-12,929.36	0.0%	38,788.00
7104.3 · Grdwtr Level-Engineering	40,573.81	65,780.00	-25,206.19	61.68%	197,340.00
7104.8 Grdwtr Level-Contracted Services	0.00	3,333,36	-3,333.36	0.0%	10,000.00
7104.9 · Grdwtr Level-Capital Equipment	0.00	3,481.25	-3,481.25	0.0%	13,925.00
7107.2 · Grd Level-Engineering	18,751.68	40,835,36	-22,083.68	45.92%	83,490.00
7107.3 · Grd Level-SAR Imagery	14,123.75	22,500.00	-8,376.25	62.77%	90,000.00
7107.6 · Grd Level-Contract Svcs	0.00	47,080.00	-47,080.00	D.0%	141,240.00
7107.61 · Grd Level-Chino Hills ASR	19,096.00	13,885.00	5,211.00	137.53%	41,655.00
7107.8 · Grd Level-Cap Equip Exte	0.00	2,607.00	-2,607.00	0.0%	10,428.00
7108.3 · Hydraulic Control-Engineering	13,567.68	42,151.00	-28, 583. 32	32,19%	126,453.00
7108.31 · Hydraulic Control-PBHSP	0.00	18,725.00	-18,725.00	0.0%	56,175.00
7108.4 · Hydraulic Control-Lab Svcs	20,625.00	8,512.00	12,113.00	242.31%	25,536.00
7108.41 · Hydraulic Control-PBHSP	0.00	16,086.64	~16,086.64	0.0%	48,260.00
7108.7 · Hydraulic Control-Prado Basin Habitat	14,093.34	100,431.00	-86,337,66	14.03%	119,497.00
7108.9 · Hydraulic Control-Contract Svcs	0.00	0,00	0.00	0.0%	0.00
7109.3 - Recharge & Well - Engineering	0.00	7,000.00	-7,000.00	0.0%	21,000.00
7202.2 · Comp Recharge-Engineering Services	0.00	7,108,00	-7,108.00	0.0%	21,324.00
7202.3 · Comp Recharge-Implementation	76,659.81	88,529,99	-11,870.18	86,59%	118,040.00
7303 · PE3&5-Engineering - Other	0,00	13,194.64	-13,194.64	0.0%	39,584.00
7402 · PE4-Engineering	14,429.47	25,405.00	-10,975.53	56.8%	76,215.00
7403 · PE4-Contract Svcs	0,00	6,743.36	-6,743.36	0.0%	20,230.00
7502 · PE6&7-Engineering	4,652,71	33,626.64	-28,973,93	13.84%	100,880.00
7502.1 · PE6&7-Engineering Svcs (Plume)	0.00	0.00		0.0%	0.00
7602 · PE8&9-Engineering	0.00	7,360.00	• • • • • • • • • • • • • • • • • • • •	0.0%	22,080.00
Total Wildermuth Environmental, Inc. Costs	459,527.01	827,847.32	-368,320.31	55.51%	1,932,768.00

\* Wildermuth and Subcontractor Engineering Budget of \$1,825,362 plus Carryover Funds from FY 2012/13 of \$107,406 = \$1,932,768 Carryover Funds FY 2012/13 = \$19,508 (7107.2) and \$87,898 (7108.7) = \$107,406

#### 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 The basic program tasks are to convene a committee that will develop this adaptive Control. 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 October 31, 2013:

Wildermuth Environmental, Inc.		50% Billing <b>''TO''</b> IEUA		50% Billing <b>"FROM"</b> 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 - Oct. 2013	\$	14,093.34	\$	(7,046.67)	\$	474.09	\$	7,520.76	23.00	\$	2,354.99
Totals \$ 146,182.37		\$	(73,091.19)	\$	6,750.01	\$	79,841.20	100.00	\$	10,603.64	
	1	7108,7	71	08.71, 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 October 31, 2013.

#### "CARRY OVER" FUNDING

The Watermaster Board approved the Operating Cash Reserve Policy 4.17 on March 22, 2012. Section 4.17.6 of the policy (Carry-over Expenses) provides Watermaster staff the authority to carryover unfinished capital projects or related expenses from one fiscal year to the next. These expenses would be included as an amendment to the current year's budget. However, because these unfinished capital projects or related expenses had been previously funded from the Assessment process, they would be excluded from the upcoming Assessment process. If these expenses were not excluded, they would be funded for multiple times over. The current policy does not address a minimum or maximum dollar amount or how long the carryover expenses can be maintained.

Once the FY 2012/13 period as of June 30, 2013 was closed, the amount of unfinished capital projects and related engineering costs were calculated and the "Carry Over" funding amount was added to the current FY 2013/14 budget. The Total "Carry Over" funding amount of \$806,730 was posted to the accounts as of July 31, 2013. The total amount of \$806,730 consisted of \$529,924 "Carried Over" from the FY 2012/13 expense funding and \$276,806 "Carried Over" from FY 2011/12 expense funding. The remaining amount of \$104,977 from FY 2011/12 for the Chino Hills ASR Project has been combined with

the remaining funding amount of \$122,518 from FY 2012/13 for the Chino Hills ASR Project for a total amount of \$227,495 in account 7107.62 (\$104,977 + \$122,518 = \$227,495).

Unspent funds from the Engineering Services budget from FY 2012/13 in account 7107.2 and 7108.7 (\$19,508 and \$87,898 respectively) were "Carried Over" into the current FY 2013/14 budget. These funds were from the Ground Level Monitoring (7107.2) and the Prado Basin Hydraulic Control (7108.7).

The Recharge Proof of Concept amount of \$300,000 from FY 2012/13 (account 7209) was "Carried Over" into the budget for FY 2013/14. An amount of \$150,000 has been coded to account (7209.1) for the Jurupa Pumping Station and the remaining amount of \$150,000 has been coded to account (7209.2) for the Wineville Basin Proof of Concept.

Watermaster carried over 171,829 (61,236 + 30,900 = 79,693 = 171,829) from FY 2011/12 into the Recharge Improvements Project categories. The amount of 272,829 was the original total amount from FY 2011/12 less the amount of 101,000 spent in FY 2012/13 leaving the balance of 171,829 to carry over into the FY 2013/14 (272,829 - 101,000 = 171,829). The amount of 61,236 has been appropriated for use for the ongoing Turner Basin Improvements (7690.2). The amount of 330,900 has been appropriated for the Hickory Basin improvement project (7690.3) while the remaining amount of 79,693 has been appropriated for Other Recharge Improvement Projects (7690.9).

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, 2014, any remaining balances of the FY 2011/12 and FY 2012/13 expenses (if any), along with any new FY 2013/14 expenses, will then be "Carried Over" into the FY 2014/15 budget.

As of October 31, 2013, the total (YTD) amount remaining of the "Carried Over" funding is \$728,740 (\$806,730 - \$77,990 = \$728,740). The following details are provided:

Budget vs. Actual Report for the Period Page 10 of 11

"Carried Over" Expenses At June 30, 2013

Gamed Over Expenses Acoune 50, 2015				
			GL Account	
Chino Hills ASR Project	\$	104,977.00	7107.62	FY 2011/12
Recharge Improvement Project - Turner Basin	\$	61,236.00	7690.2	FY 2011/12
Recharge Improvement Project - Hickory Basin	\$	30,900.00	7690.3	FY 2011/12
Recharge Improvement Project - Misc. Basins	\$	79,693.00	7690.9	FY 2011/12
Subtotal FY 2011/12 "Carry Over"	\$	276,806.00		
Ground Level Monitoring - Engineering	\$	19,508.00	7107.2	FY 2012/13
Hydraulic Control - Prado Basin - Other	\$	87,898.00	7108.7	FY 2012/13
Recharge Proof of Concept	\$	300,000.00	7209	FY 2012/13
Chino Hills ASR Project	\$	122,518.00	7107.61	FY 2012/13
Subtotal FY 2012/13 "Carry Over"	\$	529,924.00		
Total Balance, June 30, 2013		806,730.00		
"Carried Over" Expenses At June 30, 2013	<b>*</b>	007 405 00	7407 00	
Chino Hills ASR Project	\$	227,495.00	7107.62	
Ground Level Monitoring - Engineering	\$	19,508.00	7107.2	
Hydraulic Control - Prado Basin - Other	\$	87,898.00	7108.7	
Jurupa Pumping Station	\$	150,000.00	7209.1	
Wineville Basin Proof of Concept	\$	150,000.00	7209.2	
Recharge Improvement Project - Turner Basin	\$	61,236.00	7690.2	
Recharge Improvement Project - Hickory Basin	\$	30,900.00	7690.3	
Recharge Improvement Project - Misc. Basins	\$	79,693.00	7690.9	
Total Balance, June 30, 2013	\$	806,730.00		
"Carried Over" Balance, July 1, 2013	\$	806,730.00		
Less: (Invoices Received To Date FY 2013/14)				
Ground Level Monitoring - Engineering	\$	(6,543.50)	7107.2	
Hydraulic Control - Prado Basin - Other	\$	(8,214.34)	7108.7	
Wineville Basin Proof of Concept	\$	(32,332.18)	7209.2	
Recharge Improvement Project - Hickory Basin	\$	(30,900.00)	7690.3	
Updated Balance as of October 31, 2013	\$	728,739.98		

#### AUDIT FIELD WORK

Auditors from the audit firm of Charles Z. Fedak & Company were previously onsite at the Watermaster offices on May 29<sup>th</sup> through May 30<sup>th</sup> and August 12<sup>th</sup> through August 14<sup>th</sup> to conduct scheduled field work for the FY 2012/13 financial audit. Final field work was completed and the audit firm developed the Annual Financial and Audit Reports to be issued in early November 2013. The presentation of the "Draft" Annual Financial and Audit Reports to the Board by the Senior Manager of Charles Z. Fedak & Company was presented on November 21, 2013. The "Final" Annual Financial and Audit Reports will be posted to the Watermaster website before December 23, 2013.

#### ASSESSMENT INVOICING

The Watermaster Board approved the FY 2013/14 Assessment Package at the November 21, 2013 meeting. Watermaster staff also created and emailed the Assessment invoices on Thursday, November 21, 2013. The Assessment invoices are due 30 days from invoice date, so payment should be received by Watermaster on or before Monday, December 23, 2013, prior to the Holiday office closure.

This year's Assessment invoicing included the standard Assessment amounts per the Assessment Package, along with any Special Assessments and the "Excess Cash Reserve" refund credits. The Appropriative Pool had a Special Assessment of \$75,000 as approved during the budgeting process. The \$75,000 was allocated to the Appropriative Pool members based upon prorated actual production numbers from 2012/13. The Non-Agricultural Pool had a Special Assessment of \$60,000 as approved during a Confidential Session on September 12, 2013. The \$60,000 was allocated to the Non-Agricultural Pool members from 2012/13. The Excess Cash Reserves refunds were \$9,493 to the Appropriative Pool members and \$2,491 to the Non-Agricultural Pool members. The refunds were applied as credits on the Assessment invoices and allocated based upon last year's percentage of assessments paid.

This year's Assessment invoicing included the billing for the Pomona Credit for the current year, as well as the prior year's activity which was not billed for. If you recall, last year's payment to the City of Pomona in the amount of \$53,030.93 was paid in the month of March 2013 as approved by the Board on February 28, 2013. The City of Pomona received a credit on their Assessment invoice in the amount of \$53,030.93 for this year.

Also included on the Assessment invoices was the 5<sup>th</sup> and final "True-Up" billing of the Appropriative Pool members for the Non-Agricultural Pool Stored Water Purchase. Per the terms of the Paragraph 31 Settlement Agreement dated April 18, 2012, the 5<sup>th</sup> and final annual payment totaling \$3,873,238.87 is due to the Non-Agricultural Pool members for the Stored Water Purchase on or before January 15, 2014.

ATTACHMENTS 1. Financial Report - B5 04:28 PM 12/03/13 Accrual Basis

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

	1/12th (8.33%) of the Total Budget				4/12th (33%) of the Total Budget				100% of the Total Budget			
	For The Month of October 2013				Year-To-Date as of October 31, 2013				Fiscal Year End as of June 30, 2014			
	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%	153,035.68	154,581.00	-1,545.32	99.0%	154,581.00	154,581.00	0.00	100.0%
4110 · Admin Asmnts-Approp Pool	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	6,361,227.00	6,361,227.00	0.00	100.0%
4120 · Admin Asmnts-Non-Agri Pool	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	241,378.00	241,378.00	0.00	100.0%
4700 · Non Operating Revenues	0.00	0.00	0.00	0.0%	3,550.10	4,455.00	-904.90	79.69%	29,700.00	29,700.00	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	0.00	0.00	0.00	0.0%	156,585.78	159,036.00	-2,450.22	98.46%	6,786,886.00	6,786,886.00	0.00	100.0%
Gross Profit	0.00	0.00	0.00	0.0%	156,585.78	159,036.00	-2,450.22	98,46%	6,786,886.00	6,786,886.00	0.00	100.0%
Expense		<i>x</i> .										
6010 · Admin. Salary/Benefit Costs	73,661.81	59,225.78	14,436.03	124.38%	249,164.87	221,393.51	27,771.36	112.54%	617,747.00	617,747.00	0.00	100.0%
6020 · Office Building Expense	9,136.84	8,649.00	487.84	105.64%	34,060.98	35,132.00	-1,071.02	96.95%	106,630.00	106,630.00	0.00	100.0%
6030 · Office Supplies & Equip.	3,353.58	2,158.33	1,195.25	155.38%	7,095.13	7,633.36	-538.23	92.95%	22,900.00	22,900.00	0.00	100.0%
6040 · Postage & Printing Costs	3,143.42	5,858.33	-2,714.91	53.66%	14,872.77	19,083.36	-4,210.59	77.94%	57,900.00	57,900.00	0.00	100.0%
6050 · Information Services	8,946.18	8,708.00	238.18	102.74%	50,901.39	58,832.00	-7,930.61	86.52%	140,496.00	140,496.00	0.00	100.0%
6060 · Contract Services	0.00	0.00	0.00	0.0%	5,036.38	7,500.00	-2,463.62	67.15%	24,800.00	24,800.00	0.00	100.0%
6070 · Watermaster Legal Services	15,578.19	18,925.00	-3,346.81	82.32%	164,420.14	94,816.68	69,603.46	173.41%	234,100.00	234,100.00	0.00	100.0%
6080 - Insurance	0.00	0.00	0.00	0.0%	26,504.24	19,107.00	7,397.24	138.72%	19,107.00	19,107.00	0.00	100.0%
- 10 · Dues and Subscriptions	0.00	100.00	-100.00	0.0%	13,217.00	13,260.00	-43.00	99.68%	17,825.00	17,825.00	0.00	100.0%
G140 · WM Admin Expenses	300.00	200.00	100.00	150.0%	369.01	800.00	-430.99	46.13%	2,400.00	2,400.00	0.00	100.0%
6150 - Field Supplies	648.58	600.00	48.58	108.1%	950.96	1,000.00	-49.04	95.1%	1,400.00	1,400.00	0.00	100.0%
6170 · Travel & Transportation	2,080.22	1,060.00	1,020.22	196.25%	6,346.42	6,856.68	-510.26	92.56%	16,220.00	16,220.00	0.00	100.0%
6190 · Conferences & Seminars	1,603.80	1,650.00	-46.20	97.2%	4,653.60	4,800.00	-146.40	96.95%	12,500.00	12,500.00	0.00	100.0%
6200 - Advisory Comm - WM Board	2,398.01	4,632.04	-2,234.03	51.77%	7,720.49	18,224.04	-10,503.55	42.36%	54,368.00	54,368.00	0.00	100.0%
6300 · Watermaster Board Expenses	8,982.49	12,778.18	-3,795.69	70.3%	45,360.13	50,600.44	-5,240.31	89.64%	151,289.00	151,289.00	0.00	100.0%
8300 · Appr PI-WM & Pool Admin	31,414.28	11,495.44	19,918.84	273.28%	41,033.58	45,563.67	-4,530.09	90.06%	136,273.00	136,273.00	0.00	100.0%
8400 · Agri Pool-WM & Pool Admin	4,144.75	5,016.64	-871.89	82.62%	13,198.56	19,707.15	-6,508.59	66.97%	58,762.00	58,762.00	0.00	100.0%
8467 · Ag Legal & Technical Services	8,250.00	17,583.33	-9,333.33	46.92%	39,745.00	70,333.36	-30,588.36	56.51%	211,000.00	211,000.00	0.00	100.0%
8470 · Ag Meeting Attend -Special	1,750.00	1,525.00	225.00	114.75%	8,125.00	6,100.00	2,025.00	133.2%	18,300.00	18,300.00	0.00	100.0%
8471 · Ag Pool Expense	0.00	0.00	0.00	0.0%	0.00	27,500.00	-27,500.00	0.0%	65,000.00	65,000.00	0.00	100.0%
8485 · Ag Pool - Misc. Exp Ag Fund	0.00	100.00	-100.00	0.0%	94.06	200.00	-105.94	47.03%	400.00	400.00	0.00	100.0%
8500 · Non-Ag PI-WM & Pool Admin	10,902.92	9,265.72	1,637.20	117.67%	32,278.36	36,844.28	-4,565.92	87.61%	110,314.00	110,314.00	0.00	100.0%
6500 · Education Funds Use Expens	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
9400 · Depreciation Expense	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
9500 · Allocated G&A Expenditures	-19,624.50	-43,024.56	23,400.06	45.61%	-73,144.07	-200,286.62	127,142.55	36.52%	-568,626.00	-568,626.00	0.00	100.0%
6900 • Optimum Basin Mgmt Plan	89,424.84	68,227.28	21,197.56	131.07%	433,670.22	421,349.35	12,320.87	102.92%	1,009,365.00	1,009,365.00	0.00	100.0%
6950 · Mutual Agency Projects	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	10,000.00	10,000.00	0.00	100.0%
9501 · G&A Expenses Allocated-OBMP	7,535.72	17,284.17	-9,748.45	43.6%	32,033.41	80,460.74	-48,427.33	39.81%	228,433.00	228,433.00	0.00	100.0%
7101 · Production Monitoring	6,887.47	7,218.95	-331.48	95.41%	20,090.70	27,631.20	-7,540.50	72.71%	81,649.00	81,649.00	0.00	100.0%
7102 · In-line Meter Installation	61,69	5,230.90	-5,169.21	1.18%	740.23	34,926.56	-34,186.33	2.12%	104,616.00	104,616.00	0.00	100.0%
7103 - Grdwtr Quality Monitoring	10,535.60	16,230.14	-5,694.54	64.91%	44,501.04	70,528.76	-26,027,72	63.1%	202,339.00	202,339.00	0,00	100.0%
7104 · Gdwtr Level Monitoring	16,972.75	25,064.79	-8,092.04	67.72%	62,801.48	98,274.80	-35,473.32	63.9%	292,840.00	292,840.00	0.00	100.0%
7105 · Sur Wtr Qual Monitoring	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
. 100 Out the scal monitoring	1	0.00	0.00	0.0101	0.00							1

04:28 PM 12/03/13 Accrual Basis

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

		1/12th (8.33%) of the Total Budget				4/12th (33%) of the Total Budget				100% of the Total Budget			
For The Month of October 2013				Yea	Year-To-Date as of October 31, 2013				Fiscal Year End as of June 30, 2014				
Actual	Budget	\$ Over(Under)	% of Budget	Actual	Budget	\$ Over(Under)	% of Budget	Projected	Budget	\$ Over(Under)	% of Budget		
9,142.30	20,573.08	-11,430.78	44.44%	51,971.43	354,402.36	-302,430.93	14.67%	594,308.00	594,308.00	0.00	100.0%		
30,076.65	26,581.05	3,495.60	113.15%	51,115.10	196,249.30	-145,134.20	26.05%	406,943.00	406,943.00	0.00	100.0%		
0.00	1,750.00	-1,750.00	0.0%	0.00	7,000.00	-7,000.00	0.0%	21,000.00	21,000.00	0.00	100.0%		
202,370.25	217,596.63	-15,226.38	93.0%	519,965.41	881,027.95	-361,062.54	59.02%	1,358,042.00	1,358,042.00	0.00	100.0%		
182.76	5,126.21	-4,943.45	3.57%	209.99	20,288.45	-20,078.46	1.04%	60,649.00	60,649.00	0.00	100.0%		
8,596.51	9,002.82	-406.31	95.49%	16,512.21	35,879.60	-19,367.39	46.02%	107,507.00	107,507.00	0.00	100.0%		
611.78	9,280.59	-8,668.81	6.59%	4,876.99	37,074.16	-32,197.17	13.16%	111,112.00	111,112.00	0.00	100.0%		
857.28	3,545.34	-2,688.06	24.18%	1,061.79	13,889.80	-12,828.01	7.64%	41,378.00	41,378.00	0.00	100.0%		
30,900.00	76,984.67	-46,084.67	40.14%	437,026.50	846,764.16	-409,737.66	51.61%	1,111,637.00	1,111,637.00	0.00	100.0%		
0.00	41.67	-41.67	0.0%	0.00	166.64	-166.64	0.0%	500.00	500.00	0.00	100.0%		
12,088.78	25,740.39	-13,651.61	46.96%	41,110.65	119,825.87	-78,715.22	34.31%	340,193.00	340,193.00	0.00	100.0%		
592,914.95	661,984.91	-69,069.96	89.57%	2,409,691.15	3,810,740.61	-1,401,049.46	63.23%	7,593,616.00	7,593,616.00	0.00	100.0%		
-592,914.95	-661,984.91	69,069.96	89.57%	-2,253,105.37	-3,651,704.61	1,398,599.24	61.7%	-806,730.00	-806,730.00	0.00	100.0%		
0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%		
0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%		
0.00	0.00	0.00	0.0%	11.91	0.00	11.91	100.0%	0.00	0.00	0.00	0,0%		
0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%		
0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%		
0.00	0.00	0.00	0.0%	11.91	0.00	11.91	100.0%	0.00	0.00	0.00	0.0%		
0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%		
0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%		
0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%		
0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%		
0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%		
0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%		
0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%		
0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%		
0.00	0.00	0.00	0.0%	11.91	0.00	11.91	100.0%	0.00	0.00	0.00	0.0%		
-592,914.95	-661,984.91	69,069.96	89.57%	-2,253,093.46	-3,651,704.61	1,398,611.15	61.7%	-806,730.00	-806,730.00	0.00	100.0%		
	Actual 9,142.30 30,076.65 0.00 202,370.25 182.76 8,596.51 611.78 857.28 30,900.00 0.00 12,088.78 592,914.95 -592,914.95 -592,914.95 -592,914.95 -592,914.95 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0	Actual         Budget           9,142.30         20,573.08           30,076.65         26,581.05           0.00         1,750.00           202,370.25         217,596.63           182.76         5,126.21           8,596.51         9,002.82           611.78         9,280.59           857.28         3,545.34           30,900.00         76,984.67           0.00         41.67           12,088.78         25,740.39           592,914.95         -661,984.91           -592,914.95         -661,984.91           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00 <t< td=""><td>Actual         Budget         \$ Over(Under)           9,142.30         20,573.08         -11,430.78           30,076.65         26,581.05         3,495.60           0.00         1,750.00         -1,750.00           202,370.25         217,596.63         -15,226.38           182.76         5,126.21         -4,943.45           8,596.51         9,002.82         -406.31           611.78         9,280.59         -8,668.81           857.28         3,545.34         -2,688.06           30,900.00         76,984.67         -46,034.67           0.00         41.67         -41.67           12,088.78         25,740.39         -13,651.61           592,914.95         -661,984.91         -69,069.96           -592,914.95         -661,984.91         69,069.96           0.00         0.00         0.00           0.00         0.00         0.00           0.00         0.00         0.00           0.00         0.00         0.00           0.00         0.00         0.00           0.00         0.00         0.00           0.00         0.00         0.00           0.00         0.00         0.00<td>Actual         Budget         \$ Over(Under)         % of Budget           9,142.30         20,573.08         -11,430.78         44.44%           30,076.65         26,581.05         3,495.60         113.15%           0.00         1,750.00         -1,750.00         0.0%           202,370.25         217,596.63         -15,226.38         93.0%           182.76         5,126.21         -4,943.45         3.57%           8,596.51         9,002.82         -406.31         95.49%           611.78         9,280.59         -8,668.81         6.59%           857.28         3,545.34         -2,688.06         24.18%           30,900.00         76,984.67         -46,084.67         40.14%           0.00         41.67         -41.67         0.0%           12,088.78         25,740.39         -13,651.61         45.96%           592,914.95         -661,984.91         -69,069.96         89.57%           0.00         0.00         0.00         0.0%           0.00         0.00         0.00         0.0%           0.00         0.00         0.00         0.0%           0.00         0.00         0.00         0.0%           0.00</td><td>Actual         Budget         \$ Over(Under)         % of Budget         Actual           9,142.30         20,573.08         -11,430.78         44.44%         51,971.43           30,076.65         26,581.05         3,495.60         113.15%         51,115.10           0.00         1,750.00         -1,750.00         0.0%         0.00           202,370.25         217,596.63         -15,226.38         93.0%         519,965.1           182.76         5,126.21         -4,943.45         3.57%         209.99           8,596.51         9,028.29         -406.31         95.49%         16,512.21           611.78         9,280.59         -8,668.81         6.69%         4,876.89           9857.28         3,545.34         -2,688.06         24.18%         1,061.79           30,900.00         76,984.67         -46,084.67         40.14%         437,026.50           0.00         0.167         -41.67         0.0%         0.00           12,088.78         25,740.39         -13,651.61         46.96%         41,110.65           562,914.95         -681,984.91         69,069.96         89.57%         -2,253,105.37           0.000         0.000         0.000         0.000         0.000</td><td>Actual         Budget         <math>\\$</math> Over(Under)         <math>\%</math> of Budget         Actual         Budget           9,142.30         20,573.08         <math>\cdot \cdot \cdot 1</math>,430.78         44.44%         51,971.43         354,402.36           30,076.65         26,581.05         3,495.60         113.15%         51,115.10         196,249.30           0.00         1,750.00         <math>\cdot \cdot \cdot ,750.00</math>         0.0%         0.00         7,000.00           202,370.25         217,596.63         <math>\cdot \cdot \cdot ,522.8.38</math>         93.0%         519.965.41         881,027.95           182.76         5,126.21         <math>\cdot \cdot 4,943.45</math> <math>3.57\%</math>         209.99         20.288.45           8,596.51         9,002.82         <math>-406.31</math>         95.49%         16,512.21         35,879.60           611.78         9,280.59         <math>- \cdot \cdot 2,688.06</math>         24.18%         1,061.79         13,889.80           30,900.00         76,984.67         <math>- \cdot 41.67</math> <math>0.0\%</math>         0.00         166.64           12,088.78         25,740.39         <math>- \cdot \cdot 1.67</math> <math>0.0\%</math>         2,409,691.15         3,810,740.61           -592,914.95         -681,984.91         69,069.96         89.57%         2,253,105.37         <math>- \cdot 3,651,704.81</math>           0.000         <math>0.000</math><td>Actual         Budget         \$ Over(Under)         % of Budget         Actual         Budget         \$ Over(Under)           9,142.30         20,573.08         -11,430.78         44.44%         51,971.43         354,402.36         -302,430.93           30,076.65         26,581.05         3,495.60         113.15%         51,115.10         196,249.30         -145,134.20           0.00         1,750.00         -1,750.00         0.0%         0.00         7,000.00         -7,000.00           202,370.25         217,596.63         -15,226.38         93.0%         519,965.41         861,027.95         -361,062.54           182.76         5,126.21         -4,943.45         3.57%         209.99         20,288.45         -20,078.48           8,596.51         9,002.82         -406.81         6.59%         4,876.99         37,074.16         -32,197.17           857.28         3,545.34         -2,688.06         24.18%         1,061.79         13,889.80         -12,828.01           30,900.00         76,984.67         -46,084.67         40.44%         437,025.50         846,764.16         -469,77.66           0.00         41.068         41,110.65         119,825.87         -7,67.15.22         -525,914.93         -561,984.91         69,</td><td></td><td>Actual         Budget         \$ Over(Under)         % of Budget         Actual         Budget         \$ Over(Under)         % of Budget         Projected           9,142.30         20,573.08         -11,430.78         44.44%         51,971.43         364,402.36         -362,430.93         14.87%         594,308.00           0.00         1,750.00         -17,50.00         0.0%         0.00         7,000.00         0.0%         220,570.25         217,966.63         -12,522.88         93.0%         510.966.41         881,027.95         -361,962.54         50.02%         13,084,02.00           182.76         5,126.21         -4,943.45         3.57%         220,99.99         20,228.45         -20,078.46         1.04%         60,049.00           182.76         5,126.21         -4,963.1         05.49%         116,512.21         35,87.80         -11,936.739         46.02%         10,750.70           810.78         9,280.59         -4,668.46         -40.74%         437,026.50         846,764.16         -409,737.66         51.61%         11,114.200           12,088.78         25,740.39         +45.656.16         40.96%         11,016.51         119,825.67         -78,715.22         3.315         340,1139.00           12,088.78         25,740.39</td><td>Actual         Budget         \$ Over(Under)         % of Budget         \$ Over(Under)         % of Budget         Projected         Budget           9,142.20         20,073.08         -11,430.78         44.44%         51,971.43         354,402.36         302,490.93         14.67%         594,308.00         594,308.00         594,308.00         594,308.00         7000.00        </td><td>Actual         Budget         5 Over(Under)         % of Budget         Actual         Budget         5 Over(Under)         % of Budget         9% of B</td></td></td></t<>	Actual         Budget         \$ Over(Under)           9,142.30         20,573.08         -11,430.78           30,076.65         26,581.05         3,495.60           0.00         1,750.00         -1,750.00           202,370.25         217,596.63         -15,226.38           182.76         5,126.21         -4,943.45           8,596.51         9,002.82         -406.31           611.78         9,280.59         -8,668.81           857.28         3,545.34         -2,688.06           30,900.00         76,984.67         -46,034.67           0.00         41.67         -41.67           12,088.78         25,740.39         -13,651.61           592,914.95         -661,984.91         -69,069.96           -592,914.95         -661,984.91         69,069.96           0.00         0.00         0.00           0.00         0.00         0.00           0.00         0.00         0.00           0.00         0.00         0.00           0.00         0.00         0.00           0.00         0.00         0.00           0.00         0.00         0.00           0.00         0.00         0.00 <td>Actual         Budget         \$ Over(Under)         % of Budget           9,142.30         20,573.08         -11,430.78         44.44%           30,076.65         26,581.05         3,495.60         113.15%           0.00         1,750.00         -1,750.00         0.0%           202,370.25         217,596.63         -15,226.38         93.0%           182.76         5,126.21         -4,943.45         3.57%           8,596.51         9,002.82         -406.31         95.49%           611.78         9,280.59         -8,668.81         6.59%           857.28         3,545.34         -2,688.06         24.18%           30,900.00         76,984.67         -46,084.67         40.14%           0.00         41.67         -41.67         0.0%           12,088.78         25,740.39         -13,651.61         45.96%           592,914.95         -661,984.91         -69,069.96         89.57%           0.00         0.00         0.00         0.0%           0.00         0.00         0.00         0.0%           0.00         0.00         0.00         0.0%           0.00         0.00         0.00         0.0%           0.00</td> <td>Actual         Budget         \$ Over(Under)         % of Budget         Actual           9,142.30         20,573.08         -11,430.78         44.44%         51,971.43           30,076.65         26,581.05         3,495.60         113.15%         51,115.10           0.00         1,750.00         -1,750.00         0.0%         0.00           202,370.25         217,596.63         -15,226.38         93.0%         519,965.1           182.76         5,126.21         -4,943.45         3.57%         209.99           8,596.51         9,028.29         -406.31         95.49%         16,512.21           611.78         9,280.59         -8,668.81         6.69%         4,876.89           9857.28         3,545.34         -2,688.06         24.18%         1,061.79           30,900.00         76,984.67         -46,084.67         40.14%         437,026.50           0.00         0.167         -41.67         0.0%         0.00           12,088.78         25,740.39         -13,651.61         46.96%         41,110.65           562,914.95         -681,984.91         69,069.96         89.57%         -2,253,105.37           0.000         0.000         0.000         0.000         0.000</td> <td>Actual         Budget         <math>\\$</math> Over(Under)         <math>\%</math> of Budget         Actual         Budget           9,142.30         20,573.08         <math>\cdot \cdot \cdot 1</math>,430.78         44.44%         51,971.43         354,402.36           30,076.65         26,581.05         3,495.60         113.15%         51,115.10         196,249.30           0.00         1,750.00         <math>\cdot \cdot \cdot ,750.00</math>         0.0%         0.00         7,000.00           202,370.25         217,596.63         <math>\cdot \cdot \cdot ,522.8.38</math>         93.0%         519.965.41         881,027.95           182.76         5,126.21         <math>\cdot \cdot 4,943.45</math> <math>3.57\%</math>         209.99         20.288.45           8,596.51         9,002.82         <math>-406.31</math>         95.49%         16,512.21         35,879.60           611.78         9,280.59         <math>- \cdot \cdot 2,688.06</math>         24.18%         1,061.79         13,889.80           30,900.00         76,984.67         <math>- \cdot 41.67</math> <math>0.0\%</math>         0.00         166.64           12,088.78         25,740.39         <math>- \cdot \cdot 1.67</math> <math>0.0\%</math>         2,409,691.15         3,810,740.61           -592,914.95         -681,984.91         69,069.96         89.57%         2,253,105.37         <math>- \cdot 3,651,704.81</math>           0.000         <math>0.000</math><td>Actual         Budget         \$ Over(Under)         % of Budget         Actual         Budget         \$ Over(Under)           9,142.30         20,573.08         -11,430.78         44.44%         51,971.43         354,402.36         -302,430.93           30,076.65         26,581.05         3,495.60         113.15%         51,115.10         196,249.30         -145,134.20           0.00         1,750.00         -1,750.00         0.0%         0.00         7,000.00         -7,000.00           202,370.25         217,596.63         -15,226.38         93.0%         519,965.41         861,027.95         -361,062.54           182.76         5,126.21         -4,943.45         3.57%         209.99         20,288.45         -20,078.48           8,596.51         9,002.82         -406.81         6.59%         4,876.99         37,074.16         -32,197.17           857.28         3,545.34         -2,688.06         24.18%         1,061.79         13,889.80         -12,828.01           30,900.00         76,984.67         -46,084.67         40.44%         437,025.50         846,764.16         -469,77.66           0.00         41.068         41,110.65         119,825.87         -7,67.15.22         -525,914.93         -561,984.91         69,</td><td></td><td>Actual         Budget         \$ Over(Under)         % of Budget         Actual         Budget         \$ Over(Under)         % of Budget         Projected           9,142.30         20,573.08         -11,430.78         44.44%         51,971.43         364,402.36         -362,430.93         14.87%         594,308.00           0.00         1,750.00         -17,50.00         0.0%         0.00         7,000.00         0.0%         220,570.25         217,966.63         -12,522.88         93.0%         510.966.41         881,027.95         -361,962.54         50.02%         13,084,02.00           182.76         5,126.21         -4,943.45         3.57%         220,99.99         20,228.45         -20,078.46         1.04%         60,049.00           182.76         5,126.21         -4,963.1         05.49%         116,512.21         35,87.80         -11,936.739         46.02%         10,750.70           810.78         9,280.59         -4,668.46         -40.74%         437,026.50         846,764.16         -409,737.66         51.61%         11,114.200           12,088.78         25,740.39         +45.656.16         40.96%         11,016.51         119,825.67         -78,715.22         3.315         340,1139.00           12,088.78         25,740.39</td><td>Actual         Budget         \$ Over(Under)         % of Budget         \$ Over(Under)         % of Budget         Projected         Budget           9,142.20         20,073.08         -11,430.78         44.44%         51,971.43         354,402.36         302,490.93         14.67%         594,308.00         594,308.00         594,308.00         594,308.00         7000.00        </td><td>Actual         Budget         5 Over(Under)         % of Budget         Actual         Budget         5 Over(Under)         % of Budget         9% of B</td></td>	Actual         Budget         \$ Over(Under)         % of Budget           9,142.30         20,573.08         -11,430.78         44.44%           30,076.65         26,581.05         3,495.60         113.15%           0.00         1,750.00         -1,750.00         0.0%           202,370.25         217,596.63         -15,226.38         93.0%           182.76         5,126.21         -4,943.45         3.57%           8,596.51         9,002.82         -406.31         95.49%           611.78         9,280.59         -8,668.81         6.59%           857.28         3,545.34         -2,688.06         24.18%           30,900.00         76,984.67         -46,084.67         40.14%           0.00         41.67         -41.67         0.0%           12,088.78         25,740.39         -13,651.61         45.96%           592,914.95         -661,984.91         -69,069.96         89.57%           0.00         0.00         0.00         0.0%           0.00         0.00         0.00         0.0%           0.00         0.00         0.00         0.0%           0.00         0.00         0.00         0.0%           0.00	Actual         Budget         \$ Over(Under)         % of Budget         Actual           9,142.30         20,573.08         -11,430.78         44.44%         51,971.43           30,076.65         26,581.05         3,495.60         113.15%         51,115.10           0.00         1,750.00         -1,750.00         0.0%         0.00           202,370.25         217,596.63         -15,226.38         93.0%         519,965.1           182.76         5,126.21         -4,943.45         3.57%         209.99           8,596.51         9,028.29         -406.31         95.49%         16,512.21           611.78         9,280.59         -8,668.81         6.69%         4,876.89           9857.28         3,545.34         -2,688.06         24.18%         1,061.79           30,900.00         76,984.67         -46,084.67         40.14%         437,026.50           0.00         0.167         -41.67         0.0%         0.00           12,088.78         25,740.39         -13,651.61         46.96%         41,110.65           562,914.95         -681,984.91         69,069.96         89.57%         -2,253,105.37           0.000         0.000         0.000         0.000         0.000	Actual         Budget $\$$ Over(Under) $\%$ of Budget         Actual         Budget           9,142.30         20,573.08 $\cdot \cdot \cdot 1$ ,430.78         44.44%         51,971.43         354,402.36           30,076.65         26,581.05         3,495.60         113.15%         51,115.10         196,249.30           0.00         1,750.00 $\cdot \cdot \cdot ,750.00$ 0.0%         0.00         7,000.00           202,370.25         217,596.63 $\cdot \cdot \cdot ,522.8.38$ 93.0%         519.965.41         881,027.95           182.76         5,126.21 $\cdot \cdot 4,943.45$ $3.57\%$ 209.99         20.288.45           8,596.51         9,002.82 $-406.31$ 95.49%         16,512.21         35,879.60           611.78         9,280.59 $- \cdot \cdot 2,688.06$ 24.18%         1,061.79         13,889.80           30,900.00         76,984.67 $- \cdot 41.67$ $0.0\%$ 0.00         166.64           12,088.78         25,740.39 $- \cdot \cdot 1.67$ $0.0\%$ 2,409,691.15         3,810,740.61           -592,914.95         -681,984.91         69,069.96         89.57%         2,253,105.37 $- \cdot 3,651,704.81$ 0.000 $0.000$ <td>Actual         Budget         \$ Over(Under)         % of Budget         Actual         Budget         \$ Over(Under)           9,142.30         20,573.08         -11,430.78         44.44%         51,971.43         354,402.36         -302,430.93           30,076.65         26,581.05         3,495.60         113.15%         51,115.10         196,249.30         -145,134.20           0.00         1,750.00         -1,750.00         0.0%         0.00         7,000.00         -7,000.00           202,370.25         217,596.63         -15,226.38         93.0%         519,965.41         861,027.95         -361,062.54           182.76         5,126.21         -4,943.45         3.57%         209.99         20,288.45         -20,078.48           8,596.51         9,002.82         -406.81         6.59%         4,876.99         37,074.16         -32,197.17           857.28         3,545.34         -2,688.06         24.18%         1,061.79         13,889.80         -12,828.01           30,900.00         76,984.67         -46,084.67         40.44%         437,025.50         846,764.16         -469,77.66           0.00         41.068         41,110.65         119,825.87         -7,67.15.22         -525,914.93         -561,984.91         69,</td> <td></td> <td>Actual         Budget         \$ Over(Under)         % of Budget         Actual         Budget         \$ Over(Under)         % of Budget         Projected           9,142.30         20,573.08         -11,430.78         44.44%         51,971.43         364,402.36         -362,430.93         14.87%         594,308.00           0.00         1,750.00         -17,50.00         0.0%         0.00         7,000.00         0.0%         220,570.25         217,966.63         -12,522.88         93.0%         510.966.41         881,027.95         -361,962.54         50.02%         13,084,02.00           182.76         5,126.21         -4,943.45         3.57%         220,99.99         20,228.45         -20,078.46         1.04%         60,049.00           182.76         5,126.21         -4,963.1         05.49%         116,512.21         35,87.80         -11,936.739         46.02%         10,750.70           810.78         9,280.59         -4,668.46         -40.74%         437,026.50         846,764.16         -409,737.66         51.61%         11,114.200           12,088.78         25,740.39         +45.656.16         40.96%         11,016.51         119,825.67         -78,715.22         3.315         340,1139.00           12,088.78         25,740.39</td> <td>Actual         Budget         \$ Over(Under)         % of Budget         \$ Over(Under)         % of Budget         Projected         Budget           9,142.20         20,073.08         -11,430.78         44.44%         51,971.43         354,402.36         302,490.93         14.67%         594,308.00         594,308.00         594,308.00         594,308.00         7000.00        </td> <td>Actual         Budget         5 Over(Under)         % of Budget         Actual         Budget         5 Over(Under)         % of Budget         9% of B</td>	Actual         Budget         \$ Over(Under)         % of Budget         Actual         Budget         \$ Over(Under)           9,142.30         20,573.08         -11,430.78         44.44%         51,971.43         354,402.36         -302,430.93           30,076.65         26,581.05         3,495.60         113.15%         51,115.10         196,249.30         -145,134.20           0.00         1,750.00         -1,750.00         0.0%         0.00         7,000.00         -7,000.00           202,370.25         217,596.63         -15,226.38         93.0%         519,965.41         861,027.95         -361,062.54           182.76         5,126.21         -4,943.45         3.57%         209.99         20,288.45         -20,078.48           8,596.51         9,002.82         -406.81         6.59%         4,876.99         37,074.16         -32,197.17           857.28         3,545.34         -2,688.06         24.18%         1,061.79         13,889.80         -12,828.01           30,900.00         76,984.67         -46,084.67         40.44%         437,025.50         846,764.16         -469,77.66           0.00         41.068         41,110.65         119,825.87         -7,67.15.22         -525,914.93         -561,984.91         69,		Actual         Budget         \$ Over(Under)         % of Budget         Actual         Budget         \$ Over(Under)         % of Budget         Projected           9,142.30         20,573.08         -11,430.78         44.44%         51,971.43         364,402.36         -362,430.93         14.87%         594,308.00           0.00         1,750.00         -17,50.00         0.0%         0.00         7,000.00         0.0%         220,570.25         217,966.63         -12,522.88         93.0%         510.966.41         881,027.95         -361,962.54         50.02%         13,084,02.00           182.76         5,126.21         -4,943.45         3.57%         220,99.99         20,228.45         -20,078.46         1.04%         60,049.00           182.76         5,126.21         -4,963.1         05.49%         116,512.21         35,87.80         -11,936.739         46.02%         10,750.70           810.78         9,280.59         -4,668.46         -40.74%         437,026.50         846,764.16         -409,737.66         51.61%         11,114.200           12,088.78         25,740.39         +45.656.16         40.96%         11,016.51         119,825.67         -78,715.22         3.315         340,1139.00           12,088.78         25,740.39	Actual         Budget         \$ Over(Under)         % of Budget         \$ Over(Under)         % of Budget         Projected         Budget           9,142.20         20,073.08         -11,430.78         44.44%         51,971.43         354,402.36         302,490.93         14.67%         594,308.00         594,308.00         594,308.00         594,308.00         7000.00	Actual         Budget         5 Over(Under)         % of Budget         Actual         Budget         5 Over(Under)         % of Budget         9% of B		

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

THIS PAGE HAS INTENTIONALLY BEEN LEFT BLANK FOR PAGINATION

# **CHINO BASIN WATERMASTER**

I. <u>CONSENT CALENDAR</u> (App & Ag Pool)

C. 2012 ANNUAL REPORT OF THE LAND SUBSIDENCE COMMITTEE

- I. BUSINESS ITEM ROUTINE (Non-Ag Pool)
  - C. 2012 ANNUAL REPORT OF THE LAND SUBSIDENCE COMMITTEE



# 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: December 12, 2013

TO: Pool Committee Members

SUBJECT: 2012 Annual Report of the Land Subsidence Committee

#### SUMMARY

<u>Issue</u>: Watermaster is required to produce an Annual Report of the Land Subsidence Committee. The report for 2012 has been drafted.

<u>Recommendation:</u> Recommend that the Advisory Committee recommend to the Watermaster Board to adopt the 2012 Annual Report of the Land Subsidence Committee, along with filing a copy with the Court.

<u>Financial Impact</u>: There is no fiscal impact associated with the above recommendation. Production of the Report and filing it with the Court are budgeted items.

Future Consideration

Appropriative Pool: December 12, 2013 Recommendation to the Advisory Committee Non-Agricultural Pool: December 12, 2013 Recommendation to the Advisory Committee Agricultural Pool: December 12, 2013 Recommendation to the Advisory Committee Advisory Committee: December 19, 2013 Recommendation to the Watermaster Board Watermaster Board: December 19, 2013 Adopt the 2012 Annual Report of the Land Subsidence Committee, along with filing a copy with the Court [Discretionary Function]

ACTIONS:

Date - Appropriative Pool -

Date - Non-Agricultural Pool -

Date - Agricultural Pool -

Date - Advisory Committee -

Date - Watermaster Board -

#### BACKGROUND

In 1999, the OBMP Phase I Report identified pumping-induced drawdown and resultant aquifer-system compaction as the most likely cause of land subsidence and ground fissuring that had been observed in Management Zone 1 (MZ-1). Program Element 4 of the OBMP, "Develop and Implement a Comprehensive Groundwater Management Plan for Management Zone 1," called for the development and implementation of an interim management plan (IMP) for MZ-1.

From 2001 to 2005, Watermaster developed, coordinated, and conducted the IMP under the guidance of the MZ-1 Technical Committee (now called the Land Subsidence Committee.) The IMP provided enough information for Watermaster to develop Guidance Criteria for the MZ-1 producers in the investigation area that, if followed, would minimize the potential for subsidence and fissuring during the completion of the MZ-1 Subsidence Management Plan. The Guidance Criteria formed the basis for the MZ-1 Plan, which was developed by the MZ-1 Technical Committee and approved by Watermaster in October 2007. By a November 15, 2007 Order, the Watermaster Court approved the MZ-1 Plan and ordered its implementation.

#### DISCUSSION

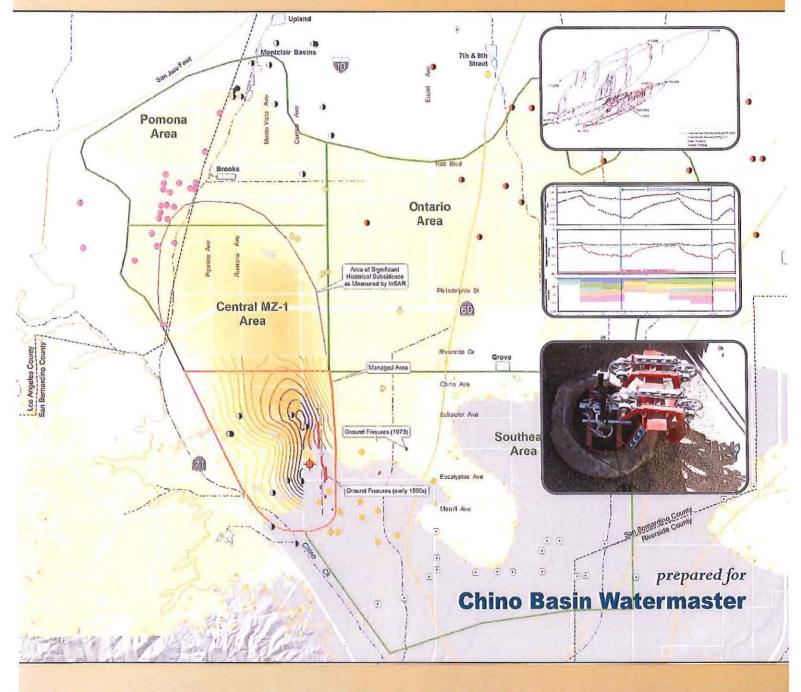
The MZ-1 Subsidence Management Plan states that Watermaster will produce an annual report at the end of each fiscal year, which includes the results of ongoing monitoring efforts, interpretations of the data, and recommended adjustment to the MZ-1 Plan, if any. The Court's Order directs Watermaster to file the annual reports with the Court. The Land Subsidence Committee has, for the last number of years, provided recommendations to Watermaster for further activities through the Watermaster budgeting process, but has not, until this year, produced a formal annual Report. The Draft 2012 Annual Report of the Land Subsidence Committee includes results and interpretations for data that were collected during calendar year 2012, and includes recommendations for Watermaster's Land-Subsidence Monitoring Program for fiscal year 2013/14. The Report was circulated through attendees of the Land Subsidence Committee meetings, and their comments have been incorporated.

#### ATTACHMENTS

1. Draft 2012 Annual Report of the Land Subsidence Committee Please access the Report appendices at: http://www.cbwm.org/FTP/Meeting%20Packets%20&%20Agendas/20131212%20Appendices%2 0to%202012%20Annual%20Report%20of%20the%20Land%20Subsidence%20Committee/

# 2012 Annual Report of the Land Subsidence Committee

Draft



December 2013



## **Table of Contents**

3.1       Managed Area       3-1         3.1.1       Groundwater Production       3-1         3.1.2       Groundwater Levels       3-1         3.1.3       Aquifer-System Deformation       3-1         3.1.4       Vertical Ground Motion       3-2         3.1.5       Horizontal Ground Motion       3-2         3.1.6       Summary       3-2         3.1.7       Horizontal Ground Motion       3-2         3.1.8       Horizontal Ground Motion       3-2         3.1.9       Horizontal Ground Motion       3-2         3.1.6       Summary       3-2         3.1.7       Horizontal MZ-1 Area       3-3         3.3       Pomona Area       3-3         3.4       Ontario Area       3-3         3.5       Southeast Area       3-3         3.6       Southeast Area       3-3	Section 1 - Intro	oduc	tion	
1.1.2       The Optimum Basin Management Program (OBMP)	1.1	Bac	kground	1-1
1.1.3       Interim Management Plan and the MZ-1 Summary Report       1-2         1.1.4       MZ-1 Subsidence Management Plan (MZ-1 Plan)       1-3         1.1.5       Annual Report of the Land Subsidence Committee       1-4         1.2       Report Organization       1-4         Section 2 - Land-Subsidence Monitoring Program (2012)       2-1         2.1       Setup and Maintenance of the Monitoring Network       2-1         2.1.1       Setup of the Chino Creek Extensometer Facility.       2-1         2.1.2       Monitoring and Testing during 2012.       2-2         2.2.1       Long-Term Pumping Test in the Managed Area       2-2         2.2.2       Monitoring of Plazometric Levels, Production, and Recharge       2-3         2.2.3       Monitoring of Aquifer-System Deformation       2-3         2.2.4       Monitoring of Vertical Ground-Surface Deformation       2-3         2.2.5       Monitoring of Horizontal Ground-Surface Deformation       2-4         3.1       Managed Area       3-1         3.1.1       Groundwater Production       3-1         3.1.3       Aquifer-System Deformation       3-2         3.1.4       Vertical Ground Motion       3-2         3.1.5       Horizontal Ground Motion       3-2         3.1.6	1.:	1.1	Subsidence and Fissuring in Chino Basin	
1.1.4       MZ-1 Subsidence Management Plan (MZ-1 Plan)       1.3         1.1.5       Annual Report of the Land Subsidence Committee       1.4         1.2       Report Organization       1.4         Section 2 - Land Subsidence Monitoring Program (2012)       2.1         2.1       Setup and Maintenance of the Monitoring Network       2.1         2.1.1       Setup and Maintenance of Monitoring Equipment and Facilities       2.1         2.1.2       Monitoring and Testing during 2012       2.2         2.2.1       Long-Term Pumping Test in the Managed Area       2.2         2.2.2       Monitoring of Plezometric Levels, Production, and Recharge       2.3         2.2.3       Monitoring of Vertical Ground-Surface Deformation       2.3         2.2.4       Monitoring of Vertical Ground-Surface Deformation       2.3         2.2.5       Monitoring of Horizontal Ground-Surface Deformation       2.3         3.1.1       Groundwater Production       3.1         3.1.2       Groundwater Production       3.1         3.1.3       Aquifer-System Deformation       3.2         3.1.4       Groundwater Production       3.1         3.1.5       Horizontal Ground Motion       3.2         3.1.1       Groundwater Production       3.1         3	1.:	1.2	The Optimum Basin Management Program (OBMP)	1-1
1.1.5       Annual Report of the Land Subsidence Committee       1.4         1.2       Report Organization       1.4         Section 2 - Land-Subsidence Monitoring Program (2012)       2.1         2.1       Setup and Maintenance of the Monitoring Network.       2.1         2.1.1       Setup of the Chino Creek Extensometer Facility.       2.1         2.1.2       Maintenance of Monitoring Equipment and Facilities       2.1         2.2       Monitoring and Testing during 2012.       2.2         2.2.1       Long-Term Pumping Test in the Managed Area       2.2         2.2.2       Monitoring of Piezometric Levels, Production, and Recharge       2.3         2.2.3       Monitoring of Vertical Ground-Surface Deformation       2.3         2.2.4       Monitoring of Vertical Ground-Surface Deformation       2.4         Section 3 - Results and Interpretations       3.1       3.1         3.1.1       Groundwater Production       3.1         3.1.3       Aquifer-System Deformation       3.2         3.1.4       Vertical Ground Motion       3.2         3.1.5       Horizontal Ground Motion       3.2         3.1.4       Vertical Ground Motion       3.2         3.1.5       Southeast Area       3.3         3.1.6       Summary<	1.	1.3	Interim Management Plan and the MZ-1 Summary Report	1-2
1.2       Report Organization       1-4         Section 2 - Land-Subsidence Monitoring Program (2012)       2-1         2.1       Setup and Maintenance of the Monitoring Network.       2-1         2.1.1       Setup of the Chino Creek Extensometer Facility.       2-1         2.1.2       Maintenance of Monitoring Equipment and Facilities       2-1         2.2       Monitoring and Testing during 2012.       2-2         2.2.1       Long-Term Pumping Test in the Managed Area       2-2         2.2.2       Monitoring of Piezometric Levels, Production, and Recharge.       2-3         2.2.3       Monitoring of Vertical Ground-Surface Deformation.       2-3         2.2.4       Monitoring of Vertical Ground-Surface Deformation.       2-3         2.2.5       Monitoring of Vertical Ground-Surface Deformation.       2-4         3.1       Groundwater Production.       3-1         3.1.1       Groundwater Production.       3-1         3.1.2       Groundwater Production.       3-1         3.1.3       Aquifer-System Deformation.       3-2         3.1.4       Vertical Ground Motion       3-2         3.1.5       Southomat Ground Motion       3-2         3.1.6       Summary       3-2         3.1.7       Horizontal Ground Moti	1.	1.4	MZ-1 Subsidence Management Plan (MZ-1 Plan)	1-3
Section 2 - Land-Subsidence Monitoring Program (2012)       2-1         2.1       Setup and Maintenance of the Monitoring Network.       2-1         2.1.1       Setup of the Chino Creek Extensometer Facility.       2-1         2.1.2       Maintenance of Monitoring Equipment and Facilities       2-1         2.2       Monitoring and Testing during 2012.       2-2         2.2.1       Long-Term Pumping Test in the Managed Area       2-2         2.2.2       Monitoring of Piezometric Levels, Production, and Recharge       2-3         2.2.3       Monitoring of Vertical Ground-Surface Deformation       2-3         2.2.4       Monitoring of Vertical Ground-Surface Deformation       2-3         2.2.5       Monitoring of Horizontal Ground-Surface Deformation       2-3         2.2.5       Monitoring of Horizontal Ground-Surface Deformation       2-4         3.1.1       Groundwater Production       3-1         3.1.2       Groundwater Production       3-1         3.1.3       Aquifer-System Deformation       3-2         3.1.4       Vertical Ground Motion       3-2         3.1.5       Horizontal Ground Motion       3-2         3.1.6       Summary       3-2         3.1.5       Horizontal Ground Motion       3-2         3.1.6	1.	1.5	Annual Report of the Land Subsidence Committee	1-4
2.1       Setup and Maintenance of the Monitoring Network.       2-1         2.1.1       Setup of the Chino Creek Extensometer Facility.       2-1         2.1.2       Maintenance of Monitoring Equipment and Facilities.       2-1         2.2       Monitoring and Testing during 2012.       2-2         2.2.1       Long-Term Pumping Test in the Managed Area       2-2         2.2.2       Monitoring of Piezometric Levels, Production, and Recharge.       2-3         2.2.3       Monitoring of Aquifer-System Deformation.       2-3         2.2.4       Monitoring of Horizontal Ground-Surface Deformation.       2-3         2.2.5       Monitoring of Horizontal Ground-Surface Deformation.       2-3         2.2.5       Monitoring of Horizontal Ground-Surface Deformation.       2-4         3.1       Managed Area       3-1         3.1.1       Groundwater Production.       3-1         3.1.2       Groundwater Levels.       3-1         3.1.3       Aquifer-System Deformation.       3-2         3.1.4       Vertical Ground Motion.       3-2         3.1.5       Horizontal Ground Motion.       3-2         3.1.6       Summary.       3-2         3.1.6       Summary.       3-2         3.1.6       Summary.       3-	1.2	Rep	ort Organization	1-4
2.1.1       Setup of the Chino Creek Extensometer Facility       2-1         2.1.2       Maintenance of Monitoring Equipment and Facilities       2-1         2.2       Monitoring and Testing during 2012       2-2         2.2.1       Long Term Pumping Test in the Managed Area       2-2         2.2.2       Monitoring of Piezometric Levels, Production, and Recharge       2-3         2.2.3       Monitoring of Aulifer-System Deformation       2-3         2.2.5       Monitoring of Horizontal Ground-Surface Deformation       2-3         2.2.5       Monitoring of Horizontal Ground-Surface Deformation       2-4         Section 3 - Results and Interpretations       3-1         3.1       Managed Area       3-1         3.1.1       Groundwater Production       3-1         3.1.2       Groundwater Levels       3-1         3.1.3       Aquifer-System Deformation       3-2         3.1.4       Vertical Ground Motion       3-2         3.1.5       Horizontal Ground Motion       3-2         3.1.6       Summary       3-2         3.2       Central MZ-1 Area       3-3         3.3       Pomona Area       3-3         3.4       Ontario Area       3-3         3.5       Southeast Area	Section 2 – Lan	d-Su	bsidence Monitoring Program (2012)	2-1
2.1.2       Maintenance of Monitoring Equipment and Facilities       2-1         2.2       Monitoring and Testing during 2012       2-2         2.2.1       Long-Term Pumping Test in the Managed Area       2-2         2.2.2       Monitoring of Piezometric Levels, Production, and Recharge       2-3         2.2.3       Monitoring of Aquifer-System Deformation       2-3         2.2.4       Monitoring of Vertical Ground-Surface Deformation       2-3         2.2.5       Monitoring of Horizontal Ground-Surface Deformation       2-3         2.2.5       Monitoring of Horizontal Ground-Surface Deformation       2-3         3.1       Groundwater Production       3-1         3.1.1       Groundwater Production       3-1         3.1.2       Groundwater Levels       3-1         3.1.3       Aquifer-System Deformation       3-2         3.1.4       Vertical Ground Motion       3-2         3.1.5       Horizontal Ground Motion       3-2         3.1.6       Summary       3-2         3.1.6       Summary       3-2         3.2       Central MZ-1 Area       3-3         3.3       Pomona Area       3-3         3.4       Ontario Area       3-3         3.5       Southeast Area <td>2.1</td> <td>Set</td> <td>up and Maintenance of the Monitoring Network</td> <td>2-1</td>	2.1	Set	up and Maintenance of the Monitoring Network	2-1
2.2       Monitoring and Testing during 2012	2.	1.1	Setup of the Chino Creek Extensometer Facility	
2.2.1       Long Term Pumping Test in the Managed Area       2-2         2.2.2       Monitoring of Piezometric Levels, Production, and Recharge       2-3         2.2.3       Monitoring of Aquifer-System Deformation       2-3         2.2.4       Monitoring of Vertical Ground-Surface Deformation       2-3         2.2.5       Monitoring of Horizontal Ground-Surface Deformation       2-4         Section 3 - Results and Interpretations       3-1         3.1       Groundwater Production       3-1         3.1.1       Groundwater Production       3-1         3.1.2       Groundwater Levels       3-1         3.1.3       Aquifer-System Deformation       3-2         3.1.4       Vertical Ground Motion       3-2         3.1.5       Horizontal Ground Motion       3-2         3.1.6       Summary       3-2         3.1.7       Horizontal Ground Motion       3-2         3.2       Central MZ-1 Area	2.	1.2	Maintenance of Monitoring Equipment and Facilities	2-1
2.2.2       Monitoring of Piezometric Levels, Production, and Recharge       2.3         2.2.3       Monitoring of Aquifer-System Deformation       2.3         2.2.4       Monitoring of Vertical Ground-Surface Deformation       2.3         2.2.5       Monitoring of Horizontal Ground-Surface Deformation       2.4         Section 3 - Results and Interpretations       3-1         3.1       Managed Area       3-1         3.1.1       Groundwater Production       3-1         3.1.2       Groundwater Levels       3-1         3.1.3       Aquifer-System Deformation       3-1         3.1.4       Vertical Ground Motion       3-2         3.1.5       Horizontal Ground Motion       3-2         3.1.6       Summary       3-2         3.1.6       Summary       3-2         3.1.6       Summary       3-2         3.1.6       Summary       3-3         3.3       Pomona Area       3-3         3.4       Ontario Area       3-3         3.5       Southeast Area       3-3         3.5       Southeast Area       3-3         3.6       Southeast Area       3-3         3.7       Pomona Anea       3-3         3.8	2.2	Mo	nitoring and Testing during 2012	2-2
2.2.2       Monitoring of Piezometric Levels, Production, and Recharge       2.3         2.2.3       Monitoring of Aquifer-System Deformation       2.3         2.2.4       Monitoring of Vertical Ground-Surface Deformation       2.3         2.2.5       Monitoring of Horizontal Ground-Surface Deformation       2.4         Section 3 - Results and Interpretations       3-1         3.1       Managed Area       3-1         3.1.1       Groundwater Production       3-1         3.1.2       Groundwater Levels       3-1         3.1.3       Aquifer-System Deformation       3-1         3.1.4       Vertical Ground Motion       3-2         3.1.5       Horizontal Ground Motion       3-2         3.1.6       Summary       3-2         3.1.6       Summary       3-2         3.1.6       Summary       3-2         3.1.6       Summary       3-3         3.1.7       Horizontal Ground Motion       3-2         3.1.8       Horizontal Ground Motion       3-2         3.1.6       Summary       3-3         3.1.7       Horizontal Ground Motion       3-2         3.1.8       Summary       3-3         3.2       Central MZ-1 Area       3-3	2.	2.1	Long-Term Pumping Test in the Managed Area	
2.2.4       Monitoring of Vertical Ground-Surface Deformation       2-3         2.2.5       Monitoring of Horizontal Ground-Surface Deformation       2-4         Section 3 - Results and Interpretations       3-1         3.1       Managed Area       3-1         3.1.1       Groundwater Production       3-1         3.1.2       Groundwater Levels       3-1         3.1.3       Aquifer-System Deformation       3-1         3.1.4       Vertical Ground Motion       3-2         3.1.5       Horizontal Ground Motion       3-2         3.1.6       Summary       3-2         3.1.6       Summary       3-2         3.2       Central MZ-1 Area       3-3         3.3       Pomona Area       3-3         3.4       Ontario Area       3-3         3.5       Southeast Area       3-3         3.4       Ontario Area       3-3         3.5       Southeast Area       3-3         3.6       Southeast Area       3-3         3.7       Recommendations for Testing and Monitoring – Fiscal Year 2013-14         4.1       Conclusions for Changes to the MZ-1 Plan       4-2         Section 5 - Glossary	2.			
2.2.5       Monitoring of Horizontal Ground-Surface Deformation	2.	2.3	Monitoring of Aquifer-System Deformation	
Section 3 - Results and Interpretations.       3-1         3.1       Managed Area       3-1         3.1.1       Groundwater Production.       3-1         3.1.2       Groundwater Levels.       3-1         3.1.3       Aquifer-System Deformation.       3-1         3.1.4       Vertical Ground Motion.       3-2         3.1.5       Horizontal Ground Motion       3-2         3.1.6       Summary.       3-2         3.1.6       Summary.       3-2         3.1.7       Horizontal Ground Motion       3-2         3.1.8       Pomona Area       3-3         3.3       Pomona Area       3-3         3.4       Ontario Area       3-3         3.5       Southeast Area       3-3         3.5       Southeast Area       3-3         3.5       Southeast Area       3-3         3.5       Southeast Area       3-3         Section 4 - Conclusions and Recommendations.       4-1         4.1       Conclusions for Testing and Monitoring – Fiscal Year 2013-14.         4.1       4.2       Recommendations for Changes to the MZ-1 Plan         4.3       Recommendations for Changes to the MZ-1 Plan       4-2         Section 5 - Glossary.	2.	2.4	Monitoring of Vertical Ground-Surface Deformation	
3.1       Managed Area       3-1         3.1.1       Groundwater Production       3-1         3.1.2       Groundwater Levels       3-1         3.1.3       Aquifer-System Deformation       3-1         3.1.4       Vertical Ground Motion       3-2         3.1.5       Horizontal Ground Motion       3-2         3.1.6       Summary       3-2         3.1.6       Summary       3-2         3.2       Central MZ-1 Area       3-3         3.3       Pomona Area       3-3         3.4       Ontario Area       3-3         3.5       Southeast Area       3-3         3.5       Southeast Area       3-3         3.5       Southeast Area       3-3         3.5       Southeast Area       3-3         3.4       Onclusions       4-1         4.1       Conclusions and Recommendations       4-1         4.2       Recommendations for Testing and Monitoring – Fiscal Year 2013-14       4-1         4.3       Recommendations for Changes to the MZ-1 Plan       4-2         Section 5 – Glossary       5-1         Section 6 – References       6-1         Appendix A – Results of Drilling and Construction of the Chino Creek Extensometer	2,	2.5	Monitoring of Horizontal Ground-Surface Deformation	
3.1.1       Groundwater Production	Section 3 – Res	sults	and Interpretations	3-1
3.1.2       Groundwater Levels.       3-1         3.1.3       Aquifer-System Deformation.       3-1         3.1.4       Vertical Ground Motion.       3-2         3.1.5       Horizontal Ground Motion       3-2         3.1.6       Summary.       3-2         3.1.6       Summary.       3-2         3.1.6       Summary.       3-2         3.1.6       Summary.       3-3         3.2       Central MZ-1 Area.       3-3         3.3       Pomona Area       3-3         3.4       Ontario Area.       3-3         3.5       Southeast Area.       3-3         4.1       Conclusions and Recommendations.       4-1         4.2       Recommendations for Testing and Monitoring – Fiscal Year 2013-14.       4-1         4.3       Recommendations for Changes to the MZ-1 Plan       4-2         Section 5 – Glossary.       5-1         Section 6 – References       6-1         Appendix A – Results of Drilling and Construction of the Chino Creek Extensome	3.1	Ma	naged Area	3-1
3.1.3       Aquifer-System Deformation       3-1         3.1.4       Vertical Ground Motion       3-2         3.1.5       Horizontal Ground Motion       3-2         3.1.6       Summary       3-2         3.1.6       Summary       3-2         3.2       Central MZ-1 Area       3-3         3.3       Pomona Area       3-3         3.4       Ontario Area       3-3         3.5       Southeast Area       3-3         3.5       Southeast Area       3-3         3.5       Southeast Area       3-3         4.1       Conclusions and Recommendations       4-1         4.2       Recommendations for Testing and Monitoring – Fiscal Year 2013-14       4-1         4.3       Recommendations for Changes to the MZ-1 Plan       4-2         Section 5 – Glossary       5-1         Section 6 – References       6-1         Appendix A – Results of Drilling and Construction of the Chino Creek Extensometer       6-1	3.	.1.1	Groundwater Production	
3.1.4       Vertical Ground Motion	3.	.1.2	Groundwater Levels	
3.1.5       Horizontal Ground Motion       3-2         3.1.6       Summary       3-2         3.2       Central MZ-1 Area       3-3         3.3       Pomona Area       3-3         3.4       Ontario Area       3-3         3.5       Southeast Area       3-3         3.5       Southeast Area       3-3         3.6       Conclusions and Recommendations       4-1         4.1       Conclusions       4-1         4.2       Recommendations for Testing and Monitoring – Fiscal Year 2013-14       4-1         4.3       Recommendations for Changes to the MZ-1 Plan       4-2         Section 5 – Glossary       5-1         Section 6 – References       6-1         Appendix A – Results of Drilling and Construction of the Chino Creek Extensometer	3	.1.3	Aquifer-System Deformation	
3.1.6       Summary	3	.1.4	Vertical Ground Motion	
3.2       Central MZ-1 Area       3-3         3.3       Pomona Area       3-3         3.4       Ontario Area       3-3         3.5       Southeast Area       3-3         3.5       Southeast Area       3-3         4.1       Conclusions and Recommendations       4-1         4.1       Conclusions       4-1         4.2       Recommendations for Testing and Monitoring – Fiscal Year 2013-14       4-1         4.3       Recommendations for Changes to the MZ-1 Plan       4-2         Section 5 – Glossary       5-1         Section 6 – References       6-1         Appendix A – Results of Drilling and Construction of the Chino Creek Extensometer       6-1	3	.1.5	Horizontal Ground Motion	3-2
3.3       Pomona Area       3-3         3.4       Ontario Area       3-3         3.5       Southeast Area       3-3         3.5       Southeast Area       3-3         Section 4 - Conclusions and Recommendations       4-1         4.1       Conclusions       4-1         4.2       Recommendations for Testing and Monitoring - Fiscal Year 2013-14       4-1         4.3       Recommendations for Changes to the MZ-1 Plan       4-2         Section 5 - Glossary       5-1         Section 6 - References       6-1         Appendix A - Results of Drilling and Construction of the Chino Creek Extensometer       6-1	3	.1.6	Summary	
3.4       Ontario Area	3.2	Cer	ntral MZ-1 Area	3-3
3.5       Southeast Area       3-3         Section 4 - Conclusions and Recommendations.       4-1         4.1       Conclusions       4-1         4.2       Recommendations for Testing and Monitoring - Fiscal Year 2013-14       4-1         4.3       Recommendations for Changes to the MZ-1 Plan       4-2         Section 5 - Glossary.       5-1         Section 6 - References       6-1         Appendix A - Results of Drilling and Construction of the Chino Creek Extensometer	3.3	Por	mona Area	
Section 4 – Conclusions and Recommendations.       4-1         4.1       Conclusions       4-1         4.2       Recommendations for Testing and Monitoring – Fiscal Year 2013-14       4-1         4.3       Recommendations for Changes to the MZ-1 Plan       4-2         Section 5 – Glossary.       5-1         Section 6 – References       6-1         Appendix A – Results of Drilling and Construction of the Chino Creek Extensometer	3.4	On	tario Area	
4.1       Conclusions       4-1         4.2       Recommendations for Testing and Monitoring – Fiscal Year 2013-14       4-1         4.3       Recommendations for Changes to the MZ-1 Plan       4-2         Section 5 – Glossary       5-1         Section 6 – References       6-1         Appendix A – Results of Drilling and Construction of the Chino Creek Extensometer	3.5	So	utheast Area	
4.2       Recommendations for Testing and Monitoring – Fiscal Year 2013-14	Section 4 - Co	nclu	sions and Recommendations	4-1
4.2       Recommendations for Testing and Monitoring – Fiscal Year 2013-14	4.1	Co	nclusions	
4.3       Recommendations for Changes to the MZ-1 Plan       4-2         Section 5 – Glossary				
Section 5 – Glossary	100000			
Section 6 – References	18,0000			
Appendix A – Results of Drilling and Construction of the Chino Creek Extensometer				Concerning and a second part of the second
	10 AB			

тос-1 Р56



#### Annual Report of the Land Subsidence Committee - 2012

Table of Contents

## **List of Tables**

- 1-1 Managed Wells
- 3-1 Groundwater Production in the Managed Area for 2012
- 4-1 Work Breakdown Structure Land-Subsidence Monitoring Program Fiscal Year 2013/14



	List of Figures
1-1	MZ-1 Managed Area and Managed Wells
1-2	Historical Land Surface Deformation in Management Zone 1
2-1	Land-Subsidence Monitoring Network - 2012
2-2	Borehole and Well Construction Summary - CCPA
3-1	Stress and Strain within the Managed Area
3-2	Stress-Strain Diagram – PA-7 Piezometer vs. Deep Extensometer
3-3	Vertical Ground Motion across Western Chino Basin - 2012
3-4	Location of the Daniels Horizontal Extensometer
3-5	Horizontal Deformation at the Daniels Horizontal Extensometer
3-6	The History of Land Subsidence in the Managed Area
3-7	The History of Land Subsidence in Central MZ-1
3-8	The History of Land Subsidence in the Pomona Area
3-9	The History of Land Subsidence in the Ontario Area
3-10	The History of Land Subsidence in the Southeast Area
3-11	Stress and Strain – Chino Creek Extensometer
4-1	Benchmark Locations for Elevation and EDM Surveys
4-2	Long-Term Pumping Test – Managed Area

тос-з Р58



## Acronyms, Abbreviations, and Initialisms

and the second	NT TOTAL AND A DESCRIPTION OF A DESCRIPR
acre-ft/yr	acre-feet per year
CCPA	Chino Creek Piezometer A
CCX	Chino Creek Extensometer Facility
CIM	California Institution for Men
DHX	Daniels Horizontal Extensometer
EDM	Electronic Distance Measurement
ft-bgs	feet below ground surface
ft-btoc	feet below top of casing
GSWC	Golden State Water Company
IEUA	Inland Empire Utilities Agency
IMP	Interim Monitoring Program
InSAR	Interferometric Synthetic Aperture Radar
MVWD	Monte Vista Water District
MZ-1	Management Zone 1
OBMP	Optimum Basin Management Plan
PE1	Program Element 1
SAWC	San Antonio Water Company
USGS	United States Geological Survey
WEI	Wildermuth Environmental Inc.



# 1.1 Background

Land subsidence is the sinking of the Earth's surface due to the rearrangement of subsurface Earth materials. In the United States alone, over 17,000 square miles in 45 states have experienced land subsidence (USGS, 1999). In many instances, land subsidence is accompanied by adverse impacts at the land surface, such as sinkholes, earth fissures, encroachment of adjacent water bodies, modified drainage patterns, and others. In populated regions, these subsidence-related impacts can result in severe damage to man-made infrastructure and costly remediation measures. Over 80% of all documented cases of land subsidence in the United States have been caused by groundwater extractions from the underlying aquifer system (USGS, 1999).

# **1.1.1 Subsidence and Fissuring in Chino Basin**

One of the earliest indications of land subsidence in Chino Basin was the appearance of ground fissures in the City of Chino. These fissures appeared as early as 1973, but an accelerated occurrence of ground fissuring ensued after 1991 and resulted in damage to existing infrastructure. Figure 1-1 shows the location of the fissures within Management Zone 1 (MZ-1) of the Chino Basin. The scientific studies that followed attributed the fissuring phenomenon to differential land subsidence that was caused by pumping of the underlying aquifer system and the consequent drainage and compaction of aquitard sediments (Fife et al., 1976; Kleinfelder, 1993, 1996; Geomatrix, 1994).

# **1.1.2 The Optimum Basin Management Program (OBMP)**

In 1999, the OBMP Phase I Report (WEI, 1999) identified pumping-induced drawdown and subsequent aquifer-system compaction as the most likely cause of land subsidence and ground fissuring observed in MZ-1. Program Element 4 of the OBMP, *Develop and Implement a Comprehensive Groundwater Management Plan for Management Zone 1*, called for the development and implementation of an interim management plan for MZ-1 that would:

- minimize subsidence and fissuring in the short-term.
- collect the information necessary to understand the extent, rate, and mechanisms of subsidence and fissuring.
- formulate a management plan to abate future subsidence and fissuring or reduce it to tolerable levels.

In 2000, the Implementation Plan in the Peace Agreement called for an aquifer-system and land subsidence investigation in the southwestern region of MZ-1 to support the development of a management plan for MZ-1 (second and third bullets above). This investigation was titled the MZ-1 Interim Monitoring Program (IMP), which is described below.

The OBMP Phase I Report also noted that land subsidence was occurring in other parts of the Basin besides Chino. Program Element 1 (PE1) of the OBMP and the Implementation Plan, Develop and Implement a Comprehensive Monitoring Program, called for the basin-wide analysis



of land subsidence via ground-level surveys and InSAR and ongoing monitoring based on the analysis of the subsidence data.

#### 1.1.3 Interim Management Plan and the MZ-1 Summary Report

From 2001 to 2005, Watermaster developed, coordinated, and conducted the IMP under the guidance of the MZ-1 Technical Committee (now called the Land Subsidence Committee). The MZ-1 Technical Committee was composed of representatives from all major MZ-1 producers and their technical consultants, including the Agricultural Pool; the cities of Chino, Chino Hills, Ontario, Pomona, and Upland; Monte Vista Water District; Golden State Water Company; and the State of California, California Institution for Men (CIM).

The main conclusions derived from the IMP were:

- 1. Groundwater production from the deep, confined, aquifer system in the southwestern region of MZ-1 caused the greatest stress to the aquifer system. In other words, pumping of the deep aquifer system caused groundwater-level drawdown that is much greater in magnitude and lateral extent than drawdown caused by pumping of the shallow aquifer system.<sup>1</sup>
- 2. Groundwater-level drawdown due to pumping of the deep aquifer system can cause inelastic (permanent) compaction of the aquifer-system sediments, which results in permanent land subsidence. The initiation of permanent compaction within the aquifer system was identified during the investigation when water levels fell below a depth of about 250 feet in the PA-7 piezometer at Ayala Park.
- 3. The then current state of aquifer-system deformation in southern MZ-1 (in the vicinity of Ayala Park) was essentially elastic. Very little permanent compaction was occurring in this area, which was in contrast to the recent past when about 2.2 feet of land subsidence occurred from about 1987 to 1995 and was accompanied by ground fissuring. Figure 1-2 shows the early land subsidence that was measured in the western Chino Basin during this period.
- 4. During this study, a previously undetected barrier to groundwater flow, called the Riley Barrier, was identified. This barrier is located within the deep aquifer system and is aligned with the historical zone of ground fissuring. Pumping from the deep aquifer system was limited to the area west of the barrier, and the resulting drawdown did not propagate eastward across the barrier. Thus, compaction occurred within the deep system on the west side of the barrier but not on the east side, which caused concentrated differential subsidence across the barrier and created the potential for ground fissuring.
- 5. InSAR and ground-level-survey data indicated that permanent subsidence in the central region of MZ-1 had occurred in the past and was continuing to occur. The InSAR data also suggested that the groundwater barrier extends northward into central MZ-1. These observations suggested that the conditions that very likely caused ground fissuring near Ayala Park in the 1990s are also present in central MZ-1 and should be studied in more detail.



<sup>&</sup>lt;sup>1</sup> Production from the deep aquifer system within the Managed Area generally occurs from wells that are screened deeper than 400 feet below the ground surface (ft-bgs). (WEI, 2007)

The methods, results, and conclusions of the IMP are described in detail in the MZ-1 Summary Report (WEI, 2006). The IMP provided enough information for Watermaster to develop Guidance Criteria for the MZ-1 producers in the investigation area that, if followed, would minimize the potential for subsidence and fissuring during the completion of the MZ-1 Subsidence Management Plan (MZ-1 Plan; WEI 2007).

### 1.1.4 MZ-1 Subsidence Management Plan (MZ-1 Plan)

The Guidance Criteria formed the basis for the MZ-1 Plan, which was developed by the MZ-1 Technical Committee and approved by Watermaster in October 2007. In November 2007, the San Bernardino County Superior Court, which retains continuing jurisdiction over the Chino Basin Adjudication, approved the MZ-1 Plan and ordered its implementation.

The MZ-1 Plan includes a list of the Managed Wells that are subject to the plan. The Managed Wells are listed in Table 1-1. The MZ-1 Plan also includes a map of the so-called Managed Area in southern MZ-1 that is subject to the plan. The Managed Area is shown on Figure 1-1.

To minimize the potential for future subsidence and fissuring in the Managed Area, the MZ-1 Plan established a Guidance Level, which is a specified depth to water measured in Watermaster's PA-7 piezometer at Ayala Park. It is defined as the threshold water level at the onset of permanent compaction of the aquifer system as recorded by the extensometer, minus five feet. The five foot reduction is meant to be a safety factor to ensure that permanent compaction does not occur in the future. The Guidance Level is subject to change based on the periodic review of monitoring data collected by Watermaster. The initial Guidance Level is 245 feet below the top of the well casing (ft-btoc) in PA-7. The Plan recommended that the Parties manage their groundwater production so that the water level in PA-7 remains above the Guidance Level.

The MZ-1 Plan calls for ongoing monitoring, data analysis, annual reporting, and adjustment to the MZ-1 Plan as warranted by the data. Implementation of the MZ-1 Plan began in 2008. The MZ-1 Plan calls for (1) the continued scope and frequency of monitoring implemented during the IMP within the Managed Area and (2) expanded monitoring of the aquifer system and land subsidence in other areas of the Chino Basin where the IMP indicated concern for future subsidence and ground fissuring. Figure 1-2 shows the location of these so-called Areas of Subsidence Concern: Central MZ-1, the Pomona Area, the Ontario Area, and the Southeast Area. The expanded monitoring efforts outside of the Managed Area are consistent with the requirements of PE1.

Potential future efforts listed in the MZ-1 Plan included: (1) more intensive monitoring of horizontal strain across the zone of historical ground fissuring to assist in developing management strategies related to fissuring, (2) injection feasibility studies within the Managed Area, (3) additional pumping tests to refine the Guidance Criteria, (4) computer-simulation modeling of groundwater flow and subsidence, and (5) development of alternative pumping plans for those Parties affected by the MZ-1 Plan. These potential future efforts are discussed by the Land Subsidence Committee, and if deemed prudent and necessary, are recommended to Watermaster for implementation in future fiscal years.

1-3 P62



## 1.1.5 Annual Report of the Land Subsidence Committee

The MZ-1 Plan states that Watermaster will produce an annual report that includes the results of ongoing monitoring efforts, interpretations of the data, and recommended adjustment to the MZ-1 Plan, if any. This Annual Report of the Land Subsidence Committee includes results and interpretations for data that were collected during calendar year 2012, and includes recommendations for Watermaster's Land-Subsidence Monitoring Program for fiscal year 2013/14.

# **1.2 Report Organization**

This report is organized into the following five sections:

Section 1 - Introduction. This section provides background information on the history of land subsidence and ground fissuring in Chino Basin, the formation of the Land Subsidence Committee and its responsibilities, and the MZ-1 Plan.

Section 2 – Land-Subsidence Monitoring Program (2012). This section describes the monitoring and testing activities that were performed by the Watermaster for its Land-Subsidence Monitoring Program during 2012.

Section 3 – Results and Interpretations. This section discusses and interprets the monitoring data collected during 2012, including the basin stresses of groundwater pumping and recharge and the basin responses including changes in groundwater levels, aquifer-system deformation, and ground motion.

Section 4 – Conclusions and Recommendations. This section summarizes the main conclusions derived from the monitoring program as of December 2012, and describes recommended activities for the program during fiscal year 2013/14 in the form of a proposed scope-of-work, schedule, and budget.

Section 5 – References. This section is a list of the publications cited in this report.



CBWM ID	Owner	Well Name	Status	Screened Interval ft-bgs			
3600461	Chino	C-7	Not Equipped <sup>2</sup>	180-780			
600670	Chino	C-15	Not Equipped	270-400, 626-820			
600487	Chino Hills	CH-1B	Inactive <sup>1</sup> 440-470, 490-610, 720-900, 940-1180				
600687	Chino Hills	CH-7C	Not Equipped	550-950			
600498	Chino Hills	CH-7D	Inactive	320-400, 410-450, 490-810, 850-930			
600488	Chino Hills	CH-15B	Active <sup>3</sup>	360-440, 480-900			
600489	Chino Hills	CH-16	Inactive 430-940				
600499	Chino Hills	CH-17	Active 300-460, 500-980				
600500	Chino Hills	CH-19	Not Equipped	340-420, 460-760, 800-1000			
3602461	CIM	CIM-11A	Active	135-148, 174-187, 240-283, 405-465, 484-512, 518-540			

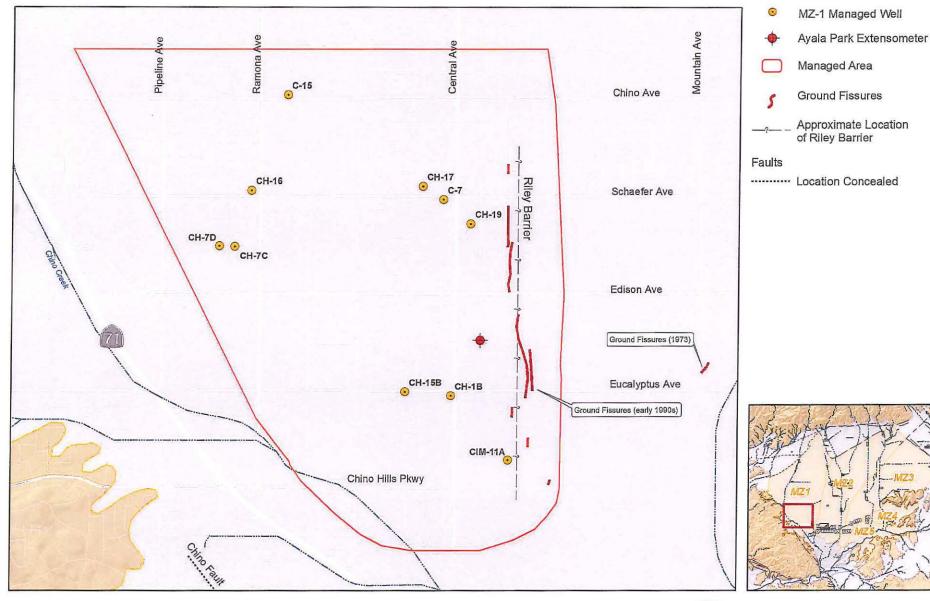
# Table 1-1 Managed Wells

<sup>1</sup> Well can pump groundwater with little or no modifications, but no pumping is planned for the current year.

<sup>2</sup> Unable to pump the well without major modifications, and no pumping is planned for the current year.

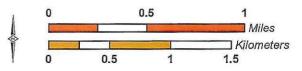
<sup>3</sup> Well is currently being used for water supply.





Prepared by: WILDERMUTH Author: TCR Date: 20130701

File: Figure\_1-1.mxd

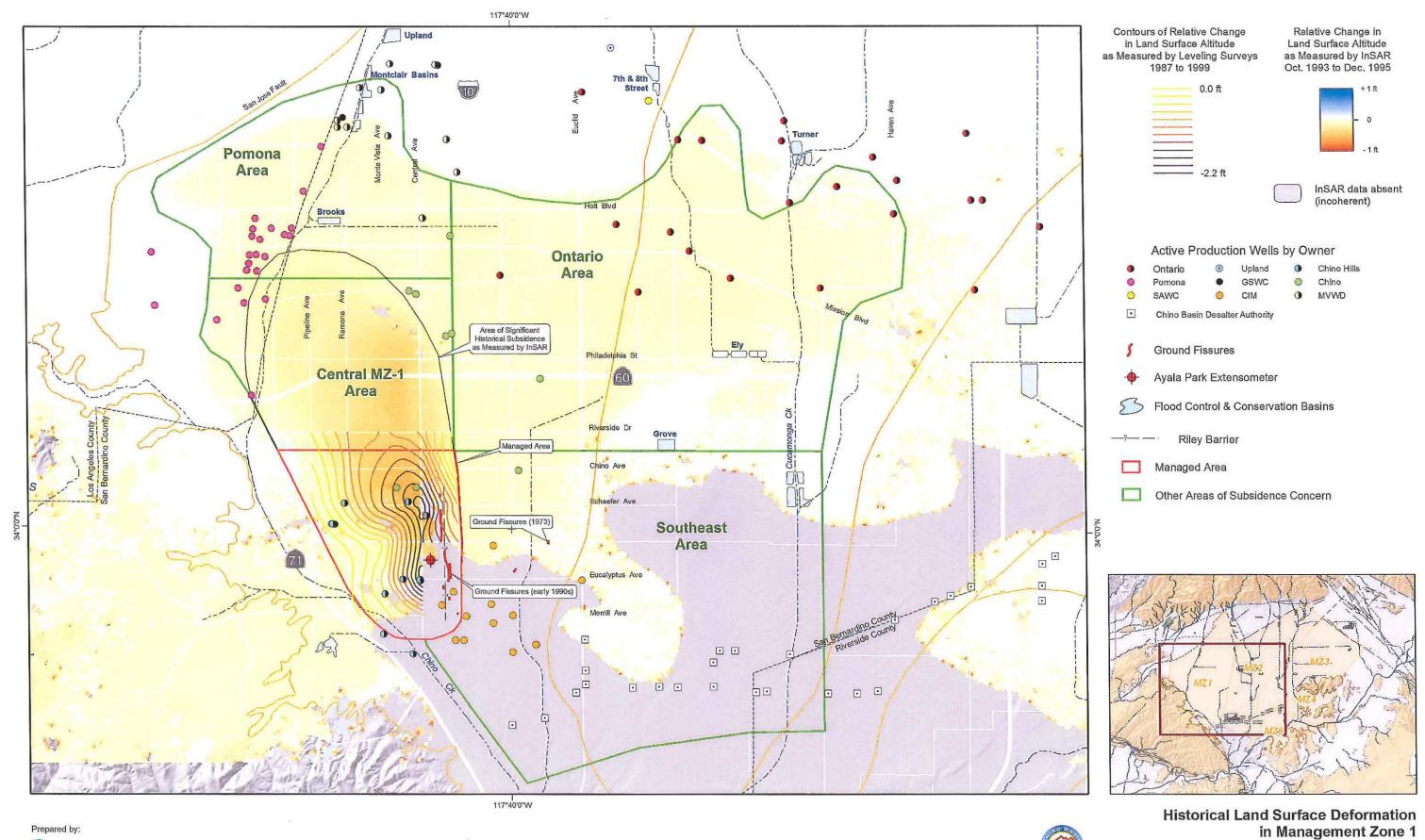


Land Subsidence Committee

2012 Annual Report

MZ-1 Managed Area and Managed Wells

Figure 1-1



Prepared by:



Author: TCR Date: 20130624 File: Figure 1\_2.mxd

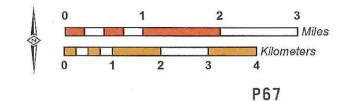




Figure 1-2

InSAR (1993 to 1995)

Leveling Surveys (1987 to 1999) and

· .

. .

# Section 2 – Land-Subsidence Monitoring Program (2012)

This section describes the monitoring and testing activities that were performed by the Watermaster for its Land-Subsidence Monitoring Program during 2012.

# 2.1 Setup and Maintenance of the Monitoring Network

Watermaster's consulting engineer and/or sub-consultants perform the work to setup and maintain the land-subsidence monitoring network. The equipment and facilities that comprise the monitoring network are shown on Figure 2-1, and include pressure transducers and data loggers to measure and record water levels at wells, extensometers that measure aquifersystem deformation and ground motion, and benchmark monuments that are periodically surveyed to measure ground motion.

## 2.1.1 Setup of the Chino Creek Extensometer Facility

During 2012, Watermaster installed the Chino Creek Extensometer Facility (CCX) on Chino Airport property in the City of Chino. The CCX is located south of Kimball Avenue and the Chino Airport and east of Euclid Avenue as shown on Figure 2-1. The CCX was installed to measure and record background data and the response of the aquifer system to new groundwater production at the Chino Creek Well Field that is scheduled to commence in 2015. The CCX began recording groundwater levels and vertical aquifer-system deformation in July 2012.

The CCX was constructed within a new dual-nested piezometer—Chino Creek Piezometer-A (CCPA). Figure 2-2 illustrates the borehole lithology, borehole geophysics, and the general well construction information for the CCPA. The shallow piezometer, CCPA-1, was completed within the shallow aquifer system. The deep piezometer, CCPA-2, was completed within the deep aquifer system. The shallow and deep aquifer systems at the CCX are separated by a layer of predominantly fine-grained sediments between about 130 and 230 feet below ground surface. The shallow extensometer, CCX-1, is a cable extensometer that was completed within CCPA-1 to measure vertical aquifer-system deformation across the shallow aquifer systems. The deep extensometer, CCX-2, is a cable extensometer that was completed within CCPA-2 to measure vertical aquifer-system deformation across the shallow and deep aquifer systems. Subtraction of the two extensometer records provides aquifer-system deformation data for the deep aquifer system only.

The monitoring equipment to measure and record piezometric levels and aquifer-system compaction were installed and calibrated at the facility during June and July 2012. A benchmark monument was installed at the surface completion of the CCX to facilitate repeated leveling surveys of elevation and to tie the CCX elevation to the Ayala Park elevation datum. Details of the construction and setup of the CCX are described within the CCX installation report which is included as Appendix A to this report.

# 2.1.2 Maintenance of Monitoring Equipment and Facilities

During 2012, Watermaster's consulting engineer replaced five pressure transducers that were malfunctioning or had failed, and performed maintenance at the extensometer facilities. Maintenance activities included: protection of the PA facility against surface-water intrusion



during strong storms; refurbishment and calibration of the pressure transducers in PC-4 and PC-2; maintenance of Watermaster's Ayala Park website; and service of liquid-level equipment and installation of solar panels at the Daniels Horizontal Extensometer.

# 2.2 Monitoring and Testing during 2012

Watermaster's consulting engineer and/or sub-consultants perform the monitoring and testing programs under the direction of the Land Subsidence Committee. This section describes the monitoring and testing programs, and the implementation of these programs during 2012.

# 2.2.1 Long-Term Pumping Test in the Managed Area

The MZ-1 Plan states that Watermaster will assist the Parties with "additional testing and monitoring to refine the Guidance Criteria" and to "develop alternative pumping plans" to "produce a reasonable quantity of groundwater from MZ-1." Furthermore, the MZ-1 Plan states that Watermaster will assist the City of Chino Hills in an injection feasibility study to determine if injection is a viable tool for managing subsidence and maximizing the use of existing groundwater production infrastructure (see pages 2-5 and 2-6 of the MZ-1 Plan for reference).

The Land Subsidence Committee developed and is now implementing the Long-Term Pumping Test within the Managed Area in response to these directives in the MZ-1 Plan. The goal of the Long-Term Pumping Test is to develop a strategy for the prudent extraction of groundwater from the Managed Area. In this case, "prudent" is defined as extracting the maximum volume of groundwater without causing damage to the ground surface or the area's infrastructure. Specific questions that the program is designed to answer are:

- 1. Is the Guidance Level for the Managed Area, as currently defined, appropriate? If no, how should the Guidance Level be updated?
- 2. Does the Riley Barrier separate the Managed Area from the Southeast Area within the deep aquifer system? If not, should the eastern boundary of the Managed Area be revised?
- 3. How does subsidence (elastic and inelastic) and rebound that occurs in the Managed Area affect the horizontal strain across the historical zone of ground fissuring and its northward extension into the heavily-urbanized portions of the City of Chino?
- 4. Is aquifer injection a viable tool for mitigating drawdown and permanent compaction in the deep aquifer system?
- 5. Is there an "acceptable" rate of land subsidence in the Managed Area? If so, what is the "acceptable" rate?

The Land Subsidence Committee envisioned the following scope and sequence for the Long-Term Pumping Test:

1. Conduct a controlled pumping test of the deep aquifer system in the Managed Area at wells CH-17 and CH-15B (with arsenic treatment). This test should cause drawdown at PA-7 to fall below the Guidance Level. The test will be closely monitored at the

December 2013 007-012-054



Ayala Park Extensometer and the horizontal monitoring facilities, and will be stopped at the first clear indication of permanent deformation.

- 2. Stop the pumping test and allow for partial recovery of groundwater levels.
- 3. Conduct two cycles of injection at CH-16 to see how injection may accelerate recovery of regional drawdown caused by pumping at CH-17 and CH-15B.
- 4. After injection tests, allow for full recovery of groundwater levels to pre-test conditions (PA-7 = 90 ft-btoc). Check stress-strain diagrams for permanent compaction of the aquifer system and/or horizontal deformation across the fissure zone.

The Long-Term Pumping Test began in spring of 2012 and is scheduled to continue until about July 2014. Ground-level surveys will be conducted when groundwater levels are at maximum drawdown and at maximum recovery. These benchmark elevation surveys will be compared to historical benchmark elevation surveys conducted at maximum recovery. Ground surface deformation will also be measured by InSAR throughout the duration of the test and at maximum drawdown and recovery of groundwater levels.

# 2.2.2 Monitoring of Piezometric Levels, Production, and Recharge

Changes in piezometric levels are the mechanism behind aquifer-system deformation and land subsidence. During 2012, water levels were measured and recorded once every 15 minutes using pressure transducers at 42 wells in the Managed Area, Central MZ-1, and the Southeast Area.

Production data were collected and compiled from the owners of the Managed Wells for calendar year 2012.

The volumes of recycled and imported water that were artificially recharged at basins in MZ-1 and MZ-2 and the direct use of recycled water within the Managed Area and the Southeast Area were collected from the Inland Empire Utilities Agency (IEUA) for fiscal year 2012.

# 2.2.3 Monitoring of Aquifer-System Deformation

Watermaster recorded aquifer-system deformation at the Ayala Park Extensometer and at the CCX where the vertical component of aquifer-system deformation is measured once every 15 minutes. Data collection at the CCX began in July 2012.

# 2.2.4 Monitoring of Vertical Ground-Surface Deformation

Watermaster monitors vertical ground motion via traditional leveling surveys and remote sensing (InSAR) techniques established during the IMP.

Watermaster retains Parsons Brinkerhoff (Parsons) to conduct the leveling surveys at selected benchmark monuments shown on Figure 2-1. The Land Subsidence Committee decides annually on the benchmarks to be surveyed. During fall 2012, Parsons conducted a leveling survey within the CCWF area. No leveling surveys were conducted in the Managed Area



because drawdown did not yet exceed the Guidance Level as planned in the Long-Term Pumping Test.

Watermaster retains Neva Ridge Technologies to acquire InSAR data from the TerraSAR-X satellite operated by the European Space Agency. The width of the TerraSAR-X data frame covers the western half of the Chino Basin only. All historical InSAR data that was collected and analyzed by Watermaster since 1993 indicates that very little vertical ground motion occurs in the eastern half of the Chino Basin. Five InSAR data frames were collected in February 2012, April 2012, July 2012, September 2012, and January 2013, and were used to create seven interferograms to record short-term and long-term vertical ground motion over the following periods:

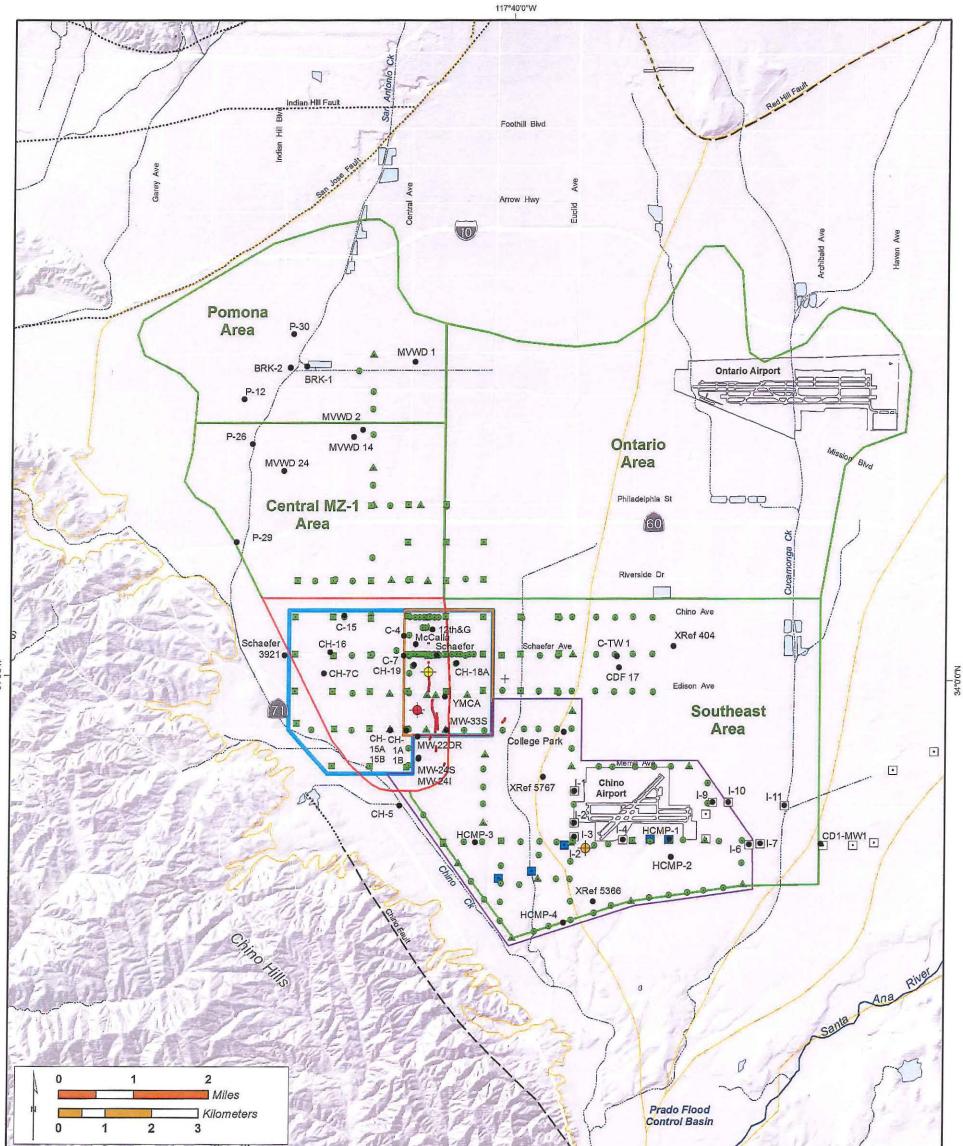
- November 2011 to February 2012
- November 2011 to April 2012
- November 2011 to July 2012
- November 2011 to September 2012
- November 2011 to January 2013
- September 2011 to September 2012
- February 2012 to January 2013.

# 2.2.5 Monitoring of Horizontal Ground-Surface Deformation

Watermaster measures horizontal ground motion across the historical zone of ground fissuring via electronic distance measurements between benchmark monuments and at horizontal extensometers that are installed across the fissure zone within the shallow soils. In 2012, data were collected from the Daniels Horizontal Extensometer (DHX) which records extension and compression across the historical fissure zone once every 15 minutes.







34°0'0'N P73

#### Survey Benchmarks

- **Class A Monuments**
- 0 **Class B Monuments**
- **City Monuments**

#### Survey Areas





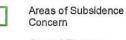
Southeast Area Surveys



Managed Area Surveys



- Well Monitored by • Pressure Transducer during 2012
- Existing CDA Wells •
  - Chino Creek Well Field
  - Ayala Park Extensometer
  - Chino Creek Extensometer
  - Daniels Horizontal Extensometer



Ground Fissures

Managed Area

#### Faults

5

117°40'0"W

Location Certain Location Approximate Approximate Location of \_\_\_ Groundwater Barrier ..... Location Concealed ---? Location Uncertain



Chino Basin Management Zones



# Land-Subsidence **Monitoring Network**

2012



Author: TCR Date: 20130628 File: Figure\_2-1.mxd

0

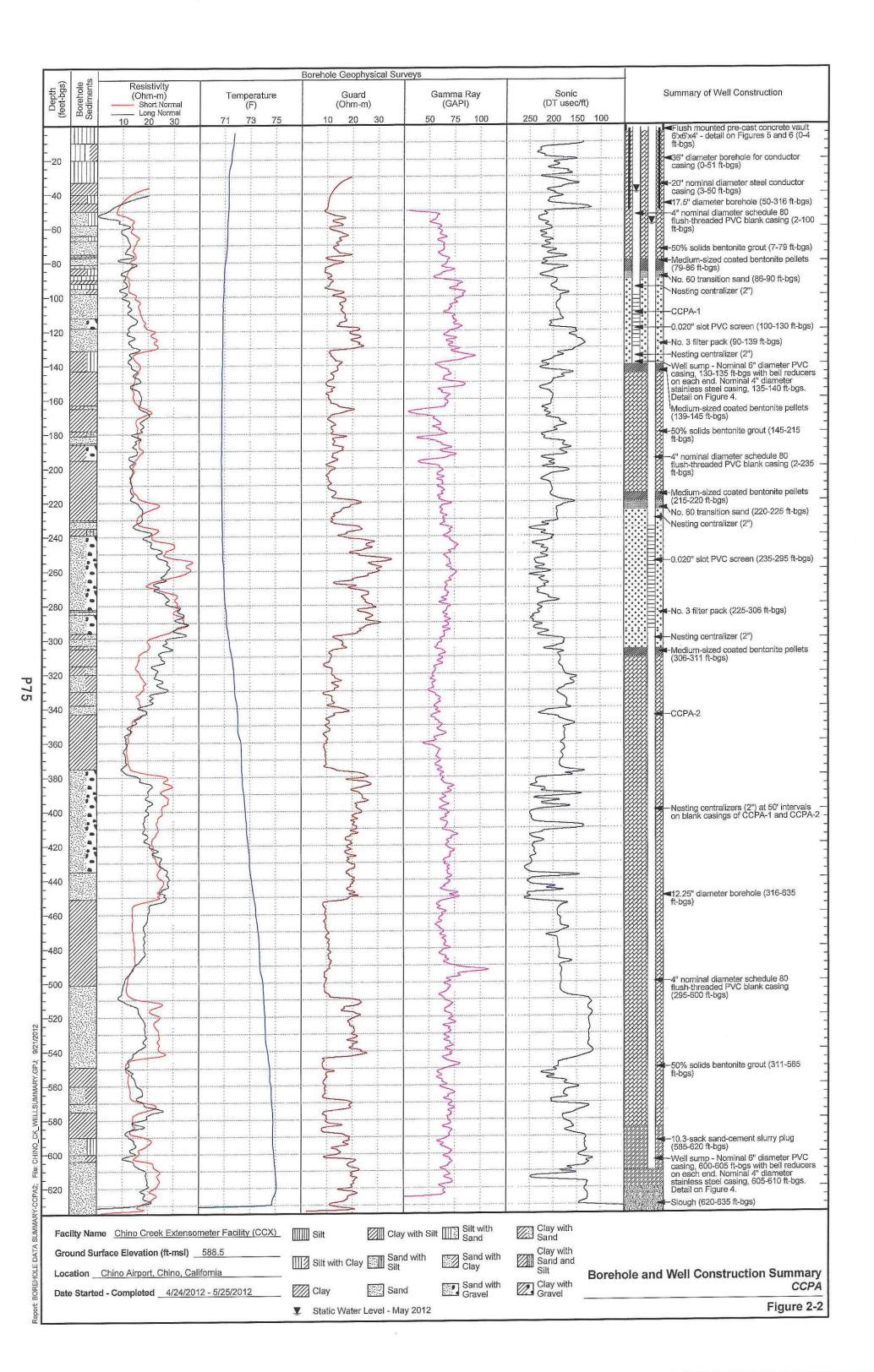
-

Land Subsidence Committee 2012 Annual Report

Figure 2-1

.

.



FOR FAGINATION

.

. .

This section describes the results and interpretations of Watermaster's subsidence monitoring efforts during 2012 in the Managed Area, Central MZ-1, the Pomona Area, the Ontario Area, and the Southeast Area.

# 3.1 Managed Area

The IMP demonstrated that in the Managed Area groundwater production from the deep aquifer is the primary influence on piezometric levels and the subsequent deformation of the aquifer system. The Managed Area is the primary focus of the MZ-1 Plan, so the discussion below describes the results of the monitoring program relative to the Guidance Criteria in the MZ-1 Plan.

# 3.1.1 Groundwater Production

Table 3-1 summarizes groundwater production by well within the Managed Area for 2012. Approximately 5,400 acre-feet of groundwater was pumped from the Managed Area in 2012—about 75 percent of the production was from wells screened in the shallow aquifer system (4,048 acre-feet) and 25 percent from wells screened in both the shallow and deep aquifer systems (1,328 acre-feet).

Figure 3-1 includes a bar chart of the production data shown in Table 3-1. It illustrates the seasonal pattern of production in the Managed Area. Production increases during the warmer spring/summer months, and decreases during the cooler fall/winter months. Production from the deep aquifer system ceased during the winter.

# 3.1.2 Groundwater Levels

Figure 3-1 includes a time-series chart of the piezometric levels at the Ayala Park Extensometer facility. These data corroborate the conclusions of the IMP and show that pumping from the deep, confined, aquifer system causes groundwater-level drawdown that is much greater in magnitude than drawdown caused by pumping of the shallow aquifer system, even though more pumping occurs from the shallow aquifer system.

Piezometric levels at the PA-7 piezometer declined by about 82 feet during the summer of 2012 while Chino Hills' Well 17 was pumping. Levels at PA-7 never declined below the Guidance Level of 245 ft-btoc.

# 3.1.3 Aquifer-System Deformation

Figure 3-1 includes a time-series chart of vertical deformation of the aquifer system as measured at the Ayala Park Extensometer facility. These data illustrate elastic deformation of the aquifer system during drawdown and recovery of piezometric levels during 2011 and 2012. The deep extensometer recorded about 0.06 feet of elastic deformation in 2012.

Figure 3-2 is a stress-strain diagram of piezometric levels measured at PA-7 (stress) versus vertical deformation of the aquifer system measured at the deep extensometer (strain). The



overlapping hysteresis loops of this stress-strain diagram since 2009 indicates that little, if any, inelastic compaction of the aquifer system sediments is occurring at Ayala Park.

### 3.1.4 Vertical Ground Motion

Figure 3-3 is a map of vertical ground motion across the western portion of Chino Basin as measured by InSAR and leveling surveys from fall-2011 to fall-2012. Vertical motion of the ground surface was minimal (+/- 0.01 feet) in the Managed Area during this period, which is consistent with the data from the Ayala Park Extensometer shown on Figure 3-1.

#### 3.1.5 Horizontal Ground Motion

Figure 3-4 is a map of the DHX which measures and records horizontal extension and compression within the shallow soils across the historical fissure zone where it passes north of 12<sup>th</sup> Street in Chino. The DHX is comprised of nine quartz-tube extensometers that were installed within a trench in an east/west series. The western extensometer is 10-feet long and the other eight extensometers are 20-feet long. The total length of the DHX is about 170 feet. The Q11 extensometer spans the surface rupture of the historical ground fissure.

Figure 3-5 is a time-series chart of horizontal deformation across the length of the DHX from west to east. The DHX began recording on October 5, 2011. The extension/compression data shown on Figure 3-5 were set to zero on May 17, 2012, prior to initiation of pumping at CH-17. Also shown on the chart is the vertical compression of the aquifer system as measured by the deep extensometer at the Ayala Park Extensometer facility, which is a measure of the compression and rebound that is occurring west of the fissure zone.

Figure 3-5 generally shows compression across the fissure zone during rebound of the land surface to the west, and extension during subsidence to the west. This pattern of horizontal strain is consistent with the conceptual model of drawdown and compression west of the fissure zone causing differential subsidence and extensional stresses across the fissure zone (and visa versa). The majority of horizontal extensometers show this same pattern, including Q11, but with differing response time and magnitude of deformation. The response of the DHX to changes at the deep extensometer was almost immediate (i.e. response times of less than an hour).

Figure 3-5 indicates a net horizontal compression of the shallow soils from October 2011 to October 2012, even though subsidence and rebound of the ground surface at Ayala Park was essentially elastic.

#### 3.1.6 Summary

Figure 3-6 provides a comprehensive description and explanation of the history of subsidence in the Managed Area. The most recent data from InSAR, ground-level surveys, and extensometers indicates that minimal vertical ground motion occurred in this area during 2011-2012. The lack of recent subsidence in this area is consistent with the observation that piezometric levels at PA-7 have not declined below the Guidance Level of 245 ft-btoc since about 2005.



# 3.2 Central MZ-1 Area

Figure 3-7 provides a comprehensive description and explanation of the history of subsidence in the Central MZ-1. The InSAR data on Figure 3-3 indicates that minimal vertical ground motion occurred in this area during the period of fall-2011 to fall-2012. The lack of recent subsidence is consistent with the recent time-series of production, groundwater levels, and subsidence shown on Figure 3-7.

# 3.3 Pomona Area

Figure 3-8 provides a comprehensive description and explanation of the history of subsidence in the Pomona Area. The InSAR data on Figure 3-3 indicate that a maximum of about 0.04 feet of land subsidence occurred in this area during the period of fall-2011 to fall-2012. This pattern of subsidence is consistent with the historical time-series of subsidence in this area shown on Figure 3-8, but suggests a decrease in the rate of subsidence. Currently, there are not enough aquifer-system data available to definitively explain the causes of the subsidence in this area or the changes in rate of subsidence.

Of particular concern in the Pomona Area is that the historical and ongoing subsidence has been differential across the San Jose Fault. This is the same spatial pattern of subsidence that lead to the episode of ground fissuring in the Managed Area during the 1990s.

# 3.4 Ontario Area

Figure 3-9 provides a comprehensive description and explanation of the history of subsidence in the Ontario Area. The InSAR data on Figure 3-3 indicate that minimal vertical ground motion occurred in this area during the period of fall-2011 to fall-2012. This indicates a decrease in the recent rate of subsidence. Currently, there are not enough aquifer-system data available to definitively explain the causes of the subsidence in this area or the changes in rate of subsidence.

# 3.5 Southeast Area

Figure 3-10 provides a comprehensive description and explanation of the history of subsidence in the Southeast Area. The InSAR on Figure 3-3 indicate that minimal vertical ground motion occurred across this area during the period of fall-2011 to fall-2012. The ground-level survey data in the vicinity of the Chino Desalter well field indicates a rebound of the land surface of about 0.05 feet over this same period. Both data sets suggest a decrease in the recent rate of subsidence or cessation of subsidence altogether.

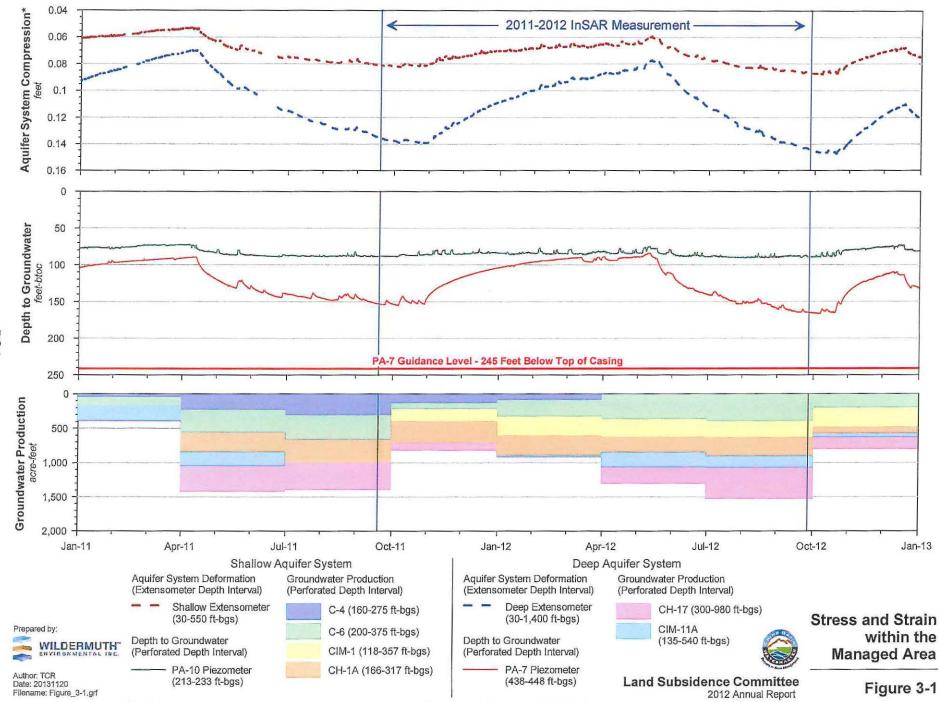
The CCX has been measuring and recording piezometric and aquifer-system deformation data in the vicinity of the Chino Desalter well field since July 2012. Figure 3-11 is a time series chart of these data. In this area, pumping from the Desalter well field has been primarily from the deep aquifer system. In the shallow aquifer system, the data show virtually no change in piezometric levels or aquifer-system deformation. In the deep aquifer system, piezometric levels recovered by about 10 feet from September to December 2012, and the deep CCX-2 extensometer recorded a small, corresponding expansion of the aquifer system.



Table 3-1									
Groundwater Production in the Managed Area for 2012									
acre-feet									

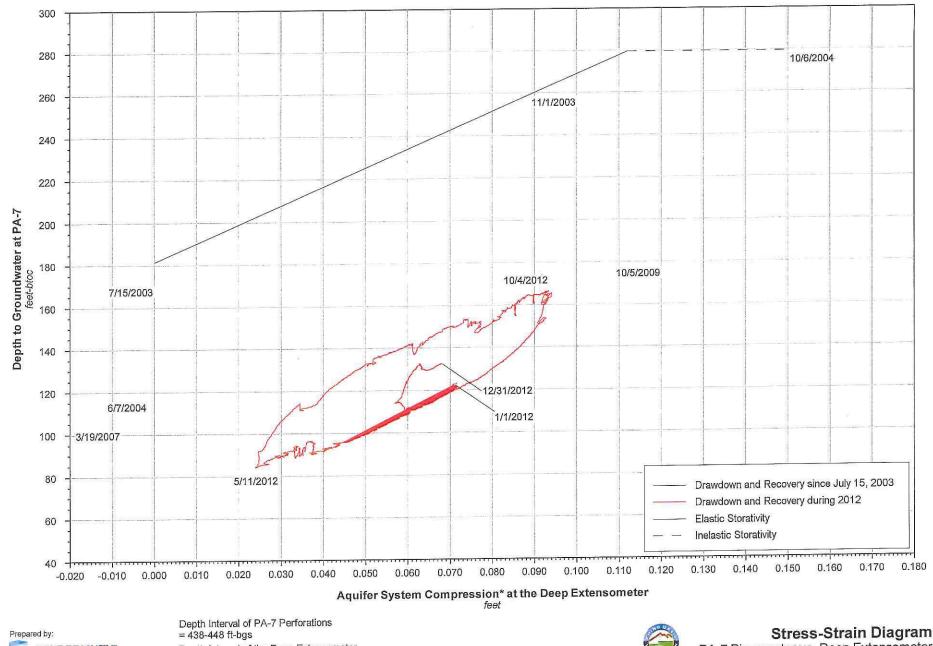
	Aquifer Layer	2012 Calendar Year							
Well Name		Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual Total	Annual Total by Aquifer Layer		
C-4	Shallow	85	0	0	0	85	4,048		
C-6		242	367	396	195	1,201			
CH-1A		284	222	269	95	871			
CH-7A		133	122	112	22	389			
CH-7B		180	167	63	28	438			
CIM-1		278	261	238	287	1,064			
CH-17	Shallow and Deep	0	241	453	169	864	1,328		
CIM-11A		26	215	169	54	465			
Totals		1,202	1,381	1,532	797	4,912	5,377		





\*Positive compression values represent compression of soils, negative compression values represent expansion of soils

P81



WILDERMUTH

Depth Interval of the Deep Extensometer = 30-1,400 feet-bgs

Land Subsidence Committee

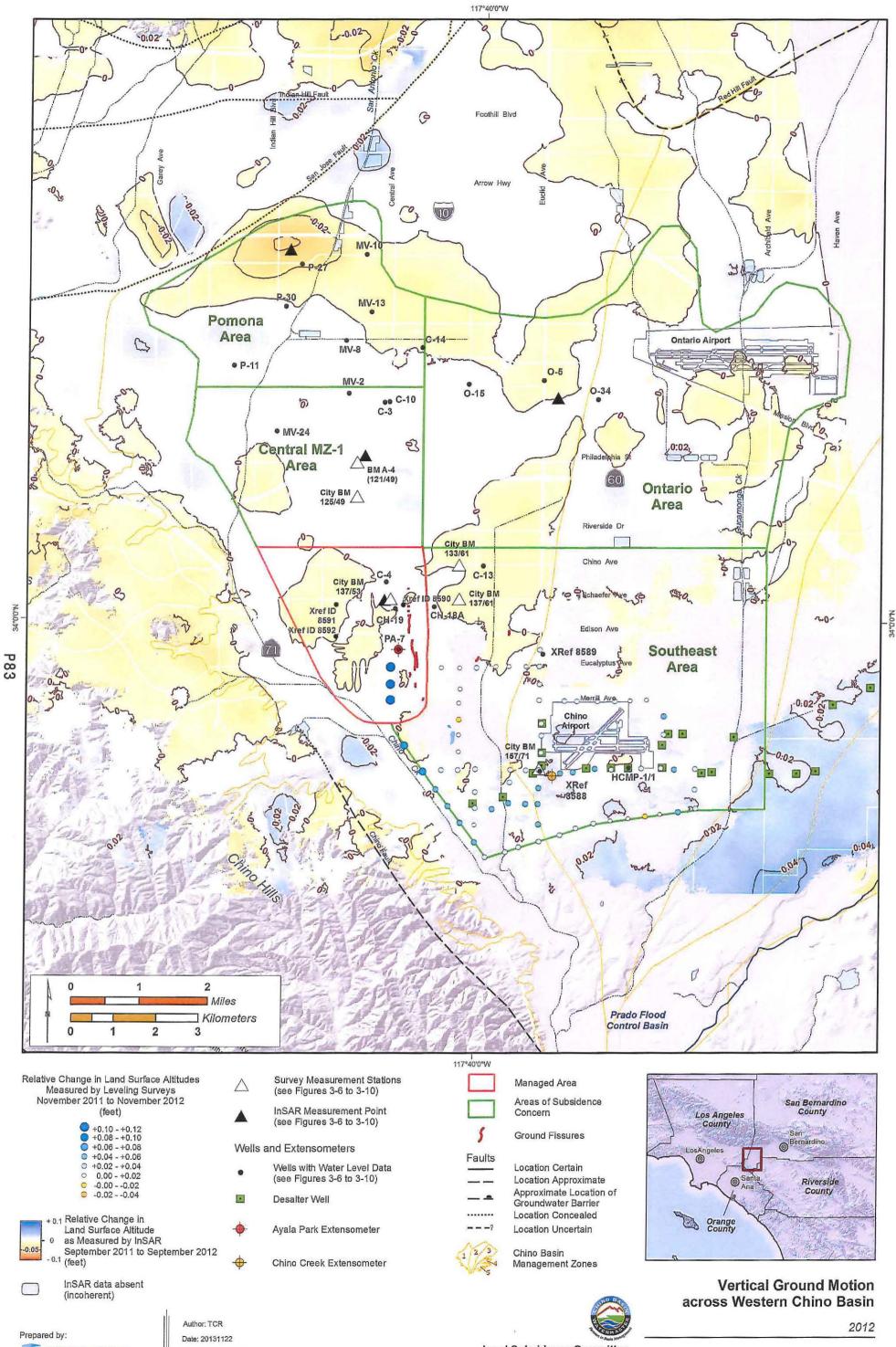
2012 Annual Report

Stress-Strain Diagram PA-7 Piezometer vs. Deep Extensometer

Author: TCR Date: 20130610 Filename: Figure\_3-2.grf

\*Positive compression values represent compression of soils, negative compression values represent expansion of soils

Figure 3-2



WILDERMUTH

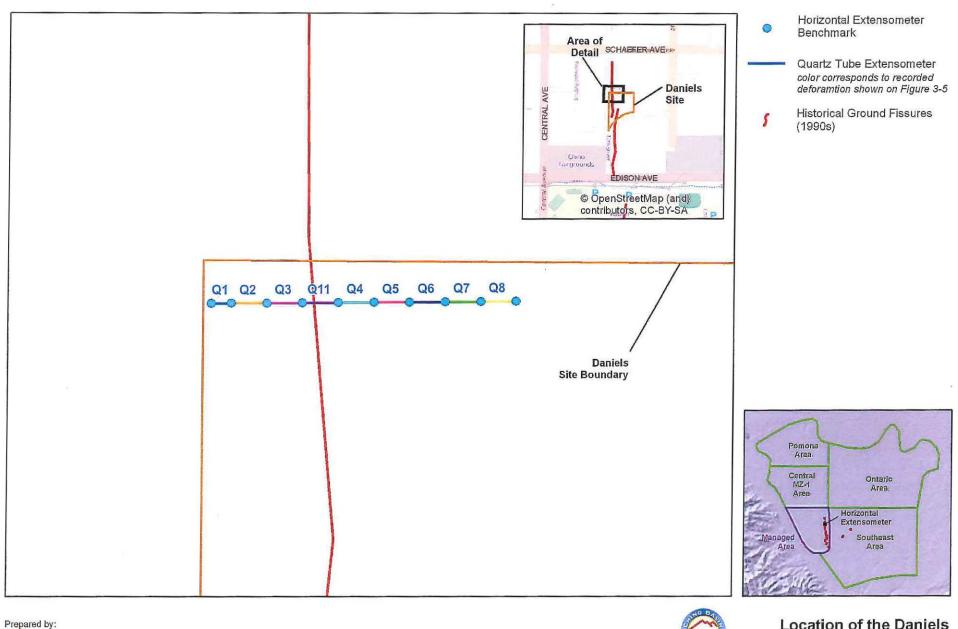
File: Figure\_3-3.mxd

Land Subsidence Committee 2012 Annual Report

Figure 3-3

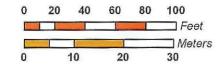
. .

.



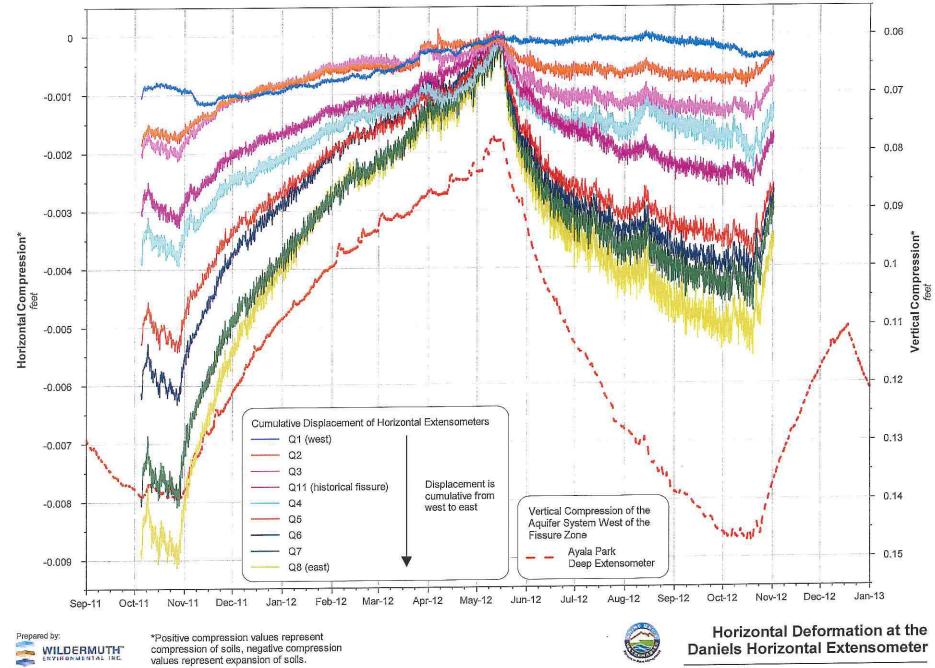
WILDERMUTH

Author: TCR Date: 20130701 File: Figure\_3-4.mxd



Land Subsidence Committee 2012 Annual Report Location of the Daniels Horizontal Extensometer

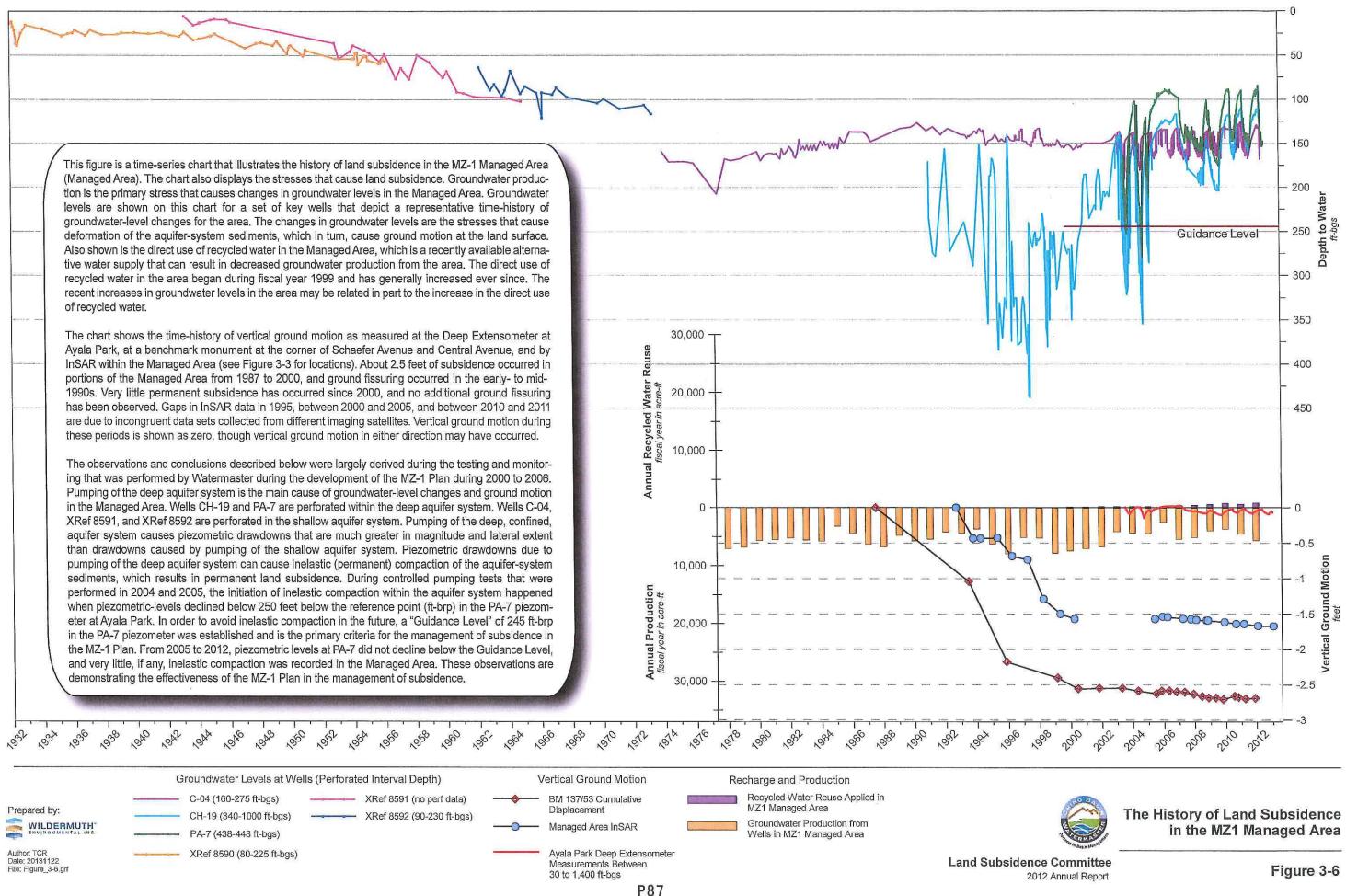
Figure 3-4

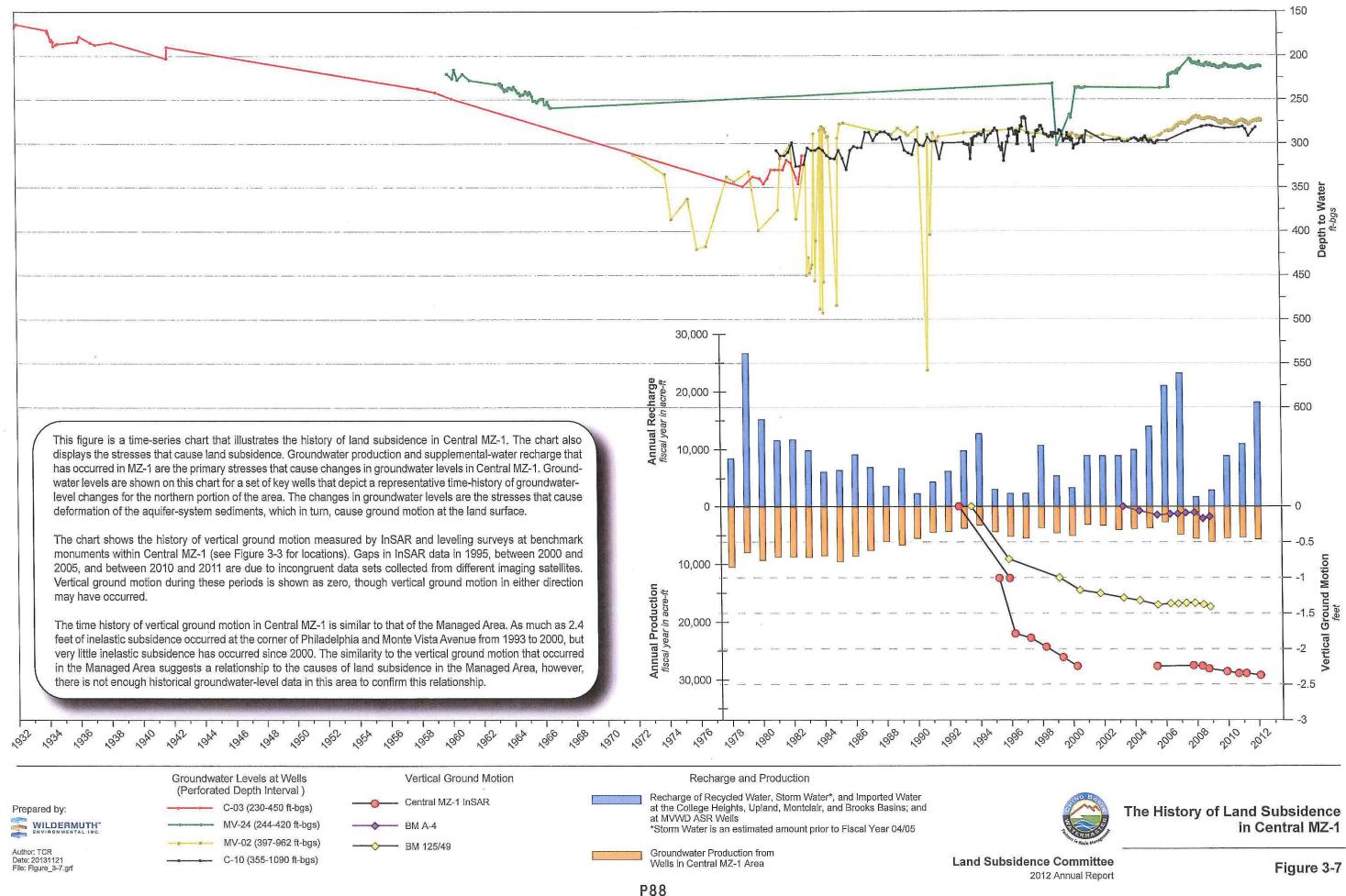


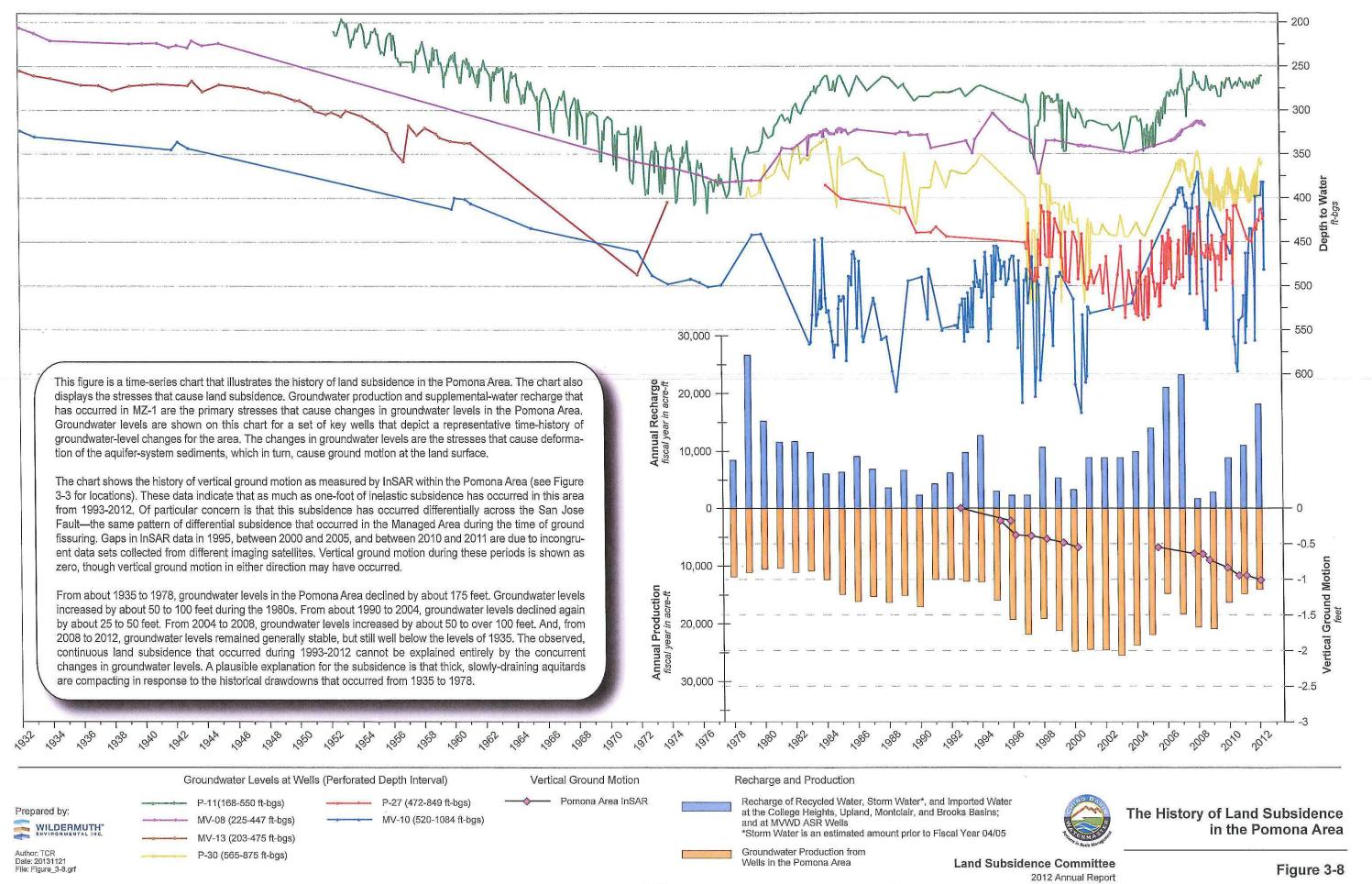
Author: TCR Date: 20131120 Filename: Figure\_3-5.grf

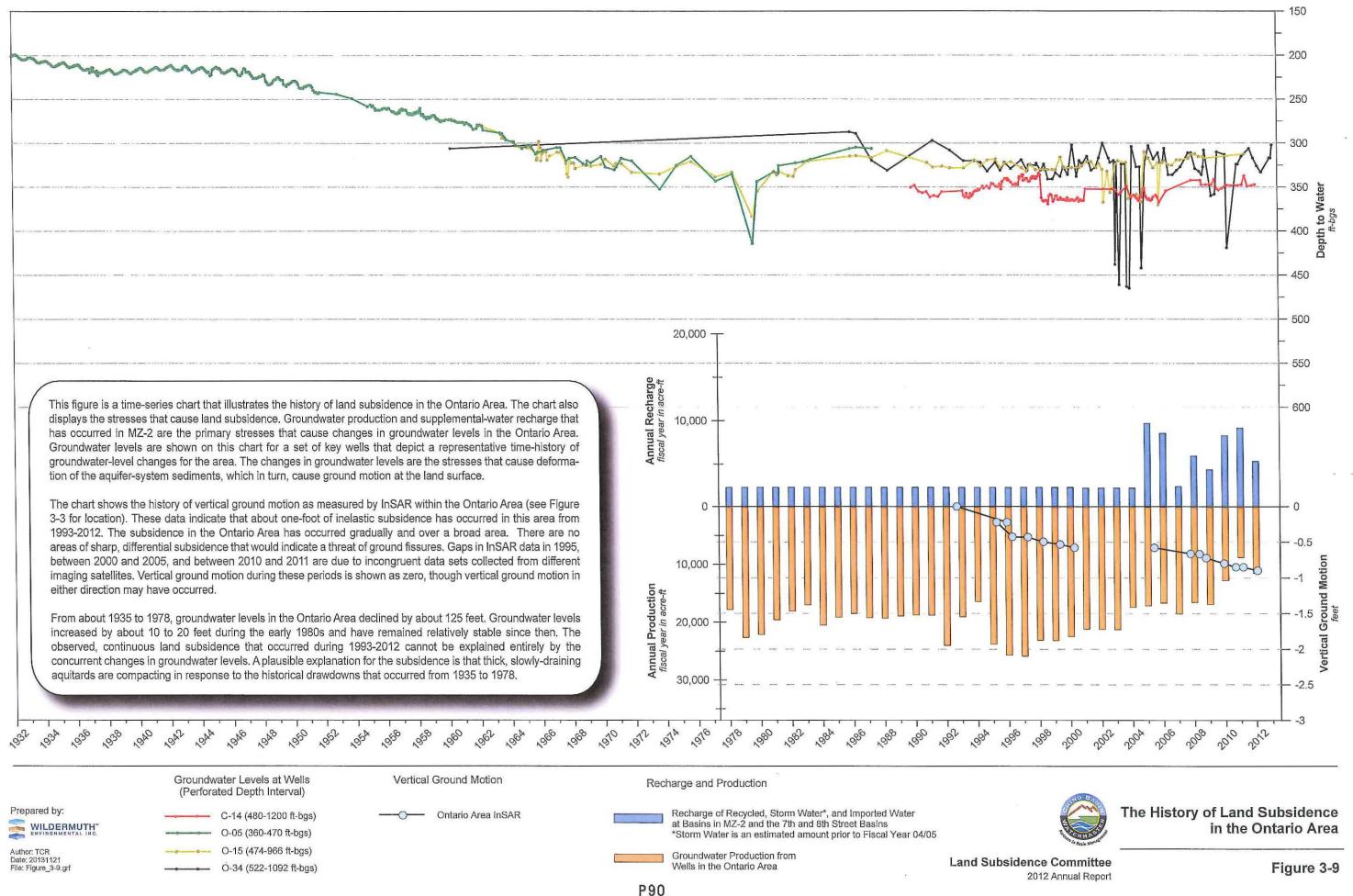
Contraction of the local division of the loc

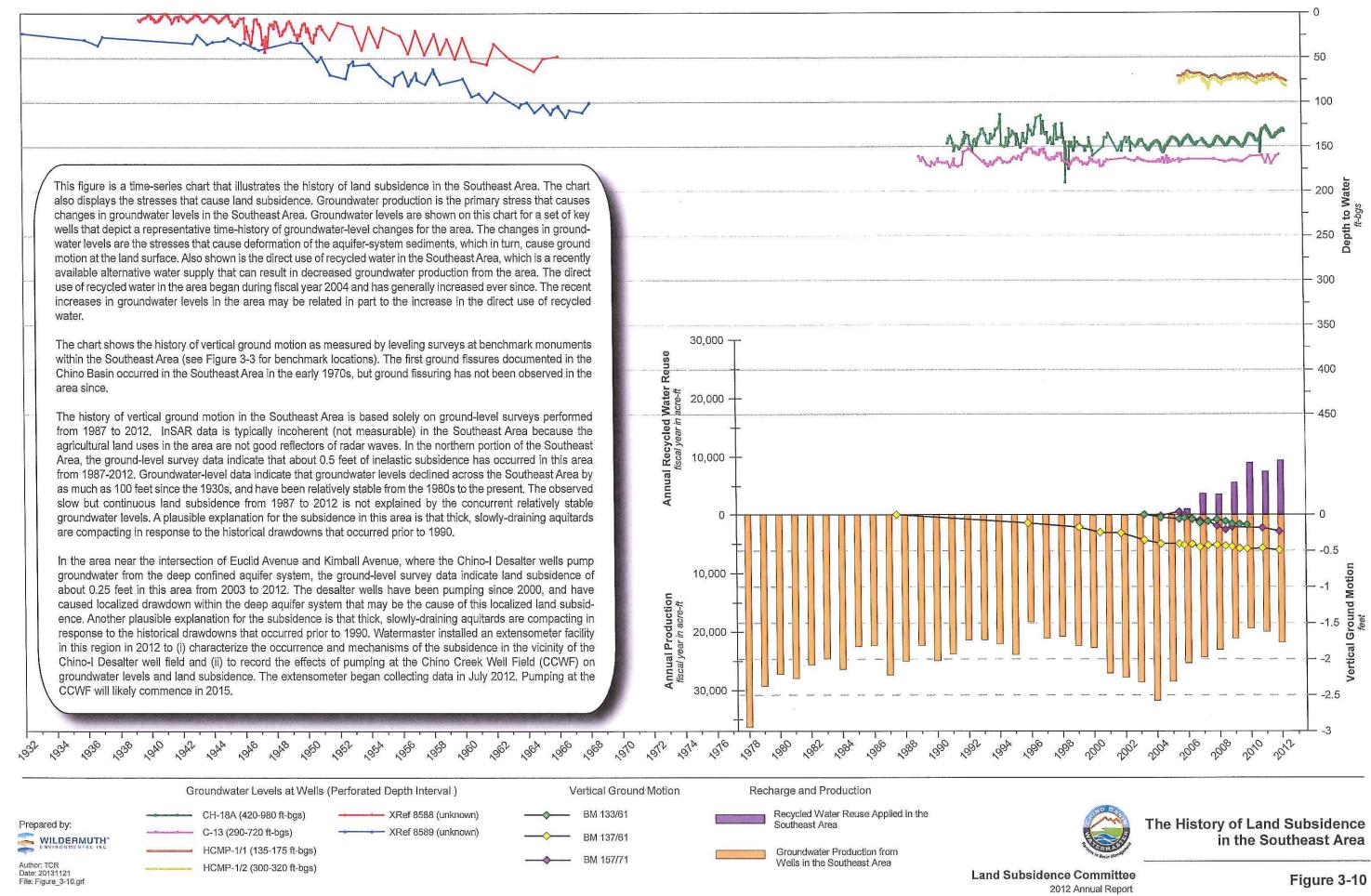
Land Subsidence Committee 2012 Annual Report

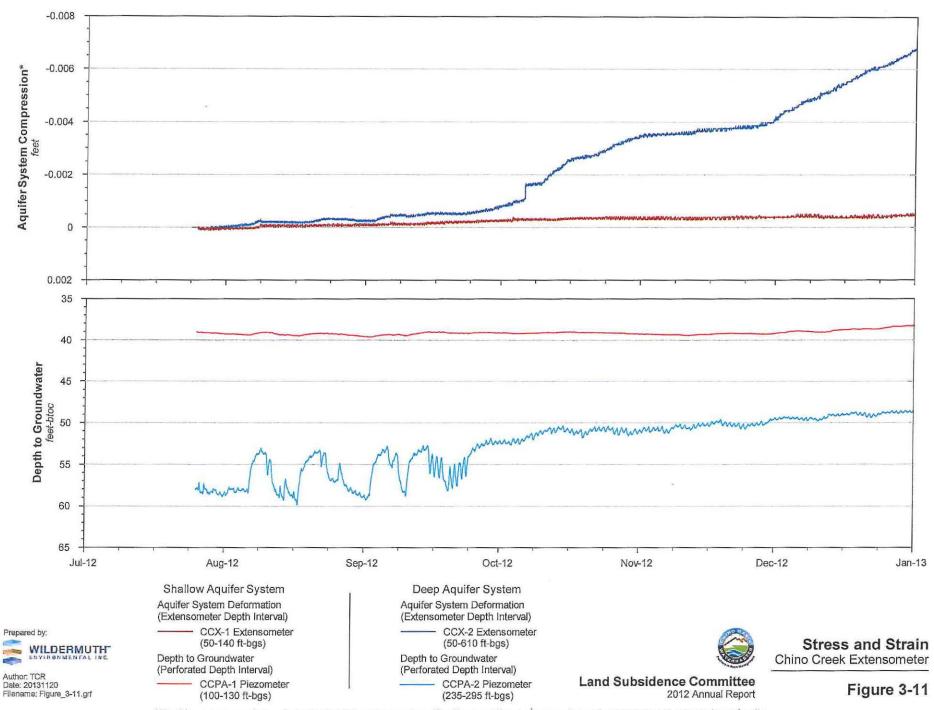












\*Positive compression values represent compression of soils, negative compression values represent expansion of soils

P93

# 4.1 Conclusions

The following are conclusions based on the data collected and analyzed for the Land-Subsidence Monitoring Program through 2012:

- Pumping of the Managed Wells did not cause drawdown of groundwater levels below the Guidance Level as measured at the PA-7 piezometer, and very little, if any, permanent subsidence was recorded in the Managed Area during 2012. These observations demonstrate the effectiveness of the MZ1 Plan in the management of subsidence.
- During 2012, differential land subsidence continued to occur in the Pomona Area across the San Jose Fault, which is the type of vertical deformation of the land surface that can lead to ground fissuring. A more intensive program of testing and monitoring is needed to better characterize the causes of land subsidence and the threat of ground fissuring in this area.
- The horizontal-strain data collected to date at the DHX demonstrates a logical response to stresses in the Managed Area:
  - horizontal extension across the fissure zone during subsidence of the ground surface in the Managed Area
  - horizontal compression across the fissure zone during rebound of the land surface in the Managed Area

The data that will be collected and analyzed from the DHX during the Long-Term Pumping Test in the Managed Area is needed to determine if it is capable of producing "management-grade" information in the future.

• Since the installation of the CCX in July 2012, there has been very little fluctuation of groundwater levels or vertical deformation of the aquifer system. There appears to be very little, if any, ongoing subsidence at the CCX.

# 4.2 Recommendations for Testing and Monitoring – Fiscal Year 2013-14

The scope-of-work for the Land-Subsidence Monitoring Program for fiscal year 2013/14 is shown in Table 4-1 as a work breakdown structure with cost estimates. The Chino Basin Watermaster has approved this scope and budget, which includes:

- Continued regular and as-needed maintenance at the Ayala Park Extensometer, Chino Creek Extensometer, and Daniels Horizontal Extensometer.
- Continued quarterly collection of groundwater-elevation and aquifer-systemdeformation data at wells and extensometers within the monitoring network.



- Installation of new benchmark monuments in the Pomona Area and conducting initial elevation and EDM surveys at these benchmarks. Figure 4-1 shows the locations of the new benchmark monuments. The elevation survey will reference the benchmark elevations to the Ayala Park datum. The EDM survey will measure the horizontal distance between the benchmark monuments that cross the San Jose Fault. These surveys will function as a baseline for comparison to future surveys.
- Continued implementation of the Long-Term Pumping Test that began in November 2012. The test is expected to continue through 2013, and into 2014. Figure 4-2 shows piezometric levels at PA-7 recorded through 2012, and the anticipated piezometric levels for the remainder of the Long-Term Pumping Test. An injection test is planned at CH-16 which could correspond with the recovery phase. The injection could accelerate the recovery of groundwater levels and facilitate the evaluation of injection as a tool for subsidence management. Watermaster is assisting the City of Chino Hills in its injection test at CH-16 with subsidence monitoring, administration of a grant from the DWR, and reporting on the results and conclusions of the injection test.
- Conducting elevation and EDM surveys at benchmarks in the Managed Area in fall 2013 and conjunction with maximum drawdown and maximum recovery of groundwater levels during the Long-Term Pumping Test.
- Conducting elevation survey at benchmarks in the Southeast Area in the fall of 2013.
- Collection and post-processing of InSAR data from the TerraSAR-X satellite operated by the European Space Agency. Five InSAR data scenes will be collected for 2013 and used to create interferograms that document the vertical motion of the land subsidence across the western portion of Chino Basin.

# 4.3 Recommendations for Changes to the MZ-1 Plan

Currently, there are no recommendations for changes to the MZ-1 Plan.





THIS PAGE HAS INTENTIONALLY BEEN LEFT BLANK FOR PAGINATION

# Table 4-1 Work Breakdown Structure Land Subsidence Monitoring Program -- Fiscal Year 2013/14

				La	bor Cost				Total	Labor		Other	Direct Cos	ts				Totals	
Task/Subtask/Description	Notes	Principal II	Principal I	Senior II	Staff	Field Tech	Clerical	Task Repetition Multiplier	Person Days	Cost	Travel	Equip and Expend	Subs	Repro	Misc,	Total ODC	Recommended Tasks 2013-14	Estimated Future Annual Costs	Potential or Future Tasks
Task 1 Setup/Maintenance of Monitoring Network												SSE R					\$56,214	\$56,214	\$89,534
1.1 Equipment maintenance	(1)		line server			-	danan ara			Control I and State of Street				in e namb	Para and a second		dente para accordante terrettere.		
Routine maintenance of Ayala Park/CCWF extensometer facilities	1 1000 10	an o antar a	harman in e in	0.125	0.125	0.75		12	12	\$9,330	\$384	\$228			a tug	\$612	\$9,942	\$9,942	
Maintenance at horizontal extensometer site Replacement/repair of equipment at extensometer facilities	(2)		6 6 6 -	0.25		1		2	2.5 6	\$1,960 \$7,380	\$64 \$32	\$200 \$10,000	\$15,040 \$10,000		, ano aro ara (	\$15,304 \$20,032	\$17,264 \$27,412	\$17,264 \$27,412	
1.2 Annual lease fees for CCWF extensioneter site	(2)	. 2				Z		1	0	\$7,380 \$0	φ <b>3</b> ∠	\$10,000	\$10,000		\$1,596	\$20,032	\$1,596	\$1,596	a n nar
1.3 Reset the PA vault at Avala Park to prevent surface water runoff intrusion	(3)	0.5	17 1237 1372 V	10	as == x	5	eko u sou	ia a speciesa	15.5	\$17,310	\$32		\$15,000		φ1,000	\$15,032	φ1,000	φ1,000	\$32,34
1.4 Abandon the PB facility	(3)							1		(*********	e 1877				8		- • • • • • • • •		
Write specification, subcontract, etc.		0,5	2	8	1	3 3 5 5		1	11.5	\$15,748				\$200		\$200			\$15,94
Coordinate with the City of Chino on schedule and landscaping				1	2			1	3	\$3,320				\$50	Selecter 11	\$50			\$3,37
Remove in situ equipment from the wells		- 0x		0.25	0.5	1		1	1.75	\$1,480	\$32	\$32				\$64	21 Hz B		\$1,54
Perform well abandonment			1	1		5		1	7	\$6,234	\$32	\$64	\$30,000			\$30,096	1 () K 8 ( M) ( M)	24 Juni 2 m	\$36,33
Task 2 Aquifer-System Monitoring and Testing	N Carlo					and an a		A Contraction			1						\$76,381	\$9,880	\$33,54
Groundwater-level and extensioneter data collection and	145																		
2.1 organization Download and check data from the Ayala Park facility	(1)	0.125	1 1	0.125		0.5		4	2	\$2,820	\$128	6 - 8 K H			i Va	\$128	\$2,948	\$1,520	1 H H H
Download and check data from the horizontal extension	1 <b>1</b> 2 12 12	0.125		0.125		0.5	а. С	4	2	\$2,820	a side the shares and shares a				\$600		\$2,898	\$1,520	ar acan
Download and check data from the CCWF facility	55 55 J 157	0.125		0.125		0.25		4	2	\$2,170	to a construction of the second				4000	\$128	\$2,298	\$1,520	
Process and upload data to database	2.23	1.00		0.25	1	0.00.000		4	5	\$5,320	and the second s					\$0	\$5,320	\$5,320	8 x 8 c 5
2.2 Conduct Long-Term Pumping Test in the Managed Area	(1)				i i se en l'anna L	eteentine in	te destations	nje snerčinaci n 1	(n)eser (de tes el			2 2020 I III A				1949-197 C. 107			
Coordinate testing with pumpers				1	1			1	1	\$1,320				ana taa ata,		\$0	\$1,320		
Collect field data; process and upload to database				2	4	1	19 - 19 - 19 - 19 - 19 - 19 - 19 - 19 -	1	7	\$7,290						\$0	\$7,290		
Prepare, analyze, and distribute stress-strain diagrams to LSC		0.25		0.25				6	3	\$4,560				\$200		\$200	\$4,760	- 188	
2.3 Conduct Injection Test in Managed Area Well rehabilitation and retrofit and injection pilot testing	(1)	- 0 0 0000								¢0	ono este aste	903 0 e 30	\$41,655	anne anner a	e e caracite	\$41,655	\$41,655		
Quarterly reports and project administration - LGA Grant	(4,5) (4)	0.125	ales an ere e	0.25	0,125		din a nea		2	\$0 \$2,680			φ41,000	\$200		\$41,655	\$2,880	$((\mathbf{x}_{i}))(\mathbf{x}_{i}) = (\mathbf{x}_{i} \cdot \mathbf{x}_{i})(\mathbf{x}_{i})(\mathbf{x}_{i}) = (\mathbf{x}_{i})(\mathbf{x}_{i})$	
Prepare two technical memoranda following each ASR cycle	(4)	1		0.125	0.120			4	3.25	\$4,770				\$242		\$200	\$5,012	42 C.S. 40.02	C 2 04 05 1 1 14 1
Prepare final report for LGA Grant and final technical report for ASR Pilot Test	(4)	3		16	5	- 10 100 14 10 -	2	1	26	\$33,040		ina anna in a		\$500		\$500			\$33,54
Task 3 Ground-Level Surveys			A se a se se		in a street										- Lordan		\$121,880	\$63,840	\$15,00
3.1 Replace destroyed benchmarks	(2)			and the second second second				1	0	\$0			\$5,400			\$5,400	\$5,400	and the second se	
3.2 Conduct Fall 2013 ground-level and EDM survey in Managed Area	(1)	e 11 de 21e e		0.5				1	0.5	\$660			\$27,900			\$27,900	\$28,560		1.0.00.8
3.3 Conduct Fall 2013 ground-level survey in Central MZ-1 Area	(3)				1977 - 1979 - 1979 1971 - 1979 - 1979 1971 - 1979 - 1979			1	0	\$0			\$15,000			\$15,000			\$15,00
3.4 Conduct Fall 2013 ground-level survey in Southeast Area (CCWF)	(3)				0. 10.000		3	1	0	\$C			\$27,700			\$27,700	\$27,700		
3.5 Install benchmarks in the Pomona Area and perform initial ground-level/EDM Survey	(3)	0.5		1				1	1.5	\$2,180			\$27,300			\$27,300	\$29,480	E - E - E - E - E - E - E - E - E -	
3.6 Conduct Spring 2014 ground-level and EDM survey in Managed Area 3.7 Process and upload data to database	(1)	0.5	endro concensione	0.5	a Bolineeroe	· · · · · · · · · · · · · · · · ·		1	0.5 1.5	\$660			\$27,900			\$27,900	\$28,560	\$2,180	
		0.5		1					1.5	\$2,180		1				\$0	\$2,180		
Task 4 BW InSAR	10								in the second	Section 1995							\$92,830		\$
4.1 InSAR data collection 4.2 Process and upload data to database/GIS	(1)	0.25		1 0.25	0.75		nî av	1	1 1.25	\$1,320 \$1,510			\$90,000			\$90,000			
	(1)	0.25	+	0.20	. 0.75		and an over the	de contra e	1.20	ຈາ,ວາເ	1 12 19 19 19	from the second	1		ng n	φL	\$1,510		
Task 5 Data Analysis and Reporting		the state of														Prese a	\$68,770	\$68,770	\$21,28
5.1 Data analysis in Managed Area Production/piezometric/extensometer	. (1)					10.000	2 commences	des enges o		<b>\$7.0</b> 00			¢00.000	ese ne	es s as es	000.000	¢07.500	\$27,590	
EDM and ground-level survey data				4	1			1 2 4 2 2	6	\$7,360 \$8,000			\$20,230			\$20,230 \$0	\$27,590 \$8,000	\$27,590	2 0 0 B
InSAR data				0.5	0.5		(1)-(1)-(1)-(1)-(1)-(1)-(1)-(1)-(1)-(1)-		1	\$1,160				for a second		\$C S(	\$1,160		***
Tectonic data	0110 <b>1</b> 02-003-003		00 00 00 00 00 00		0.5			1 (1 ) (1 ) (1 ) (1 ) (1 ) (1 )	0.5	\$500		and a second second second				\$0	\$500	\$500	and the local area from a
Recycled water reuse data				0.5	-			1	0.5	\$660					1	\$0	\$660		1
5.2 Prepare MZ-1 Annual Report	(1)													1 5 mm	S SILE A R		person property contacts on the contact		
Prepare draft technical memorandum	and the second	1		10	6		3	1	20	\$23,560		i man n		\$200		\$200			
Prepare final technical memorandum		. h	ad a con m	2	2	01	0.5	<b>1</b>	5.5	\$6,800				\$300		\$300		\$7,100	
5.3 Update MZ-1 Plan (if necessary)	. (1)	5		5	5		1	1	16	\$21,080			t a come	\$200		\$200	a contract of the second second	~	\$21,28
Task 6 Meetings and Administration	1. 20000																\$27,67		
6.1 Land Subsidence Committee meetings	(1)	a la ana fana	est a res A ra	- [ ]	di same			3	6	\$9,120				\$100		\$510			
6.2 Ad hoc meetings 6.3 Project Administration	(1)	1.5	···						7.5	\$3,04 \$10,50		a provension		\$100		\$146 \$(	5 \$3,186 5 \$10,500	\$3,186 \$10,500	
6.4 Scope and Budget for FY2014/15	(1)	1		2		- 101 TRICK		· · · · · · · · · ·	7.5	\$10,50		dencer in a				ф( \$1	\$10,500		
and the second				alaa ilaa		1.1111	- 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 199 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999	di ser ber	e je mořece	φ+,00		in san sa		1			and second as a start frame		
Totals			1						4	2.		3	1	1			\$443,750	\$319,209	\$159,35

Notes:

(1) Required by MZ-1 Plan and/or Peace Agreement

(2) Contingency budget. Spent only if necessary.

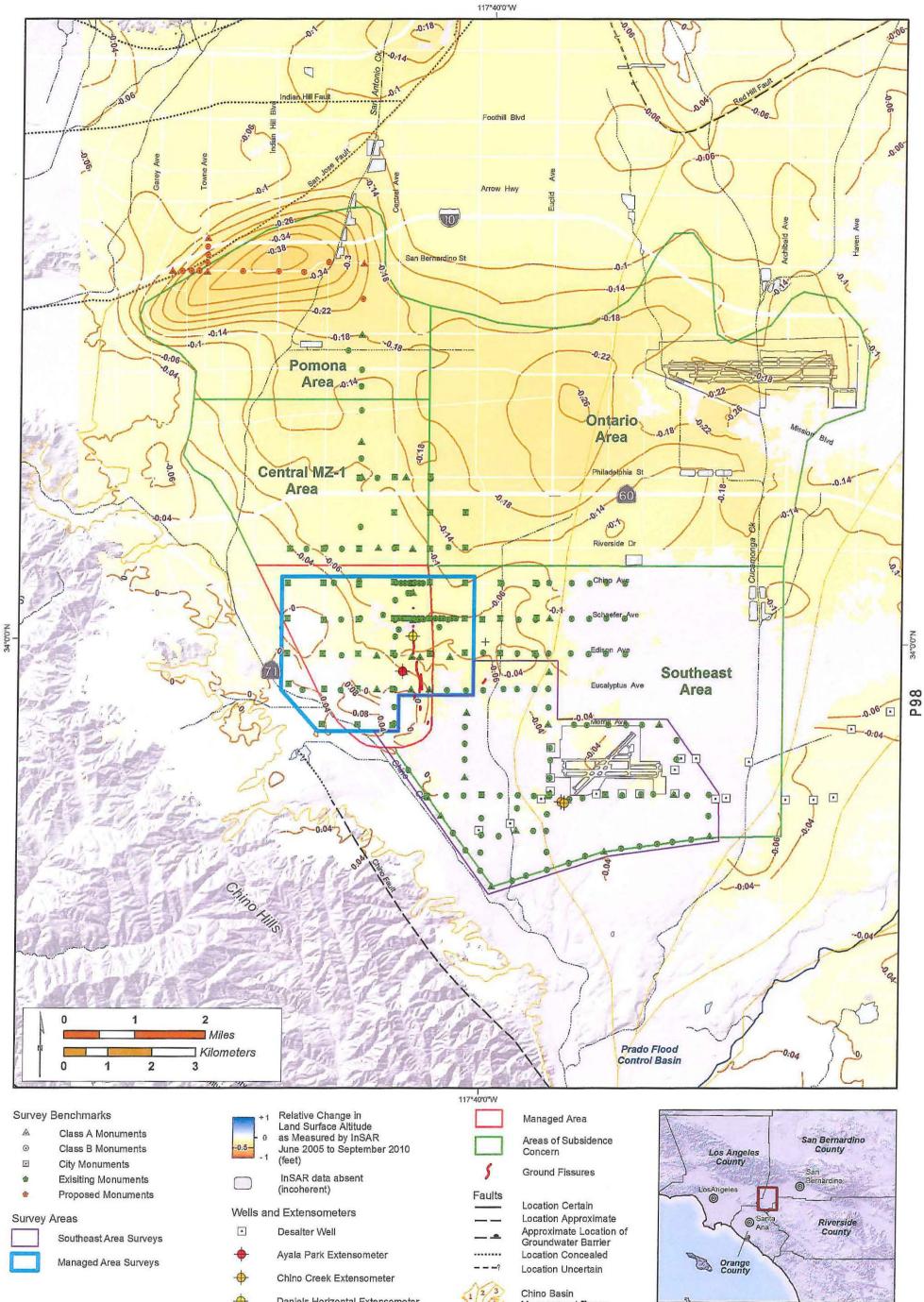
(3) Discretionary task. Performed if recommended by the Land Subsidence Committee

(4) \$19,518 is expected to be carried over for labor and ODC for BW-GLMP: Aquifer System Monitoring and Testing for all Recommended Tasks. Total costs are \$27,400.

(5) \$129,936 is expected to be carried over for Outside Pros for BW-GLMP: Aquifer System Monitoring and Testing - Outside Pro. Total costs are \$171,591.

6/11/2013







Author: TCR Date: 20130628 File: Figure\_4-1.mxd

0

Daniels Horizontal Extensometer

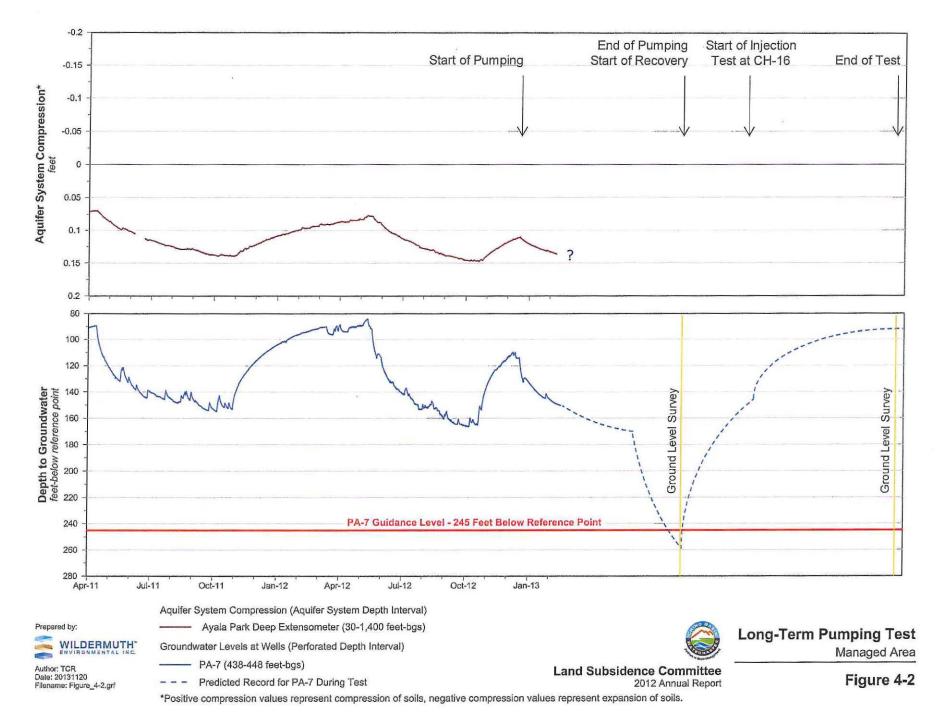
Land Subsidence Committee 2012 Annual Report

Chino Basin

Management Zones

**Benchmark Locations for Elevation and EDM Surveys** 

Figure 4-1



66d

The following glossary of terms and definitions are utilized within this report and generally in the discussions at meetings of the Land Subsidence Committee (USGS, 1999).

Aquifer - A saturated, permeable, geologic unit that can transmit significant quantities of groundwater under ordinary hydraulic gradients and is permeable enough to yield economic quantities of water to wells.

Aquifer System – A heterogeneous body of interbedded permeable and poorly permeable geologic units that function as a water-yielding hydraulic unit at a regional scale. The aquifer system may comprise one or more aquifers within which aquitards are interspersed. Confining units may separate the aquifers and impede the vertical exchange of groundwater between aquifers within the aquifer system.

Aquitard - A saturated, but poorly permeable, geologic unit that impedes groundwater movement and does not yield water freely to wells, but which may transmit appreciable water to and from adjacent aquifers and, where sufficiently thick, may constitute an important groundwater storage unit. Areally extensive aquitards may function regionally as confining units within aquifer systems.

Artesian – An adjective referring to confined aquifers. Sometimes the term artesian is used to denote a portion of a confined aquifer where the altitudes of the potentiometric surface are above land surface (flowing wells and artesian wells are synonymous in this usage). But more generally the term indicates that the altitudes of the potentiometric surface are above the altitude of the base of the confining unit (artesian wells and flowing wells are not synonymous in this case).

**Compaction** – Compaction in the geologic sense refers to the inelastic compression of the aquifer system. Compaction of the aquifer system reflects the rearrangement of the mineral grain pore structure and largely nonrecoverable reduction of the porosity under stresses greater than the preconsolidation stress. Compaction, as used here, is synonymous with the term "virgin consolidation" used by soils engineers. The term refers to both the process and the measured change in thickness. As a practical matter, a very small amount (1 to 5 percent) of the compaction is recoverable as a slight elastic rebound of the compacted material if stresses are reduced.

Compression - A reversible compression of sediments under increasing effective stress; it is recovered by an equal expansion when aquifer-system heads recover to their initial higher values.

**Consolidation** – In soil mechanics, consolidation is the adjustment of a saturated soil in response to increased load, involving the squeezing of water from the pores and a decrease in void ratio or porosity of the soil. The term "compaction" is sometimes used in preference to consolidation.





**Confined Aquifer System** – A system capped by a regional aquitard that strongly inhibits the vertical propagation of head changes to or from an overlying aquifer. The heads in a confined aquifer system may be intermittently or consistently different than in the overlying aquifer.

**Deformation, Elastic** – A fully reversible deformation of a material. In this report, the term "elastic" typically refers the deformation of the aquifer-system sediments or the land surface.

**Deformation, Inelastic** – A non-reversible deformation of a material. In this report, the term "inelastic" typically refers the permanent deformation of the aquifer-system sediments or the land surface.

**Differential Land Subsidence** – Markedly different magnitudes of subsidence over a short horizontal distance, which can be the cause ground fissuring.

Drawdown – Decline in aquifer-system head typically due to pumping by a well. Elastic deformation,

Expansion – In this report, expansion refers to expansion of sediments. A reversible expansion of sediments under decreasing effective stress.

Extensometer - A monitoring well housing a free-standing pipe or cable that can measure vertical deformation of the aquifer-system sediments between the bottom of the pipe and the land surface datum.

Ground Fissures – Elongated vertical cracks in the ground surface that can extend several tens of feet in depth.

**Head** – A measure of the potential for fluid flow. The height of the free surface of a body of water above a given subsurface point.

**Hydraulic Conductivity** – A measure of the medium's capacity to transmit a particular fluid. The volume of water at the existing kinematic viscosity that will move in a porous medium in unit time under a unit hydraulic gradient through a unit area. In contrast to permeability, it is a function of the properties of the liquid as well as the porous medium.

Hydraulic Gradient – Change in head over a distance along a flow line within an aquifer system.

**InSAR (Synthetic Aperture Radar Interferometry)** – A remote-sensing method (radar data collected from satellites) that measures ground-surface displacement over time.

Linear Potentiometer – A highly sensitive electronic device that can generate continuous measurements of displacement between two objects. Used to measure movement of the land-surface datum with respect to the top of the extensioneter measuring point.

Nested Piezometer – A single borehole containing more than one piezometer.

Overburden - The weight of overlying sediments including their contained water.





**Piezometer** – A monitoring well that measures groundwater levels at a point, or in a very limited depth interval, within an aquifer-system.

**Piezometric (Potentiometric) Surface** – An imaginary surface representing the total head of groundwater within a confined aquifer system, and is defined by the level to which the water will rise in wells or piezometers that are screened within the confined aquifer system.

Pore pressure - Water pressure within the pore space of a saturated sediment.

**Rebound** – Elastic rising of the land surface.

Stress, Effective – The maximum antecedent effective stress to which a deposit has been subjected and which it can withstand without undergoing additional permanent deformation. Stress changes in the range less than the preconsolidation stress produce elastic deformations of small magnitude. In fine-grained materials, stress increases beyond the preconsolidation stress produce much larger deformations that are principally inelastic (nonrecoverable). Synonymous with "virgin stress."

Stress, Preconsolidation – The maximum antecedent effective stress to which a deposit has been subjected and which it can withstand without undergoing additional permanent deformation. Stress changes in the range less than the preconsolidation stress produce elastic deformations of small magnitude. In fine-grained materials, stress increases beyond the preconsolidation stress produce much larger deformations that are principally inelastic (nonrecoverable). Synonymous with "virgin stress."

Stress – Stress (pressure) that is borne by and transmitted through the grain-to-grain contacts of a deposit, and thus affects its porosity and other physical properties. In one-dimensional compression, effective stress is the average grain-to-grain load per unit area in a plane normal to the applied stress. At any given depth, the effective stress is the weight (per unit area) of sediments and moisture above the water table, plus the submerged weight (per unit area) of sediments between the water table and the specified depth, plus or minus the seepage stress (hydrodynamic drag) produced by downward or upward components, respectively, of water movement through the saturated sediments above the specified depth. Effective stress may also be defined as the difference between the geostatic stress and fluid pressure at a given depth in a saturated deposit, and represents that portion of the applied stress which becomes effective as intergranular stress.

Subsidence - Sinking or settlement of the land surface, due to any of several processes.

**Transducer, Pressure** – An electronic device that can measure groundwater levels by converting water pressure to a recordable electrical signal. Typically, the transducer is connected to a data logger, which records the measurements.

Water Table – The surface of a body of unconfined groundwater at which the pressure is equal to atmospheric pressure, and is defined by the level to which the water will rise in wells or piezometers that are screened within the unconfined aquifer system.





### **Section 6 – References**

- Fife, D.L., Rodgers, D.A., Chase, G.W., Chapman, R.H., and E.C. Sprotte. (1976). Geologic Hazards in Southwestern San Bernardino County, California: California Division of Mines and Geology Special Report 113, 40 p.
- Geomatrix Consultants, Inc. (1994). Final Report Ground Fissuring Study, California Department of Corrections, California Institution for Men, Chino, California. Project No. 2360. San Francisco, CA.
- Kleinfelder, Inc. (1993). Geotechnical Investigation, Regional Subsidence and Related Ground Fissuring, City of Chino, California. Project No. 58-3101-01. Diamond Bar, CA.
- Kleinfelder, Inc. (1996). Chino Basin Subsidence and Fissuring Study, Chino, California. Project No. 58-5264-02. Diamond Bar, CA.
- United States Geological Survey (USGS). (1999). Land subsidence in the United States (Devin Galloway, David R. Jones, S.E). Ingebritsen. USGS Circular 1182. 175 p.
- Wildermuth Environmental, Inc. (WEI). (1999). Optimum Basin Management Program. Phase I Report. Prepared for the Chino Basin Watermaster. August 19, 1999.
- Wildermuth Environmental, Inc. (WEI). (2006). Optimum Basin Management Program. Management Zone 1 Interim Monitoring Program. MZ-1 Summary Report. Prepared for the Chino Basin Watermaster. February, 2006.
- Wildermuth Environmental, Inc. (WEI). (2007). Chino Basin Optimum Basin Management Program. Management Zone 1 Subsidence Management Plan. Prepared for the Chino Basin Watermaster. October, 2007.



## **Appendix A**

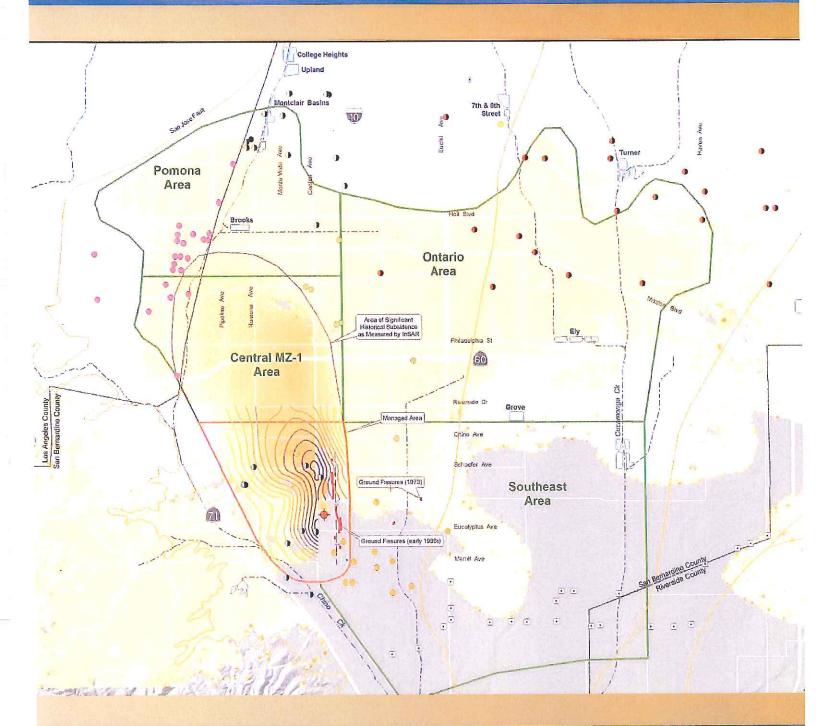
**Results of Drilling and Construction of the Chino Creek Extensometer** 

ž

## **Appendix B**

Monitoring Data through December 2012

WILDERMUTH ENVIRONMENTAL INC.



Corporate Office 23692 Birtcher Drive ake Forest, California 92630 T: 949.420.3030 F: 949.420.4040

www.wildermtRhe0.6onmental.com

## **CHINO BASIN WATERMASTER**

I. <u>CONSENT CALENDAR</u> (App & Ag Pool) D. ANNUAL FINDING OF SUBSTANTIAL COMPLIANCE WITH THE RECHARGE MASTER PLAN

I. <u>BUSINESS ITEM ROUTINE</u> (Non-Ag Pool) D. ANNUAL FINDING OF SUBSTANTIAL COMPLIANCE WITH THE RECHARGE MASTER PLAN



## CHINO BASIN WATERMASTER

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

PETER KAVOUNAS, P.E. General Manager

### STAFF REPORT

DATE: December 12, 2013

TO: Pool Committee Members

SUBJECT: Annual Finding of Substantial Compliance with the Recharge Master Plan

#### SUMMARY

Issue: The Finding is required on an annual basis according to Section 8.3 of the Peace II Agreement

<u>Recommendation:</u> Recommend that the Advisory Committee recommend to the Watermaster Board to adopt the finding in the Wildermuth Report that Watermaster is in substantial compliance with the Recharge Master Plan.

Financial Impact: There is no financial impact associated with this action.

#### Future Consideration

Appropriative Pool: December 12, 2013 Recommendation to the Advisory Committee Non-Agricultural Pool: December 12, 2013 Recommendation to the Advisory Committee Agricultural Pool: December 12, 2013 Recommendation to the Advisory Committee Advisory Committee: December 19, 2013 Recommendation to the Watermaster Board Watermaster Board: December 19, 2013 Adopt the Finding of Compliance [Discretionary Function]

ACTIONS:

Date – Appropriative Pool – Date – Non-Agricultural Pool – Date – Agricultural Pool – Date – Advisory Committee – Date – Watermaster Board – Annual Finding of Substantial Compliance with the Recharge Master Plan Page 2 of 2

#### BACKGROUND

During the period of 2008-2010, Watermaster, in collaboration with the Inland Empire Utilities Agency (IEUA) and Chino Basin Water Conservation District (CBWCD), completed the 2010 Recharge Master Plan Update (RMPU). The RMPU was submitted to the Court in June 2010, and the Court subsequently approved the 2010 RMPU in October 2010. Watermaster has completed the amendment of the 2010 RMPU, pursuant to the Court's order, which the Board adopted in September 2013. The 2013 RMPU Amendment includes a Funding and Implementation Plan for the further recharge projects recommended for construction.

Pursuant to Section 8.3 of the Peace II Agreement, Watermaster is obligated to make an annual finding that it is in substantial compliance with the Recharge Master Plan, as it is revised. This requirement exists to ameliorate any long-term risk attributable to reliance upon un-replenished groundwater production by the Desalters, and is a condition on the annual availability of any portion of the 400,000 acre-feet set aside as controlled overdraft. Wildermuth Environmental, Inc. (WEI) has prepared the attached opinion regarding the adequacy of replenishment capacity, which includes the information that Watermaster needs to make this finding for Fiscal Year 2013-2014.

#### DISCUSSION

WEI's analysis finds that current projections indicate that Watermaster has sufficient recharge capacity to meet the future replenishment obligations identified in the 2010 RMPU. Current analysis indicates that if re-operation were terminated at any time through 2030, Watermaster would be able to immediately increase its replenishment activity and maintain the hydrologic balance in the Basin as required by the Judgment.

#### ATTACHMENTS

1. Wildermuth Report



December 3, 2013

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

#### Subject: Annual Finding of Adequate Replenishment Capacity - Fiscal 2013-14

Dear Mr. Kavounas,

At your direction and pursuant to the Peace II Agreement, Wildermuth Environmental, Inc. (WEI) has prepared this opinion regarding the adequacy of replenishment capacity in the Chino Basin.

In part, Section 7.3 of the Peace II Agreement reads:

"Re-Operation and Watermaster's apportionment of controlled overdraft will not be suspended in the event that Hydraulic Control is achieved in any year *before* the full 400,000 acre-feet has been produced so long as: [...] and (ii) Watermaster is in substantial compliance with a Court approved Recharge Master Plan as set forth in Paragraph 8.1 below."

Review of Section 8.1 of the Peace II Agreement clearly indicates that this compliance relates to the implementation of plans to ensure that Watermaster has enough supplemental water recharge capacity to meet its replenishment obligation after the re-operation water is completely exhausted. Section 8.3 of the Peace II Agreement states:

"To ameliorate any long-term risks attributable to reliance upon un-replenished groundwater production by the Desalters, the annual availability of any portion of the 400,000 acre-ft set aside as controlled overdraft as a component of the Physical Solution, is expressly subject to Watermaster making an annual finding about whether it is in substantial compliance with the revised Watermaster Recharge Master Plan pursuant to Paragraphs 7.3 and 8.1 above."

Pursuant to the Peace II Agreement, Watermaster is obligated, after the completion of the 2010 Recharge Master Plan Update (RMPU), to make an annual finding that there is enough supplemental water recharge capacity to meet its replenishment obligations. This letter report includes the information required by Watermaster to make this finding for fiscal 2013-14.

<sup>23692</sup> Birtcher Drive, Lake Forest, CA 92630 • Tel: 949.420.3030 • Fax: 949.420.4040 • www.wildermuthenvironmental.com

During the period of 2008-2010, Watermaster, in collaboration with the Inland Empire Utilities Agency (IEUA) and Chino Basin Water Conservation District (CBWCD), completed the 2010 RMPU, which was submitted to the Court in June 2010. The 2010 RMPU was developed in a transparent and intense stakeholder process.<sup>1</sup> The Court subsequently approved the 2010 RMPU in October 2010. Section 7.4 of the 2010 RMPU Final Report concludes:

"No new recharge facilities will be required to meet Watermaster's replenishment obligations through the planning period, provided that the Riverside Corona Feeder is completed within the next ten years."<sup>2</sup>

The qualification of this finding as to the Riverside Corona Feeder was an acknowledgment that a new source of supply may be required for the Jurupa Community Services District (JCSD) such that the JCSD can reduce its net groundwater pumping to a sustainable level.<sup>3</sup> Groundwater modeling, completed in 2007 and 2009 to evaluate the groundwater basin's response to the implementation of the Peace II project description, suggested future declines in groundwater levels in the JCSD well field. Groundwater modeling studies in 2012 and 2013, based on revised post-2010 RMPU groundwater production projections, also predicted that the JCSD may have future production sustainability challenges. The 2010 RMPU identified a project to potentially mitigate this excessive drawdown whereby future replenishment deliveries would be provided to the JCSD for direct use, allowing the JCSD to reduce its groundwater production. Watermaster and the IEUA recently completed the 2013 Amendment to the 2010 Recharge Master Plan Update (2013 Amendment) pursuant to the October 2010 Court Order. Watermaster and the IEUA identified several feasible recharge projects that, if implemented, will improve the production sustainability of JCSD wells.

The groundwater production and replenishment projections used to evaluate the adequacy of existing supplemental water recharge capacity in the 2010 RMPU were developed in 2008 and 2009 and are significantly greater than the projections developed by Watermaster following the completion of the 2010 Urban Water Management Plans. The groundwater production and replenishment projections were revised by Watermaster pursuant to a recommendation in the 2010 RMPU and the October 2010 Court Order approving the 2010 RMPU. These updated replenishment projections clearly show that the future replenishment obligation will be substantially less than that anticipated by the 2010 RMPU. The reasons for the decline in future replenishment obligations are state-mandated conservation requirements and the changing economics of groundwater production. As to the latter, some producers have determined that it is more economical to use more imported water directly than to overproduce and incur replenishment costs and additional production-based Watermaster assessments. The table below compares the projected replenishment obligations from the 2013 Amendment to the 2010 RMPU.<sup>4</sup>

#### Comparison of Projected Replenishment Obligations (acre-ft)

<sup>&</sup>lt;sup>1</sup> See rmp.wildermuthenvironmental.com.

<sup>&</sup>lt;sup>2</sup> See page 7-4 of the 2010 Recharge Master Plan Update.

<sup>&</sup>lt;sup>3</sup> To be clear, this is not a replenishment capacity issue. This is a balance of recharge and discharge issue. The JCSD has constructed several wells in a relatively small geographic area. The combination of the close proximity of these wells and regional changes in groundwater levels may cause excessive groundwater level declines in some of the JCSD's wells. The Riverside Corona Feeder is one of several potential projects that could provide water to the JCSD to enable them to reduce their groundwater production.

<sup>&</sup>lt;sup>4</sup> See Table 2-4, 2013 Amendment to the 2010 RMPU.

25,000 to 40,000

91,200 to 106,200

In-Lieu Total

Year	Replenishment Projection from the 2010 RMPU	Replenishment Projection from the 2013 RMPU Amendment
2015	9,700	0
2020	13,900	0
2025	30,900	4,700
2030	44,500	18,400
2035	55,500	42,600

The supplemental water recharge capacity in the Chino Basin as estimated in the 2010 RMPU and as updated in 2013 are listed below.

	(acre-ft/yr)	
Recharge Facility	2010 RMPU	Revised 2013 Estimate <sup>5</sup>
Spreading Basins	83,100	60,600
ASR Wells	5,600	5,600

#### Supplemental Water Recharge Capacity (acre-ft/yr)

The revised 2013 supplemental water recharge capacity estimate is less than reported last year due to changes in the estimated recharge rates at spreading basins.<sup>6</sup> Table 1 (attached) lists the spreading basins available to Watermaster and their respective supplemental water recharge capacities.

25,000 to 40,000

113,700 to 128,700

The Metropolitan Water District of Southern California (Metropolitan) provides imported water to the Chino Basin area through the IEUA. In its 2010 Integrated Regional Plan (IRP) Update, Metropolitan indicated that it will have enough water to meet all of the supplemental water requirements within its service area through 2035, provided that it implements the programs described in the 2010 IRP Update. The Watermaster parties can also import non-State Water Project water into the Chino Basin area, if Metropolitan fails to provide enough imported water for replenishment.

Based on our knowledge of the conditions in fiscal year 2013-14 and future water management projections, Watermaster's ability to recharge the Basin with supplemental water to mitigate future overproduction is sufficient to meet expected future replenishment obligations. If re-operation were discontinued at any time through 2030, Watermaster would be able to immediately increase its replenishment activity and maintain the hydrologic balance in the Basin required by the Judgment. The supplemental water recharge capacity available to the Watermaster is about five times the projected replenishment obligation in 2030 and twice the projected replenishment obligation in 2035.

Moreover, in November 2011, Watermaster committed to engage in a process to develop a preemptive replenishment program that would involve the acquisition and recharge of supplemental water in advance of incurring replenishment obligations and storing that water until future replenishment obligations occur. Preemptive replenishment is a complementary management tool that further enhances Watermaster's ability to meet its future replenishment requirements.

<sup>&</sup>lt;sup>5</sup> Spreading basin capacity available during non-storm periods per Table1 (attached) with average recharge rate (column 14)

<sup>&</sup>lt;sup>6</sup> Based on a personal conversation with Jason Pivovaroff of IEUA and on the IEUA Fiscal Year 2013/14 Operating and Capital Program Budget Volume 2: Ten-Year Capital Improvement Plan.

Please contact me if you have any questions or concerns regarding this opinion.

Very truly yours,

Wildermuth Environmental, Inc.

March J.W. Icluse

Mark J. Wildermuth, PE President

(2) (6) (7) (8) (9) (10) (11) (12) (13) (14) Supplemental Water Recharge Average Supplemental Imported Water Turn Out Capac Recharge **Operational Availability for Supplemental Water Recharge** Water Recharge Capacity Rate<sup>1</sup> Max Useful Quarter 3 Quarter 4 Quarter 1 Quarter 2 **Spreading Basin** Turn Out Discharge Discharge Jan Feb Mar Jul Aug Sep Oct Nov Dec Apr May Jun Name Rate Rate (cfs) (acre-ft/yr) (cfs) (cfs) **Brooks Street Basin** 0.71 0.71 0.74 0.80 0.90 0.93 0.00 0.00 0.93 0.87 0.83 0.77 1,484 3 College Heights Basins 0.71 0.71 0.74 0.80 0.90 0.93 0.00 0.00 0.93 0.87 0.83 0.77 15 7,421 Montclair Basin 1 0.71 0.71 0.74 0.80 0.90 0.93 0.00 0.00 0.93 0.87 0.83 0.77 **OC59** 300 300 Montclair Basin 2 0.71 0.71 0.74 0.80 0.90 0.93 0.00 0.00 0.93 0.87 0.83 0.77 19 9,400 Montclair Basin 3 0.71 0.71 0.74 0.80 0.90 0.93 0.00 0.00 0.93 0.87 0.83 0.77 Montclair Basin 4 0.71 0.71 0.74 0.80 0.90 0.93 0.00 0.00 0.93 0.87 0.83 0.77 Seventh and Eighth Street Basins 0.71 0.71 0.74 0.80 0.90 0.93 0.00 0.00 0.93 0.87 0.83 0.77 **CB20** 30 30 7 3,463 Upland Basin 0.71 0.71 0.74 0.80 0.90 0.93 0.00 0.00 0.93 0.87 0.83 0.77 6 2,968 **OC59** 80 80 Subtotal Management Zone 1 24,736 Ely Basins 0.71 0.71 0.74 0.80 0.90 0.93 0.00 0.00 0.93 0.87 0.83 0.77 30 30 3 1,484 **CB20** Etiwanda Debris Basin 0.71 0.71 0.74 0.80 0.90 0.93 0.00 0.00 0.93 0.87 0.83 0.77 30 4 1.979 **CB14** 30 Hickory Basin 0.71 0.71 0.74 0.80 0.90 0.93 0.00 0.00 0.93 0.87 0.83 0.77 2 989 **CB18** 30 30 Lower Day Basin 0.71 0.71 0.74 0.80 0.90 0.93 0.00 0.00 0.93 0.87 0.83 0.77 6 2,968 **CB15** 30 20 San Sevaine No. 1 0.71 0.71 0.74 0.80 0.90 0.93 0.00 0.00 0.93 0.87 0.83 0.77 San Sevaine No. 2 0.71 0.71 0.74 0.80 0.90 0.93 0.00 0.00 0.93 0.87 0.83 0.77 26 12,863 **CB13** 30 .23 San Sevaine No. 3 0.71 0.71 0.74 0.80 0.90 0.93 0.00 0.00 0.93 0.87 0.83 0.77 San Sevaine Nos. 4 and 5 0.71 0.71 0.74 0.80 0.90 0.93 0.00 0.00 0.93 0.87 0.83 0.77 Turner Basins Nos, 1 and 2 0.71 0.71 0.74 0.80 0.90 0.93 0.00 0.00 0.93 0.87 0.83 0.77 7 3,463 **CB11** 40 9 Turner Basins Nos. 3 and 4 0.71 0.71 0.74 0.80 0.90 0.93 0.00 0.00 0.93 0.87 0.83 0.77 Victoria Basin 0.71 0.71 0.74 0.80 0.90 0.93 0.00 0.00 0.93 0.87 0.83 0.77 4 **CB14** 30 30 1,979 Subtotal Management Zone 2 25,726 Banana Basin 0.71 0.71 0.74 0.80 0.90 0.93 0.00 0.00 0.93 0.87 0.83 0.77 2 989 Declez Basin 0.71 0.71 0.74 0.80 0.90 0.93 0.00 0.00 0.93 0.87 0.83 0.77 **CB18** 30 30 3 1,484 IEUA RP3 Ponds 0.71 0.71 0.74 0.80 0.90 0.93 0.00 0.00 0.93 0.87 0.83 0.77 18 8,905 Subtotal Management Zone 3 11,379 Total 61,841

Table 1 Supplemental Water Recharge Capacity Estimates

<sup>1</sup> Based on a Personal personal conversation with Jason Pivovaroff of IEUA and on the IEUA Fiscal Year 2013/14 Operating and Capital Program Budget Volume 2: Ten-Year Capital Improvement Plan.

(19)	(20)	(21)	(22)	(23)	(24)
city	Theore		mum Supp arge Capa		Water
Turnout Limited?	J. Starling				
Enniced	Annual	Q3	Q4	Q1	Q2
			(acre-ft/Qtr)		
No No	1,484 7,421	391 1,957	477 2,383	169 843	448 2,238
No	9,400	2,479	3,018	1,067	2,835
No No	3,463 2,968	913 783	1,112 953	393 337	1,044 895
	24,736	6,524	7,943	2,809	7,460
No No No	1,484 1,979 1,187 2,968	391 522 313 783	477 635 381 953	169 225 135 337	448 597 358 895
Yes	11,379	3,001	3,654	1,292	3,432
No	3,463	913	1,112	393	1,044
No	1,979	522	635	225	597
	24,439	6,446	7,848	2,775	7,371
No	989 1,484 8,905	261 391 2,349	318 477 2,860	112 169 1,011	298 448 2,686
	11,379	3,001	3,654	1,292	3,432
	60,555	15,970	19,445	6,876	18,262



# THIS PAGE HAS INTENTIONALLY BEEN LEFT BLANK FOR PAGINATION

.

## **CHINO BASIN WATERMASTER**

### II. BUSINESS ITEMS (App Pool Only)

A. MINOR APPROPRIATORS ELECTION FOR WATERMASTER BOARD APPOINTMENT



## 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: December 12, 2013

TO: Pool Committee Members

SUBJECT: Appointment of Minor Appropriator Representative to Watermaster Board for Calendar Years 2014 and 2015

#### SUMMARY

<u>Issue</u>: According to the approved Watermaster Board rotation schedule, the Minor Appropriators need to appoint a representative to the Watermaster Board for 2014 and 2015. The appointee may be elected among the Minor Appropriators by election.

Recommendation: Appoint a representative to the Watermaster Board.

Financial Impact: There is no financial impact associated with this action.

Future Consideration Appropriative Pool: December 12, 2013 Minors to make appointment

<u>ACTIONS:</u> Date – Appropriative Pool –

#### BACKGROUND

According to the attached Board rotation schedule approved by the Appropriative Pool on September 26, 2000, a Minor Appropriative Pool representative will occupy an Appropriative Pool seat on the Watermaster Board in 2014 and 2015, beginning with the January 2014 meeting.

#### DISCUSSION

In the past, Minor Appropriators have held an election during an Appropriative Pool meeting to appoint their Board representative. An election can be decided by majority rule by the Minor Appropriators, unless one of the Minor Appropriators requests a volume vote. Minor Appropriators and their present volume vote percentages are listed in the second attachment to this letter.

To be counted as part of any vote, proxies must be delivered in writing to Watermaster prior to the vote. The Recording Secretary will report on any proxies that may have been delivered to Watermaster.

#### ATTACHMENTS

- 1. Board rotation schedule
- 2. Minor Appropriators Volume Vote

## ROTATION SCHEDULE FOR REPRESENTATIVES TO THE WATERMASTER

Existing and Proposed Representation of the Parties to the Judgment

Interim		APPROPRIATOR	रऽ	NON AG	AGRICULT	JRAL POOL		MUNICIPALS	
34-month	<u></u>	{24}		{13 Ind.}	{3 Gr	oups}	{3	Overlying Distr	icts}
Mar-98	Ontario	MVWD	CCWD	Industry	Dairy	Crops	IEUA	TVMWD	WMWD
1999	Ontario	MVWD	CCWD	Industry	Dairy	Crops	IEUA	TVMWD	WMWD
2000	Ontario	MVWD	CCWD	Industry	Dairy	Crops	IEUA	TVMWD	WMWD
Term Cycles	(2yr)	(2yr)	(2yr)	(3yr)	(3yr)	(3yr)	(3yr)	(3yr)	(3yr)
Reappoint	Big	Medium	Small						
Jan - 01	FWC	MVWD	CCWD	Industry	Dairy	Crops	IEUA	TVMWD	WMWD
Jan - 02	FWC	Chino	Ontario	Industry	Dairy	State	IEUA	TVMWD	WMWD
Jan - 03	Pomona	Chino	Minor Rep	Industry	Crop	State	IEUA	TVMWD	WMWD
Jan - 04	Pomona	FUWC	Chino Hills	Industry	Crop	State	IEUA	TVMWD	WMWD
_ Jan - 05	Jurupa	FUWC	Chino Hills	Industry	Crop	Dairy	IEUA	TVMWD	WMWD
Ld									
<mark>⊣</mark> Jan - 06	Jurupa	MVWD	Minor Rep	Industry	State	Dairy	IEUA	TVMWD	WMWD
<b>J</b> an - 07	Ontario	MVWD	Minor Rep	Industry	State	Dairy	IEUA	TVMWD	WMWD
Jan - 08	Ontario	CCWD	Upland	Industry	State	Crop	IEUA	TVMWD	WMWD
Jan - 09	FWC	CCWD	Upland	Industry	Dairy	Crop	IEUA	TVMWD	WMWD
Jan - 10	FWC	Chino	Minor Rep	Industry	Dairy	Crop	IEUA	TVMWD	WMWD
	-				<b>D</b> .				
Jan - 11	Pomona	Chino	Minor Rep	Industry	Dairy	State	IEUA	TVMWD	WMWD
Jan - 12	Pomona	FUWC	Chino Hills	Industry	Crop	State	IEUA	TVMWD	WMWD
Jan - 13	Jurupa	FUWC	Chino Hills	Industry	Crop	State	IEUA	TVMWD	WMWD
Jan - 14	Jurupa	MVWD	Minor Rep	Industry	Crop	Dairy	IEUA	TVMWD	WMWD
Jan - 15	Ontario	MVWD	Minor Rep	Industry	State	Dairy	IEUA	TVMWD	WMWD

The noted rotation sequence perpetuates indefinitely until and unless there is a Court approved change

Approved by the Appropriative Pool September 26, 2000



## Chino Basin Watermaster 2012-2013 Appropriative Pool Volume Vote

Assessment Year 2012-2013 (Production Year 2011-2012)

	Assess	able Production	I	Share of Operat	ting Yield	TOTAL VOLUME	
	Acre-Ft	Percentage	Votes	Acre-Ft	Votes	Non-Minor	Minor
Arrowhead Mtn Spring Water Co	369.040	0.465%	2.326	0.000	0.000		2.326
Chino Hills, City Of	3,401.160	4.287%	21.433	2,111.422	19.253	40.686	
Chino, City Of	0.000	0.000%	0.000	4,033.857	36.782	36.782	
Cucamonga Valley Water District	14,948.728	18.841%	94.204	3,619.454	33.004	127.207	
Fontana Union Water Company	0.000	0.000%	0.000	6,391.736	58.283	58.283	
Fontana Water Company	5,694.480	7.177%	35.885	1.000	0.009	35.895	
Fontana, City Of	0.000	0.000%	0.000	0.000	0.000		0.000
Golden State Water Company	745.735	0.940%	4.699	411.476	3.752		8.451
Jurupa Community Services District	15,916.835	20.061%	100.305	2,061.118	18.794	119.099	
Marygold Mutual Water Company	1,174.962	1.481%	7.404	655.317	5.975	~	13.380
Monte Vista Irrigation Company	0.000	0.000%	0.000	676.759	6.171		6.171
Monte Vista Water District	9,911.649	12.492%	62.461	4,823.954	43.987	106.448	
Niagara Bottling, LLC	1,349.170	1.700%	8.502	0.000	0.000		8.502
Nicholson Trust	0.000	0.000%	0.000	4.000	0.036		0.036
Norco, City Of	0.000	0.000%	0.000	201.545	1.838		1.838
Ontario, City Of	13,698.422	17.265%	86.325	11,373.816	103.711	190.036	
Pomona, City Of	11,420.171	14.394%	71.968	11,215.852	102.271	174.238	
San Antonio Water Company	172.368	0.217%	1.086	1,506.888	13.740		14.827
San Bernardino County Shtg Prk	14.788	0.019%	0.093	0.000	0.000		0.093
Santa Ana River Water Company	0.000	0.000%	0.000	1,301.374	11.866		11.866
Upland, City Of	525.025	0.662%	3.309	2,852.401	26.009	29.318	
West End Consolidated Water Company	0.000	0.000%	0.000	947.714	8.642		8,642
West Valley Water District	0.000	0.000%	0.000	644.317	5.875		5.875
TOTAL	79,342.533	100.000%	500.000	54,834.000	500.000	917.992	82.008
						1,000.	.000

## **CHINO BASIN WATERMASTER**

### IV. INFORMATION

1. Cash Disbursements for November 2013

	Туре	Date	Num	Name	Мето	Account	Paid Amount
	Bill Pmt -Check	11/04/2013	17330	ARROWHEAD MOUNTAIN SPRING WATER	0023230253	1012 · Bank of America Gen'l Ckg	
	Bill	10/28/2013	0023230253		Office Water Bottle - October 2013	6031.7 · Other Office Supplies	57.85
ΤΟΤΑΙ	_						57.85
	Bill Pmt -Check	11/04/2013	17331	CHARLES Z. FEDAK & COMPANY		1012 · Bank of America Gen') Ckg	
	Bill	09/30/2013			Progress Billing - September 2013	6062 · Audit Services	800.00
ΤΟΤΑΙ							800.00
	Bill Pmt -Check	11/04/2013	17332	DGO AUTO DETAILING		1012 · Bank of America Gen'l Ckg	
	Bill	10/28/2013			Wash 3 trucks on 10/09/13 & 4 trucks on 10/23/13	6177 · Vehicle Repairs & Maintenance	175.00
TOTAL	•						175.00
	Bill Pmt -Check	11/04/2013	17333	DIRECTV	019447404	1012 · Bank of America Gen'l Ckg	
	Bill	10/28/2013	019447404		Basic serviice for 10/19/13 -11/18/13	6031.7 · Other Office Supplies	94.99
TOTAL							94.99
<b>v</b>	Bill Pmt -Check	11/04/2013	17334	EUROFINS EATON ANALYTICAL		1012 · Bank of America Gen'l Ckg	
قت ا	Bill	10/29/2013	L0139064		L0139064	7108.4 · Hydraulic Control-Lab Svcs	2,038.00
9	Bill	10/29/2013	L0139238		L0139238	7108.4 · Hydraulic Control-Lab Svcs	3,340.00
	Bill	10/29/2013	L0139558		L0139558	7108.4 · Hydraulic Control-Lab Svcs	4,018.00
	Bill	10/29/2013	L0140594		L0140594	7108.4 · Hydraulic Control-Lab Svcs	6,675.00
TOTAL							16,071.00
	Bill Pmt -Check	11/04/2013	17335	FOREVER YOUNG PORTRAITURE	10172013	1012 · Bank of America Gen'l Ckg	
	Bill	10/23/2013	10172013		10172013	6147 · Other Admin Expenses	150.00
TOTAL							150.00
	Bill Pmt -Check	11/04/2013	17336	GRAINGER	9276639490	1012 · Bank of America Gen'l Ckg	
	Bill	10/28/2013	9276639490		Disposable gloves	7103.6 Grdwtr Qual-Supplies	124.21
TOTAL							124.21
	Bill Pmt -Check	11/04/2013	17337	GUARANTEED JANITORIAL SERVICE, INC.	10-29905	1012 · Bank of America Gen'l Ckg	
	Bill	10/28/2013	10-29905		October 2013	6024 · Building Repair & Maintenance	865.00
TOTAL							865.00
	Bill Pmt -Check	11/04/2013	17338	INLAND EMPIRE UTILITIES AGENCY	90012950	1012 · Bank of America Gen'l Ckg	
	Bill	10/29/2013	90012950		GW Recharge O&M FY 2013-2013 2nd Quarter	7206 · Comp Recharge-O&M	198,694.00
TOTAL							198,694.00

	Туре	Date	Num	Name	Memo	Account	Paid Amount
	Bill Pmt -Check	11/04/2013	17339	OFFICE TEAM	38979553	1012 - Bank of America Gen'l Ckg	
	Bill	10/28/2013	38979553		Week ending 10/18/13	6017.1 · Executive Assistant Services	1,824.80
					Overtime week ending 10/18/13	6017.1 · Executive Assistant Services	68.43
ΤΟΤΑ	L						1,893.23
	Bill Pmt -Check	11/04/2013	17340	SANDERS, LAURA		1012 · Bank of America Gen'l Ckg	
	Bill	10/28/2013			Transcript for 10/02/13 Court Hearing	6046 · Legal Publications/Services	252.00
τοτα	L						252.00
	Bill Pmt -Check	11/04/2013	17341	STATE COMPENSATION INSURANCE FUND	1970970-13	1012 · Bank of America Gen'l Ckg	
	Bill	10/28/2013	1970970-13		Premium on account 10/26/13-11/26/13	60183 · Worker's Comp Insurance	786.42
ΤΟΤΑ	L						786.42
	Bill Pmt -Check	11/04/2013	17342	THE LAWTON GROUP	6017	1012 · Bank of America Gen'l Ckg	
	Bill	10/28/2013	20578		Week ending 10/20/13	6017 Temporary Services	824.00
	Bill	10/28/2013	20555		Week ending 10/13/13	6017 · Temporary Services	659.20
TOTA							1,483.20
P12		11/04/2013	17343	VERIZON		1012 · Bank of America Gen'l Ckg	
Ö		10/28/2013	012561121521714508		012561121521714508	7405 · PE4-Other Expense	184.55
	Bill	10/30/2013	012519116950792103		012519116950792103	6022 · Telephone	590.76
τοται	_						775.31
	Bill Pmt -Check	11/04/2013	17344	VISION SERVICE PLAN	00-101789-0001	1012 · Bank of America Gen'l Ckg	
	Bill	10/28/2013	0010178980001		Vision premium - November 2013	60182.2 · Dental & Vision Ins	87.57
TOTAL	-						87.57
	Bill Pmt -Check	11/04/2013	17345	YUKON DISPOSAL SERVICE	08-K2 213849	1012 · Bank of America Gen'i Ckg	
	Bill	10/29/2013	08-k2 213849		Service for November 2013	6024 · Building Repair & Maintenance	106.53
TOTAL	-						106.53
	Bill Pmt -Check	11/05/2013	17346	APPLIED COMPUTER TECHNOLOGIES	2423	1012 - Bank of America Gen'l Ckg	
	Bill	10/31/2013	2423		Datbase consulting - October 2013	6052.2 · Applied Computer Technol	2,760.00
TOTAL							2,760.00
	Bill Pmt -Check	11/05/2013	17347	CHEF DAVE'S CAFE & CATERING	1300	1012 · Bank of America Gen'l Ckg	
	Bill	10/24/2013	1300		Lunch for 10/24/2013 Board Meeting	6312 · Meeting Expenses	431.90
TOTAL							431.90
		11/05/2013	17348	EUROFINS EATON ANALYTICAL		1012 · Bank of America Gen'l Ckg	

For Informational Purposes Only

	Туре	Date	Num	Name	Memo	Account	Paid Amount
	Bill	10/24/2013	L0141636		L0141636	7108.4 Hydraulic Control-Lab Svcs	2,102.00
	Bill	10/24/2013	L0141957		L0141957	7108.4 · Hydraulic Control-Lab Svcs	420.00
ΤΟΤΑΙ	L						2,522.00
	Bill Pmt -Check	11/05/2013	17349	GREAT AMERICA LEASING CORP.	14417221	1012 · Bank of America Gen'l Ckg	
	Bill	10/31/2013	14417221		Damage - back panel	6043.2 · Ricoh Usage & Maintenance Fee	162.00
					Usage for Black Copies	6043.2 · Ricoh Usage & Maintenance Fee	85.71
					Usage for Color Copies	6043.2 · Ricoh Usage & Maintenance Fee	55.50
TOTAL	L						303.21
	Bill Pmt -Check	11/05/2013	17350	HOGAN LOVELLS	2772965	1012 · Bank of America Gen'l Ckg	
	Bill	10/31/2013	2772965		Non-Ag Legal Services - October 2013	8567 · Non-Ag Legal Service	2,218.74
TOTAL	-						2,218.74
	Bill Pmt -Check	11/05/2013	17351	HSBC BUSINESS SOLUTIONS	7003-7309-1000-2744	1012 · Bank of America Gen'l Ckg	
	Bill	10/31/2013	7003730910002744		Miscellaneous office supplies	6031.7 · Other Office Supplies	1,132.79
TOTAL	-						1,132.79
P12		11/05/2013	17352	NORDBAK'S PROMOTIONAL PRODUCTS	1031136	1012 · Bank of America Gen'l Ckg	
2		10/31/2013	103113		Uniforms for B. McLaughlin	6154 · Uniforms	334.26
TOTAL	-				Ū.		334.26
	Dill Durf. Charal	44105/0040	47050		474		
	Bill Pmt -Check	11/05/2013	17353	PARK PLACE COMPUTER SOLUTIONS, INC.	479	1012 · Bank of America Gen'l Ckg	a 850 op
TOTAL	Bill	10/31/2013	479		IT Consulting Services - October 2013	6052.1 · Park Place Comp Solutn	2,850.00
TOTAL							2,850.00
	Bill Pmt -Check	11/05/2013	17354	STAPLES BUSINESS ADVANTAGE	8027477770	1012 · Bank of America Gen'l Ckg	
	Bill	10/24/2013	8027477770		Miscellaneous office supplies	6031.7 · Other Office Supplies	77.51
TOTAL							77.51
	Bill Pmt -Check	11/06/2013	17355	BOWCOCK, ROBERT		1012 · Bank of America Gen'l Ckg	
	Bill	10/07/2013	10/07 Bd Officer Mtg		10/07/13 Board Officers and Chairs Meeting	6311 · Board Member Compensation	125.00
	Bill	10/24/2013	10/24 Board Mtg		10/24/13 Board Meeting	6311 · Board Member Compensation	125.00
TOTAL							250.00
	Bill Pmt -Check	11/06/2013	17356	CRAIG, ROBERT		1012 · Bank of America Gen'l Ckg	
	Bill	10/03/2013	10/03 Bus Plan Mtg		10/03/13 Business Plan Meeting	6311 · Board Member Compensation	125,00
	Bill	10/10/2013	10/10 App Pool Mtg		10/10/13 Appropriative Pool Meeting	6311 · Board Member Compensation	125.00
	Bill	10/17/2013	10/17 Advis Comm Mtg		10/17/13 Advisory Committee Meeting	6311 · Board Member Compensation	125.00
	Bill	10/24/2013	10/24 Board Mtg		10/24/13 Board Meeting	6311 · Board Member Compensation	125.00

	Туре	Date	Num	Name	Memo	Account	Paid Amount
TOTAL							500.00
Bill P	Pmt -Check 11/	06/2013	17357	CURATALO, JAMES		1012 · Bank of America Gen'i Ckg	
Bill	10/:	21/2013	10/21 Mtg w/GM		10/21/13 Meeting with GM	6311 · Board Member Compensation	125,00
Bill	10/2	24/2013	10/24 Board Mtg		10/24/13 Board Meeting	6311 - Board Member Compensation	125.00
TOTAL							250.00
Bill P	Pmt -Check 11/(	06/2013	17358	DE BOOM, NATHAN	Ag Pool Member Meeting Compensation	1012 · Bank of America Gen'l Ckg	
Bill	10/1	10/2013	10/10 Ag Pool Mtg		10/10/13 Ag Pool Meeting	8411 · Compensation	25.00
					Ag Pool Member Meeting Compensation	8470 · Ag Meeting Attend -Special	100.00
TOTAL							125,00
Bill Pi	Pmt -Check 11/0	06/2013	17359	DURRINGTON, GLEN	10/10/13 Ag Pool Meeting	1012 · Bank of America Gen'l Ckg	
Bill	10/1	10/2013	10/10 Ag Pool Mtg		10/10/13 Ag Pool Meeting	8411 · Compensation	25.00
					10/10/13 Ag Pool Meeting	8470 · Ag Meeting Attend -Special	100.00
TOTAL							125.00
TO BILL PI	mt -Check 11/0	06/2013	17360	ELIE, STEVEN	10/24/13 Board Meeting	1012 · Bank of America Gen'l Ckg	
<u> </u>		24/2013	10/24 Board Mtg		10/24/13 Board Meeting	6311 · Board Member Compensation	125.00
N BIII TO <b>N</b> AL							125.00
Bill Pr	mt-Check 11/0	6/2013	17361	FEENSTRA, BOB		1012 · Bank of America Gen'l Ckg	
Bill		7/2013	10/07 Pool Chairs Mt		10/07/13 Board and Pool Chairs Meeting	8470 · Ag Meeting Attend -Special	125.00
Bill			10/10 Ag Pool Mtg		10/10/13 Ag Pool Meeting	8470 · Ag Meeting Attend -Special	125.00
Bill		4/2013	10/14 Chair/Counsel		10/14/13 Ag Pool Chair and Counsel Meeting	8470 · Ag Meeting Attend -Special	125.00
Bill			10/24 Board Meeting		10/24/13 Board Meeting - alternate for Paul Hofer	6311 · Board Member Compensation	125.00
TOTAL						·	500.00
Bill Pr	mt -Check 11/0	6/2013	17362	HALL, PETE*		1012 · Bank of America Gen'l Ckg	
Bill			10/10 Ag Pool Mtg		10/10/13 Ag Pool Meetíng	8470 · Ag Meeting Attend -Special	125.00
Bill			10/17 Advisory Comm		10/17/13 Advisory Committee Meeting	8470 · Ag Meeting Attend -Special	125.00
Bill			10/17 LSC Mtg		10/17/13 Land Subsidence Committee Meeting	8470 · Ag Meeting Attend -Special	125.00
Bill	10/2/	4/2013	10/24 Board Mtg		10/24/13 Board Meeting	8470 · Ag Meeting Attend -Special	125.00
TOTAL							500.00
Bill Pn	mt -Check 11/0	6/2013	17363	Huitsing, John	Ag Pool Member Compensation	1012 · Bank of America Gen'l Ckg	
Bill	10/10	0/2013	10/10 Ag Pool Mtg		10/10/13 Ag Pool Meeting	8411 Compensation	25.00
					Ag Pool Member Compensation	8470 Ag Meeting Attend -Special	100.00

125.00

	Туре	Date	Num	Name	<u>.                                    </u>	Memo	Account	Paid Amount
	Bill Pmt -Check	11/06/2013	17364	KAVOUNAS, PETER		Travel Expense Reimbursement	1012 · Bank of America Gen'l Ckg	
	Bill	10/08/2013				Travel expense reimbursement	6171.1 · GM - Reimbursement	25.00
TOTAL								25.00
	Bill Pmt -Check	11/06/2013	17365	KOOPMAN, GENE		Ag Pool Member Meeting Compensation	1012 · Bank of America Gen'l Ckg	
	Bill	10/10/2013	10/10 Ag Pool Mtg			10/10/13 Ag Pool Meeting	8411 · Compensation	25.00
						Ag Pool Member Meeting Compensation	8470 · Ag Meeting Attend -Special	100.00
TOTAL								125.00
	Bill Pmt -Check	11/06/2013	17366	KUHN, BOB			1012 - Bank of America Gen'l Ckg	
	Bill	10/07/2013	10/17 Bd Officer Mtg			10/07/13 Board Officer Meeting	6311 · Board Member Compensation	125.00
	Bill	10/17/2013	10/17 Advis Comm Mtg			10/17/13 Advisory Committee Meeting	6311 · Board Member Compensation	125.00
	Bill	10/21/2013	10/21 Mtg w/GM			10/21/13 Meeting with GM	6311 · Board Member Compensation	125.00
	Bill	10/24/2013	10/24 Board Mtg			10/24/13 Board Meeting	6311 · Board Member Compensation	125.00
	Bill	10/30/2013	10/30 Ass Pkg Wkshop			10/30/13 Assessment Package Workshop	6311 · Board Member Compensation	125.00
TOTAL								625.00
Р	Bill Pmt -Check	11/06/2013	17367	OFFICE TEAM		39035064	1012 · Bank of America Gen'l Ckg	
12	Bill	10/31/2013	39035064			Week ending 10/25/13	6017.1 · Executive Assistant Services	1,779.18
ω						Overtime week ending 10/25/13	6017.1 · Executive Assistant Services	68.43
TOTAL								1,847.61
	Bill Pmt -Check	11/06/2013	17368	PAYCHEX		2013103100	1012 · Bank of America Gen'l Ckg	
	Bill	10/31/2013	2013103100			October 2013	6012 · Payroll Services	372.78
TOTAL								372.78
	Bill Pmt -Check	11/06/2013	17369	PIERSON, JEFFREY			1012 · Bank of America Gen'l Ckg	
	Bill	10/10/2013	10/10 Ag Pool Mtg			10/10/13 Ag Pool Meeting	8470 · Ag Meeting Attend -Special	125.00
	Bill	10/17/2013	10/17 Advis Comm Mtg		,	10/17/13 Advisory Committee Meeting	8470 · Ag Meeting Attend -Special	125.00
	Bill	10/24/2013	10/24 Board Mtg			10/24/13 Board Meeting	8470 - Ag Meeting Attend -Special	125.00
TOTAL								375.00
	Bill Pmt -Check	11/06/2013	17370	ROGERS, PETER			1012 · Bank of America Gen'l Ckg	
	Bill	10/07/2013	10/07 Bd Officers Mt			10/07/13 Board Officers Meeting	6311 · Board Member Compensation	125.00
	Bill	10/24/2013	10/24 Board Mtg			10/24/13 Board Meeting	6311 · Board Member Compensation	125.00
TOTAL								250.00
l	Bill Pmt -Check	11/06/2013	17371	TELECOM SERVICES		5820	1012 · Bank of America Gen'l Ckg	
	Bill	10/31/2013	5820			To repair line # 5 problem with Verizon	6022 · Telephone	110.00
TOTAL								110.00

	Туре	Date	Num	Name	Memo	Account	Paid Amount
	Bill Pmt -Check	11/06/2013	17372	THE LAWTON GROUP	6017	1012 · Bank of America Gen'l Ckg	
	Bill	10/31/2013	20598		Week ending 10/27/13	6017 · Temporary Services	659.20
τοται	L						659,20
	Bill Pmt -Check	11/06/2013	17373	VANDEN HEUVEL, GEOFFREY	6311	1012 · Bank of America Gen'l Ckg	
	BIII	10/24/2013	10/24 Board Mtg		10/24/13 Board Meeting	6311 · Board Member Compensation	125.00
τοται	L						125.00
	Bill Pmt -Check	11/06/2013	17374	VANDEN HEUVEL, ROB	Ag Pool Member Compensation	1012 ⋅ Bank of America Gen'l Ckg	
	Bill	10/10/2013	10/10 Ag Pool Mtg		10/10/13 Advisory Committee Meeting	8411 - Compensation	25.00
					Ag Pool Member Compensation	8470 · Ag Meeting Attend -Special	100.00
TOTAL	L						125.00
	Bill Pmt -Check	11/07/2013	17375	KAVOUNAS, PETER	VOID: Travel Expense Reimbursement	1012 · Bank of America Gen'l Ckg	0.00
	General Journal	11/09/2013	11/09/2013	Payroll and Taxes for 10/27/13-11/09/13	Payroll and Taxes for 10/27/13-11/09/13	1012 · Bank of America Gen'l Ckg	
σ					Direct Deposits for 10/27/13-11/09/13	1012 · Bank of America Gen'l Ckg	19,252.54
12					Garnishment for 10/27/13-11/09/13	1012 · Bank of America Gen'l Ckg	125.76
4					Payroll Taxes for 10/27/13-11/09/13	1012 · Bank of America Gen'l Ckg	7,119.83
					Payroll Checks for 10/27/13-11/09/13	1014 · Bank of America P/R Ckg	1,028.85
				ICMA-RC	457 Employee deductions for 10/27/13-11/09/13	1012 · Bank of America Gen'l Ckg	3,127.22
				ICMA-RC	401(a) Employee deductions for 10/27/13-11/09/13	1012 · Bank of America Gen'l Ckg	923.03
TOTAL							31,577.23
	Bill Pmt -Check	11/12/2013	17376	ZANGWILL, BRADLEY		1012 · Bank of America Gen'l Ckg	
	Bill	10/31/2013			Hioliday card pictures	6147 · Other Admin Expenses	150.00
TOTAL							150.00
	Bill Pmt -Check	11/14/2013	17377	ACWA JOINT POWERS INSURANCE AUTHORIT	A000232800	1012 - Bank of America Gen'l Ckg	
	Bill	11/09/2013	A000232800		Prepayment - December	1409 · Prepaid Life, BAD&D & LTD	126.76
					November 2013	60191 · Life & Disab.Ins Benefits	105.68
TOTAL							232.44
	Bill Pmt -Check	11/14/2013	17378	CORELOGIC INFORMATION SOLUTIONS	21012668	1012 · Bank of America Gen'l Ckg	
	Bill	10/31/2013	81012668		21012668	7103.7 · Grdwtr Qual-Computer Svc	62.50
					21012668	7101.4 · Prod Monitor-Computer	62.50
TOTAL					21012668	7101.4 · Prod Monitor-Computer	125.00

.

	Туре	Date	Num	Name	Memo	Account	Paid Amount
	Bill	11/06/2013	15910		DISC Profile for Kavounas and Truong	6013 · Human Resources Services	240.00
TOTA	-						240.00
	Bill Pmt -Check	11/14/2013	17380	PREMIERE GLOBAL SERVICES	14864726	1012 · Bank of America Gen'l Ckg	
	Bill Pint -Gneck		17380	PREMIERE GLOBAL SERVICES		-	14.50
	Dill	10/31/2013	14004720		Ag pool agenda call on 10/01 Non-Ag pool agenda call on 10/01	8412 · Meeting Expenses 8512 · Meeting Expense	14.50
					Appropriative pool agenda call on 10/01	8312 · Meeting Expenses	14.51
					Safe Yield Recalculation calls on 10/07 & 10/25	6909.1 · OBMP Meetings	56.34
						8512 · Meeting Expense	18.38
					Non-Ag pool meeting call on 10/10	6909.1 · OBMP Meetings	27.35
					Call on 10/17 re City of Fontana motion	-	23.81
					Call with Rossi at WMWD on 10/21	6909.1 · OBMP Meetings	183.45
TOTAL					Monthly fees and conferencing software testing	6022 · Telephone	352.85
101712	-						
	Bill Pmt -Check	11/14/2013	17381	PUBLIC EMPLOYEES' RETIREMENT SYSTEM	Payor #3493	1012 · Bank of America Gen'l Ckg	
	General Journal	10/26/2013	10/26/2013	PUBLIC EMPLOYEES' RETIREMENT SYSTEM	CalPERS Retirement for 10/13/13-10/26/13	2000 · Accounts Payable	6,802.37
TOTAL							6,802.37
P12	Bill Pmt -Check	11/14/2013	17382	THE LAWTON GROUP	6017	1012 · Bank of America Gen'l Ckg	
25		11/13/2013	20629	THE LAWTON GROOP	Week ending 11/03/13	6017 · Temporary Services	824.00
		11/10/2010	20028		Week ending 11/03/13	Contra Temporary Services	824.00
TOTAL							624.00
	Bill Pmt -Check	11/14/2013	17383	UNION 76	300-732-989	1012 · Bank of America Gen'l Ckg	
	Bill	10/31/2013	300732989		Fuel - October 2013	6175 · Vehicle Fuel	340.22
TOTAL							340.22
	Bill Pmt -Check	11/14/2013	17384	UNITED HEALTHCARE	0033140691	1012 · Bank of America Gen'l Ckg	500.07
	Bill	11/09/2013	0033140691		Dental premilum - December 2013	60182.2 · Dental & Vision Ins	588.27
TOTAL							588.27
	Bill Pmt -Check	11/14/2013	17385	WESTERN DENTAL SERVICES, INC.	11882	1012 · Bank of America Gen'l Ckg	
	Bill	11/13/2013	11882		Dental premium - November 2013	60182.2 · Dental & Vision Ins	30.00
TOTAL							30.00
	Bill Pmt -Check	11/14/2013	17386	OFFICE TEAM	39083426	1012 · Bank of America Gen'l Ckg	
	Bill	11/13/2013	39083426		Week ending 11/01/13	6017.1 · Executive Assistant Services	1,824.80
TOTAL							1,824.80
	Bill Pmt -Check	11/21/2013	17387	ACWA	643	1012 · Bank of America Gen'l Ckg	
	Bill	11/05/2013	643	-	2014 Agency Dues	1433 · Prepaid Membership Dues	14,370.00
		11100/2010					

Туре	Date	Num	Name	Memo	Account	Paid Amount
TOTAL						14,370.00
Bill Pmt -Check	11/21/2013	17388	BANK OF AMERICA	XXXX-XXXX-XXXX-9341	1012 · Bank of America Gen'l Ckg	
Bill	10/31/2013	XXXX-XXXX-XXXX-9341		Expedited combination for safe in Executive Office	6031.7 · Other Office Supplies	32.40
				Notary for paperwork to obtain combination 4 safe	6031.7 · Other Office Supplies	10.00
				Aacrylic nameplate holders for Boardroom	6031.7 · Other Office Supplies	28.07
				Acrylic double-sided window display for Boardroom	1 6031.7 · Other Office Supplies	86.38
				Meals for 2013 CalPERS Educational Forum	6192 · Training & Seminars	22.00
				Meals for 2013 CalPERS Educational Forum	6192 · Training & Seminars	39,58
				Meals for 2013 CalPERS Educational Forum	6192 · Training & Seminars	11.83
				Hotel for 2013 CalPERS Educational Forum	6192 · Training & Seminars	632.12
				Replacement chairs for office staff	6031.7 · Other Office Supplies	259.19
				Lunch for Safe Yield Recalculation Meeting	6909.1 · OBMP Meetings	56.97
				Rental car for GRA Bi-Annual Meeting	6191 · Conferences - General	112.77
				Gas for rental car for GRA Bi-Annual Meeting	6191 · Conferences - General	13.38
				Valet for airport for GRA Bi-Annual Meeting	6191 · Conferences - General	46.00
				Hotel for GRA Bi-Annual Meeting	6191 · Conferences - General	227.30
Ъ				Hotel for GRA Conference	6191 · Conferences - General	239.94
<u> </u>				Airfare for GRA Bi-Annual Meeting	6191 · Conferences - General	199.80
26				Airfare for GRA Bi-Annual Meeting	6191 · Conferences - General	25.00
-				PK meeting w/Ag Pool Chair and counsel	8412 · Meeting Expenses	79.44
				PK meeting w/WMWD - John Rossi	8312 Meeting Expenses	27.84
				Gas for rental car for GRA Conference	6191 Conferences - General	14.08
				PK meeting w/Bill Mathis	6013 · Human Resources Services	32.94
TOTAL				-		2,197.03
Bill Pmt -Check	11/21/2013	17389	CALPERS	1394905143	1012 · Bank of America Gen'l Ckg	
Bill Fint -Check	11/18/2013	1394905143	CALFERS	Medical premium - December 2013	60182.1 · Medical Insurance	5,581.56
	1110/2013	1394903143		Medical premium - December 2010		5,581.56
TOTAL .						3,361.30
Bill Pmt -Check	11/21/2013	17390	CUCAMONGA VALLEY WATER DISTRICT	Lease due December 1, 2013	1012 · Bank of America Gen'l Ckg	
Bill	11/18/2013		- · · · · · · · · · · · · · · · · · · ·	Lease due December 1, 2013	- 1422 · Prepaid Rent	6,160.00
TOTAL						6,160.00
	44/04/00/42	47864		40480	1012 - Bank of America Coull Close	
Bill Pmt -Check	11/21/2013	17391	EGOSCUE LAW GROUP	10489	1012 · Bank of America Gen'l Ckg	8,250.00
Bill	10/31/2013	10489		Ag Pool Legal Services - October 2013	8467 · Ag Legal & Technical Services	— <u> </u>
TOTAL						8,250.00
Bill Pmt -Check	11/21/2013	17392	GEOSCIENCE SUPPORT SERVICES, INC.	4555-11-14	1012 · Bank of America Gen'l Ckg	
Bill	10/31/2013	4555-11-14			7107.61 · Grd Level-Chino Hills ASR	6,175.00
וווס	10/3 //2013	4000-11-14				

	Туре	Date	Num	Name	Memo	Account	Paid Amount
ΤΟΤΑ	L						6,175.00
	Bill Pmt -Check	11/21/2013	17393	GRAINGER		1012 · Bank of America Gen'l Ckg	
	Bill	11/18/2013	9292486728		YSI Cal Solution	7103.6 · Grdwtr Qual-Supplies	189,45
	Bill	11/18/2013	9294754768		Hose bibb	7103.6 · Grdwtr Qual-Supplies	58.19
ΤΟΤΑ	L						247.64
	Bill Pmt -Check	11/21/2013	17394	KAVOUNAS, PETER	Travel Expense Reimbursement	1012 · Bank of America Gen'l Ckg	
	Bill	11/18/2013			Travel expense reimbursement	6171.1 · GM - Reimbursement	46.57
ΤΟΤΑΙ	-						46.57
	Bill Pmt -Check	11/21/2013	17395	LEGAL SHIELD	111802	1012 · Bank of America Gen'l Ckg	
	Bill	11/18/2013	0111802		Employee deductions - November 2013	60194 · Other Employee Insurance	51.80
ΤΟΤΑΙ	-						51.80
	Bill Pmt -Check	11/21/2013	17396	OFFICE TEAM	39132334	1012 · Bank of America Gen'l Ckg	
	Bill	11/08/2013	39132334		Week ending 11/08/13	6017.1 · Executive Assistant Services	1,824.80
TOTEL							1,824.80
27 <sub>.</sub>	Bill Pmt -Check	11/21/2013	17397	PUBLIC EMPLOYEES' RETIREMENT SYSTEM	Payor #3493	1012 · Bank of America Gen'l Ckg	
	General Journal	11/09/2013	11/09/2013	PUBLIC EMPLOYEES' RETIREMENT SYSTEM	CalPERS Retirement for 10/27/13-11/09/13	2000 · Accounts Payable	6,802.37
TOTAL							6,802,37
	Bill Pmt -Check	11/21/2013	17398	R&D PEST SERVICES	0171746	1012 · Bank of America Gen'l Ckg	
	Bill	11/18/2013	0171746		Continuing treatment for ants	6024 · Building Repair & Maintenance	85.00
TOTAL							85.00
	Bill Pmt -Check	11/21/2013	17399	SAN BERNARDINO COUNTY FLOOD CONTROL	P-198284	1012 · Bank of America Gen'l Ckg	
	Bill	11/18/2013	P-198284		Annual Inspection Fee for San Sevaine Channel	6909.3 · Other OBMP Expenses	1,900.00
TOTAL							1,900.00
	Bill Pmt -Check	11/21/2013	17400	STANDARD INSURANCE CO.	Policy # 00-649299-0009	1012 · Bank of America Gen'l Ckg	
	Bill	11/18/2013			Policy # 00-649299-0009	60191 · Life & Disab.Ins Benefits	482,28
TOTAL							482.28
	Bill Pmt -Check	11/21/2013	17401	STAPLES BUSINESS ADVANTAGE	8027558788	1012 · Bank of America Gen'l Ckg	
	Bill	11/02/2013	8027558788		Back rests, file jackets,	6031.7 · Other Office Supplies	44.50
					11x17 paper	6031.1 - Copy Paper	122,30
TOTAL							166.80

	Туре	Date	Num	Name	Memo	Account	Paid Amount
	Bill Pmt -Check	11/21/2013	17402	STATE WATER RESOURCES CONTROL BOAR		1012 · Bank of America Gen'l Ckg	
	Bill	11/08/2013	094-014940		Water Rights Fee A028473	7205 · Comp Recharge-Other Expense	944.47
	Bill	11/08/2013	094-014939		Water Rights Fee A028996	7205 · Comp Recharge-Other Expense	1,580.47
	Bill	11/08/2013	094-14458		Water Rights Fee A031369	7205 - Comp Recharge-Other Expense	3,779.97
ΤΟΤΑ	L						6,304.91
	Bill Pmt -Check	11/21/2013	17403	STAULA, MARY L	Retiree Medical	1012 - Bank of America Gen'l Ckg	
	Bill	11/30/2013			Nov. 2013	60182.4 · Retiree Medical	29.19
ΤΟΤΑΙ	L					-	29.19
	Bill Pmt -Check	11/21/2013	17404	THE LAWTON GROUP	6017	1012 · Bank of America Gen'l Ckg	
	Bill	11/10/2013	20652		Week ending 11/10/13	6017 · Temporary Services	824.00
ΤΟΤΑΙ	_					-	824.00
	Bill Pmt -Check	11/21/2013	17405	VERIZON WIRELESS	9714387968	1012 · Bank of America Gen'l Ckg	
	Bill	11/18/2013	9714387968		Monthly service	6022 · Telephone	391.38
TOTAL	_					-	391.38
σ							
12	Bill Pmt -Check	11/21/2013	17406	WILDERMUTH ENVIRONMENTAL INC		1012 · Bank of America Gen'l Ckg	
28		10/31/2013	2013318		2013318	6906 · OBMP Engineering Services	116.25
	Bill	10/31/2013	2013319		2013319	6906.73 · OBMP - Safe Yield	7,696.78
					2013319	6906.71 · OBMP - Misc. GM Requests	4,942.65
					2013319	6906.72 · OBMP - Data Requests-Non CBWM	600.00
	Bill	10/31/2013	2013320		2013320	6906.72 · OBMP - Data Requests-Non CBWM	2,578.75
	Bill	10/31/2013	2013321		2013321	6906 · OBMP Engineering Services	1,257,50
	Bill	10/31/2013	2013322		2013322	6906.1 · OBMP - Watermaster Model Update	270,00
	Bill	10/31/2013	2013323		2013323	7103.3 · Grdwtr Qual-Engineering	8,027.50
	Bill	10/31/2013	2013324		2013324	7104.3 · Grdwtr Level-Engineering	11,416.77
	Bill	10/31/2013	2013325		2013325	7107.61 · Grd Level-Chino Hills ASR	924.00
	Bill	10/31/2013	2013326		2013326	7107.2 · Grd Level-Engineering	82.50
	Bill	10/31/2013	2013327		2013327	7107.2 · Grd Level-Engineering	1,960.80
	Bill	10/31/2013	2013328		2013328	7108.3 · Hydraulic Control-Engineering	1,227.99
	Bill	10/31/2013	2013329		2013329	7108.3 · Hydraulic Control-Engineering	3,620.59
	Bill	10/31/2013	2013330		2013330	7108.7 · Hydraulic Control - Prado Basin	1,291.25
	Bill	10/31/2013	2013331		2013331	7202.3 Comp Recharge-Implementation	2,460.00
	Bill	10/31/2013	2013332		2013332	7402 · PE4-Engineering	7,626.97
	Bill	10/31/2013	2013333		2013333	7502 · PE6&7-Engineering	387.50
	Bill	10/31/2013	2013334		2013334	7108.7 · Hydraulic Control - Prado Basin	4,895.25
TOTAL							61,383.05

Page 10 of 11

Туре	Date	Num	Name	Memo	Account	Paid Amount
General Journa	11/23/2013	11/23/2013	Payroll and Taxes for 11/10/13-11/23/13	Payroll and Taxes for 11/10/13-11/23/13	1012 · Bank of America Gen'l Ckg	
				Direct Deposits for 11/10/13-11/23/13	1012 · Bank of America Gen'l Ckg	28,925.72
				Garnishment for 11/10/13-11/23/13	1012 · Bank of America Gen'l Ckg	125.76
				Payroll Taxes for 11/10/13-11/23/13	1012 · Bank of America Gen'l Ckg	8,996.12
				Payroll Checks for 11/10/13-11/23/13	1014 · Bank of America P/R Ckg	1,046.48
			ICMA-RC	457 Employee deduction for 11/10/13-11/23/13	1012 · Bank of America Gen'i Ckg	3,677.22
			ICMA-RC	401(a) Employee deduction for 11/10/13-11/23/13	1012 · Bank of America Gen'l Ckg	1,355.92
TOTAL						44,127.22
					Total Disbursements:	452,674.09

Page 11 of 11

THIS PAGE HAS INTENTIONALLY BEEN LEFT BLANK FOR PAGINATION