

**AGENDA
IRVINE RANCH WATER DISTRICT
BOARD OF DIRECTORS
REGULAR MEETING**

December 10, 2018

PLEDGE OF ALLEGIANCE

CALL TO ORDER 5:00 p.m., Board Room, District Office
15600 Sand Canyon Avenue, Irvine, California

ROLL CALL Directors LaMar, Matheis, Swan, Withers and President Reinhart

NOTICE

If you wish to address the Board on any item, including Consent Calendar items, please file your name with the Secretary. Forms are provided on the lobby table. Remarks are limited to three minutes per speaker on each subject. Consent Calendar items will be acted upon by one motion, without discussion, unless a request is made for specific items to be removed from the Calendar for separate action.

COMMUNICATIONS TO THE BOARD

1. A. Written:
- B. Oral:
2. ITEMS RECEIVED TOO LATE TO BE AGENDIZED

Recommendation: Determine the need to discuss and/or take immediate action on item(s).

PUBLIC HEARING

Next Resolution No. 2018-30

3. EVALUATING A CHANGE IN THE ELECTIONS PROCESS FOR THE IRVINE RANCH WATER DISTRICT BOARD OF DIRECTORS AND ESTABLISHING DIVISION BOUNDARIES
 - A. Declare the Board meeting to be the time and place for a third Board Meeting;
 - B. Announce the hearing was noticed by publication;
 - C. Receive and file the Affidavits of Posting and Proof of Publication;
 - D. Request legal counsel to describe the nature of the proceedings and purpose;
 - E. Open the hearing to solicit and accept comment on the proposed move to by-division elections;
 - F. Request that the Government Relations Officer provide a report to the Board regarding the draft division maps and on any written comments received;
 - G. Inquire whether there is any person present who wishes to provide comments;
 - H. Inquire whether there are any comments or questions from the members of the Board; and
 - I. Close the hearing and authorize staff to agendize a fourth Public Hearing on January 14, 2019 to solicit and accept comment on the proposed move to by division elections, composition of divisions, the draft division maps and sequence of elections.

| CONSENT CALENDAR | Next Resolution No. 2018- 30 | Items 4 - 11 |
|------------------|------------------------------|--------------|
|------------------|------------------------------|--------------|

4. RATIFY/APPROVE BOARD OF DIRECTORS' ATTENDANCE AT MEETINGS AND EVENTS

Recommendation: That the Board ratify/approve the meetings and events for Mary Aileen Matheis, Steve LaMar, Peer Swan, Doug Reinhart, and John Withers, as described.

5. MINUTES OF REGULAR BOARD MEETING

Recommendation: That the minutes of the November 12, 2018 Regular Board meeting be approved as presented.

6. NOVEMBER 2018 TREASURY REPORTS

Recommendation: That the Board receive and file the Treasurer's Investment Summary report, the Summary of Fixed and Variable Rate Debt, and Disclosure report of reimbursements to Board members and staff; approve the November 2018 summary of payroll ach payments in the total amount of \$2,088,664 and approve the November 2018 Accounts Payable Disbursement Summary of Warrants 393005 through 393942 Workers' Compensation distributions, wire transfers, payroll withholding distributions and voided checks in the total amount of \$16,006,783.

7. ELDERWOOD SEWER UPSIZING – FINAL ACCEPTANCE

Recommendation: That the Board accept construction of the Elderwood Sewer Upsizing, Project 10095; authorize the General Manager to file a Notice of Completion; and authorize the Payment of the retention 35 days after the date of recording the Notice of Completion.

8. ADOPTION OF A REVISED DISTRICT SCHEDULE OF POSITIONS AND SALARY RATE RANGES

Recommendation: That the Board adopt a resolution rescinding Resolution No. 2018-24 and adopting a revised schedule of positions and salary rate ranges.

Res. No. 2018-

9. ADOPTION OF THE 2018 SOUTH ORANGE COUNTY INTEGRATED REGIONAL WATER MANAGEMENT PLAN

Recommendation: That the Board adopt a Resolution adopting the 2018 South Orange County Integrated Regional Water Management Plan.

Res. No. 2018-

| | | |
|-------------------------|------------------------------------|---------------------|
| CONSENT CALENDAR | Next Resolution No. 2018-30 | Items 4 - 11 |
|-------------------------|------------------------------------|---------------------|

10. FY 2017-18 COMPREHENSIVE ANNUAL FINANCIAL REPORT

Recommendation: Receive and file.

11. TWO-YEAR OPERATING BUDGET PROPOSAL

Recommendation: That the Board approve a shift to a two-year budget rate setting cycle, starting with fiscal year 2019-20 and 2020-21.

ACTION CALENDAR

12. MWRP EMERGENCY DISCHARGE TO SAN DIEGO CREEK CONSTRUCTION AWARD

Recommendation: That the Board authorize the General Manager to execute a construction contract with PCL Construction Inc., in the amount of \$981,465, for the Michelson Water Recycling Plant Emergency Recycled Water Diversion to San Diego Creek, Project 10093.

13. ENTERPRISE SERVER AND STORAGE REPLACEMENT

Recommendation: That the Board approve a General Plant budget increase and expenditure of \$340,000 with Sirius Computer Solutions to purchase and implement the Enterprise Server and Storage Replacement Equipment.

14. ELECTION OF OFFICERS FOR 2019

Recommendation: That an election be conducted of the President and Vice President of the Board of Directors of the Irvine Ranch Water District.

OTHER BUSINESS

Pursuant to Government Code Section 54954.2, members of the Board of Directors or staff may ask questions for clarification, make brief announcements, and make brief reports on his/her own activities. The Board or a Board member may provide a reference to staff or other resources for factual information, request staff to report back at a subsequent meeting concerning any matter, or direct staff to place a matter of business on a future agenda. Such matters may be brought up under the General Manager's Report or Directors' Comments.

15. General Manager's Report

16. Directors' Comments

17. Community Updates: Receive an oral update from District liaison(s) regarding communities within IRWD's service area and discuss relevant community happenings.

OTHER BUSINESS

18. CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION – Pursuant to Government Code Section 54956.9(d)(1): *Orange County Water District v. SABIC Innovative Plastics US, LLC, et al.*, Case No.:30-2008-00078246-CU-TT-CXC
19. Open Session
20. Adjourn

Availability of agenda materials: Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the Irvine Ranch Water District Board of Directors in connection with a matter subject to discussion or consideration at an open meeting of the Board of Directors are available for public inspection in the District's office, 15600 Sand Canyon Avenue, Irvine, California ("District Office"). If such writings are distributed to members of the Board less than 72 hours prior to the meeting, they will be available from the District Secretary of the District Office at the same time as they are distributed to Board Members, except that if such writings are distributed one hour prior to, or during, the meeting, they will be available at the entrance to the Board of Directors Room of the District Office. The Irvine Ranch Water District Board Room is wheelchair accessible. If you require any special disability-related accommodations (e.g., access to an amplified sound system, etc.), please contact the District Secretary at (949) 453-5300 during business hours at least seventy-two (72) hours prior to the scheduled meeting. This agenda can be obtained in alternative format upon written request to the District Secretary at least seventy-two (72) hours prior to the scheduled meeting.

December 10, 2018

Prepared and

submitted by: C. Compton

Approved by: Paul A. Cook

PUBLIC HEARING

EVALUATING A CHANGE IN THE ELECTIONS PROCESS FOR THE IRVINE RANCH WATER DISTRICT BOARD OF DIRECTORS AND ESTABLISHING DIVISION BOUNDARIES

SUMMARY:

Pursuant to Water Code section 35180, IRWD uses an at-large method to elect the members of its Board of Directors. The at-large method allows for voters from the entire service area to elect each of the five members of the Board of Directors. The California Voting Rights Act favors a by-division method of election instead of an at-large method of election for electing members of local government governing bodies. A by-division method divides a service area into separate divisions and allows the voters from each division, as opposed to voters from the entire service area, to elect a member of the board of directors. In a by-division method of election, the elected individual serves as the division's representative on the board and must reside in that division.

Since 2017, Elections Code section 10650 has authorized special districts such as IRWD to move from an at-large method of election to a by-division method of election in furtherance of the purposes of the California Voting Rights Act. Elections Code section 10010 governs the process for evaluating and transitioning to a by-division method of election. The first step in initiating the process is the adoption of a resolution of "Intent to Initiate the Process of Establishing Divisions and Elections by Divisions." The IRWD Board of Directors adopted a resolution of "Intent to Initiate the Process of Establishing Divisions and Elections by Divisions" on April 2, 2018. The next steps involved a series of public hearings.

Pursuant to Elections Code section 10010, a public hearing is now being held on December 10 after the drawing of draft maps. The purpose of this hearing is to invite and solicit public comments on the draft division maps, which have been published by the District on its website, and the potential sequence of elections for the directors from each division at different times to provide for staggered terms of office.

RECOMMENDED HEARING PROCEDURE:

President: Declare the Board meeting of December 10, 2018, to be the time and place for a third hearing on evaluating a change in the elections process for the Irvine Ranch Water District Board of Directors and establishing division boundaries, and asks the Board Secretary to announce how the hearing was noticed.

Board Secretary: Announce that the hearing was noticed by publication in the *Orange County Register* on Sunday, November 25, 2018; by publication in Spanish in the *Excelsior Unidos* on Friday, November 23, 2018; by publication in Korean in the *Korea Times* on Saturday, November 24, 2018; by publication in English and Traditional Chinese in the *World*

Journal on Saturday, November 24, 2018, and Sunday, November 25, 2018; by publication in Farsi in *Hafteh Bazaar* on Friday, November 30, 2018; by electronic posting in English, Farsi, Korean, Traditional Chinese, and Spanish on the IRWD website, through which the notice can be translated into approximately 20 languages; and by physical posting at IRWD's headquarters. Announce that the four draft maps— Map A, Map B, Map C and Map D— were published on IRWD's website by December 3, 2018. The Board Secretary presents affidavits of posting and proof of publication to the Board related to the hearing.

Board of Directors: The Board of Directors receives and files the affidavits of posting and proof of publication as presented by the Board Secretary.

President: Request legal counsel to describe the nature of the proceedings, and to explain the purpose of the hearing.

Legal Counsel: Describe the nature of the proceedings, and explains the purpose of the hearing as being the opportunity to invite and solicit public comment on the draft division maps, which have been published by the District on its website at least seven days prior to the hearing, and the potential sequence of elections for the directors from each division at different times to provide for staggered terms of office.

Board of Directors: Open the hearing by taking the following recommended action:

RECOMMENDED MOTION: THAT THE PUBLIC HEARING BE OPENED TO SOLICIT AND ACCEPT COMMENT ON THE PROPOSED MOVE TO BY-DIVISION ELECTIONS, THE COMPOSITION OF DIVISIONS, THE DRAFT DIVISION MAPS, AND SEQUENCE OF ELECTIONS.

President: Request that the Government Relations Officer provide a report to the Board regarding the draft division maps, and on any written comments received.

Government Relations Officer: Provide a report to the Board regarding the draft division maps, and on any written comments received.

President: Inquire whether there is any person present who wishes to provide comments on the proposed move to by-division elections, the composition of divisions, the draft maps, and the sequence of elections.

Inquire whether there are any comments or questions from members of the Board of Directors. After comments or questions, states that the hearing will be closed.

Board of Directors: Close the hearing by taking the following recommended action:

RECOMMENDED MOTION: THAT THIS THIRD PUBLIC HEARING BE CLOSED AND AUTHORIZE STAFF TO AGENDIZE A FOURTH PUBLIC HEARING FOR JANUARY 14, 2019, FOR THE BOARD OF DIRECTORS TO SOLICIT AND ACCEPT COMMENT ON THE PROPOSED MOVE TO BY-DIVISION ELECTIONS, THE COMPOSITION OF DIVISIONS, THE DRAFT DIVISION MAPS, AND SEQUENCE OF ELECTIONS.

BACKGROUND:

In 2002, Governor Gray Davis signed the California Voting Rights Act (CVRA) into law. The CVRA states that an at-large method of election may not be used to elect local governing boards if it “impairs the ability of a protected class to elect candidates of its choice or its ability to influence the outcome of an election.” (Elections Code §14027)

A violation of the CVRA may be established if it is shown that racially polarized voting, combined with an at-large voting system, impairs the ability of a protected class of voters to elect candidates of its choice or to influence the outcome of an election. (Elections Code §14028(a)) Under the CVRA, “racially polarized voting” means voting in which there is a difference between the choice of candidates or other electoral choices that are preferred by voters in a protected class, and in the choice of candidates and electoral choices that are preferred by voters in the rest of the electorate. (Elections Code §14026(e))

As of the writing of this report, IRWD has not been presented with any evidence of racially polarized voting in its elections, but many local governments have had their at-large method of election challenged under the CVRA. Additionally, many local governments have voluntarily moved to a by-division method of election because it is the only election method not vulnerable to a challenge under the CVRA.

Statutorily Mandated Process for Evaluating a By-Division Method of Election:

While the current at-large method of election used by IRWD pursuant to Water Code section 35180 has served the District’s customers and constituents well, Elections Code section 10650 allows the board of a special district, like IRWD, to move from an at-large method of election to a by-division method of election in furtherance of the purposes of the CVRA.

Elections Code section 10010 provides the process for evaluating divisions and a transition to by-division elections. That process requires, at a minimum, that a special district:

- Adopt a resolution of intent to change the election system;
- Hold at least four public hearings to discuss division maps and the sequence of the division elections;

- The first and second hearing must be held within 30 days of each other and the public is invited to provide input regarding the composition of the divisions and sequence of elections;
- After draft division maps are drawn, one or more proposed maps are published at least seven days before the third hearing. Any further revisions to the proposed map(s) would be published at least seven days before being adopted; and
- The third and fourth public hearings are held within 45 days of each other; and
- Hold at least one more public hearing at which it considers final action to transition to by-division elections and considers adoption of a final map of division boundaries.

Legally Required Factors Considered When Evaluating Division Boundaries:

While a number of federal and state laws govern the drawing of division boundaries, the U.S. Constitution establishes the fundamental principle which governs the drawing of division boundaries. Above all else, the Constitution requires that divisions be equal, or nearly equal, in total population. Federal courts have ruled that this means that the population difference between the most and least populous divisions may not exceed ten percent. California Elections Code section 22000 further suggests that divisions should be drawn to be, “as far as practicable, equal in population” using the population numbers from the last federal decennial census.

Provided that the equality in population, based on the last decennial census, requirement is met, the Elections Code also allows for consideration of: (1) topography, (2) geography, (3) cohesiveness, contiguity, integrity, and compactness of territory, and (4) communities of interests of the division” when determining where division boundaries are placed.

IRWD Process to Evaluate Establishment of Divisions and Elections by Divisions:

On April 2, 2018, the IRWD Board of Director adopted a resolution of “Intent to Initiate the Process of Establishing Divisions and Elections by Divisions.” In its adoption of the resolution, the Board determined that the public interest was best served by initiating the process to evaluate divisions and a transition to by-division elections. The Board authorized the General Manager, or his designee, to initiate a public evaluation process that complies with Elections Code section 10010, and encourages and allows for full public participation, careful consideration and input into an evaluation of divisions and a transition to by-division elections within IRWD.

The first step in the District’s evaluation process was the release of data related to the population characteristics of the IRWD’s service area. That data was presented to the Board during a Board workshop on May 14, 2018. Attached as Exhibit “A” is a copy of the summary of “Existing Conditions for Irvine Ranch Water District” provided to the Board.

The second step in the District’s evaluation process was to hold two public hearings, which were held on June 4 and June 18. These hearings were conducted before the drawing of a draft map or

maps of proposed division boundaries. The purpose of the hearings was to invite and solicit public comment on the proposed move to by-division elections, the composition of divisions and the sequence of elections prior to the drawing of draft maps.

The third step in the District's evaluation process was for the Board to discuss criteria to be used by the District when drawing proposed director division boundaries. The criteria was discussed at a Board Workshop held on August 13, 2018. The criteria discussed at the August 13 workshop is included in the presentation materials attached as Exhibit "B".

Following the workshop, prior to the drawing of potential division area maps, the District invited the public to submit additional comments on the composition of possible divisions and to submit conceptual maps for consideration as the potential division area maps were drawn. That public comment period ran from August 15 to October 15, 2018. During the comment period, the District received two comments and maps from the public. Those comments and maps are attached as Exhibit "C".

Now, IRWD is holding a third public hearing to invite and solicit public comment on the draft division maps, which have been published by the District on its website, and the potential sequence of elections for the directors from each division at different times to provide for staggered terms of office. The four draft maps are attached as Exhibit "D".

It is important to note that the draft maps are a starting point for the Board's discussion on possible division boundaries, and additional maps or refinements may be made should the Board want to see other options at the next public hearing.

FISCAL IMPACTS:

Due to the adoption of a resolution of "Intent to Initiate the Process of Establishing Divisions and Elections by Divisions" and by undertaking the Elections Code section 10010 process to evaluate by-divisions elections, the District is incurring costs of a demographer and special legal counsel in addition to potentially other costs.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

This item was not reviewed by a Committee.

LIST OF EXHIBITS:

Exhibit "A" – Existing Conditions for Irvine Ranch Water District
Exhibit "B" – Presentation Materials from the December 10, 2018, Public Hearing
Exhibit "C" – Public Comments and Maps Received Between August 15 and October 15, 2018
Exhibit "D" – Draft Division Maps A, B, C and D

Existing Conditions for Irvine Ranch Water District

Table 1. Population by Race/Ethnicity for IRWD

| | Number | Percent |
|--|----------------|---------------|
| 2010 Total Population | 337,151 | 100.0% |
| Hispanic or Latino of any Race | 40,325 | 12.0% |
| Non-Hispanic White | 171,195 | 50.8% |
| Non-Hispanic Asian | 104,775 | 31.1% |
| Non-Hispanic Black or African-American | 5,173 | 1.5% |
| All Other Non-Hispanic Races/Ethnicities | 15,681 | 4.7% |
| 2010 Population 18 Years and Older | 261,651 | 100.0% |
| Hispanic or Latino of any Race | 28,531 | 10.9% |
| Non-Hispanic White | 138,759 | 53.0% |
| Non-Hispanic Asian | 81,062 | 31.0% |
| Non-Hispanic Black or African-American | 4,029 | 1.5% |
| All Other Non-Hispanic Races/Ethnicities | 9,266 | 3.5% |
| 2016 Citizen Voting Age Population (CVAP) | 244,343 | 100.0% |
| Hispanic or Latino of any Race | 27,413 | 11.2% |
| Non-Hispanic White | 135,507 | 55.5% |
| Non-Hispanic Asian | 68,731 | 28.1% |
| Non-Hispanic Black or African-American | 4,810 | 2.0% |
| All Other Non-Hispanic Races/Ethnicities | 7,879 | 3.2% |

Sources: 2010 Decennial Census P.L. 94-171 Redistricting Data;

U.S. Census Bureau American Community Survey 5-year estimates, 2012-2016

The target director division population is calculated by dividing the total population by the number of board members.

Table 2. Target Population for Division Scenarios

| Division ID | Division Type | Total 2010 Population | Target Population for Each Division | Division Majority (50% + 1) | Majority of CVAP (50% + 1) |
|-------------|-----------------|-----------------------|-------------------------------------|-----------------------------|----------------------------|
| 5 | 5-Division Plan | 337,151 | 67,430 | 33,716 | 24,435 |

PUBLIC HEARING

BOARD OF DIRECTORS DISTRICTING DRAFT MAPS

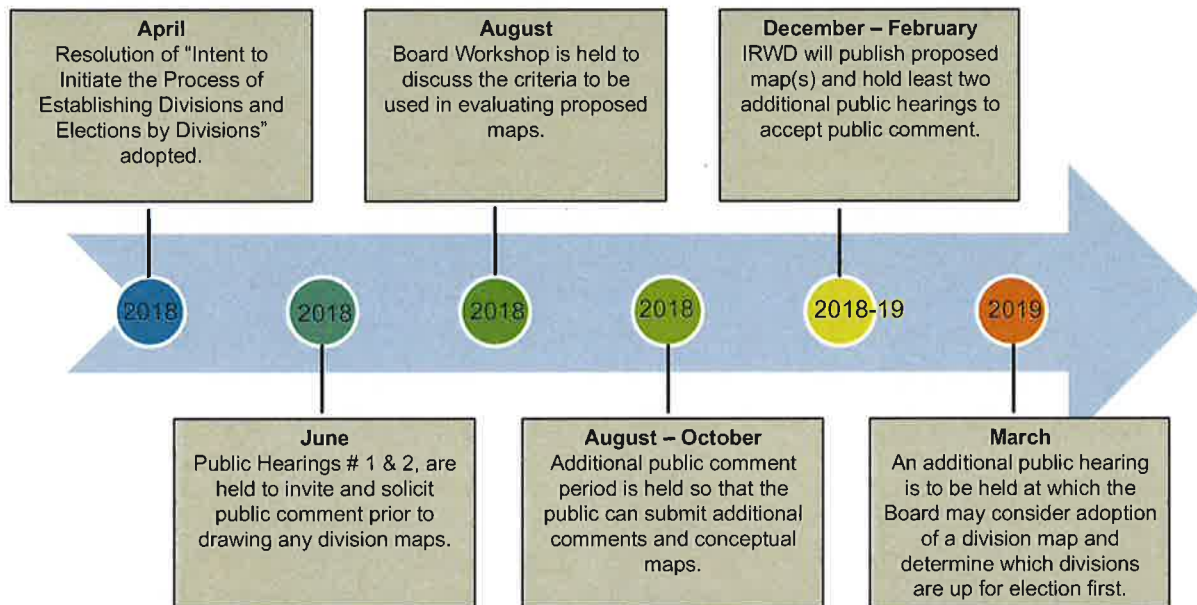
December 10, 2018



Presentation Agenda

- Review of Process and Timeline for Evaluation
- Proposed Sequencing of Elections
- Review the Criteria for Drawing Division Boundaries
- Review of Draft Maps
- Discussion

Process for Evaluating a Change of Election Method and Director Division Boundaries



Goal for Today

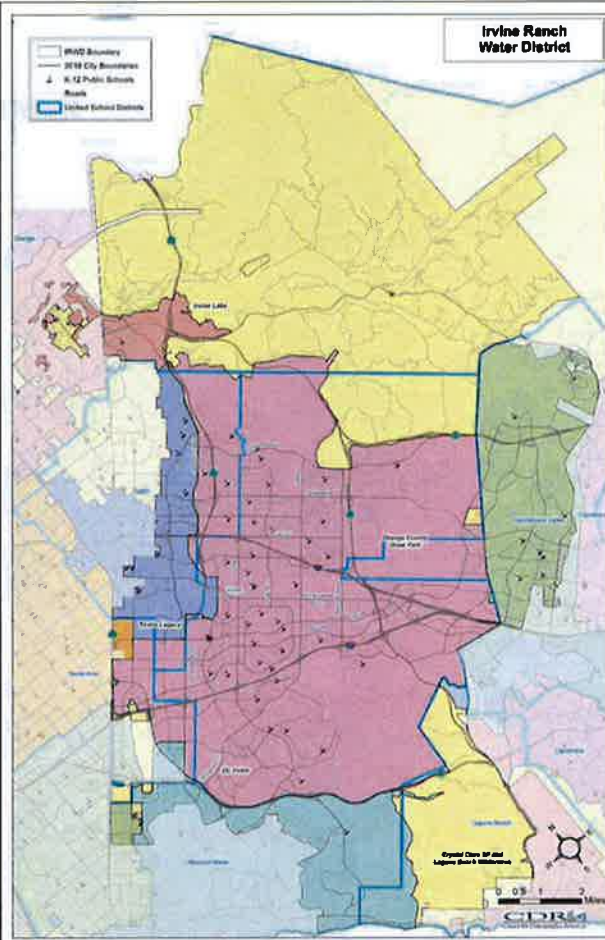
- Review and discuss proposed sequencing of elections.
- Review and discuss the draft maps.
 - Are any of the maps not viable?
 - Are there revisions you would like to see made to the draft maps?
 - Prioritization.

Proposed Sequencing of Elections

- If adopted, new divisions would take effect for the 2020 election.
- Propose to sequence elections with existing staggered terms of board members.
 - 2020: Two divisions up for election
 - 2022: Three divisions up for election

IRWD Criteria for Drawing Division Boundaries

- 1) Each director division shall contain a nearly equal number of inhabitants as reflected in the most recent decennial census.
- 2) Divisions shall be drawn in a manner that complies with the Federal Voting Rights Act.
- 3) Divisions shall consist of contiguous territory.
- 4) Divisions will be in as compact a form as possible given the other criteria set forth.
- 5) Division boundaries will respect communities of interest as much as possible.
- 6) Division boundaries will consider jurisdictional boundaries as much as possible.
- 7) Division boundaries will observe topography and geography such as man-made and natural geographic features insofar as practicable.
- 8) Division boundaries will attempt to allow the voters to retain current Directors if they choose by avoiding placing Directors in the same division insofar as this does not conflict with federal or state law requirements.
- 9) To the extent proposed divisions do not contain equal population as reflected in the most recent decennial census, population growth since the last decennial census and anticipated population growth before the next decennial census may be considered so long as population deviation remains within the parameters allowed by law.



7

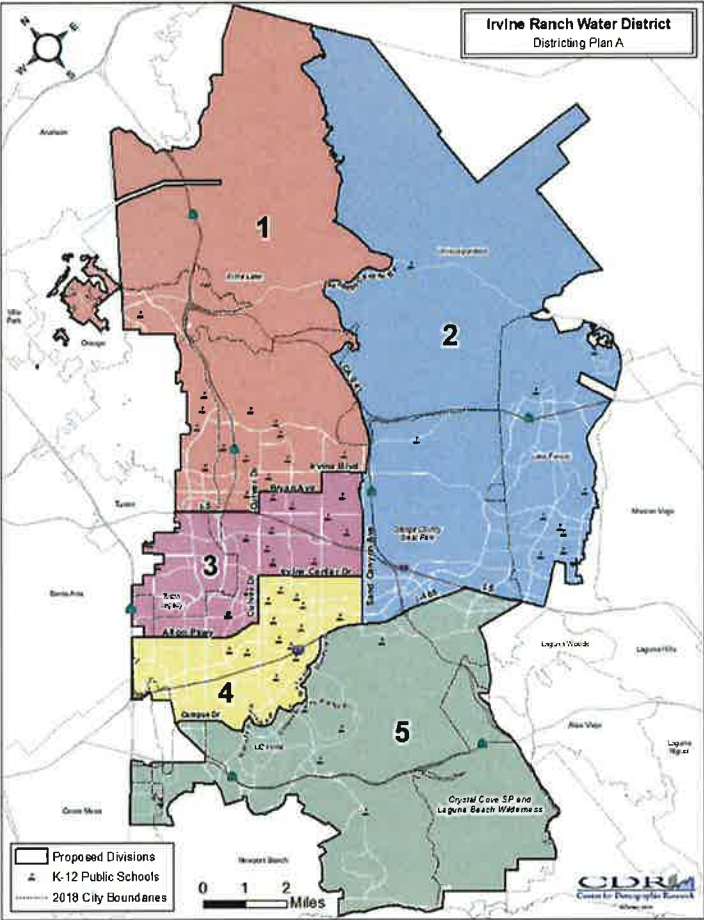
Summary of Plans

| Map | Percent Spread | Contiguous Divisions? | Viable? |
|--------|----------------|-----------------------|---------|
| Plan A | 3.19% | Yes | Yes |
| Plan B | 8.60% | Yes | Yes |
| Plan C | 6.89% | Yes | Yes |
| Plan D | 4.90% | Yes | Yes |

Plan A

Plan A
Percentage Spread:
3.19%

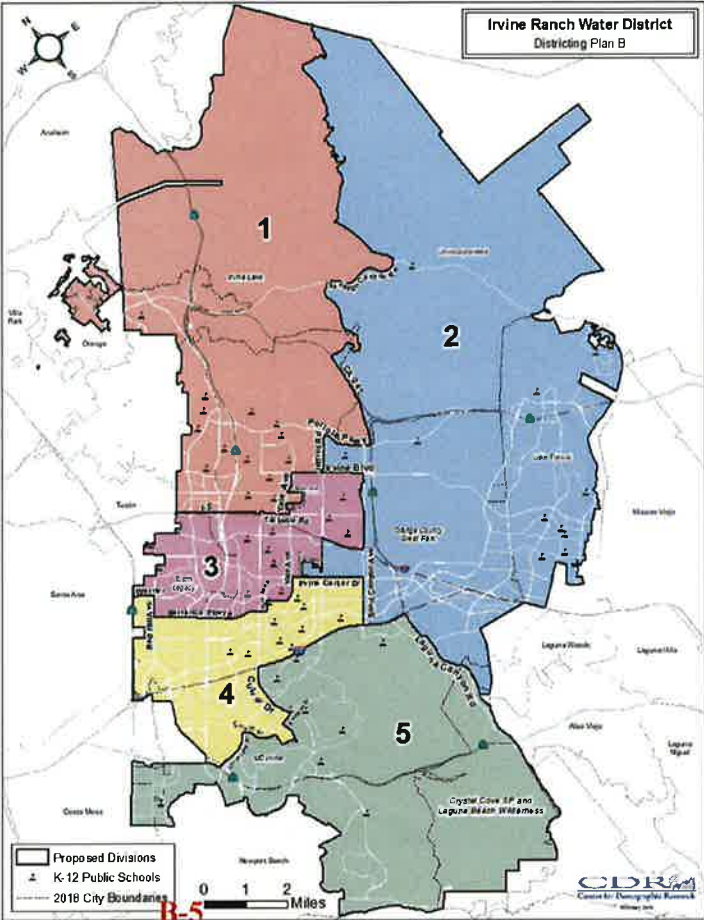
Irvine Ranch Water District



Plan B

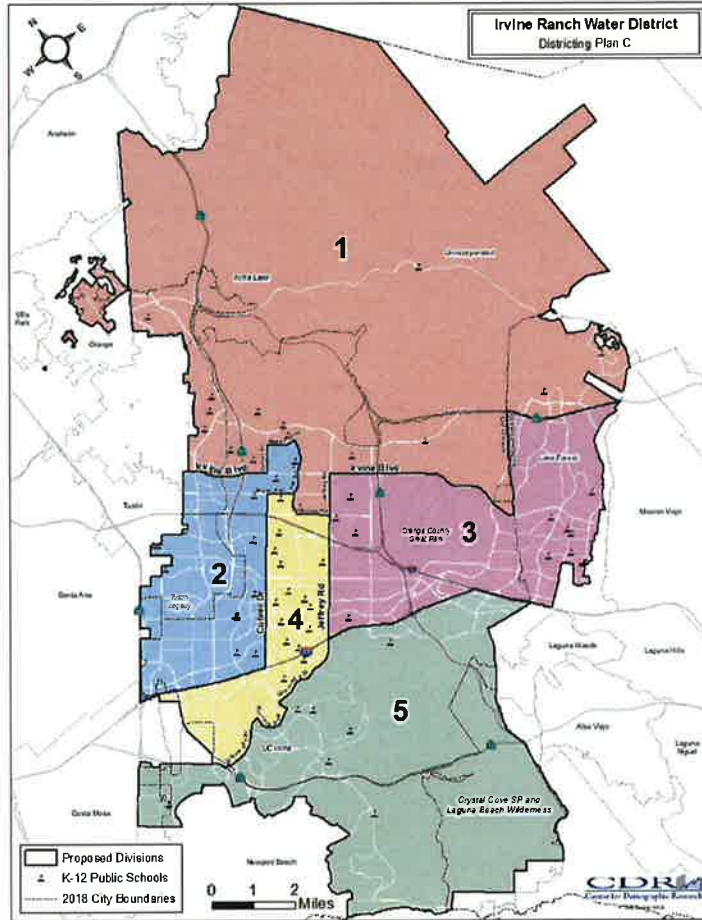
Plan B
Percentage Spread:
8.60%

Irvine Ranch Water District



Plan C

Plan C
Percentage Spread:
6.89%

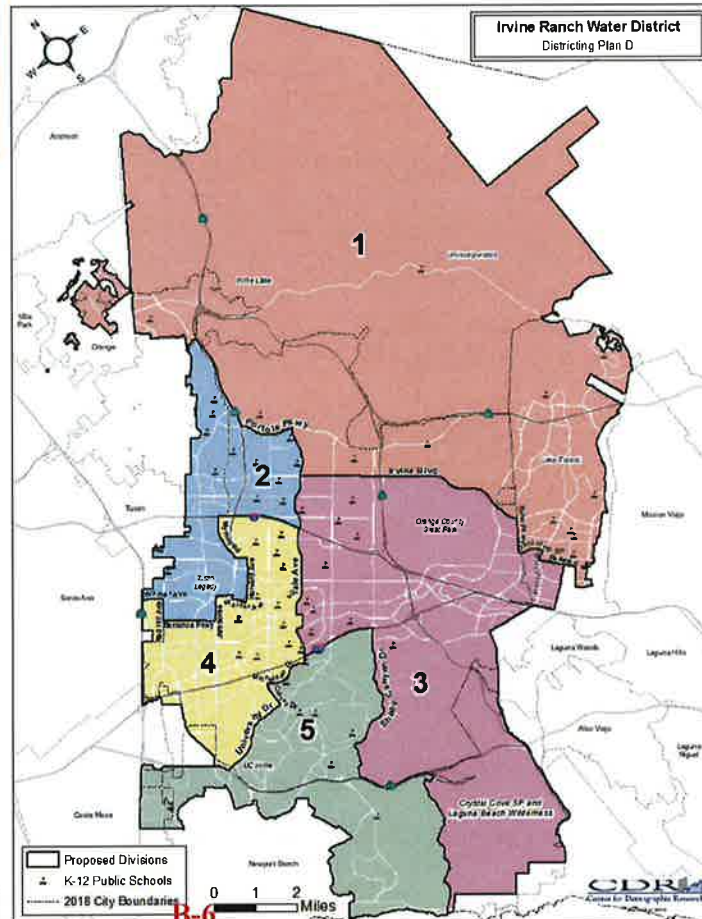


Irvine Ranch Water District

11

Plan D

Plan D
Percentage Spread:
4.90%



Irvine Ranch Water District

12

Plan A

Plan A
Percentage Spread:
3.19%

Irvine Ranch Water District- Plan A

Table 1. Population by Division and Race/Ethnicity

| | DIVISION | | | | | Total |
|---|----------|--------|--------|--------|--------|---------|
| | 1 | 2 | 3 | 4 | 5 | |
| Total Population | 67,229 | 66,316 | 67,365 | 68,468 | 67,773 | 337,151 |
| Hispanic or Latino of any Race | 7,092 | 13,223 | 7,809 | 6,058 | 6,143 | 40,325 |
| Non-Hispanic White | 31,151 | 39,670 | 27,294 | 34,423 | 38,659 | 171,197 |
| Non-Hispanic Asian | 25,013 | 9,693 | 27,673 | 23,253 | 19,143 | 104,775 |
| Non-Hispanic Black or African-American | 993 | 1,060 | 1,284 | 1,123 | 713 | 5,173 |
| All Other Non-Hispanic Races/Ethnicities | 2,980 | 2,670 | 3,305 | 3,611 | 3,115 | 15,681 |
| Population 18 Years and Older | 49,792 | 50,705 | 50,050 | 54,799 | 55,405 | 261,651 |
| Hispanic or Latino of any Race | 4,857 | 8,993 | 5,422 | 4,428 | 4,831 | 28,531 |
| Non-Hispanic White | 24,432 | 31,702 | 21,987 | 28,806 | 31,836 | 138,763 |
| Non-Hispanic Asian | 18,245 | 7,661 | 20,746 | 18,347 | 16,061 | 81,062 |
| Non-Hispanic Black or African-American | 751 | 855 | 933 | 888 | 602 | 4,029 |
| All Other Non-Hispanic Races/Ethnicities | 1,507 | 1,494 | 1,860 | 2,330 | 2,075 | 9,266 |
| Citizen Voting Age Population (CVAP) | 47,635 | 49,668 | 46,432 | 48,938 | 51,670 | 244,343 |
| Hispanic or Latino of any Race | 4,875 | 6,338 | 5,553 | 4,097 | 6,550 | 27,413 |
| Non-Hispanic White | 21,773 | 32,994 | 20,425 | 29,094 | 31,224 | 135,510 |
| Non-Hispanic Asian | 18,195 | 7,835 | 17,550 | 13,355 | 11,796 | 68,731 |
| Non-Hispanic Black or African-American | 1,093 | 1,081 | 1,274 | 950 | 462 | 4,810 |
| All Other Non-Hispanic Races/Ethnicities | 1,899 | 1,420 | 1,680 | 1,442 | 1,638 | 7,879 |
| Target Division Population | 67,430 | | | | | |
| Division Difference from Target Population | -201 | -1,114 | -65 | 1,038 | 343 | |
| Percent Difference from Target Population | -0.30% | -1.65% | -0.10% | 1.54% | 0.51% | |
| Percentage Spread | 3.19% | | | | | |

Table 2. Share of Division Populations

| | DIVISION | | | | |
|---|----------|--------|--------|--------|--------|
| | 1 | 2 | 3 | 4 | 5 |
| Total Population | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Hispanic or Latino of any Race | 10.5% | 19.9% | 11.6% | 8.8% | 9.1% |
| Non-Hispanic White | 46.3% | 59.8% | 40.5% | 50.3% | 57.0% |
| Non-Hispanic Asian | 37.2% | 14.6% | 41.1% | 34.0% | 28.2% |
| Non-Hispanic Black or African-American | 1.5% | 1.6% | 1.9% | 1.6% | 1.1% |
| All Other Non-Hispanic Races/Ethnicities | 4.4% | 4.0% | 4.9% | 5.3% | 4.6% |
| Population 18 Years and Older | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Hispanic or Latino of any Race | 9.8% | 17.7% | 10.6% | 8.1% | 8.7% |
| Non-Hispanic White | 49.1% | 62.5% | 43.2% | 52.6% | 57.5% |
| Non-Hispanic Asian | 36.0% | 15.1% | 40.7% | 33.5% | 29.0% |
| Non-Hispanic Black or African-American | 1.5% | 1.7% | 1.8% | 1.6% | 1.1% |
| All Other Non-Hispanic Races/Ethnicities | 3.0% | 2.9% | 3.7% | 4.3% | 3.7% |
| Citizen Voting Age Population (CVAP) | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Hispanic or Latino of any Race | 10.2% | 12.8% | 12.0% | 8.4% | 12.7% |
| Non-Hispanic White | 45.7% | 66.4% | 44.0% | 59.5% | 60.4% |
| Non-Hispanic Asian | 38.2% | 15.8% | 37.8% | 27.3% | 22.8% |
| Non-Hispanic Black or African-American | 2.3% | 2.2% | 2.6% | 1.9% | 0.9% |
| All Other Non-Hispanic Races/Ethnicities | 3.6% | 2.9% | 3.6% | 2.9% | 3.2% |

Plan B

Plan B
Percentage Spread:
8.60%

Irvine Ranch Water District- Plan B

Table 1. Population by Division and Race/Ethnicity

| | DIVISION | | | | | Total |
|---|----------|--------|--------|--------|--------|---------|
| | 1 | 2 | 3 | 4 | 5 | |
| Total Population | 67,094 | 68,886 | 65,550 | 64,912 | 70,709 | 337,151 |
| Hispanic or Latino of any Race | 7,047 | 13,668 | 7,409 | 6,362 | 6,039 | 40,325 |
| Non-Hispanic White | 30,783 | 41,003 | 27,634 | 30,375 | 41,402 | 171,197 |
| Non-Hispanic Asian | 25,335 | 10,516 | 26,224 | 23,282 | 19,318 | 104,775 |
| Non-Hispanic Black or African-American | 962 | 1,114 | 1,143 | 1,245 | 709 | 5,173 |
| All Other Non-Hispanic Races/Ethnicities | 2,967 | 2,785 | 3,140 | 3,548 | 3,241 | 15,681 |
| Population 18 Years and Older | 49,410 | 52,802 | 49,516 | 52,774 | 52,149 | 261,651 |
| Hispanic or Latino of any Race | 4,792 | 9,192 | 5,143 | 4,685 | 4,719 | 28,531 |
| Non-Hispanic White | 23,924 | 32,846 | 22,260 | 25,748 | 33,975 | 138,763 |
| Non-Hispanic Asian | 18,483 | 8,254 | 19,577 | 18,924 | 15,784 | 81,062 |
| Non-Hispanic Black or African-American | 725 | 900 | 815 | 992 | 597 | 4,029 |
| All Other Non-Hispanic Races/Ethnicities | 1,476 | 1,570 | 1,721 | 2,425 | 2,074 | 9,266 |
| Citizen Voting Age Population (CVAP) | 44,561 | 52,099 | 47,595 | 46,874 | 53,214 | 244,343 |
| Hispanic or Latino of any Race | 4,486 | 6,512 | 5,471 | 4,698 | 6,046 | 27,413 |
| Non-Hispanic White | 20,375 | 34,244 | 21,111 | 26,098 | 33,682 | 135,510 |
| Non-Hispanic Asian | 17,041 | 8,681 | 18,035 | 13,387 | 11,587 | 68,731 |
| Non-Hispanic Black or African-American | 1,085 | 1,128 | 1,197 | 1,008 | 392 | 4,810 |
| All Other Non-Hispanic Races/Ethnicities | 1,574 | 1,534 | 1,781 | 1,483 | 1,507 | 7,879 |
| Target Division Population | 67,430 | | | | | |
| Division Difference from Target Population | -336 | 1,456 | -1,880 | -2,518 | 3,279 | |
| Percent Difference from Target Population | -0.50% | 2.16% | -2.79% | -3.73% | 4.86% | |
| Percentage Spread | 8.60% | | | | | |

Table 2. Share of Division Populations

| | DIVISION | | | | |
|---|----------|--------|--------|--------|--------|
| | 1 | 2 | 3 | 4 | 5 |
| Total Population | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Hispanic or Latino of any Race | 10.5% | 19.6% | 11.3% | 9.8% | 8.5% |
| Non-Hispanic White | 45.9% | 59.5% | 42.2% | 46.8% | 58.6% |
| Non-Hispanic Asian | 37.8% | 15.3% | 40.0% | 36.0% | 27.3% |
| Non-Hispanic Black or African-American | 1.4% | 1.6% | 1.7% | 1.9% | 1.0% |
| All Other Non-Hispanic Races/Ethnicities | 4.4% | 4.0% | 4.8% | 5.5% | 4.6% |
| Population 18 Years and Older | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Hispanic or Latino of any Race | 9.7% | 17.4% | 10.4% | 8.9% | 8.3% |
| Non-Hispanic White | 48.4% | 62.2% | 45.0% | 48.8% | 59.4% |
| Non-Hispanic Asian | 37.4% | 15.7% | 39.5% | 35.9% | 27.6% |
| Non-Hispanic Black or African-American | 1.5% | 1.7% | 1.6% | 1.9% | 1.0% |
| All Other Non-Hispanic Races/Ethnicities | 3.0% | 3.0% | 3.5% | 4.6% | 3.6% |
| Citizen Voting Age Population (CVAP) | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Hispanic or Latino of any Race | 10.1% | 12.5% | 11.5% | 10.4% | 11.4% |
| Non-Hispanic White | 45.7% | 65.7% | 44.4% | 55.7% | 63.3% |
| Non-Hispanic Asian | 38.2% | 16.7% | 37.9% | 28.6% | 21.8% |
| Non-Hispanic Black or African-American | 2.4% | 2.2% | 2.5% | 2.2% | 0.7% |
| All Other Non-Hispanic Races/Ethnicities | 3.5% | 2.9% | 3.7% | 3.2% | 2.8% |

Plan C

Plan C
Percentage Spread:
6.89%

Irvine Ranch Water District-Plan C

Table 1. Population by Division and Race/Ethnicity

| | DIVISION | | | | | Total |
|---|----------|--------|--------|--------|--------|----------------|
| | 1 | 2 | 3 | 4 | 5 | |
| Total Population | 67,287 | 68,734 | 64,489 | 67,504 | 69,137 | 337,151 |
| Hispanic or Latino of any Race | 7,207 | 8,366 | 11,970 | 6,565 | 6,217 | 40,325 |
| Non-Hispanic White | 34,971 | 27,775 | 34,295 | 34,978 | 39,178 | 171,197 |
| Non-Hispanic Asian | 21,208 | 27,914 | 14,497 | 21,318 | 19,836 | 104,775 |
| Non-Hispanic Black or African-American | 882 | 1,285 | 1,065 | 1,217 | 724 | 5,173 |
| All Other Non-Hispanic Races/Ethnicities | 3,019 | 3,394 | 2,662 | 3,426 | 3,180 | 15,681 |
| Population 18 Years and Older | 49,198 | 52,320 | 49,821 | 53,898 | 56,414 | 261,651 |
| Hispanic or Latino of any Race | 4,994 | 5,738 | 8,157 | 4,759 | 4,883 | 28,531 |
| Non-Hispanic White | 26,753 | 22,422 | 28,090 | 29,237 | 32,261 | 138,763 |
| Non-Hispanic Asian | 15,298 | 21,233 | 11,188 | 16,792 | 16,551 | 81,062 |
| Non-Hispanic Black or African-American | 681 | 988 | 846 | 904 | 610 | 4,029 |
| All Other Non-Hispanic Races/Ethnicities | 1,472 | 1,939 | 1,540 | 2,206 | 2,109 | 9,266 |
| Citizen Voting Age Population (CVAP) | 49,766 | 45,063 | 47,919 | 49,264 | 52,331 | 244,343 |
| Hispanic or Latino of any Race | 4,740 | 5,511 | 5,614 | 4,908 | 6,640 | 27,413 |
| Non-Hispanic White | 25,854 | 19,822 | 29,236 | 29,019 | 31,579 | 135,510 |
| Non-Hispanic Asian | 16,698 | 16,710 | 10,470 | 12,856 | 11,997 | 68,731 |
| Non-Hispanic Black or African-American | 889 | 1,160 | 1,328 | 971 | 462 | 4,810 |
| All Other Non-Hispanic Races/Ethnicities | 1,585 | 1,860 | 1,271 | 1,510 | 1,653 | 7,879 |
| Target Division Population | 67,430 | | | | | |
| Division Difference from Target Population | -143 | 1,304 | -2,941 | 74 | 1,707 | |
| Percent Difference from Target Population | -0.21% | 1.93% | -4.36% | 0.11% | 2.53% | |
| Percentage Spread | 6.89% | | | | | |

Table 2. Share of Division Populations

| | DIVISION | | | | |
|---|----------|--------|--------|--------|--------|
| | 1 | 2 | 3 | 4 | 5 |
| Total Population | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Hispanic or Latino of any Race | 10.7% | 12.2% | 18.6% | 9.7% | 9.0% |
| Non-Hispanic White | 52.0% | 40.4% | 53.2% | 51.8% | 56.7% |
| Non-Hispanic Asian | 31.5% | 40.6% | 22.5% | 31.6% | 28.7% |
| Non-Hispanic Black or African-American | 1.3% | 1.9% | 1.7% | 1.8% | 1.0% |
| All Other Non-Hispanic Races/Ethnicities | 4.5% | 4.9% | 4.1% | 5.1% | 4.6% |
| Population 18 Years and Older | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Hispanic or Latino of any Race | 10.2% | 11.0% | 16.4% | 8.8% | 8.7% |
| Non-Hispanic White | 54.4% | 42.5% | 56.4% | 54.2% | 57.2% |
| Non-Hispanic Asian | 31.1% | 40.6% | 22.5% | 31.2% | 29.3% |
| Non-Hispanic Black or African-American | 1.4% | 1.9% | 1.7% | 1.7% | 1.1% |
| All Other Non-Hispanic Races/Ethnicities | 3.0% | 3.7% | 3.1% | 4.1% | 3.7% |
| Citizen Voting Age Population (CVAP) | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Hispanic or Latino of any Race | 9.5% | 12.2% | 11.7% | 10.0% | 12.7% |
| Non-Hispanic White | 52.0% | 44.0% | 61.0% | 58.9% | 60.3% |
| Non-Hispanic Asian | 33.6% | 37.1% | 21.8% | 26.1% | 22.9% |
| Non-Hispanic Black or African-American | 1.8% | 2.6% | 2.8% | 2.0% | 0.9% |
| All Other Non-Hispanic Races/Ethnicities | 3.2% | 4.1% | 2.7% | 3.1% | 3.2% |

Plan D

Plan D
Percentage Spread:
4.90%

Irvine Ranch Water District-Plan D

Table 1. Population by Division and Race/Ethnicity

| | DIVISION | | | | | Total |
|---|----------|--------|--------|--------|--------|----------------|
| | 1 | 2 | 3 | 4 | 5 | |
| Total Population | 68,657 | 67,602 | 65,350 | 67,537 | 68,006 | 337,151 |
| Hispanic or Latino of any Race | 12,543 | 7,853 | 7,213 | 6,607 | 6,109 | 40,325 |
| Non-Hispanic White | 41,197 | 28,932 | 30,824 | 30,538 | 39,706 | 171,197 |
| Non-Hispanic Asian | 11,168 | 26,688 | 23,012 | 25,545 | 18,352 | 104,775 |
| Non-Hispanic Black or African-American | 1,026 | 1,045 | 1,082 | 1,310 | 710 | 5,173 |
| All Other Non-Hispanic Races/Ethnicities | 2,722 | 3,094 | 3,219 | 3,527 | 3,118 | 15,681 |
| Population 18 Years and Older | 51,839 | 49,715 | 50,426 | 53,280 | 56,391 | 261,651 |
| Hispanic or Latino of any Race | 8,542 | 5,293 | 5,073 | 4,749 | 4,874 | 28,531 |
| Non-Hispanic White | 32,446 | 22,525 | 25,379 | 25,332 | 33,081 | 138,763 |
| Non-Hispanic Asian | 8,565 | 19,542 | 17,249 | 19,971 | 15,735 | 81,062 |
| Non-Hispanic Black or African-American | 811 | 774 | 834 | 1,009 | 601 | 4,029 |
| All Other Non-Hispanic Races/Ethnicities | 1,475 | 1,581 | 1,891 | 2,219 | 2,100 | 9,266 |
| Citizen Voting Age Population (CVAP) | 50,644 | 44,570 | 50,582 | 45,490 | 53,057 | 244,343 |
| Hispanic or Latino of any Race | 6,593 | 4,568 | 4,832 | 4,656 | 6,764 | 27,413 |
| Non-Hispanic White | 32,329 | 19,404 | 26,910 | 24,296 | 32,571 | 135,510 |
| Non-Hispanic Asian | 9,180 | 17,843 | 16,566 | 13,602 | 11,540 | 68,731 |
| Non-Hispanic Black or African-American | 967 | 1,124 | 1,084 | 1,173 | 462 | 4,810 |
| All Other Non-Hispanic Races/Ethnicities | 1,575 | 1,631 | 1,190 | 1,763 | 1,720 | 7,879 |
| Target Division Population | 67,430 | | | | | |
| Division Difference from Target Population | 1,227 | 172 | -2,080 | 107 | 575 | |
| Percent Difference from Target Population | 1.82% | 0.25% | -3.08% | 0.16% | 0.85% | |
| Percentage Spread | 4.90% | | | | | |

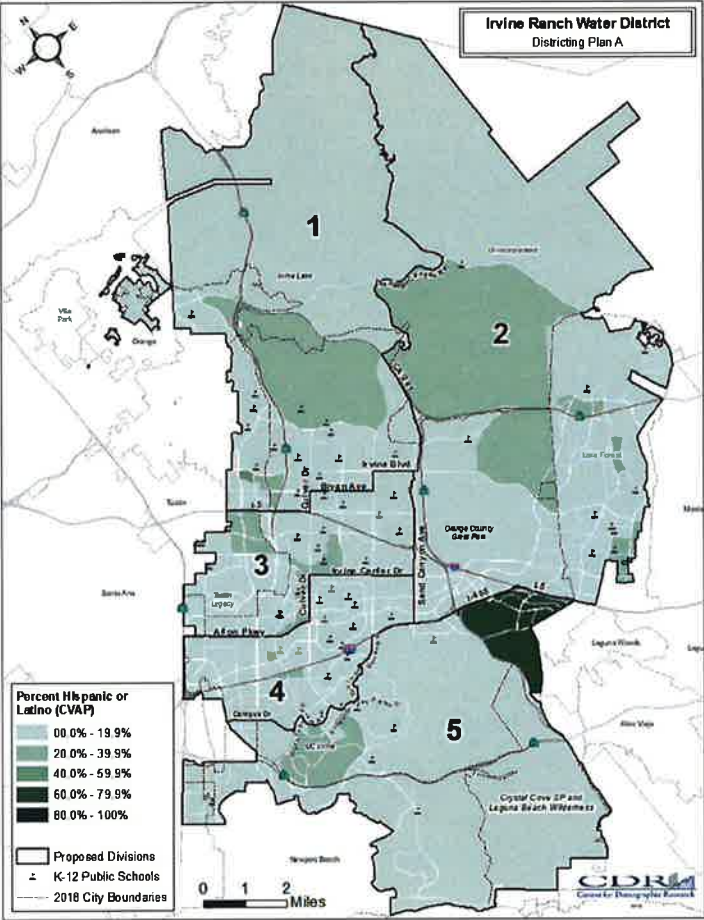
Table 2. Share of Division Populations

| | DIVISION | | | | |
|---|----------|--------|--------|--------|--------|
| | 1 | 2 | 3 | 4 | 5 |
| Total Population | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Hispanic or Latino of any Race | 18.3% | 11.6% | 11.0% | 9.8% | 9.0% |
| Non-Hispanic White | 60.0% | 42.8% | 47.2% | 45.2% | 58.4% |
| Non-Hispanic Asian | 16.3% | 39.5% | 35.2% | 37.8% | 27.0% |
| Non-Hispanic Black or African-American | 1.5% | 1.5% | 1.7% | 1.9% | 1.0% |
| All Other Non-Hispanic Races/Ethnicities | 4.0% | 4.6% | 4.9% | 5.2% | 4.6% |
| Population 18 Years and Older | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Hispanic or Latino of any Race | 16.5% | 10.6% | 10.1% | 8.9% | 8.6% |
| Non-Hispanic White | 62.6% | 45.3% | 50.3% | 47.5% | 58.7% |
| Non-Hispanic Asian | 16.5% | 39.3% | 34.2% | 37.5% | 27.9% |
| Non-Hispanic Black or African-American | 1.6% | 1.6% | 1.7% | 1.9% | 1.1% |
| All Other Non-Hispanic Races/Ethnicities | 2.8% | 3.2% | 3.8% | 4.2% | 3.7% |
| Citizen Voting Age Population (CVAP) | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Hispanic or Latino of any Race | 13.0% | 10.2% | 9.6% | 10.2% | 12.7% |
| Non-Hispanic White | 63.8% | 43.5% | 53.2% | 53.4% | 61.4% |
| Non-Hispanic Asian | 18.1% | 40.0% | 32.8% | 29.9% | 21.8% |
| Non-Hispanic Black or African-American | 1.9% | 2.5% | 2.1% | 2.6% | 0.9% |
| All Other Non-Hispanic Races/Ethnicities | 3.1% | 3.7% | 2.4% | 3.9% | 3.2% |

Plan A

Plan A
 Percentage Spread:
 3.19%

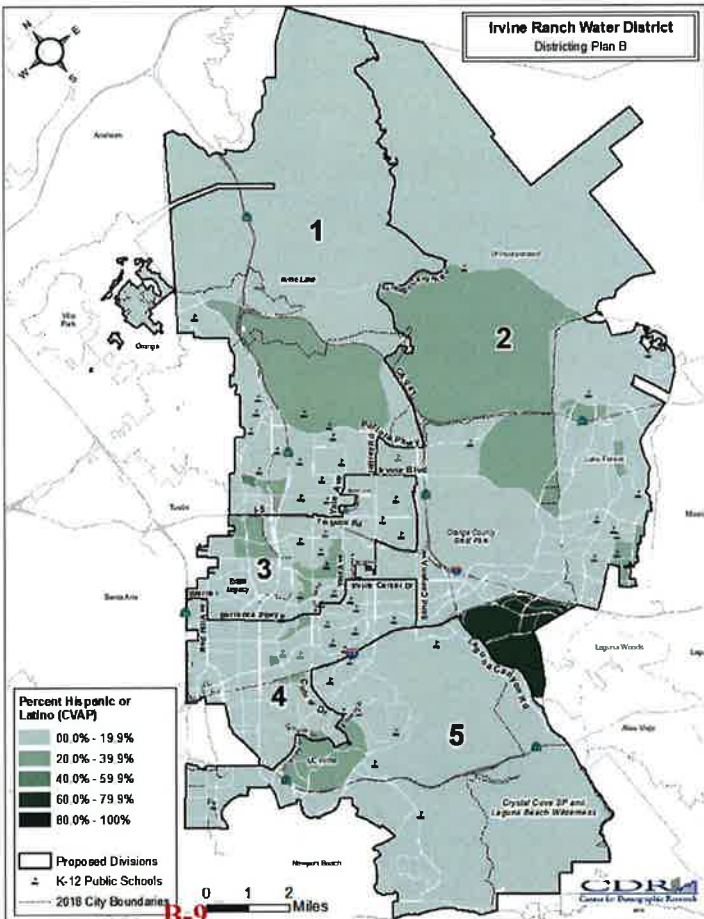
Largest Hispanic share of CVAP:
 12.8%- Division 2
 12.7%- Division 5



Plan B

Plan B
 Percentage Spread:
 8.60%

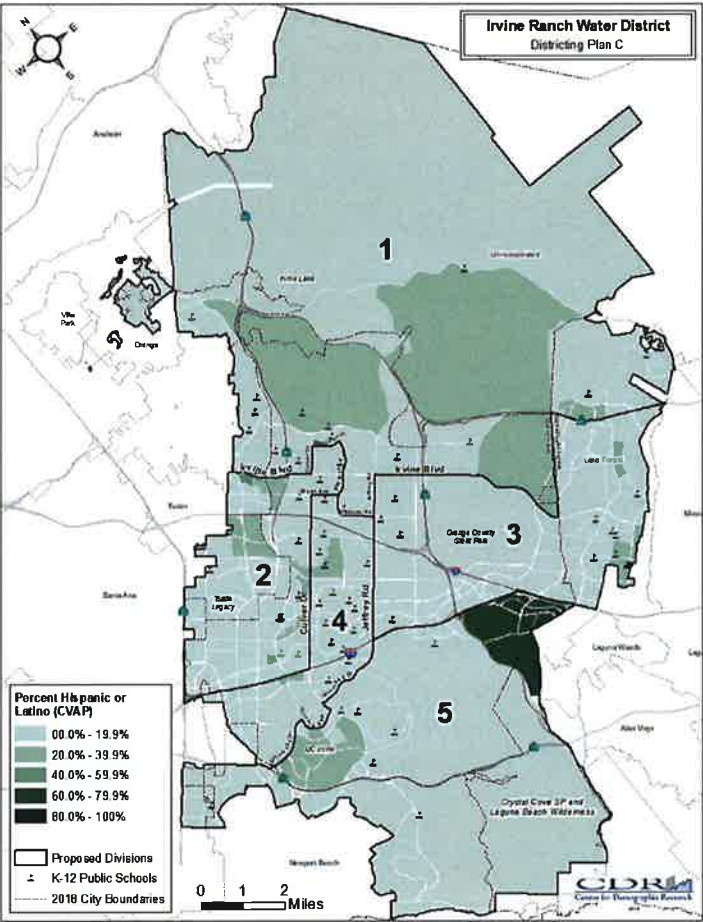
Largest Hispanic share of CVAP:
 12.5%- Division 2
 11.5%- Division 3



Plan C

Plan C
 Percentage Spread:
 6.89%

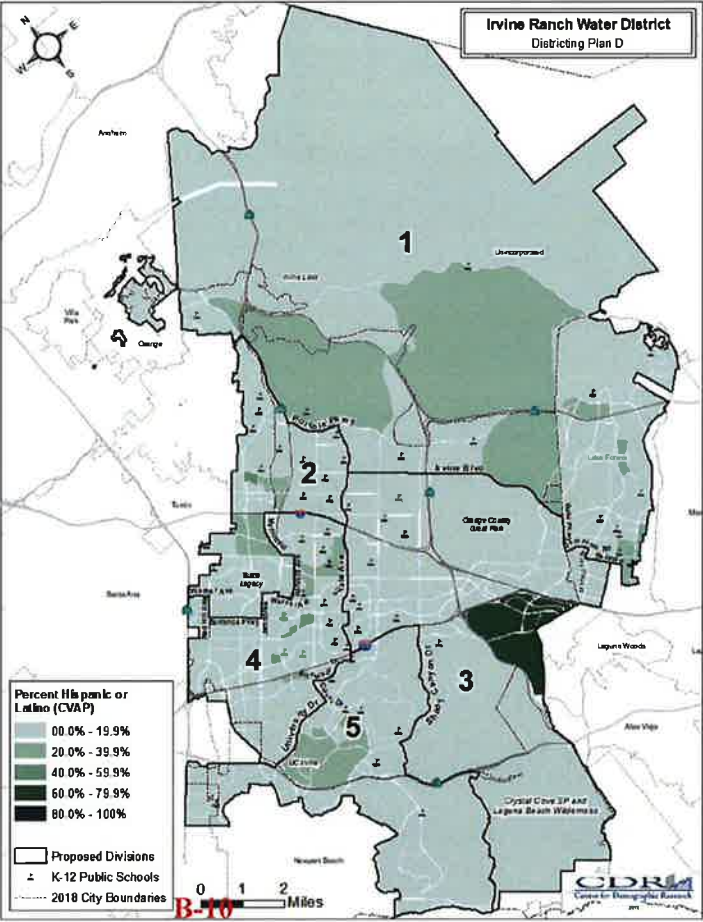
Largest Hispanic
 share of CVAP:
 12.7%- Division 5
 12.2%- Division 2



Plan D

Plan D
 Percentage Spread:
 4.90%

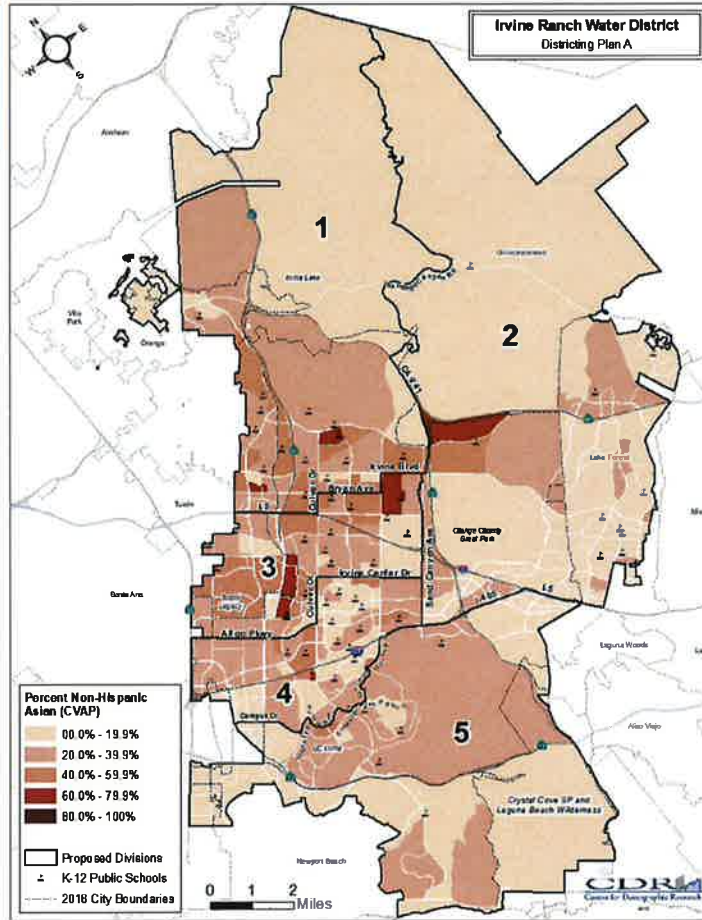
Largest Hispanic
 share of CVAP:
 13.0%- Division 1
 12.7%- Division 5



Plan A

Plan A
 Percentage Spread:
 3.19%

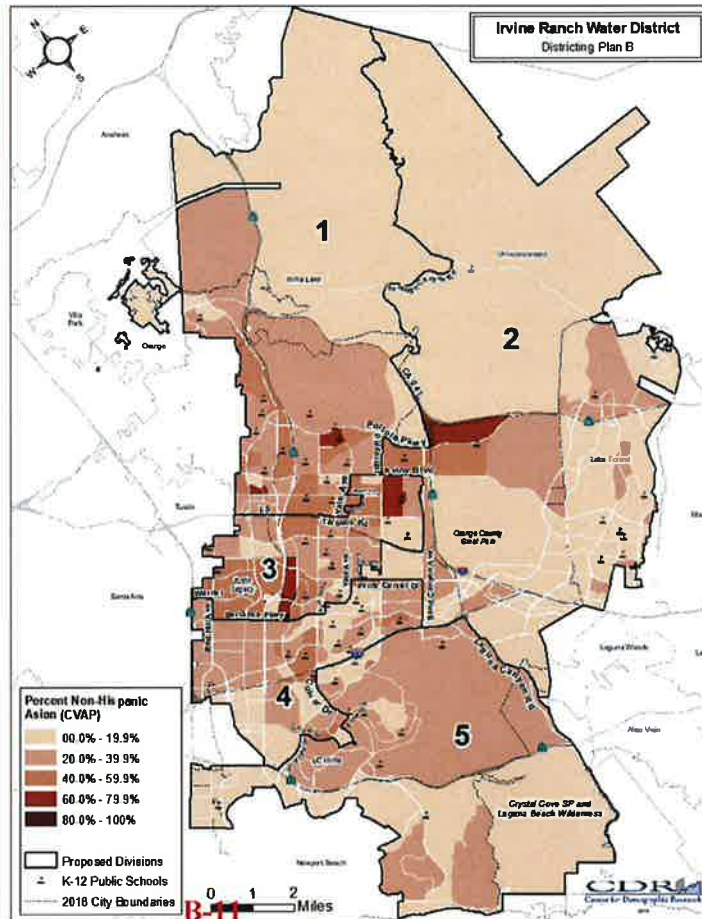
Largest Non-Hispanic Asian share of CVAP:
 38.2%- Division 1
 37.8%- Division 3



Plan B

Plan B
 Percentage Spread:
 8.60%

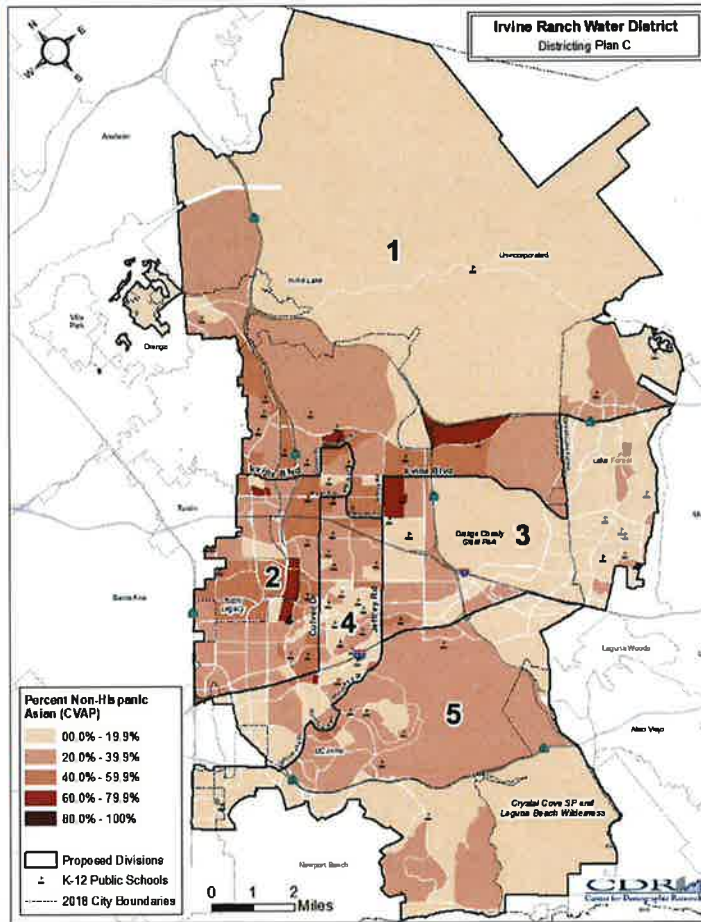
Largest Non-Hispanic Asian share of CVAP:
 38.2%- Division 1
 37.9%- Division 3



Plan C

Plan C
Percentage Spread:
6.89%

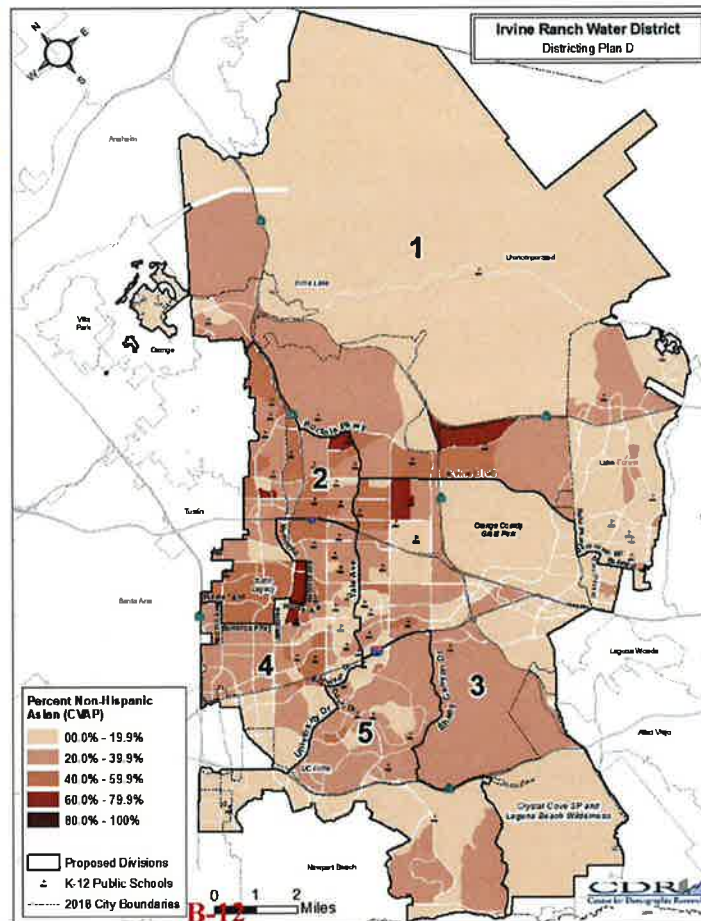
Largest Non-Hispanic Asian share of CVAP:
37.1%- Division 2
33.6%- Division 1



Plan D

Plan D
Percentage Spread:
4.90%

Largest Non-Hispanic Asian share of CVAP:
40.0%- Division 2
32.8%- Division 3



Questions & Public Comment



Irvine Ranch Water District

25

EXHIBIT "C"

Public Comment Submitted to the Irvine Ranch Water District on the Composition of Possible Divisions August 15 – October 15, 2018

| Author | Comment Submitted |
|----------------|--|
| Andrew Pollard | <p>The proposed divisions were created as carefully as possible to minimize deviations from the target population amounts, while attempting to maintain well-established neighborhoods under a single director (Woodbridge, UC Irvine, Lake Forest, Tustin Ranch). Due to the nature of the population data, some neighborhoods had to be split between two directors to avoid an imbalance in the number of registered voters.</p> <p>From a geography perspective, I attempted to divide the overall land area as much as possible so that a single director is not left with an oversized district, while others are responsible for more compact districts, as this could potentially be viewed as an unfair advantage in an election. This is reflected in the division of the unincorporated area at the northeast end of the IRWD service area.</p> <p>Where possible, major streets and highways served as dividing lines between the various district areas. I attempted to keep the lines as clean and straight as possible, while minimizing the amount of zig-zags. I figured that this would be beneficial to the overall compactness and simplicity of the map.</p> <p>Lastly, this proposed breakup of the IRWD service area is not submitted in support or against the proposed move to district elections.</p> <p>Thank you, Andrew Pollard</p> |

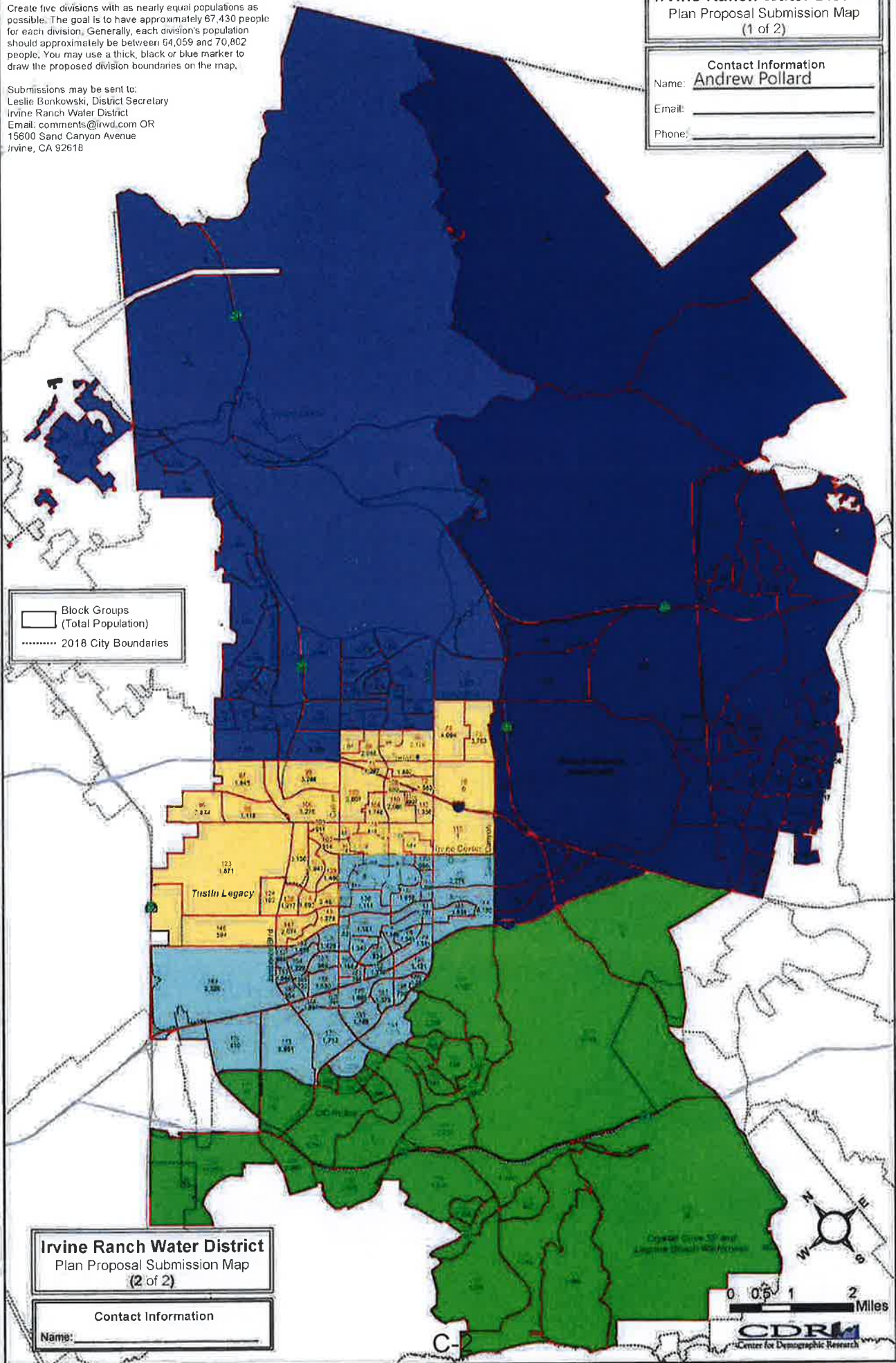
Create five divisions with as nearly equal populations as possible. The goal is to have approximately 67,430 people for each division. Generally, each division's population should approximately be between 64,059 and 70,802 people. You may use a thick, black or blue marker to draw the proposed division boundaries on the map.

Submissions may be sent to:
 Leslie Bonkowski, District Secretary
 Irvine Ranch Water District
 Email: comments@irwd.com OR
 15600 Sand Canyon Avenue
 Irvine, CA 92618

Irvine Ranch Water District
 Plan Proposal Submission Map
 (1 of 2)

Contact Information
 Name: Andrew Pollard
 Email: _____
 Phone: _____

Block Groups
 (Total Population)
 2018 City Boundaries



Irvine Ranch Water District
 Plan Proposal Submission Map
 (2 of 2)

Contact Information
 Name: _____

0 0.5 1 2 Miles

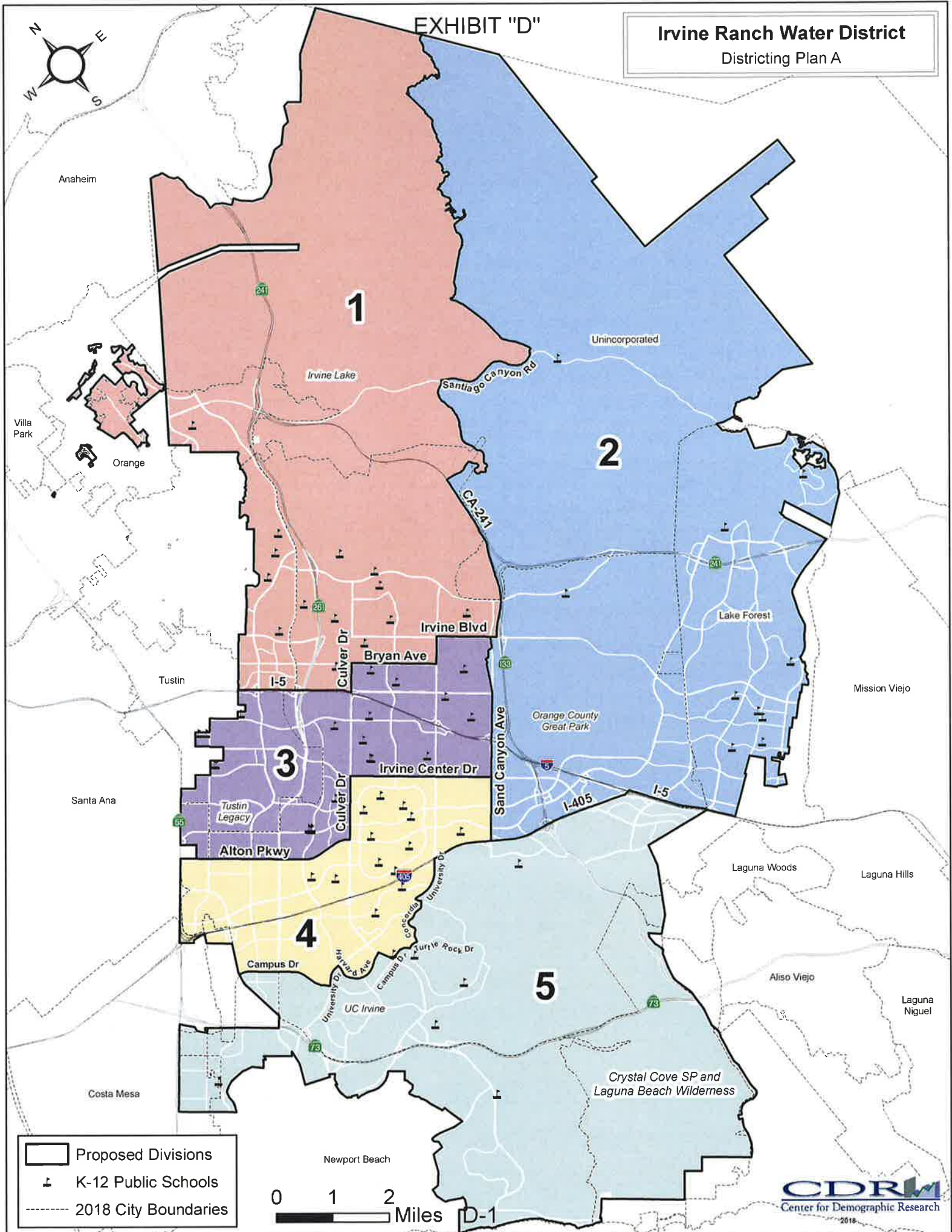
CDR
 Center for Demographic Research

**Public Comment Submitted to the Irvine Ranch Water District
on the Composition of Possible Divisions
August 15 – October 15, 2018**

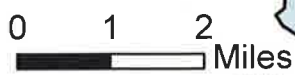
| Author | Comment Submitted |
|--|--|
| Zeke Hernandez on behalf of California LULAC/Santa Ana LULAC Council #147 | This districting plan provides an opportunity for a Latino candidate to be elected to the IRWD board because the northeast area of the District that has a strong Latino voting block is not splintered. |

EXHIBIT "D"

Irvine Ranch Water District
Districting Plan A



Proposed Divisions
 K-12 Public Schools
 2018 City Boundaries



D-1

Irvine Ranch Water District- Plan A

Table 1. Population by Division and Race/Ethnicity

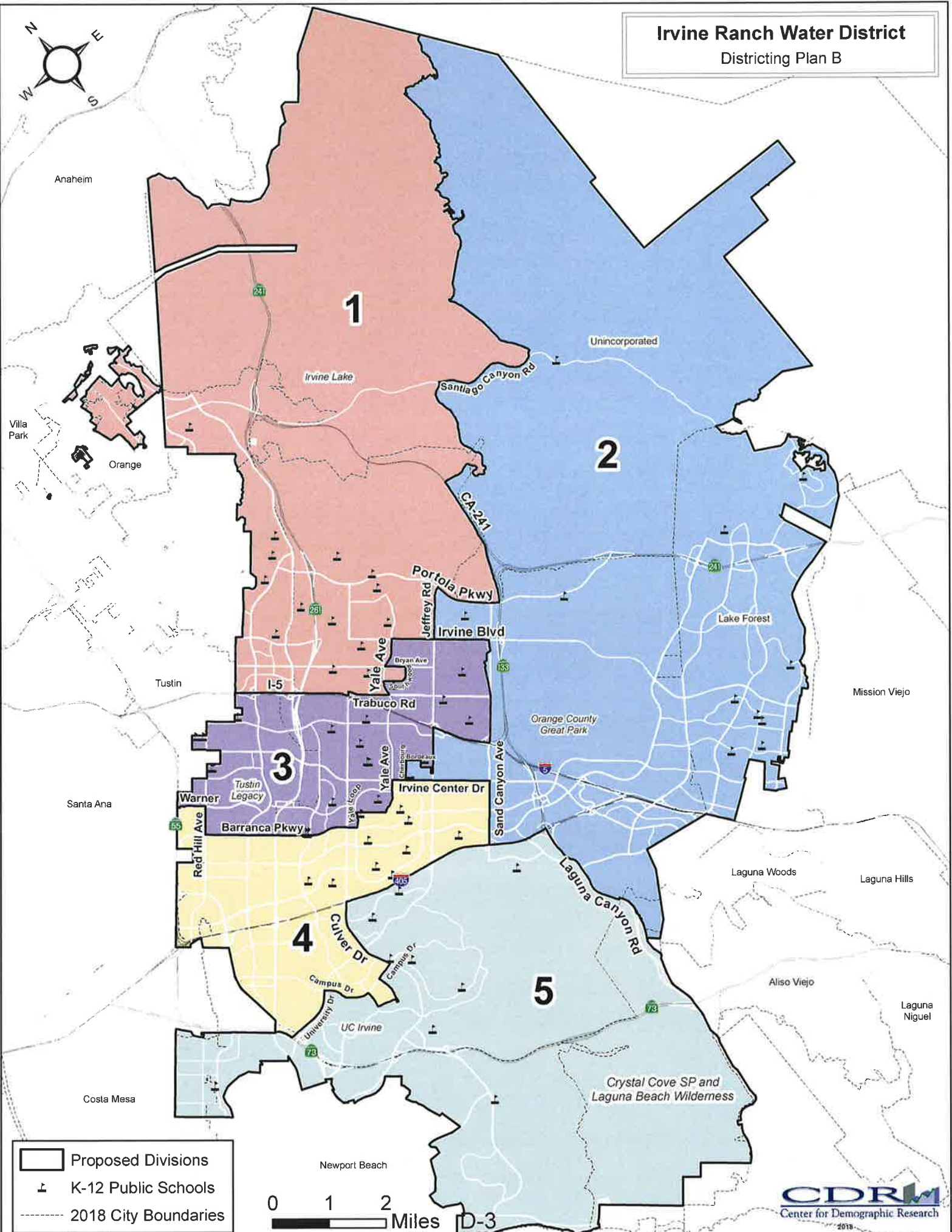
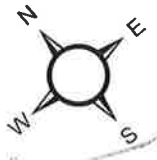
| | DIVISION | | | | | Total |
|---|----------|--------|--------|--------|--------|----------------|
| | 1 | 2 | 3 | 4 | 5 | |
| Total Population | 67,229 | 66,316 | 67,365 | 68,468 | 67,773 | 337,151 |
| Hispanic or Latino of any Race | 7,092 | 13,223 | 7,809 | 6,058 | 6,143 | 40,325 |
| Non-Hispanic White | 31,151 | 39,670 | 27,294 | 34,423 | 38,659 | 171,197 |
| Non-Hispanic Asian | 25,013 | 9,693 | 27,673 | 23,253 | 19,143 | 104,775 |
| Non-Hispanic Black or African-American | 993 | 1,060 | 1,284 | 1,123 | 713 | 5,173 |
| All Other Non-Hispanic Races/Ethnicities | 2,980 | 2,670 | 3,305 | 3,611 | 3,115 | 15,681 |
| Population 18 Years and Older | 49,792 | 50,705 | 50,950 | 54,799 | 55,405 | 261,651 |
| Hispanic or Latino of any Race | 4,857 | 8,993 | 5,422 | 4,428 | 4,831 | 28,531 |
| Non-Hispanic White | 24,432 | 31,702 | 21,987 | 28,806 | 31,836 | 138,763 |
| Non-Hispanic Asian | 18,245 | 7,661 | 20,748 | 18,347 | 16,061 | 81,062 |
| Non-Hispanic Black or African-American | 751 | 855 | 933 | 888 | 602 | 4,029 |
| All Other Non-Hispanic Races/Ethnicities | 1,507 | 1,494 | 1,860 | 2,330 | 2,075 | 9,266 |
| Citizen Voting Age Population (CVAP) | 47,635 | 49,668 | 46,432 | 48,938 | 51,670 | 244,343 |
| Hispanic or Latino of any Race | 4,875 | 6,338 | 5,553 | 4,097 | 6,550 | 27,413 |
| Non-Hispanic White | 21,773 | 32,994 | 20,425 | 29,094 | 31,224 | 135,510 |
| Non-Hispanic Asian | 18,195 | 7,835 | 17,550 | 13,355 | 11,796 | 68,731 |
| Non-Hispanic Black or African-American | 1,093 | 1,081 | 1,224 | 950 | 462 | 4,810 |
| All Other Non-Hispanic Races/Ethnicities | 1,699 | 1,420 | 1,680 | 1,442 | 1,638 | 7,879 |

| | | | | | | |
|--|--------|--------|--------|-------|-------|--|
| Target Division Population | 67,430 | | | | | |
| Division Difference from Target Population | -201 | -1,114 | -65 | 1,038 | 343 | |
| Percent Difference from Target Population | -0.30% | -1.65% | -0.10% | 1.54% | 0.51% | |
| Percentage Spread | 3.19% | | | | | |

Table 2. Share of Division Populations

| | DIVISION | | | | |
|---|----------|--------|--------|--------|--------|
| | 1 | 2 | 3 | 4 | 5 |
| Total Population | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Hispanic or Latino of any Race | 10.5% | 19.9% | 11.6% | 8.8% | 9.1% |
| Non-Hispanic White | 46.3% | 59.8% | 40.5% | 50.3% | 57.0% |
| Non-Hispanic Asian | 37.2% | 14.6% | 41.1% | 34.0% | 28.2% |
| Non-Hispanic Black or African-American | 1.5% | 1.6% | 1.9% | 1.6% | 1.1% |
| All Other Non-Hispanic Races/Ethnicities | 4.4% | 4.0% | 4.9% | 5.3% | 4.6% |
| Population 18 Years and Older | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Hispanic or Latino of any Race | 9.8% | 17.7% | 10.6% | 8.1% | 8.7% |
| Non-Hispanic White | 49.1% | 62.5% | 43.2% | 52.6% | 57.5% |
| Non-Hispanic Asian | 36.6% | 15.1% | 40.7% | 33.5% | 29.0% |
| Non-Hispanic Black or African-American | 1.5% | 1.7% | 1.8% | 1.6% | 1.1% |
| All Other Non-Hispanic Races/Ethnicities | 3.0% | 2.9% | 3.7% | 4.3% | 3.7% |
| Citizen Voting Age Population (CVAP) | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Hispanic or Latino of any Race | 10.2% | 12.8% | 12.0% | 8.4% | 12.7% |
| Non-Hispanic White | 45.7% | 66.4% | 44.0% | 59.5% | 60.4% |
| Non-Hispanic Asian | 38.2% | 15.8% | 37.8% | 27.3% | 22.8% |
| Non-Hispanic Black or African-American | 2.3% | 2.2% | 2.6% | 1.9% | 0.9% |
| All Other Non-Hispanic Races/Ethnicities | 3.6% | 2.9% | 3.6% | 2.9% | 3.2% |

Irvine Ranch Water District Districting Plan B



Legend:

- Proposed Divisions
- K-12 Public Schools
- 2018 City Boundaries



Irvine Ranch Water District- Plan B

Table 1. Population by Division and Race/Ethnicity

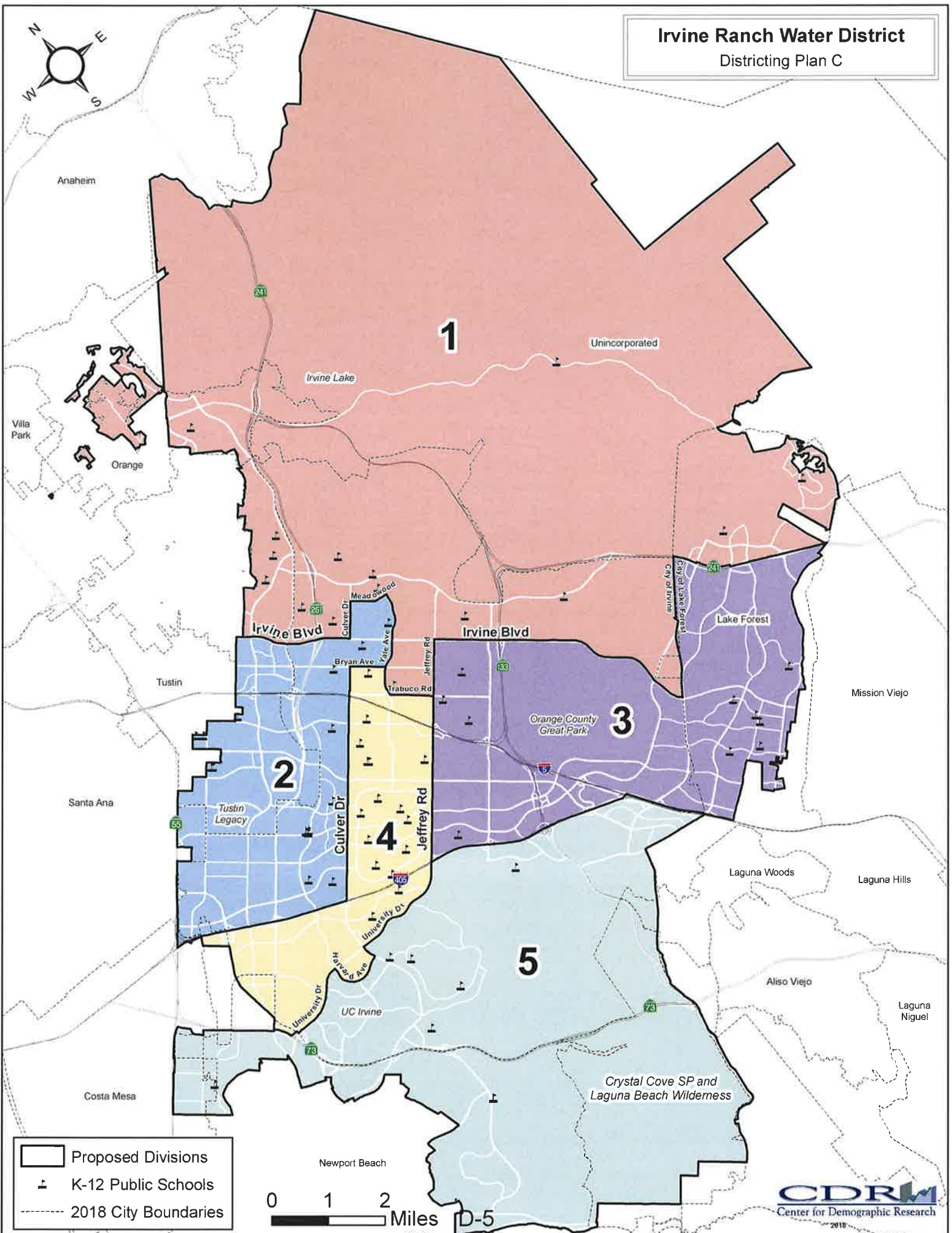
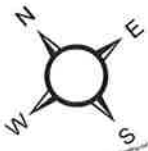
| | DIVISION | | | | | Total |
|---|----------|--------|--------|--------|--------|----------------|
| | 1 | 2 | 3 | 4 | 5 | |
| Total Population | 67,094 | 68,886 | 65,550 | 64,912 | 70,709 | 337,151 |
| Hispanic or Latino of any Race | 7,047 | 13,468 | 7,409 | 6,362 | 6,039 | 40,325 |
| Non-Hispanic White | 30,783 | 41,003 | 27,634 | 30,375 | 41,402 | 171,197 |
| Non-Hispanic Asian | 25,335 | 10,516 | 26,224 | 23,382 | 19,318 | 104,775 |
| Non-Hispanic Black or African-American | 962 | 1,114 | 1,143 | 1,245 | 709 | 5,173 |
| All Other Non-Hispanic Races/Ethnicities | 2,967 | 2,785 | 3,140 | 3,548 | 3,241 | 15,681 |
| Population 18 Years and Older | 49,410 | 52,802 | 49,516 | 52,774 | 57,149 | 261,651 |
| Hispanic or Latino of any Race | 4,792 | 9,192 | 5,143 | 4,685 | 4,719 | 28,531 |
| Non-Hispanic White | 23,934 | 32,846 | 22,260 | 25,748 | 33,975 | 138,763 |
| Non-Hispanic Asian | 18,483 | 8,294 | 19,577 | 18,924 | 15,784 | 81,062 |
| Non-Hispanic Black or African-American | 725 | 900 | 815 | 992 | 597 | 4,029 |
| All Other Non-Hispanic Races/Ethnicities | 1,476 | 1,570 | 1,721 | 2,425 | 2,074 | 9,266 |
| Citizen Voting Age Population (CVAP) | 44,561 | 52,099 | 47,595 | 46,874 | 53,214 | 244,343 |
| Hispanic or Latino of any Race | 4,486 | 6,512 | 5,471 | 4,898 | 6,046 | 27,413 |
| Non-Hispanic White | 20,375 | 34,244 | 21,111 | 26,098 | 33,682 | 135,510 |
| Non-Hispanic Asian | 17,041 | 8,681 | 18,035 | 13,387 | 11,587 | 68,731 |
| Non-Hispanic Black or African-American | 1,085 | 1,128 | 1,197 | 1,008 | 392 | 4,810 |
| All Other Non-Hispanic Races/Ethnicities | 1,574 | 1,534 | 1,781 | 1,483 | 1,507 | 7,879 |

| | | | | | | |
|--|--------|-------|--------|--------|-------|--|
| Target Division Population | 67,430 | | | | | |
| Division Difference from Target Population | -336 | 1,456 | -1,880 | -2,518 | 3,279 | |
| Percent Difference from Target Population | -0.50% | 2.16% | -2.79% | -3.73% | 4.86% | |
| Percentage Spread | 8.60% | | | | | |

Table 2. Share of Division Populations

| | DIVISION | | | | |
|---|----------|--------|--------|--------|--------|
| | 1 | 2 | 3 | 4 | 5 |
| Total Population | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Hispanic or Latino of any Race | 10.5% | 19.6% | 11.3% | 9.8% | 8.5% |
| Non-Hispanic White | 45.9% | 59.5% | 42.2% | 46.8% | 58.6% |
| Non-Hispanic Asian | 37.8% | 15.3% | 40.0% | 36.0% | 27.3% |
| Non-Hispanic Black or African-American | 1.4% | 1.6% | 1.7% | 1.9% | 1.0% |
| All Other Non-Hispanic Races/Ethnicities | 4.4% | 4.0% | 4.8% | 5.5% | 4.6% |
| Population 18 Years and Older | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Hispanic or Latino of any Race | 9.7% | 17.4% | 10.4% | 8.9% | 8.3% |
| Non-Hispanic White | 48.4% | 62.2% | 45.0% | 48.8% | 59.4% |
| Non-Hispanic Asian | 37.4% | 15.7% | 39.5% | 35.9% | 27.6% |
| Non-Hispanic Black or African-American | 1.5% | 1.7% | 1.6% | 1.9% | 1.0% |
| All Other Non-Hispanic Races/Ethnicities | 3.0% | 3.0% | 3.5% | 4.6% | 3.6% |
| Citizen Voting Age Population (CVAP) | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Hispanic or Latino of any Race | 10.1% | 12.5% | 11.5% | 10.4% | 11.4% |
| Non-Hispanic White | 45.7% | 65.7% | 44.4% | 55.7% | 63.3% |
| Non-Hispanic Asian | 38.2% | 16.7% | 37.9% | 28.6% | 21.8% |
| Non-Hispanic Black or African-American | 2.4% | 2.2% | 2.5% | 2.2% | 0.7% |
| All Other Non-Hispanic Races/Ethnicities | 3.5% | 2.9% | 3.7% | 3.2% | 2.8% |

Irvine Ranch Water District Districting Plan C



- Proposed Divisions
- K-12 Public Schools
- 2018 City Boundaries

0 1 2 Miles D-5

Irvine Ranch Water District- Plan C

Table 1. Population by Division and Race/Ethnicity

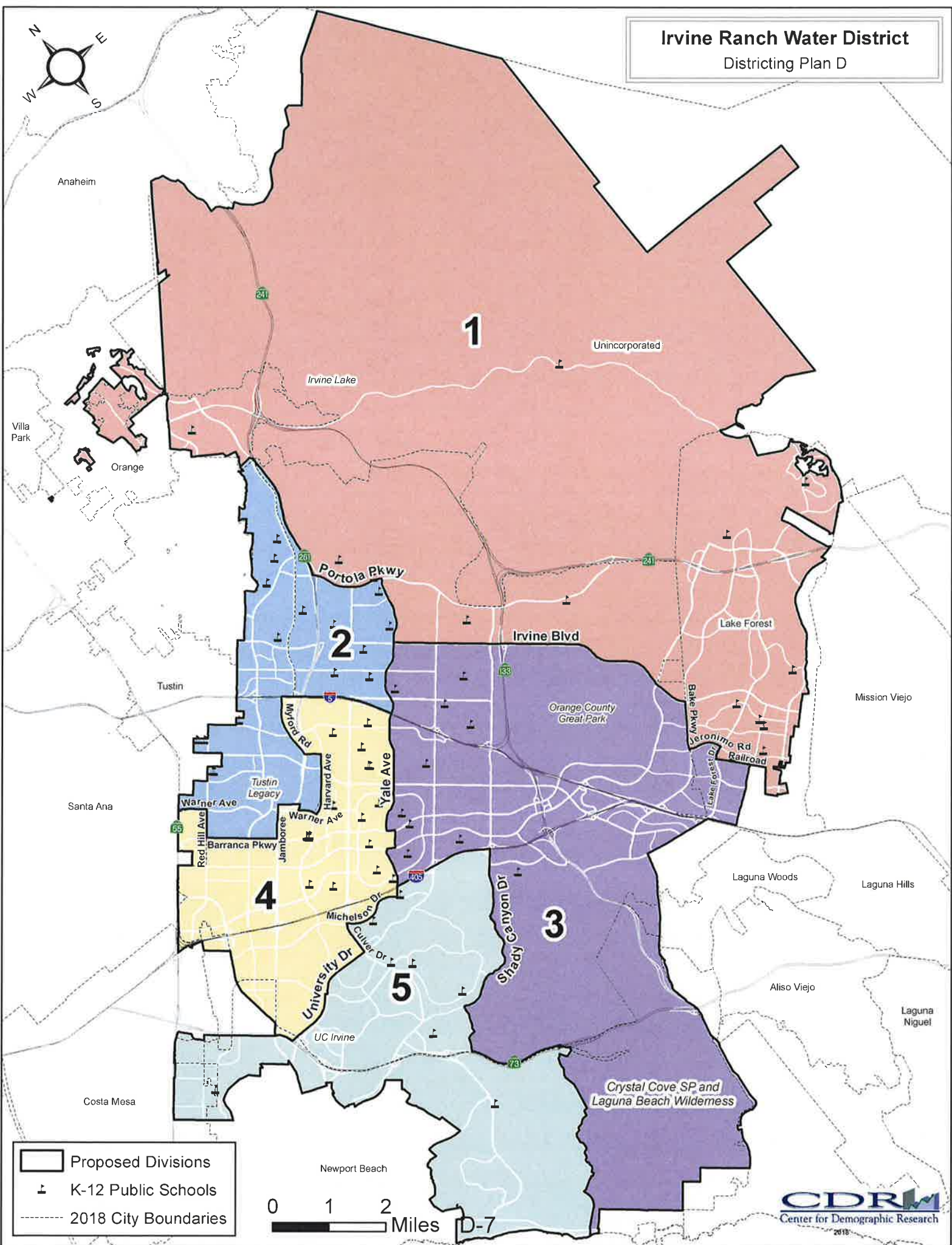
| | DIVISION | | | | | Total |
|---|----------|--------|--------|--------|--------|----------------|
| | 1 | 2 | 3 | 4 | 5 | |
| Total Population | 67,287 | 68,734 | 64,489 | 67,504 | 69,137 | 337,151 |
| Hispanic or Latino of any Race | 7,207 | 8,366 | 11,970 | 6,565 | 6,217 | 40,325 |
| Non-Hispanic White | 34,971 | 27,775 | 34,295 | 34,978 | 39,178 | 171,197 |
| Non-Hispanic Asian | 21,208 | 27,914 | 14,497 | 21,318 | 19,838 | 104,775 |
| Non-Hispanic Black or African-American | 882 | 1,285 | 1,065 | 1,217 | 724 | 5,173 |
| All Other Non-Hispanic Races/Ethnicities | 3,019 | 3,394 | 2,662 | 3,426 | 3,180 | 15,681 |
| Population 18 Years and Older | 49,198 | 52,320 | 49,821 | 53,898 | 56,414 | 261,651 |
| Hispanic or Latino of any Race | 4,994 | 5,738 | 8,157 | 4,759 | 4,883 | 28,531 |
| Non-Hispanic White | 26,753 | 22,422 | 28,090 | 29,237 | 32,261 | 138,763 |
| Non-Hispanic Asian | 15,298 | 21,233 | 11,188 | 16,792 | 16,551 | 81,062 |
| Non-Hispanic Black or African-American | 681 | 988 | 846 | 904 | 610 | 4,029 |
| All Other Non-Hispanic Races/Ethnicities | 1,472 | 1,939 | 1,540 | 2,206 | 2,109 | 9,266 |
| Citizen Voting Age Population (CVAP) | 49,766 | 45,063 | 47,919 | 49,264 | 52,331 | 244,343 |
| Hispanic or Latino of any Race | 4,740 | 5,511 | 5,614 | 4,908 | 6,640 | 27,413 |
| Non-Hispanic White | 25,854 | 19,822 | 29,236 | 29,019 | 31,579 | 135,510 |
| Non-Hispanic Asian | 16,698 | 16,710 | 10,470 | 12,856 | 11,997 | 68,731 |
| Non-Hispanic Black or African-American | 889 | 1,160 | 1,328 | 971 | 462 | 4,810 |
| All Other Non-Hispanic Races/Ethnicities | 1,585 | 1,860 | 1,271 | 1,510 | 1,653 | 7,879 |

| | | | | | |
|--|--------|-------|--------|-------|-------|
| Target Division Population | 67,430 | | | | |
| Division Difference from Target Population | -143 | 1,304 | -2,941 | 74 | 1,707 |
| Percent Difference from Target Population | -0.21% | 1.93% | -4.36% | 0.11% | 2.53% |
| Percentage Spread | 6.89% | | | | |

Table 2. Share of Division Populations

| | DIVISION | | | | |
|---|----------|--------|--------|--------|--------|
| | 1 | 2 | 3 | 4 | 5 |
| Total Population | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Hispanic or Latino of any Race | 10.7% | 12.2% | 18.6% | 9.7% | 9.0% |
| Non-Hispanic White | 52.0% | 40.4% | 53.2% | 51.8% | 56.7% |
| Non-Hispanic Asian | 31.5% | 40.6% | 22.5% | 31.6% | 28.7% |
| Non-Hispanic Black or African-American | 1.3% | 1.9% | 1.7% | 1.8% | 1.0% |
| All Other Non-Hispanic Races/Ethnicities | 4.5% | 4.9% | 4.1% | 5.1% | 4.6% |
| Population 18 Years and Older | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Hispanic or Latino of any Race | 10.2% | 11.0% | 16.4% | 8.8% | 8.7% |
| Non-Hispanic White | 54.4% | 42.9% | 56.4% | 54.2% | 57.2% |
| Non-Hispanic Asian | 31.1% | 40.6% | 22.5% | 31.2% | 29.3% |
| Non-Hispanic Black or African-American | 1.4% | 1.9% | 1.7% | 1.7% | 1.1% |
| All Other Non-Hispanic Races/Ethnicities | 3.0% | 3.7% | 3.1% | 4.1% | 3.7% |
| Citizen Voting Age Population (CVAP) | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Hispanic or Latino of any Race | 9.5% | 12.2% | 11.7% | 10.0% | 12.7% |
| Non-Hispanic White | 52.0% | 44.0% | 61.0% | 58.9% | 60.3% |
| Non-Hispanic Asian | 33.6% | 37.1% | 21.8% | 26.1% | 22.9% |
| Non-Hispanic Black or African-American | 1.8% | 2.6% | 2.8% | 2.0% | 0.9% |
| All Other Non-Hispanic Races/Ethnicities | 3.2% | 4.1% | 2.7% | 3.1% | 3.2% |

Irvine Ranch Water District Districting Plan D



- Proposed Divisions
- K-12 Public Schools
- 2018 City Boundaries

0 1 2 Miles

D-7

Irvine Ranch Water District- Plan D

Table 1. Population by Division and Race/Ethnicity

| | DIVISION | | | | | Total |
|---|----------|--------|--------|--------|--------|----------------|
| | 1 | 2 | 3 | 4 | 5 | |
| Total Population | 68,657 | 67,602 | 65,350 | 67,537 | 68,005 | 337,151 |
| Hispanic or Latino of any Race | 12,543 | 7,853 | 7,213 | 6,607 | 6,109 | 40,325 |
| Non-Hispanic White | 41,197 | 28,932 | 30,824 | 30,538 | 39,706 | 171,197 |
| Non-Hispanic Asian | 11,168 | 26,688 | 23,012 | 25,545 | 18,362 | 104,775 |
| Non-Hispanic Black or African-American | 1,026 | 1,045 | 1,082 | 1,310 | 710 | 5,173 |
| All Other Non-Hispanic Races/Ethnicities | 2,723 | 3,084 | 3,219 | 3,537 | 3,118 | 15,681 |
| Population 18 Years and Older | 51,839 | 49,715 | 50,426 | 53,280 | 56,391 | 261,651 |
| Hispanic or Latino of any Race | 8,542 | 5,293 | 5,073 | 4,749 | 4,874 | 28,531 |
| Non-Hispanic White | 32,446 | 22,525 | 25,379 | 25,332 | 33,081 | 138,763 |
| Non-Hispanic Asian | 8,565 | 19,542 | 17,249 | 19,971 | 15,735 | 81,062 |
| Non-Hispanic Black or African-American | 811 | 774 | 834 | 1,009 | 601 | 4,029 |
| All Other Non-Hispanic Races/Ethnicities | 1,475 | 1,581 | 1,891 | 2,219 | 2,100 | 9,266 |
| Citizen Voting Age Population (CVAP) | 50,644 | 44,570 | 50,582 | 45,490 | 53,057 | 244,343 |
| Hispanic or Latino of any Race | 6,593 | 4,568 | 4,832 | 4,656 | 6,764 | 27,413 |
| Non-Hispanic White | 32,329 | 19,404 | 26,910 | 24,296 | 32,571 | 135,510 |
| Non-Hispanic Asian | 9,180 | 17,843 | 16,566 | 13,602 | 11,540 | 68,731 |
| Non-Hispanic Black or African-American | 967 | 1,124 | 1,084 | 1,173 | 462 | 4,810 |
| All Other Non-Hispanic Races/Ethnicities | 1,575 | 1,631 | 1,190 | 1,763 | 1,720 | 7,879 |

| | | | | | | |
|--|--------|-------|--------|-------|-------|--|
| Target Division Population | 67,430 | | | | | |
| Division Difference from Target Population | 1,227 | 172 | -2,080 | 107 | 575 | |
| Percent Difference from Target Population | 1.82% | 0.25% | -3.08% | 0.16% | 0.85% | |
| Percentage Spread | 4.90% | | | | | |

Table 2. Share of Division Populations

| | DIVISION | | | | |
|---|----------|--------|--------|--------|--------|
| | 1 | 2 | 3 | 4 | 5 |
| Total Population | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Hispanic or Latino of any Race | 18.3% | 11.6% | 11.0% | 9.8% | 9.0% |
| Non-Hispanic White | 60.0% | 42.8% | 47.2% | 45.2% | 58.4% |
| Non-Hispanic Asian | 16.3% | 39.5% | 35.2% | 37.8% | 27.0% |
| Non-Hispanic Black or African-American | 1.5% | 1.5% | 1.7% | 1.9% | 1.0% |
| All Other Non-Hispanic Races/Ethnicities | 4.0% | 4.6% | 4.9% | 5.2% | 4.6% |
| Population 18 Years and Older | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Hispanic or Latino of any Race | 16.5% | 10.6% | 10.1% | 8.9% | 8.6% |
| Non-Hispanic White | 62.6% | 45.3% | 50.3% | 47.5% | 58.7% |
| Non-Hispanic Asian | 16.5% | 39.3% | 34.2% | 37.5% | 27.9% |
| Non-Hispanic Black or African-American | 1.6% | 1.6% | 1.7% | 1.9% | 1.1% |
| All Other Non-Hispanic Races/Ethnicities | 2.8% | 3.2% | 3.8% | 4.2% | 3.7% |
| Citizen Voting Age Population (CVAP) | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Hispanic or Latino of any Race | 13.0% | 10.2% | 9.6% | 10.2% | 12.7% |
| Non-Hispanic White | 63.8% | 43.5% | 53.2% | 53.4% | 61.4% |
| Non-Hispanic Asian | 18.1% | 40.0% | 32.8% | 29.9% | 21.8% |
| Non-Hispanic Black or African-American | 1.9% | 2.5% | 2.1% | 2.6% | 0.9% |
| All Other Non-Hispanic Races/Ethnicities | 3.1% | 3.7% | 2.4% | 3.9% | 3.2% |

December 10, 2018

Prepared and

Submitted by: K. Swan *KJ*

Approved by: Paul A. Cook *PA. Cook*

CONSENT CALENDAR

RATIFY/APPROVE BOARD OF DIRECTORS'
ATTENDANCE AT MEETINGS AND EVENTS

SUMMARY:

Pursuant to Resolution 2006-29 adopted on August 28, 2006, approval of attendance of the following events and meetings are required by the Board of Directors.

Events/Meetings

Steven LaMar

December 13 OCBC & ACC-OC 2018 Holiday Event
January 9-11, 2019 National Water Resources Association 2019 Leadership Forum, Phoenix

Mary Aileen Matheis

December 6 OC Forum's 2018 Midterm Election Recap Luncheon, Newport Beach

Doug Reinhart

December 6 MWDOC Semi-Annual Elected Officials' Forum

Peer Swan

December 5 Water Education Foundation's *Water Year 2019: Feast or Famine?*
Presentation, Irvine

December 6 OC Forum's 2018 Midterm Election Recap Luncheon, Newport Beach

December 7 California Association of Sanitation Agencies Federal Legislation Committee
Meeting, Sacramento

John Withers

December 6 MWDOC Semi-Annual Elected Officials' Forum

December 11 City of Irvine Swearing-In Ceremony

December 13 OCBC & ACC-OC 2018 Holiday Event

January 27-29, 2019 VerdeXchange 2019 Conference & Expo, Los Angeles

RECOMMENDATION:

THAT THE BOARD RATIFY/APPROVE THE MEETINGS AND EVENTS FOR STEVEN LAMAR, MARY AILEEN MATHEIS, DOUG REINHART, PEER SWAN, AND JOHN WITHERS AS DESCRIBED HEREIN.

LIST OF EXHIBITS:

None.

December 10, 2018

Prepared and

Submitted by: K. Swan *KS*

Approved by: Paul A. Cook *[Signature]*

CONSENT CALENDAR

MINUTES OF BOARD MEETING

SUMMARY:

Provided are the minutes of the November 12, 2018 Regular Board meeting for approval.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

Not applicable.

RECOMMENDATION:

THAT THE MINUTES OF THE NOVEMBER 12, 2018 REGULAR BOARD MEETING BE APPROVED AS PRESENTED.

LIST OF EXHIBITS:

Exhibit "A" – November 12, 2018 Minutes of Regular Board Meeting

EXHIBIT "A"

MINUTES OF REGULAR MEETING – NOVEMBER 12, 2018

The regular meeting of the Board of Directors of the Irvine Ranch Water District (IRWD) was called to order at 5:00 p.m. by President Reinhart on November 12, 2018 in the District office, 15600 Sand Canyon Avenue, Irvine, California.

Directors Present: Reinhart, LaMar, Swan, Matheis, and Withers.

Directors Absent: None.

Also Present: General Manager Cook, Executive of Engineering and Water Quality Burton, Executive Director of Finance and Administration Clary, Executive Director of Water Policy Weghorst, Executive Director of Operations Chambers, Director of Treasury and Risk Management Jacobson, Director of Water Resources Sanchez, Director of Water Recycling Operations Zepeda, Director of Public Affairs Beeman, Director of Human Resources Roney, Government Relations Officer Compton, Public Affairs Manager Fabris, Legal Counsel Collins, Assistant Secretary Swan, Asset Systems Manager Meserlian, Principal Engineer Akiyoshi, Principal Engineer Mori, Electrical and Instrumentation Manager O'Neill, Manager of Risk & Contracts Administration Shinbashi, Water Efficiency Manager McNulty, Water Efficiency Supervisor Hastings, Senior Human Resources Analyst Srader, Associate Engineer Marcacci, Associate Engineer Robinson, Financial Analyst Pardee, Operator III Daniel, , Mr. Andrew Pollard, Mr. Gregorio Estrada (HDR), Ms. Jennifer Ziv (Woodard & Curran), Mr. Scott Goldman (Woodard & Curran), Mr. Andrew Lazenby (Brown & Caldwell), Ms. Wendy Browley (Brown & Caldwell), Mr. Colin Lavin (IBEW #47), Mr. Jeff Brown, and members of the public.

WRITTEN COMMUNICATIONS: None.

ORAL COMMUNICATIONS: Mr. Colin Lavin of International Brotherhood of Electrical Workers addressed the Board relative to the status of the labor negotiations.

Mr. Matthew Daniel, a District Employee, introduced himself to the Board and spoke in support of the general unit employees labor negotiations and asked that negotiations move forward.

ITEMS TOO LATE TO BE AGENDIZED: None.

BOARD PRESENTATION

POTABLE REUSE CONCEPTUAL STUDY

Associate Engineer Marcacci presented a PowerPoint presentation regarding the Potable Reuse Conceptual Study to identify beneficial potable reuse options that was initiated by the District in December 2017. He outlined the three core elements of the project: 1) survey the current regulatory and industry environment; 2) conceptually analyze potable reuse alternatives for IRWD;

BOARD PRESENTATION (CONTINUED)

and 3) conduct a workshop with the Board of Directors regarding potable reuse. Mr. Marcacci indicated that staff and project consultant Brown and Caldwell completed the first two elements and presented nine alternatives to implementing potable reuse. Based on the screening criteria, staff identified four top recommended alternatives. Staff then responded to several comments made by the Board and staff was thanked for their efforts regarding the study.

CONSENT CALENDAR

President Reinhart asked that Item No. 9, IRVINE RANCH WATER DISTRICT STRATEGIC MEASURES be moved to the action calendar for discussion. There being no further comments, this item was moved to the action calendar (See page 3).

Prior to the consideration of the Consent Calendar, President Reinhart provided comments on Item No. 6, CHANGES TO GENERAL MANAGER'S COMPENSATION. Mr. Reinhart reported that on October 22, 2018, the Board conducted its annual performance evaluation of the General Manager. The Board was asked to consider changes to his compensation as a result of that performance review.

Mr. Reinhart said that pursuant to Government Code Section 54953(c)(3), prior to taking final action on changes to the General Manager's compensation, he was providing a summary of the recommended action before the Board. The recommendation is to increase the annual base salary of the General Manager by 4%, or \$11,800, to \$306,800, a one-time performance award of \$9,000 as a taxable lump sum cash payment, and adjust the automobile allowance to \$725 per month, effective October 1, 2018. All other aspects of the General Manger's compensation would remain unchanged.

There being no further comments, on MOTION by Withers, seconded by LaMar, and unanimously carried (Withers, LaMar, Swan, Matheis, and Reinhart voting aye), CONSENT CALENDAR ITEMS 4 THROUGH 8 AND 10 WERE APPROVED AS FOLLOWS:

4. RATIFY/APPROVE BOARD OF DIRECTORS' ATTENDANCE AT MEETINGS AND EVENTS

Recommendation: That the Board ratify/approve the meetings and events for Mary Aileen Matheis, Steve LaMar, Peer Swan and John Withers, as described.

5. MINUTES OF REGULAR BOARD MEETING

Recommendation: That the minutes of the October 22, 2018 Regular Board Meeting be approved as presented.

CONSENT CALENDAR (CONTINUED)

6. CHANGES TO GENERAL MANAGER'S COMPENSATION

Recommendation: That the Board approve an increase to the annual salary of the General Manager to the amount of \$306,800, a one-time performance award in the amount of \$9,000, and adjust the General Manager's automobile allowance to \$725 per month, effective October 1, 2018.

7. OFFSITE PIPELINES FOR THE IRVINE LAKE PIPELINE NORTH CONVERSION FINAL ACCEPTANCE

Recommendation: That the Board accept construction of the offsite pipelines for the Irvine Lake Pipeline North Conversion, Project 05823, authorize the General Manager to file a Notice of Completion, and authorize the payment of the retention 35 days after the date of recording the Notice of Completion.

8. REVISIONS TO THE DISTRICT'S CONFLICT OF INTEREST CODE

Recommendation: That the Board adopt the following resolution by title:

RESOLUTION NO. 2018 - 28

RESOLUTION OF THE BOARD OF DIRECTORS OF
IRVINE RANCH WATER DISTRICT RESCINDING RESOLUTION NO. 2015-30 AND
ADOPTING A REVISED CONFLICT OF INTEREST CODE FOR THE DISTRICT

10. 2018 LEGISLATIVE AND REGULATORY UPDATE

Recommendation: That the Board approve including IRWD in the attached Orange County Water District letter as one of the Producers in support of the formation of a Funding Area that will allow north Orange County to compete for state bond funds through the Integrated Regional Water Management program.

ACTION CALENDAR

IRVINE RANCH WATER DISTRICT STRATEGIC MEASURES

Following comments by President Reinhart and clarification provided by staff, on MOTION by Reinhart, seconded by LaMar, and unanimously carried (Withers, LaMar, Swan, Matheis, and

Reinhart voting aye), THE IRVINE RANCH WATER DISTRICT STRATEGIC MEASURES WERE RECEIVED AND FILED.

ACTION CALENDAR (CONTINUED)

ANNUAL MICROSOFT ENTERPRISE AGREEMENT SOFTWARE MAINTENANCE RENEWAL

General Manager Cook reported that the Microsoft Enterprise Agreement for Software Maintenance, which provides upgrades and maintenance for all of the Microsoft software used by the District, expires on November 30, 2018. This agreement provides discounted pricing for software maintenance and licenses to state and local government entities.

Director Swan reported that this item was reviewed by the Finance and Personnel Committee on November 6, 2018. On MOTION by Swan, seconded by LaMar, and unanimously carried (Withers, LaMar, Swan, Matheis, and Reinhart voting aye), THAT THE BOARD AUTHORIZED RENEWAL OF THE MICROSOFT ENTERPRISE AGREEMENT FOR A THREE-YEAR PERIOD EFFECTIVE DECEMBER 1, 2018 THROUGH NOVEMBER 30, 2021 IN THE AMOUNT OF \$510,000.

BUSINESS INTELLIGENCE CLOUD DISASTER RECOVERY IMPLEMENTATION AND REPORTING CONSULTANT SERVICES VARIANCE APPROVAL

Director of Information Services Mossbarger reported that the District's Oracle Business Intelligence (BI) Cloud Disaster Recovery Implementation and Reporting project started in October 2017. Mr. Mossbarger said that BI is an Oracle module used for analyzing data and presenting information to enhance decision making. He said the project provides for a backup Cloud Disaster Recovery (DR) environment for BI in the event of a system failure. The scope of the project included several initial user operational reports to be developed. The District entered into a Professional Services Agreement with Dilytics to assist with the implementation. A variance is needed to the Professional Services Agreement for development of additional reports.

Following discussion, on MOTION by Swan, seconded by Matheis, and unanimously carried (Withers, LaMar, Swan, Matheis, and Reinhart voting aye), THE BOARD AUTHORIZED THE GENERAL MANAGER TO EXECUTE A VARIANCE TO THE AGREEMENT WITH DILYTICS FOR VARIANCE NO. 4 IN THE AMOUNT OF \$426,000 FOR THE ORACLE BUSINESS INTELLIGENCE CLOUD DISASTER RECOVERY IMPLEMENTATION AND REPORTING AGREEMENT AND APPROVED A BUDGET INCREASE IN THE AMOUNT OF \$246,000 EACH TO PROJECTS 10345 AND 10347 FOR A TOTAL OF \$492,000.

CONSULTANT SELECTION FOR A STUDY OF IRWD'S FUTURE POTENTIAL WATER EFFICIENCY

General Manager Cook reported that a study of IRWD's Future Potential Water Efficiency is proposed to assist IRWD with understanding the current extent and impacts of water efficiency programs, device saturation, identifying opportunities for future water savings, and evaluating the potential efficacy of future water efficiency programs within IRWD. Mr. Cook said that the results of the study will inform the strategic planning, design, and implementation of future water

ACTION CALENDAR (CONTINUED)

efficiency programs and support activities that will IRWD's ensure compliance with statewide water use efficiency targets. Mr. Cook further said that staff has highlighted benefits noted in the bullet points in the write-up.

Supervisor Hastings reported that on August 21, 2018, staff issued a Request for Proposal to 18 firms to conduct a study on Future Potential Water Efficiency. Three firms submitted proposals: A & N Technical Services, EnviroSMART Solutions Group, and EKI. Staff completed a thorough evaluation of the proposals, conducted interviews and completed reference checks.

Ms. Hastings said staff recommends the selection of EKI to complete the work. Key strengths of the EKI's proposal include: 1) a strong project team that has in-depth understanding and expertise in designing, implementing, analyzing and modeling water efficiency programs to support water resources planning efforts; 2) extensive experience using principles of data science and analytics to conduct and present quantitative analyses of water efficiency program saturation and effectiveness; and 3) significant experience developing unique and proven methods to evaluate water use and savings potential to identify where best to target programs, identify future program opportunities and inform the strategic targeting and implementation of water efficiency programs.

Director Matheis reported that this item was reviewed by the Water Resources Policy and Communications Committee on November 5, 2018, and on MOTION by Matheis, seconded by LaMar, and unanimously carried (Withers, LaMar, Swan, Matheis, and Reinhart voting aye), **THE BOARD AUTHORIZED THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH EKI ENVIRONMENT & WATER IN THE AMOUNT OF \$158,958 TO CONDUCT A STUDY ON IRWD'S FUTURE POTENTIAL WATER EFFICIENCY.**

2019-2020 FEDERAL ADVOCACY SERVICES

General Manager Cook reported on September 4, 2018, the District released a Request for Qualifications (RFQ) for federal advocacy services. Through the RFQ process, IRWD sought to retain the firm best suited to meet the District's federal advocacy needs. The District received nine responses to the RFQ and interviewed the top two qualified firms, with staff's recommendation of retaining the services Kadash & Associates.

Government Relations Officer Compton stated based on the firm's qualifications and strategic ability to influence policy decisions at the federal level, they bring decades of experience and key contacts that will provide the District with a high level of knowledge, credibility, and access in Washington, D.C., which will assist the District with achieving its federal policy, funding and regulatory goals. The firm has a strong record of engaging with clients on proper messaging, tracking, and monitoring funding and legislative opportunities, coordinating appropriate advocacy meetings, and communicating with clients.

ACTION CALENDAR (CONTINUED)

Director Matheis reported that this item was reviewed by the Water Resources Policy and Communications Committee on November 5, 2018, and on MOTION by Matheis, seconded by LaMar, and unanimously carried (Withers, LaMar, Swan, Matheis, and Reinhart voting aye), THE BOARD AUTHORIZED THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH KADESH & ASSOCIATES FOR FEDERAL ADVOCACY AND CONSULTING SERVICES FOR THE PERIOD OF DECEMBER 1, 2018, THROUGH DECEMBER 31, 2020, AT A RATE OF \$10,000 PER MONTH PLUS REASONABLE REIMBURSABLE DIRECT EXPENSES FOR A TOTAL CONTRACT AMOUNT NOT TO EXCEED \$265,000.

PROPOSED IRWD POLICY PRINCIPLES REGARDING METROPOLITAN WATER DISTRICT'S REGIONAL RECYCLED WATER PROGRAM

General Manager Cook introduced a new policy paper articulating IRWD's position on "the Carson Plant", a new groundwater augmentation program that is being developed by Metropolitan Water District of Southern California (MWD).

Executive Director of Water Policy Weghorst provided highlights outlining the District's support of advocacy for the Carson Plant. He stated while MWD is currently studying the feasibility of developing the Carson Plant, a full-scale project would provide up to 150 MGD of advanced purified water to the region and would become a major source of water for Orange County.

Director Matheis reported that this item was reviewed by the Water Resources Policy and Communications Committee on November 5, 2018, and the Committee recognizes that the policy paper fits into the District's projections moving forward. After discussion and comments regarding the policy principles with staff, the Board provided four modifications to be executed within the paper. On MOTION by Matheis, seconded by LaMar, and unanimously carried (Withers, LaMar, Swan, Matheis, and Reinhart voting aye), THE BOARD ADOPTED THE PROPOSED IRWD POLICY POSITION PAPER REGARDING METROPOLITAN WATER DISTRICT'S PROPOSED REGIONAL RECYCLED WATER PROGRAM AS AMENDED.

BOARD OF DIRECTORS' FEES

General Manager Cook reported that the Board of Directors' fees is an item that is brought to the Board every year and is reviewed by the Finance and Personnel Committee.

Director Swan reported that this item was reviewed by the Finance and Personnel Committee on November 6, 2018. The most recent increase was effective in January 2017; and the Board can elect to increase the fees by 5% each year.

On MOTION by Withers, seconded by Swan, and unanimously carried (Withers, LaMar, Swan, Matheis, and Reinhart voting aye), THE BOARD ACCEPTED THE FIVE (5%) PERCENT COMPENSATION INCREASE FOR CALENDAR YEAR 2019.

GENERAL MANAGER'S REPORT

General Manager Cook reported that the ACC-OC Thanksgiving Reception will be held at the District's Learning Center Thursday, November 15 and encouraged the Board to attend. Mr. Cook said that the next Board meeting will be cancelled due to insufficient items for approval. He concluded with a tribute to thank and honor all Veterans who work for the District and were present for tonight's meeting.

DIRECTORS' COMMENTS

Director Withers reported on the elections for OCSD, congratulated District staff member Mark Tettermer on his election for Lake Forest City Council. He further stated that he attended the NWRI Clarke Prize events.

Director Matheis congratulated fellow Board members on their reelection. She further reported on the Alliance for Community Trees' visit to the Shadetree Partnership nursery; the dedication of the Philip L. Anthony Water Quality Laboratory at OCWD; and a Shadetree Partnership monthly nursery event.

Director Swan reported on his attendance the NWRI Clarke Prize events; the monthly WACO meeting; the UCI Water event featuring Israel's experience with water management; and a Localizing California Waters workshop in Groveland.

Director LaMar congratulated Mr. Andrew Pollard on a great campaign. He reported on his participation in the Nation Water Resources Association's Conference in San Diego.

President Reinhart reported that he had approximately 45 residents participate in his resident tour of the District; he attended MWDOC and SOCWA Board meetings; a monthly WACO meeting; a MWDOC workshop with MWD Directors; and his monthly discussion of District activities with the General Manager.

COMMUNITY UPDATES: None.

CLOSED SESSION

At 7:08 p.m., President Reinhart recessed the Board meeting and announced that the following Closed Session would be held as follows:

CLOSED SESSION CONFERENCE WITH LABOR NEGOTIATORS – Pursuant to Government Code Section 54957.6

Designated Agency Representatives: Paul Cook and Jenny Roney

Employee Groups: IBEW Local #47 General Unit Employees and

IBEW Local #47 Non-Exempt Supervisor Unit Employees

OPEN SESSION

Following the Closed Session, the meeting was reconvened at 8:00 p.m. with Directors Reinhart, LaMar, Swan, Matheis and Withers present. President Reinhart said that there was no action to report.

ADJOURNMENT

There being no further business, President Reinhart adjourned the meeting at 8:03 p.m.





APPROVED and SIGNED this 10th day of December, 2018.

President, IRVINE RANCH WATER DISTRICT

Secretary IRVINE RANCH WATER DISTRICT

APPROVED AS TO FORM:

Claire Hervey Collins, Legal Counsel
– Lewis Brisbois

December 10, 2018 
Prepared by: J. Davis/T. Fournier 
Submitted by: R. Jacobson/C. Clary 
Approved by: Paul A. Cook 

CONSENT CALENDAR

NOVEMBER 2018 TREASURY REPORTS

SUMMARY:

The following is submitted for the Board's information and approval:

- A. The Investment Summary Report for November 2018. This Investment Summary Report is in conformity with the 2018 Investment Policy and provides sufficient liquidity to meet estimated expenditures during the next six months, as outlined in Exhibit "A".
- B. The Summary of Fixed and Variable Debt as of November 30, 2018, as outlined in Exhibit "B".
- C. The Summary of Payroll ACH payments in the total amount of \$2,088,664 as outlined in Exhibit "C".
- D. The November 30, 2018 Disbursement Summary of warrants 393005 through 393942, wire transfers, Workers' Compensation distributions, payroll withholding distributions, and voided checks in the total amount of \$16,006,783 as outlined in Exhibit "D".
- E. The Disclosure Report of Reimbursements to Board Members and Staff for November 2018, detailing payments or reimbursements for individual charges of \$100.00 or more per transaction, as outlined in Exhibit "E".

FISCAL IMPACTS:

As of November 30, 2018, the book value of the investment portfolio was \$365,730,334, with a 1.69% rate of return and a market value of \$363,280,296. Based on the District's September 30, 2018 quarterly real estate investment rate of return of 9.05%, the weighted average return for the fixed income and real estate investments was 3.91%.

As of November 30, 2018, the outstanding principal amount of fixed and variable rate debt was \$672,220,000. The monthly weighted average all-in variable rate was 1.77%. Including the District's weighted average fixed rate bond issues of 3.70% and the previous month's negative cash accruals from fixed payer interest rate swaps, which hedge a portion of the District's variable rate debt, the total average debt rate was 3.71%.

Payroll ACH payments totaled \$2,088,664, and wire transfers, all other ACH payments, and checks issued for debt service, accounts payable, payroll, and water purchases for November totaled \$16,006,783.

ENVIRONMENTAL COMPLIANCE:

This item is not a project as defined in the California Environmental Quality Act Code of Regulations, Title 14, Chapter 3, Section 15378.

COMMITTEE STATUS:

This item was not submitted to a Committee; however, the investment and interest rate swap reports are submitted to the Finance and Personnel Committee on a monthly basis.

RECOMMENDATION:

THAT THE BOARD RECEIVE AND FILE THE TREASURER'S INVESTMENT SUMMARY REPORT, THE SUMMARY OF FIXED AND VARIABLE RATE DEBT, AND DISCLOSURE REPORT OF REIMBURSEMENTS TO BOARD MEMBERS AND STAFF; APPROVE THE NOVEMBER 2018 SUMMARY OF PAYROLL ACH PAYMENTS IN THE TOTAL AMOUNT OF \$2,088,664 AND APPROVE THE NOVEMBER 2018 ACCOUNTS PAYABLE DISBURSEMENT SUMMARY OF WARRANTS 393005 THROUGH 393942 WORKERS' COMPENSATION DISTRIBUTIONS, WIRE TRANSFERS, PAYROLL WITHHOLDING DISTRIBUTIONS AND VOIDED CHECKS IN THE TOTAL AMOUNT OF \$16,006,783.

LIST OF EXHIBITS:

Exhibit "A" – Investment Summary Report

Exhibit "B" – Summary of Fixed and Variable Debt

Exhibit "C" – Monthly Payroll ACH Summary

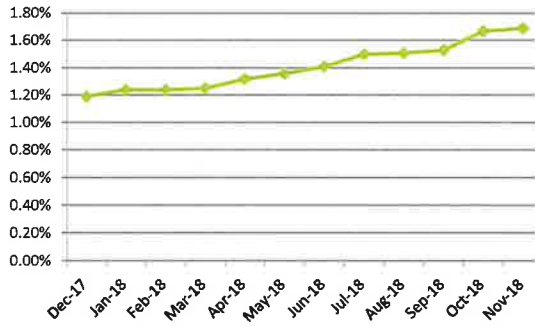
Exhibit "D" – Monthly Summary of District Disbursements

Exhibit "E" – Disclosure of Reimbursements to Board Members and Staff

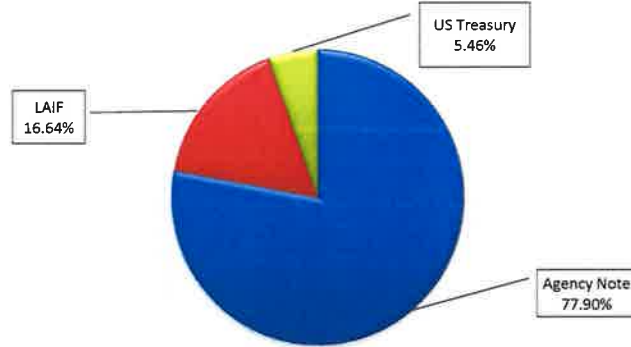
Exhibit "A"

Irvine Ranch Water District
Investment Portfolio Summary
November 2018

Monthly Fixed Income Yield



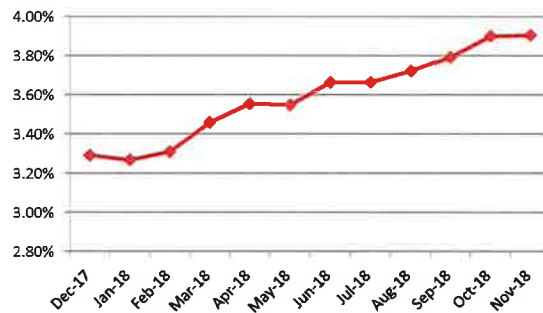
Portfolio Distribution



Investment Summary

| Type | PAR | Book Value | Market Value |
|--------------------|--------------------|--------------------|--------------------|
| Agency Note | 285,550,000 | 285,223,861 | 282,859,169 |
| LAIF | 61,000,000 | 61,000,000 | 60,867,777 |
| US Treasury | 20,000,000 | 19,506,473 | 19,553,350 |
| Grand Total | 366,550,000 | 365,730,334 | 363,280,296 |

Weighted Average Return
Including Real Estate Portfolio



Maturity Distribution



Top Issuers

| Issuer | PAR | % Portfolio |
|-------------------------------------|--------------------|----------------|
| Fed Natl Mortgage Assoc | 80,000,000 | 21.83% |
| Fed Home Loan Bank | 70,550,000 | 19.24% |
| Fed Farm Credit Bank | 70,000,000 | 19.10% |
| Fed Home Loan Mortgage Corp | 65,000,000 | 17.73% |
| State of California Treasury - LAIF | 61,000,000 | 16.64% |
| US Treasury | 20,000,000 | 5.46% |
| Grand Total | 366,550,000 | 100.00% |

IRVINE RANCH WATER DISTRICT
INVESTMENT SUMMARY REPORT

11/30/18

| SETTLMT | Call Schedule | Initial Call | Maturity Date | Rating | INVESTMENT TYPE | INSTITUTION / ISSUER | PAR Amount | COUPON DISCOUNT | YIELD | ORIGINAL COST | CARRY VALUE | MARKET VALUE ⁽¹⁾ 11/30/2018 | UNREALIZED ⁽²⁾ GAIN/(LOSS) |
|----------|------------------|--------------|---------------|-------------|-----------------|-----------------------------|--------------|-----------------|--------|-----------------|-----------------|---|--|
| 08/23/17 | | | 12/01/18 | | LAIF | State of California Tsy. | \$61,000,000 | | 2.000% | \$61,000,000.00 | \$61,000,000.00 | 60,867,776.64 | (132,223.36) |
| 12/21/16 | N/A | N/A | 12/05/18 | Aaa/AA+/AAA | FFCB - Note | Fed Farm Credit Bank | 5,000,000 | 1.100% | 1.319% | 4,978,900.00 | 5,001,423.14 | 4,999,650.00 | (1,773.14) |
| 09/01/16 | NA | NA | 12/14/18 | Aaa/AA+/NR | FHLB - Note | Fed Home Loan Bank | 5,000,000 | 1.750% | 0.941% | 5,091,300.00 | 5,000,753.10 | 4,999,150.00 | (1,603.10) |
| 12/27/16 | NA | NA | 12/14/18 | Aaa/AA+/NR | FHLB - Note | Fed Home Loan Bank | 5,000,000 | 1.750% | 1.320% | 5,041,536.20 | 4,999,881.79 | 4,999,150.00 | (731.79) |
| 09/01/16 | One Time | 07/30/18 | 01/30/19 | Aaa/AA+/AAA | FHLMC - Note | Fed Home Loan Mortgage Corp | 5,000,000 | 0.950% | 1.009% | 4,993,000.00 | 4,999,523.27 | 4,988,450.00 | (11,073.27) |
| 10/26/16 | One Time | 07/30/18 | 01/30/19 | Aaa/AA+/AAA | FHLMC - Note | Fed Home Loan Mortgage Corp | 5,000,000 | 0.950% | 1.035% | 4,999,500.00 | 4,999,240.92 | 4,988,450.00 | (10,790.92) |
| 10/26/16 | One Time | 07/30/18 | 01/30/19 | Aaa/AA+/AAA | FHLMC - Note | Fed Home Loan Mortgage Corp | 5,000,000 | 0.950% | 1.040% | 4,990,000.00 | 4,999,200.97 | 4,988,450.00 | (10,750.97) |
| 10/12/16 | Continuous after | 02/12/18 | 02/12/19 | Aaa/AA+/NR | FHLB - Note | Fed Home Loan Bank | 10,000,000 | 1.050% | 1.093% | 9,990,000.00 | 9,998,909.73 | 9,973,900.00 | (25,009.73) |
| 09/01/16 | NA | NA | 03/08/19 | Aaa/AA+/AAA | FHLB - Note | Fed Home Loan Bank | 5,000,000 | 1.500% | 0.964% | 5,066,500.00 | 5,007,026.69 | 4,987,800.00 | (19,226.69) |
| 03/21/18 | NA | NA | 03/21/19 | Aaa/NA/NR | FHLB - Note | Fed Home Loan Bank | 10,000,000 | 2.125% | 2.125% | 10,000,000.00 | 10,000,000.00 | 9,990,900.00 | (9,100.00) |
| 10/12/16 | N/A | N/A | 03/29/19 | Aaa/AA+/AAA | FHLMC - Note | Fed Home Loan Mortgage Corp | 5,000,000 | 1.050% | 1.050% | 4,999,950.00 | 4,999,992.32 | 4,976,250.00 | (23,742.32) |
| 10/12/16 | N/A | N/A | 04/15/19 | Aaa/AA+/AAA | FHLMC - Note | Fed Home Loan Mortgage Corp | 10,000,000 | 1.125% | 0.992% | 10,032,800.00 | 10,005,556.28 | 9,950,500.00 | (55,056.28) |
| 10/31/16 | N/A | N/A | 04/26/19 | Aaa/AA+/AAA | FHLMC - Note | Fed Home Loan Mortgage Corp | 5,000,000 | 1.050% | 1.060% | 4,998,750.00 | 4,999,797.41 | 4,970,600.00 | (29,197.41) |
| 09/01/16 | N/A | N/A | 05/28/19 | Aaa/AA+/NR | FHLB - Note | Fed Home Loan Bank | 5,000,000 | 1.030% | 1.048% | 4,997,550.00 | 4,999,563.46 | 4,988,450.00 | (9,103.46) |
| 04/19/18 | N/A | N/A | 05/30/19 | Aaa/AA+/AAA | FHLMC - Note | Fed Home Loan Mortgage Corp | 5,000,000 | 1.750% | 2.252% | 4,972,500.00 | 4,987,807.88 | 4,979,800.00 | (8,007.88) |
| 09/01/16 | NA | NA | 06/14/19 | Aaa/AA+/NR | FHLB - Note | Fed Home Loan Bank | 5,000,000 | 1.625% | 0.987% | 5,087,400.00 | 5,016,774.61 | 4,974,750.00 | (42,024.61) |
| 10/12/16 | NA | NA | 06/14/19 | Aaa/AA+/NR | FHLB - Note | Fed Home Loan Bank | 5,000,000 | 1.625% | 1.103% | 5,068,515.88 | 5,015,108.63 | 4,974,750.00 | (40,358.63) |
| 10/12/16 | NA | NA | 07/19/19 | Aaa/AA+/AAA | FHLMC - Note | Fed Home Loan Mortgage Corp | 5,000,000 | 0.875% | 1.098% | 4,969,652.90 | 4,992,488.34 | 4,945,400.00 | (47,088.34) |
| 09/01/16 | NA | NA | 07/26/19 | Aaa/AA+/AAA | FNMA - Note | Fed Natl Mortgage Assoc | 5,000,000 | 1.150% | 1.180% | 4,995,700.00 | 4,999,036.77 | 4,951,450.00 | (47,586.77) |
| 09/01/16 | N/A | N/A | 08/28/19 | Aaa/AA+/AAA | FNMA - Note | Fed Natl Mortgage Assoc | 5,000,000 | 1.150% | 1.160% | 4,998,500.00 | 4,999,628.78 | 4,944,350.00 | (55,278.78) |
| 09/01/16 | NA | NA | 08/28/19 | Aaa/AA+/AAA | FNMA - Note | Fed Natl Mortgage Assoc | 5,000,000 | 1.125% | 1.132% | 4,999,000.00 | 4,999,752.52 | 4,943,450.00 | (56,302.52) |
| 09/28/16 | Quarterly | 03/09/17 | 09/09/19 | Aaa/AA+/AAA | FNMA - Note | Fed Natl Mortgage Assoc | 5,000,000 | 1.125% | 1.142% | 4,997,500.00 | 4,999,339.67 | 4,940,050.00 | (59,289.67) |
| 04/10/18 | NA | NA | 09/13/19 | Aaa/AA+/NR | FHLB - Note | Fed Home Loan Bank | 5,000,000 | 2.375% | 2.288% | 5,006,000.00 | 5,003,293.67 | 4,987,150.00 | (16,143.67) |
| 09/28/16 | Continuous after | 12/27/16 | 09/27/19 | Aaa/AA+/NR | FHLB - Note | Fed Home Loan Bank | 5,000,000 | 1.250% | 1.189% | 5,001,500.00 | 5,000,411.33 | 4,940,900.00 | (59,511.33) |
| 10/12/16 | Continuous after | 10/03/17 | 10/03/19 | Aaa/AA+/NR | FHLB - Note | Fed Home Loan Bank | 10,000,000 | 1.125% | 1.160% | 9,989,780.00 | 9,996,932.12 | 9,868,100.00 | (128,832.12) |
| 10/12/16 | Continuous after | 10/11/17 | 10/11/19 | Aaa/AA+/NR | FFCB - Note | Fed Farm Credit Bank | 10,000,000 | 1.120% | 1.205% | 9,975,000.00 | 9,992,367.46 | 9,864,400.00 | (127,967.46) |
| 11/08/16 | Quarterly | 05/08/17 | 11/08/19 | Aaa/AA+/NR | FNMA - Note | Fed Natl Mortgage Assoc | 5,000,000 | 1.250% | 1.245% | 5,000,750.00 | 5,000,234.25 | 4,930,850.00 | (69,384.25) |
| 11/28/16 | NA | NA | 11/15/19 | Aaa/AA+/NR | FHLB - Note | Fed Home Loan Bank | 5,000,000 | 1.375% | 1.440% | 4,990,550.00 | 4,996,951.89 | 4,934,750.00 | (62,201.89) |
| 11/28/16 | Quarterly | 05/25/17 | 11/25/19 | Aaa/AA+/NR | FNMA - Note | Fed Natl Mortgage Assoc | 5,000,000 | 1.400% | 1.503% | 4,985,000.00 | 4,995,068.68 | 4,934,050.00 | (61,018.68) |
| 12/12/16 | NA | NA | 12/12/19 | Aaa/AA+/NR | FFCB - Note | Fed Farm Credit Bank | 5,000,000 | 1.450% | 1.440% | 5,001,450.00 | 5,000,497.03 | 4,933,000.00 | (67,497.03) |
| 12/21/16 | NA | NA | 12/19/19 | Aaa/AA+/NR | FFCB - Note | Fed Farm Credit Bank | 5,000,000 | 1.500% | 1.621% | 4,982,350.00 | 4,993,815.23 | 4,931,850.00 | (61,965.23) |
| 12/20/17 | NA | NA | 01/17/20 | Aaa/AA+/AAA | FHLMC - Note | Fed Home Loan Mortgage Corp | 5,000,000 | 1.500% | 1.932% | 4,956,250.00 | 4,970,333.11 | 4,930,700.00 | (39,633.11) |
| 10/16/17 | NA | NA | 02/28/20 | Aaa/AA+/AAA | FNMA - Note | Fed Natl Mortgage Assoc | 5,000,000 | 1.500% | 1.612% | 4,987,025.00 | 4,993,190.00 | 4,921,650.00 | (71,540.00) |
| 12/20/17 | NA | NA | 03/13/20 | Aaa/AA+/NR | FHLB - Note | Fed Home Loan Bank | 5,000,000 | 4.125% | 1.940% | 5,237,200.00 | 5,166,098.28 | 5,082,450.00 | (83,648.28) |
| 10/03/17 | NA | NA | 04/20/20 | Aaa/AA+/AAA | FHLMC - Note | Fed Home Loan Mortgage Corp | 5,000,000 | 1.375% | 1.630% | 4,968,350.00 | 4,982,779.68 | 4,903,800.00 | (78,979.68) |
| 06/29/18 | NA | NA | 04/23/20 | Aaa/AA+/AAA | FHLMC - Note | Fed Home Loan Mortgage Corp | 5,000,000 | 2.500% | 2.544% | 4,996,000.00 | 4,996,962.73 | 4,979,850.00 | (17,112.73) |
| 06/29/18 | NA | NA | 05/15/20 | Aaa/AA+/AAA | FFCB - Note | Fed Farm Credit Bank | 5,000,000 | 2.550% | 2.566% | 4,998,450.00 | 4,998,800.22 | 4,981,450.00 | (17,350.22) |
| 11/21/17 | Continuous after | 02/20/18 | 05/20/20 | Aaa/AA+/AAA | FFCB - Note | Fed Farm Credit Bank | 5,000,000 | 1.830% | 1.930% | 4,987,500.00 | 4,980,565.45 | 4,929,850.00 | (50,715.45) |
| 06/11/18 | NA | NA | 06/11/20 | Aaa/NR/AAA | FFCB - Note | Fed Farm Credit Bank | 5,000,000 | 2.500% | 2.570% | 4,997,100.00 | 4,997,786.32 | 4,979,950.00 | (17,836.32) |
| 11/10/17 | NA | NA | 06/22/20 | Aaa/AA+/AAA | FNMA - Note | Fed Natl Mortgage Assoc | 5,000,000 | 1.500% | 1.750% | 4,968,000.00 | 4,992,796.38 | 4,901,750.00 | (91,046.38) |

IRVINE RANCH WATER DISTRICT
INVESTMENT SUMMARY REPORT

11/30/18

| SETTLMT | Call Schedule | Initial Call | Maturity Date | Rating | INVESTMENT TYPE | INSTITUTION / ISSUER | PAR Amount | COUPON DISCOUNT | YIELD | ORIGINAL COST | CARRY VALUE | MARKET VALUE ⁽¹⁾ 11/30/2018 | UNREALIZED ⁽²⁾ GAIN/(LOSS) |
|--------------------------|------------------|--------------|---------------|-------------|-----------------|-----------------------------|----------------------|-----------------|--------|-------------------------|-------------------------|--|---------------------------------------|
| 04/19/18 | NA | NA | 07/30/20 | Aaa/AA+/AAA | FNMA - Note | Fed Natl Mortgage Assoc | 5,000,000 | 1.500% | 2.535% | 4,886,000.00 | 4,916,929.17 | 4,894,550.00 | (22,379.17) |
| 06/08/18 | NA | NA | 07/30/20 | Aaa/AA+/AAA | FNMA - Note | Fed Natl Mortgage Assoc | 5,000,000 | 1.500% | 2.559% | 4,890,100.00 | 4,914,802.94 | 4,894,550.00 | (20,252.94) |
| 12/20/17 | Quarterly | 11/10/16 | 08/10/20 | Aaa/AA+/AAA | FHLMC - Note | Fed Home Loan Mortgage Corp | 5,000,000 | 1.450% | 2.052% | 4,923,000.00 | 4,942,489.63 | 4,883,050.00 | (59,439.63) |
| 09/14/18 | NA | NA | 08/24/20 | Aaa/AA+/AAA | FFCB - Note | Fed Farm Credit Bank | 5,000,000 | 2.680% | 2.789% | 4,989,700.00 | 4,990,831.55 | 4,986,400.00 | (4,431.55) |
| 05/21/18 | Continuous after | 12/01/17 | 09/01/20 | Aaa/AA+/AAA | FFCB - Note | Fed Farm Credit Bank | 5,000,000 | 1.680% | 2.735% | 4,884,250.00 | 4,911,175.06 | 4,901,650.00 | (9,525.06) |
| 09/14/18 | NA | NA | 09/04/20 | Aaa/AA+/AAA | FFCB - Note | Fed Farm Credit Bank | 5,000,000 | 2.690% | 2.794% | 4,990,050.00 | 4,991,126.42 | 4,984,300.00 | (6,826.42) |
| 12/12/17 | One Time | 09/28/18 | 09/28/20 | Aaa/AA+/AAA | FNMA - Note | Fed Natl Mortgage Assoc | 5,000,000 | 2.000% | 2.000% | 5,000,000.00 | 5,000,000.00 | 4,916,150.00 | (83,850.00) |
| 10/31/17 | One Time | 10/30/18 | 10/30/20 | Aaa/NR/AAA | FNMA - Note | Fed Natl Mortgage Assoc | 5,550,000 | 1.850% | 1.850% | 5,550,000.00 | 5,550,000.00 | 5,431,119.00 | (118,881.00) |
| 09/28/18 | NA | NA | 10/31/20 | Aaa/NR/AAA | Treasury - Note | US Treasury | 5,000,000 | 1.750% | 2.847% | 4,889,453.13 | 4,880,192.66 | 4,900,200.00 | 20,007.34 |
| 12/13/17 | Continuous after | 08/23/17 | 11/23/20 | Aaa/AA+/AAA | FFCB - Note | Fed Farm Credit Bank | 5,000,000 | 1.770% | 2.060% | 4,958,750.00 | 4,968,104.09 | 4,895,800.00 | (72,304.09) |
| 12/13/17 | Quarterly | 05/24/18 | 11/24/20 | Aaa/AA+/AAA | FNMA - Note | Fed Natl Mortgage Assoc | 5,000,000 | 1.900% | 2.023% | 4,982,500.00 | 4,986,464.72 | 4,896,950.00 | (89,514.72) |
| 11/30/17 | NA | NA | 11/24/20 | Aaa/AA+/AAA | FFCB - Note | Fed Farm Credit Bank | 5,000,000 | 1.850% | 1.964% | 4,983,550.00 | 4,989,073.58 | 4,903,300.00 | (85,773.58) |
| 12/20/17 | NA | NA | 12/28/20 | Aaa/AA+/AAA | FNMA - Note | Fed Natl Mortgage Assoc | 5,000,000 | 1.875% | 2.023% | 4,978,400.00 | 4,983,173.91 | 4,903,650.00 | (79,523.91) |
| 11/09/18 | NA | NA | 12/31/20 | Aaa/NR/AAA | Treasury - Note | US Treasury | 5,000,000 | 2.375% | 2.958% | 4,939,843.75 | 4,941,533.96 | 4,955,450.00 | 13,916.04 |
| 11/27/18 | NA | NA | 01/25/21 | Aaa/AA+/AAA | FHLMC - Note | Fed Home Loan Mortgage Corp | 5,000,000 | 3.020% | 3.021% | 5,000,000.00 | 5,000,000.00 | 4,999,950.00 | (50.00) |
| 10/12/18 | NA | NA | 01/31/21 | Aaa/NR/AAA | Treasury - Note | US Treasury | 10,000,000 | 1.375% | 2.890% | 9,664,843.76 | 9,684,746.15 | 9,697,700.00 | 12,953.85 |
| TOTAL INVESTMENTS | | | | | | | \$366,550,000 | | | \$365,798,250.62 | \$365,730,333.94 | \$363,280,295.64 | |

| | |
|------------|-------------------------|
| Petty Cash | 3,400.00 |
| Ck Balance | 1,849,167.99 |
| | <u>\$367,650,818.61</u> |

| | | | | |
|---|---|--|-----------------------------|--------------|
| ⁽¹⁾ LAIF market value is as of the most recent quarter-end as reported by LAIF. | Outstanding Variable Rate Debt | \$273,300,000 | | |
| Security market values are determined using Bank of New York ("Trading Prices"), Bloomberg and/or broker dealer pricing. | Net Outstanding Variable Rate Debt (Less \$130 million fixed-payer swaps) | \$143,300,000 | | |
| ⁽²⁾ Gain (loss) calculated against carry value using the trading value provided by Bank of New York/or Brokers | Investment Balance: | \$367,650,819 | | |
| ⁽³⁾ Real estate rate of return is based on most recent quarter end return | Investment to Variable Rate Debt Ratio: | 257% | | |
| | Portfolio - Average Number of Days To Maturity | 320 | | |
| | Investment Portfolio | Real Estate⁽³⁾ Portfolio | Weighted Avg. Return | |
| | November | 1.69% | 9.05% | 3.91% |
| | October | 1.67% | 9.05% | 3.90% |
| | Change | 0.02% | | 0.01% |

This Investment Summary Report is in conformity with the 2018 Investment Policy and provides sufficient liquidity to meet the next six months estimated expenditures.
*S - Step up

IRVINE RANCH WATER DISTRICT
SUMMARY OF MATURITIES

11/30/18

| DATE | TOTAL | % | LAIF | Agency Notes | Agency Discount Notes | Collateral Deposit | US Treasury |
|----------------------------|----------------------|----------------|---------------------|----------------------|-----------------------|--------------------|---------------------|
| 11/18 | \$61,000,000 | 16.64% | \$61,000,000 | | | | |
| 12/18 | 15,000,000 | 4.09% | | 15,000,000 | | | |
| 01/19 | 15,000,000 | 4.09% | | 15,000,000 | | | |
| 02/19 | 10,000,000 | 2.73% | | 10,000,000 | | - | |
| 03/19 | 20,000,000 | 5.46% | | 20,000,000 | | | |
| 04/19 | 15,000,000 | 4.09% | | 15,000,000 | | | |
| 05/19 | 10,000,000 | 2.73% | | 10,000,000 | | | |
| 06/19 | 10,000,000 | 2.73% | | 10,000,000 | | | |
| 07/19 | 10,000,000 | 2.73% | | 10,000,000 | | | |
| 08/19 | 10,000,000 | 2.73% | | 10,000,000 | | | |
| 09/19 | 15,000,000 | 4.09% | | 15,000,000 | | | |
| 10/19 | 20,000,000 | 5.46% | | 20,000,000 | | | |
| SUB-TOTAL | \$211,000,000 | 57.56% | \$61,000,000 | \$150,000,000 | | | |
| 13 Months - 3 YEARS | | | | | | | |
| 11/01/19 - 2/28/2020 | 35,000,000 | 9.55% | | 35,000,000 | | | |
| 3/01/2020 - 5/31/2020 | 30,000,000 | 8.18% | | 30,000,000 | | | |
| 6/01/2020 - 8/31/2020 | 25,000,000 | 6.82% | | 25,000,000 | | | |
| 9/01/2020 - 11/30/2020 | 40,550,000 | 11.06% | | 35,550,000 | | | 5,000,000 |
| 12/01/2020 - 2/28/2021 | 25,000,000 | 6.82% | | 10,000,000 | | | 15,000,000 |
| | - | | | | | | |
| | - | | | | | | |
| | - | | | | | | |
| | - | | | | | | |
| TOTALS | \$366,550,000 | 100.00% | \$61,000,000 | \$285,550,000 | | | \$20,000,000 |

% OF PORTFOLIO

16.64%

77.90%

5.46%

Irvine Ranch Water District
Summary of Real Estate - Income Producing Investments
9/30/2018

| | ACQUISITION DATE | PROPERTY TYPE | OWNERSHIP INTEREST | ORIGINAL COST | MARKET VALUE 9/30/2018 | ANNUALIZED RATE OF RETURN QUARTER ENDED 9/30/2018 |
|---|---------------------|------------------|-----------------------|-----------------------|---------------------------|--|
| Sycamore Canyon | Dec-92 | Apartments | Fee Simple | \$ 43,550,810 | \$ 145,000,000 | 19.02% |
| Wood Canyon Villas | Jun-91 | Apartments | Limited Partner | \$ 6,000,000 | \$ 30,670,120 | 8.55% |
| ITC (230 Commerce) | Jul-03 | Office Building | Fee Simple | \$ 5,739,845 | \$ 11,500,000 | 10.85% |
| Waterworks Business Pk. | Nov-08 | Research & Dev. | Fee Simple | \$ 8,630,577 | \$ 9,000,000 | 5.82% |
| Sand Canyon Professional Center | Jul-12 | Medical Office | Fee Simple | \$ 8,648,594 | \$ 11,000,000 | 8.88% |
| Total - Income Properties | | | | \$ 72,569,826 | \$ 207,170,120 | 14.73% |
| OTHER REAL ESTATE | | | | | | |
| DESCRIPTION | | | | | | |
| Serrano Summit - Promissory Note | Sep-17 | NA | NA | \$ 81,600,000 | \$ 81,600,000 | 4.00% |
| Total - Income Producing Real Estate Investments | | | | \$ 154,169,826 | \$ 288,770,120 | 9.05% |

IRVINE RANCH WATER DISTRICT INVESTMENT SUMMARY REPORT
INVESTMENT ACTIVITY
Nov-18

MATURITIES/SALES/CALLS

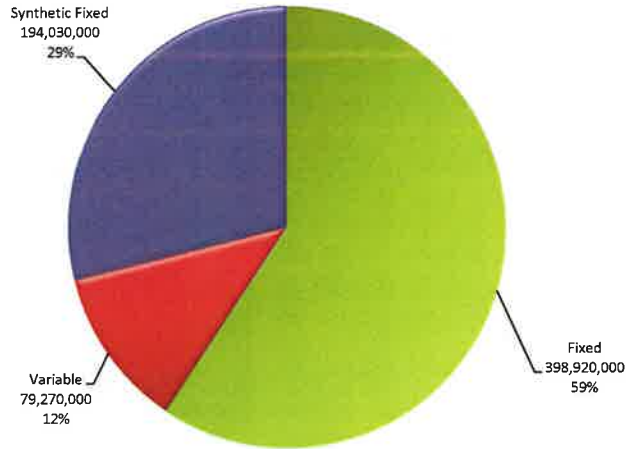
PURCHASES

| DATE | SECURITY TYPE | PAR | YIELD | Settlement Date | Maturity Date | SECURITY TYPE | PAR | YIELD TO MATURITY |
|------------|---------------|--------------|-------|-----------------|---------------|--------------------|-------------|-------------------|
| 11/27/2018 | FNMA - Note | \$10,000,000 | 0.96% | 11/9/2018 | 12/31/2020 | US - Treasury Note | \$5,000,000 | 2.96% |
| | | | | 11/27/2018 | 1/25/2021 | FHLMC - Note | \$5,000,000 | 3.02% |

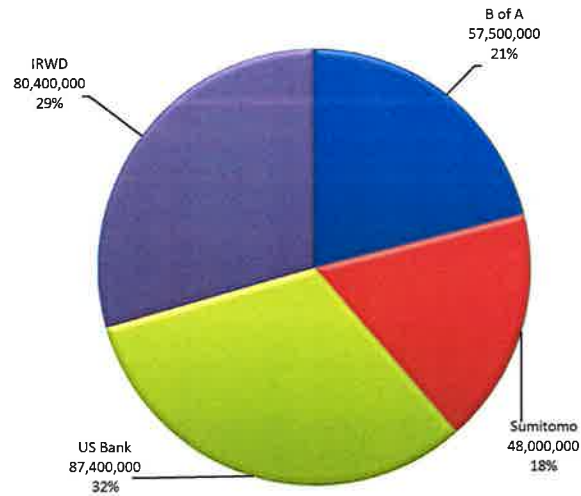
Exhibit “B”

Irvine Ranch Water District
 Summary of Fixed and Variable Rate Debt
 November 2018

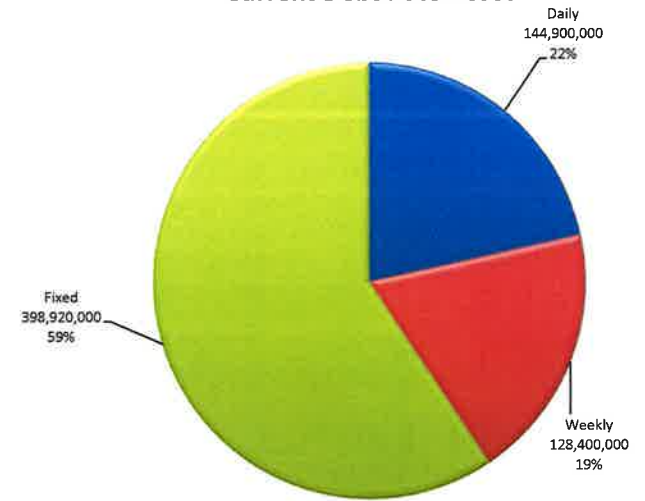
Current Debt Mix By Type



Letters of Credit / Support



Current Debt Rate Reset



Outstanding Par by Series

| Series | Issue Date | Maturity Date | Remaining Principal | Percent | Letter of Credit/Support | Rmkt Agent | Mode | Reset |
|---------------------------------|------------|---------------|----------------------|----------------|--------------------------|------------|----------|--------|
| Series 1993 | 05/19/93 | 04/01/33 | \$29,900,000 | 4.45% | US Bank | BAML | Variable | Daily |
| Series 2008-A Refunding | 04/24/08 | 07/01/35 | \$48,000,000 | 7.14% | Sumitomo | BAML | Variable | Weekly |
| Series 2011-A-1 Refunding | 04/15/11 | 10/01/37 | \$48,240,000 | 7.18% | IRWD | Goldman | Variable | Weekly |
| Series 2011-A-2 Refunding | 04/15/11 | 10/01/37 | \$32,160,000 | 4.78% | IRWD | Morgan | Variable | Weekly |
| Series 2009 - A | 06/04/09 | 10/01/41 | \$57,500,000 | 8.55% | US Bank | US Bank | Variable | Daily |
| Series 2009 - B | 06/04/09 | 10/01/41 | \$57,500,000 | 8.55% | B of A | Goldman | Variable | Daily |
| 2010 Refunding COPS | 02/23/10 | 03/01/20 | \$3,775,000 | 0.56% | N/A | N/A | Fixed | Fixed |
| 2016 COPS | 09/01/16 | 03/01/46 | \$116,745,000 | 17.37% | N/A | N/A | Fixed | Fixed |
| 2010 Build America Taxable Bond | 12/16/10 | 05/01/40 | \$175,000,000 | 26.03% | N/A | N/A | Fixed | Fixed |
| Series 2016 | 10/12/16 | 02/01/46 | \$103,400,000 | 15.38% | N/A | N/A | Fixed | Fixed |
| Total | | | \$672,220,000 | 100.00% | | | | |

IRVINE RANCH WATER DISTRICT
SUMMARY OF FIXED & VARIABLE RATE DEBT

November-18

ITN
Daily
Weekly

| GENERAL BOND INFORMATION | | | | | | | LETTER OF CREDIT INFORMATION | | | | | | | TRUSTEE INFORMATION | | | | | | | |
|-------------------------------------|------------|---------------|------------------------|--------------|---------------------|----------------------|---|------------------------------|---------------|------------|----------|---------|-------------------|----------------------|-----------------|------------------|-------|-----------|-------------|------------|--|
| VARIABLE RATE ISSUES | Issue Date | Maturity Date | Principal Payment Date | Payment Date | Original Par Amount | Remaining Principal | Letter of Credit | Reimbursement Agreement Date | L/C Exp. Date | MOODYS | S&P | FITCH | LOC Stated Amount | LOC Fee | Annual LOC Cost | Rmkt Agent | Reset | Rmkt Fees | Annual Cost | Trustee | |
| SERIES 1993 | 05/19/93 | 04/01/33 | APR 1 (2014) | 5th Bus. Day | \$38,300,000 | \$29,900,000 | US BANK | 05/07/15 | 12/15/21 | Aa3/VMIG1 | AA-/A-1+ | N/R | \$30,303,036 | 0.3300% | \$100,000 | BAML | DAILY | 0.10% | \$29,900 | BANK OF NY | |
| SERIES 2008-A Refunding | 04/24/08 | 07/01/35 | JUL 1 | 5th Bus. Day | \$60,215,000 | \$48,000,000 | SUMITOMO | 04/01/11 | 07/21/21 | A1/P-1 | A/A-1 | A/F1 | \$48,710,137 | 0.3150% | \$153,437 | BAML | WED | 0.07% | \$33,600 | BANK OF NY | |
| SERIES 2011-A-1 Refunding | 04/15/11 | 10/01/37 | Oct 1 | 1st Bus. Day | \$60,545,000 | \$48,240,000 | N/A | N/A | N/A | Aa1/VMIG1 | A-1+ | AAA/F1+ | N/A | N/A | N/A | Goldman | WED | 0.13% | \$60,300 | BANK OF NY | |
| SERIES 2011-A-2 Refunding | 04/15/11 | 10/01/37 | Oct 1 | 1st Bus. Day | \$40,370,000 | \$32,160,000 | N/A | N/A | N/A | Aa1/VMIG1 | A-1+ | AAA/F1+ | N/A | N/A | N/A | Morgan S | WED | 0.13% | \$40,200 | BANK OF NY | |
| SERIES 2009 - A | 06/04/09 | 10/01/41 | Oct 1 | 1st Bus. Day | \$75,000,000 | \$57,500,000 | US BANK | 04/01/11 | 12/15/21 | Aa2/VMIG 1 | AA-/A-1+ | AA/F1+ | \$58,142,740 | 0.3300% | \$191,871 | US Bank | DAILY | 0.07% | \$40,250 | US BANK | |
| SERIES 2009 - B | 06/04/09 | 10/01/41 | Oct 1 | 1st Bus. Day | \$75,000,000 | \$57,500,000 | B of A | 04/01/11 | 07/15/19 | A1/VMIG 1 | A/A-1 | A1/F1+ | \$58,142,740 | 0.4000% | \$232,571 | Goldman | DAILY | 0.10% | \$57,500 | US BANK | |
| \$349,430,000 | | | | | | \$273,300,000 | SUB-TOTAL VARIABLE RATE DEBT | | | | | | | \$195,298,652 | 0.3471% | \$677,879 | | | | | |
| | | | | | | | | | | | | | | (Wt. Avg) | | | | | | | |
| FIXED RATE ISSUES | | | | | | | | | | | | | | | | | | | | | |
| 2010 REFUNDING COPS | 02/23/10 | 03/01/20 | Mar -1 | MAR/SEPT | \$85,145,000 | \$3,775,000 | N/A | N/A | N/A | Aa1 | AAA | AAA | N/A | N/A | N/A | N/A | N/A | N/A | N/A | BANK OF NY | |
| 2010 GO Build America Taxable Bonds | 12/16/10 | 05/01/40 | MAY (2025) | MAY/NOV | \$175,000,000 | \$175,000,000 | N/A | N/A | N/A | Aa1 | AAA | NR | N/A | N/A | N/A | N/A | N/A | N/A | N/A | US BANK | |
| 2016 COPS | 09/01/16 | 03/01/46 | Mar -1 | MAR/SEPT | \$116,745,000 | \$116,745,000 | N/A | N/A | N/A | NR | AAA | AAA | N/A | N/A | N/A | N/A | N/A | N/A | N/A | US BANK | |
| SERIES 2016 | 10/12/16 | 02/01/46 | Feb -1 | FEB/AUG | \$103,400,000 | \$103,400,000 | N/A | N/A | N/A | NR | AAA | AAA | N/A | N/A | N/A | N/A | N/A | N/A | N/A | BANK OF NY | |
| \$480,290,000 | | | | | | \$398,920,000 | SUB-TOTAL FIXED RATE DEBT | | | | | | | | | | | | | | |
| \$829,720,000 | | | | | | \$672,220,000 | TOTAL - FIXED & VARIABLE RATE DEBT | | | | | | | | | | | | | | |

| Remarketing Agents | | | GO VS COP's | | |
|--------------------|--------------------|-----|-------------|--------------------|-----|
| Goldman | 105,740,000 | 39% | GO: | 551,700,000 | 82% |
| Morgan Stanley | 32,160,000 | 12% | COPS: | 120,520,000 | 18% |
| BAML | 77,900,000 | 29% | Total | 672,220,000 | |
| US Bank | 57,500,000 | 21% | | | |
| | 273,300,000 | | | | |

| LOC Banks | | Breakdown Between Variable & Fixed Rate Mode | |
|-----------------|--------------------|--|-------------------------|
| SUMITOMO | 48,000,000 | Daily Issues | 144,900,000 22% |
| BANK OF AMERICA | 57,500,000 | Weekly Issues | 48,000,000 7% |
| US BANK | 87,400,000 | ITN Issues | 80,400,000 12% |
| | 192,900,000 | Sub-Total | 273,300,000 |
| | | Fixed Rate Issues | \$398,920,000 59% |
| | | Sub-Total - Fixed | 398,920,000 |
| | | TOTAL DEBT | |
| | | FIXED & VAR. | 672,220,000 100% |

IRVINE RANCH WATER DISTRICT
SUMMARY OF DEBT RATES
Nov-18

| Rmkt Agent Mode | GOLDMAN DAILY | GOLDMAN WEEKLY | MORGAN STANLEY WEEKLY | MERRILL LYNCH DAILY | MERRILL LYNCH WEEKLY | US BANK DAILY |
|---------------------------|---------------|----------------|-----------------------|---------------------|----------------------|---------------|
| Bond Issue | 2009 - B | 2011 A-1 | 2011 A-2 | 1993 | 2008-A | 2009-A |
| Par Amount | 57,500,000 | 48,240,000 | 32,160,000 | 29,900,000 | 48,000,000 | 57,500,000 |
| Bank | BOFA | (SIFMA -1) | (SIFMA -1) | US BANK | Sumitomo | US BANK |
| Reset | | Wednesday | Wednesday | Wednesday | Wednesday | |
| 11/1/2018 | 1.23% | 1.60% | 1.60% | 1.22% | 1.33% | 1.23% |
| 11/2/2018 | 1.22% | 1.60% | 1.60% | 1.17% | 1.33% | 1.23% |
| 11/3/2018 | 1.22% | 1.60% | 1.60% | 1.17% | 1.33% | 1.23% |
| 11/4/2018 | 1.22% | 1.60% | 1.60% | 1.17% | 1.33% | 1.23% |
| 11/5/2018 | 1.23% | 1.60% | 1.60% | 1.17% | 1.33% | 1.23% |
| 11/6/2018 | 1.23% | 1.60% | 1.60% | 1.23% | 1.33% | 1.22% |
| 11/7/2018 | 1.26% | 1.60% | 1.60% | 1.26% | 1.33% | 1.24% |
| 11/8/2018 | 1.27% | 1.61% | 1.61% | 1.26% | 1.38% | 1.28% |
| 11/9/2018 | 1.28% | 1.61% | 1.61% | 1.28% | 1.38% | 1.30% |
| 11/10/2018 | 1.28% | 1.61% | 1.61% | 1.28% | 1.38% | 1.30% |
| 11/11/2018 | 1.28% | 1.61% | 1.61% | 1.28% | 1.38% | 1.30% |
| 11/12/2018 | 1.28% | 1.61% | 1.61% | 1.28% | 1.38% | 1.30% |
| 11/13/2018 | 1.31% | 1.61% | 1.61% | 1.31% | 1.38% | 1.30% |
| 11/14/2018 | 1.32% | 1.61% | 1.61% | 1.35% | 1.38% | 1.32% |
| 11/15/2018 | 1.33% | 1.65% | 1.65% | 1.35% | 1.44% | 1.34% |
| 11/16/2018 | 1.35% | 1.65% | 1.65% | 1.37% | 1.44% | 1.35% |
| 11/17/2018 | 1.35% | 1.65% | 1.65% | 1.37% | 1.44% | 1.35% |
| 11/18/2018 | 1.35% | 1.65% | 1.65% | 1.37% | 1.44% | 1.35% |
| 11/19/2018 | 1.35% | 1.65% | 1.65% | 1.37% | 1.44% | 1.36% |
| 11/20/2018 | 1.38% | 1.65% | 1.65% | 1.38% | 1.44% | 1.37% |
| 11/21/2018 | 1.38% | 1.65% | 1.65% | 1.39% | 1.44% | 1.38% |
| 11/22/2018 | 1.38% | 1.68% | 1.68% | 1.39% | 1.46% | 1.38% |
| 11/23/2018 | 1.40% | 1.68% | 1.68% | 1.38% | 1.46% | 1.38% |
| 11/24/2018 | 1.40% | 1.68% | 1.68% | 1.38% | 1.46% | 1.38% |
| 11/25/2018 | 1.40% | 1.68% | 1.68% | 1.38% | 1.46% | 1.38% |
| 11/26/2018 | 1.38% | 1.68% | 1.68% | 1.39% | 1.46% | 1.38% |
| 11/27/2018 | 1.38% | 1.68% | 1.68% | 1.37% | 1.46% | 1.38% |
| 11/28/2018 | 1.40% | 1.68% | 1.68% | 1.38% | 1.46% | 1.40% |
| 11/29/2018 | 1.42% | 1.68% | 1.68% | 1.39% | 1.45% | 1.40% |
| 11/30/2018 | 1.44% | 1.68% | 1.68% | 1.39% | 1.45% | 1.40% |
| Avg Interest Rates | 1.32% | 1.64% | 1.64% | 1.32% | 1.41% | 1.32% |
| Rmkt Fee | 0.10% | 0.13% | 0.13% | 0.10% | 0.07% | 0.07% |
| LOC Fee | 0.40% | | | 0.33% | 0.32% | 0.33% |
| All-In Rate | 1.82% | 1.77% | 1.77% | 1.75% | 1.79% | 1.72% |
| Par Amount | 105,740,000 | | 32,160,000 | 77,900,000 | | 57,500,000 |

| Interest Rate Mode | Percent of Total Variable Rate Debt | Par Outstanding | Weighted All-In Average Rate | Base Rate Average |
|--|-------------------------------------|-----------------------|------------------------------|-------------------|
| Daily | 53.02% | 144,900,000 | 1.77% | 1.32% |
| Weekly | 46.98% | 128,400,000 | 1.77% | 1.55% |
| | 100.00% | \$ 273,300,000 | 1.77% | 1.43% |
| Fixed | | | | |
| COPS 2010 | 0.95% | 3,775,000 | 3.82% | |
| COPS 2016 | 29.27% | 116,745,000 | 2.90% | |
| BABS 2010 | 43.87% | 175,000,000 | 4.45% | (1) |
| SERIES 2016 | 25.92% | 103,400,000 | 3.32% | |
| | 100.00% | \$ 398,920,000 | 3.70% | |
| All-In Debt Rate Including \$130 Million Notional Amount of Swaps | | | | 3.71% |

(1) Rate adjusted up from 4.35% as a result of sequestration reducing BAB's subsidy by 6.2%

Exhibit "C"

MONTHLY SUMMARY OF PAYROLL ACH PAYMENTS

**November
2018**

| | AMOUNT | VENDOR | PURPOSE |
|------------|------------------------------|-----------------|--------------------------|
| 11/9/2018 | 1,126,326.04 | BANK OF AMERICA | ACH Payments for Payroll |
| 11/23/2018 | 962,338.33 | BANK OF AMERICA | ACH Payments for Payroll |
| | <u>\$2,088,664.37</u> | | |

Exhibit "D"

IRWD Ledger Upgrade

Void Payment Register

Report Date: 03-DEC-2018 15:19

Include Zero Amount Payments: Yes
 Display Payee Address: No

Period From: 01-NOV-18

Page: 1
 To: 30-NOV-18
 Date: Void Date

Bank: Bank of America N.A.

Branch: Los Angeles

Account: Checking AP and PR

Bank Account Currency: USD

Payment Currency: USD (US Dollar)

| Payment Number | Date | Payee Name | Site | Address | Payment Amount | Void Date |
|------------------------------|-----------|-----------------------------|---------------|---------|----------------|-----------|
| Payment Document: IRWD CHECK | | | | | | |
| 389489 | 05-JUL-18 | ARAKI, YASUHIRO | PAY | | 47.69 | 19-NOV-18 |
| 389512 | 05-JUL-18 | CUESTA CONSTRUCTION COMPANY | PAY | | 535.26 | 29-NOV-18 |
| 389531 | 05-JUL-18 | HUANG, QIYING | PAY | | 33.56 | 19-NOV-18 |
| 389537 | 05-JUL-18 | KILBURN, M. | PAY | | 28.04 | 19-NOV-18 |
| 389638 | 12-JUL-18 | CHEN, SHULING | PAY | | 22.88 | 19-NOV-18 |
| 389677 | 12-JUL-18 | GRACE, MELVIN | PAY | | 59.37 | 19-NOV-18 |
| 389703 | 12-JUL-18 | MACDUFF, CHRIS | PAY | | 16.00 | 19-NOV-18 |
| 389704 | 12-JUL-18 | MAILLOUX, KOLLEEN | PAY | | 29.80 | 19-NOV-18 |
| 389709 | 12-JUL-18 | MOMENTUM PROPERTY MANAGMENT | PAY | | 53.46 | 19-NOV-18 |
| 389899 | 19-JUL-18 | JI, WEI | PAY | | 60.00 | 19-NOV-18 |
| 390111 | 26-JUL-18 | LIU, XIAOYANG | PAY | | 60.11 | 19-NOV-18 |
| 390121 | 26-JUL-18 | MILLER-WHITE, SHERRY | PAY | | 370.64 | 29-NOV-18 |
| 392489 | 11-OCT-18 | WATERSMART SOFTWARE, INC | SAN FRANCISCO | | 13,597.50 | 28-NOV-18 |
| 393202 | 08-NOV-18 | Hartoog, Jeremy | HOME | | 805.78 | 13-NOV-18 |
| 393940 | 28-NOV-18 | SINFIELD, LILY | PAY | | 19.99 | 29-NOV-18 |

Payment Document Subtotal 15,740.08

Bank Account Subtotal 15,740.08

Report Count: 15

Report Total 15,740.08

Voids

*** End of Report ***

IRWD Ledger Upgrade Payment Register For 01-NOV-18 To 30-NOV-18 Report Date: 03-DEC-2018 15:24
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 1
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|-------------------------------|--------------|-----------|---------------------------------------|--------|----------------|--------------|----------------|------------|
| Payment Document : IRWD CHECK | | | | | | | | |
| 393005 | | 01-NOV-18 | IRWD-PETTY CASH CUSTODIAN | IRVINE | 1,200.71 | 01-NOV-18 | 1,200.71 | Reconciled |
| 393006 | | 01-NOV-18 | Cortez, Malcolm A (Malcolm) | | 227.32 | 16-NOV-18 | 227.32 | Reconciled |
| 393007 | | 01-NOV-18 | Hankla, Jeremy | | 50.00 | 05-NOV-18 | 50.00 | Reconciled |
| 393008 | | 01-NOV-18 | Hufana, Eugenio D | | 89.93 | 01-NOV-18 | 89.93 | Reconciled |
| 393009 | | 01-NOV-18 | McElroy, Dorien | | 197.00 | 05-NOV-18 | 197.00 | Reconciled |
| 393010 | | 01-NOV-18 | Nash, Joel | | 93.20 | 06-NOV-18 | 93.20 | Reconciled |
| 393011 | | 01-NOV-18 | Oldewage, Lars D (Lars) | | 172.22 | 05-NOV-18 | 172.22 | Reconciled |
| 393012 | | 01-NOV-18 | Orozco, Linda | | 63.23 | 06-NOV-18 | 63.23 | Reconciled |
| 393013 | | 01-NOV-18 | Saini, Mohit | | 238.14 | 05-NOV-18 | 238.14 | Reconciled |
| 393014 | | 01-NOV-18 | Smithson, Christopher F (Christopher) | | 103.50 | 07-NOV-18 | 103.50 | Reconciled |
| 393015 | | 01-NOV-18 | A, YINA | | 88.49 | | | Negotiable |
| 393016 | | 01-NOV-18 | ADLER, MICHAEL & BETH | | 4,457.97 | 05-NOV-18 | 4,457.97 | Reconciled |
| 393017 | | 01-NOV-18 | ADT SECURITY SERVICES INC | | 412.47 | 08-NOV-18 | 412.47 | Reconciled |
| 393018 | | 01-NOV-18 | AIRGAS, INC. | | 966.61 | 05-NOV-18 | 966.61 | Reconciled |
| 393019 | | 01-NOV-18 | ALEXANDER'S CONTRACT SERVICES, INC. | | 119,397.70 | 07-NOV-18 | 119,397.70 | Reconciled |
| 393020 | | 01-NOV-18 | ALLIANCE RESOURCE CONSULTING LLC | | 12,500.00 | 07-NOV-18 | 12,500.00 | Reconciled |
| 393021 | | 01-NOV-18 | ALSTON & BIRD LLP | | 23,986.83 | 08-NOV-18 | 23,986.83 | Reconciled |
| 393022 | | 01-NOV-18 | ANTHONY N. LARSEN | | 450.00 | 06-NOV-18 | 450.00 | Reconciled |
| 393023 | | 01-NOV-18 | APPLIED ENGINEERING CONCEPTS | | 8,680.00 | 05-NOV-18 | 8,680.00 | Reconciled |
| 393024 | | 01-NOV-18 | ARMORCAST PRODUCTS COMPANY | | 7,695.93 | 05-NOV-18 | 7,695.93 | Reconciled |
| 393025 | | 01-NOV-18 | AT&T | | 4,280.93 | 07-NOV-18 | 4,280.93 | Reconciled |
| 393026 | | 01-NOV-18 | AT&T | | 54.06 | 07-NOV-18 | 54.06 | Reconciled |
| 393027 | | 01-NOV-18 | AT&T | | 11.61 | 07-NOV-18 | 11.61 | Reconciled |
| 393028 | | 01-NOV-18 | AUSTIN HARDWOODS, INC | | 209.37 | 13-NOV-18 | 209.37 | Reconciled |
| 393029 | | 01-NOV-18 | AUTOZONE PARTS, INC. | | 128.81 | 08-NOV-18 | 128.81 | Reconciled |
| 393030 | | 01-NOV-18 | BALES, TWILA | | 149.49 | | | Negotiable |
| 393031 | | 01-NOV-18 | BARTOLOME, JADE | | 29.27 | 05-NOV-18 | 29.27 | Reconciled |
| 393032 | | 01-NOV-18 | BAY, TRENISE | | 35.00 | | | Negotiable |
| 393033 | | 01-NOV-18 | BERNABE, ESTEPHANY | | 64.18 | 16-NOV-18 | 64.18 | Reconciled |
| 393034 | | 01-NOV-18 | BILL'S SWEEPING SERVICE INC | | 1,050.00 | 07-NOV-18 | 1,050.00 | Reconciled |

IRWD Ledger Upgrade Payment Register For 01-NOV-18 To 30-NOV-18 Report Date: 03-DEC-2018 15:24
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 2
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|-------------------------------|--------------|-----------|-----------------------------------|------|----------------|--------------|----------------|------------|
| Payment Document : IRWD CHECK | | | | | | | | |
| 393035 | | 01-NOV-18 | BLACK & VEATCH CORPORATION | | 302,326.28 | 13-NOV-18 | 302,326.28 | Reconciled |
| 393036 | | 01-NOV-18 | BRIGHTVIEW LANDSCAPE DEVELOPMENT | | 1,515.74 | | | Negotiable |
| 393037 | | 01-NOV-18 | BRITHINEE ELECTRIC | | 38,722.82 | 07-NOV-18 | 38,722.82 | Reconciled |
| 393038 | | 01-NOV-18 | BTF PRECISE MICROBIOLOGY INC. | | 571.81 | 06-NOV-18 | 571.81 | Reconciled |
| 393039 | | 01-NOV-18 | C I OLSON & ASSOCIATES, INC. | | 3,600.01 | 07-NOV-18 | 3,600.01 | Reconciled |
| 393040 | | 01-NOV-18 | C WELLS PIPELINE MATERIALS INC | | 6,087.90 | 09-NOV-18 | 6,087.90 | Reconciled |
| 393041 | | 01-NOV-18 | CALIFORNIA BARRICADE RENTAL, INC. | | 9,505.00 | 07-NOV-18 | 9,505.00 | Reconciled |
| 393042 | | 01-NOV-18 | CANON SOLUTIONS AMERICA, INC. | | 498.63 | 06-NOV-18 | 498.63 | Reconciled |
| 393043 | | 01-NOV-18 | CAPTIVE AUDIENCE MARKETING INC. | | 79.00 | 06-NOV-18 | 79.00 | Reconciled |
| 393044 | | 01-NOV-18 | CDW GOVERNMENT LLC | | 796.00 | 07-NOV-18 | 796.00 | Reconciled |
| 393045 | | 01-NOV-18 | CHAIREL CUSTOM HAY, INC. | | 9,223.00 | 06-NOV-18 | 9,223.00 | Reconciled |
| 393046 | | 01-NOV-18 | CHARLES P CROWLEY COMPANY INC | | 6,184.59 | 09-NOV-18 | 6,184.59 | Reconciled |
| 393047 | | 01-NOV-18 | CHEM TECH INTERNATIONAL INC | | 35,448.89 | 07-NOV-18 | 35,448.89 | Reconciled |

| | | | | | | | |
|--------|-----------|----------------------------------|--|-----------|-----------|-----------|------------|
| 393048 | 01-NOV-18 | CHUNG, LING | | 365.45 | 06-NOV-18 | 365.45 | Reconciled |
| 393049 | 01-NOV-18 | CITY OF IRVINE | | 3,173.20 | 05-NOV-18 | 3,173.20 | Reconciled |
| 393050 | 01-NOV-18 | CITY OF ORANGE | | 171.23 | 05-NOV-18 | 171.23 | Reconciled |
| 393051 | 01-NOV-18 | CONSTELLATION NEWENERGY, INC. | | 30,123.88 | 08-NOV-18 | 30,123.88 | Reconciled |
| 393052 | 01-NOV-18 | CORELOGIC INC | | 241.24 | 07-NOV-18 | 241.24 | Reconciled |
| 393053 | 01-NOV-18 | CORREA, JENNIFER | | 47.49 | 06-NOV-18 | 47.49 | Reconciled |
| 393054 | 01-NOV-18 | COX COMMUNICATIONS, INC. | | 391.31 | 06-NOV-18 | 391.31 | Reconciled |
| 393055 | 01-NOV-18 | CRASNEAN, BENJAMIN | | 33.25 | | | Negotiable |
| 393056 | 01-NOV-18 | CS-AMSCO | | 5,400.01 | 14-NOV-18 | 5,400.01 | Reconciled |
| 393057 | 01-NOV-18 | CULLIGAN OF SANTA ANA | | 7,000.00 | 05-NOV-18 | 7,000.00 | Reconciled |
| 393058 | 01-NOV-18 | D & G SIGNS | | 4,367.56 | 07-NOV-18 | 4,367.56 | Reconciled |
| 393059 | 01-NOV-18 | DAI, ZEYI | | 15.30 | 21-NOV-18 | 15.30 | Reconciled |
| 393060 | 01-NOV-18 | DARTMOUTH COURT APTS | | 738.61 | 07-NOV-18 | 738.61 | Reconciled |
| 393061 | 01-NOV-18 | DAVIS FARR LLP | | 30,000.00 | 06-NOV-18 | 30,000.00 | Reconciled |

IRWD Ledger Upgrade
 BANK: Bank of America N.A. Branch : Los Angeles
 Bank Account Currency: USD (US Dollar)
 Payment Type: All

Payment Register For 01-NOV-18 To 30-NOV-18
 Account: Checking AP and PR
 Payment Currency: USD (US Dollar)
 Display Supplier Address: No

Report Date: 03-DEC-2018 15:24
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| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|-------------------------------|--------------|-----------|---|------|----------------|--------------|----------------|------------|
| Payment Document : IRWD CHECK | | | | | | | | |
| 393062 | | 01-NOV-18 | DE VAUL PAINT COMPANY | | 834.42 | 07-NOV-18 | 834.42 | Reconciled |
| 393063 | | 01-NOV-18 | DEE JASPAR & ASSOCIATES, INC. | | 147.00 | 15-NOV-18 | 147.00 | Reconciled |
| 393064 | | 01-NOV-18 | DELL MARKETING LP | | 5,040.04 | 05-NOV-18 | 5,040.04 | Reconciled |
| 393065 | | 01-NOV-18 | DIGITAL MAP PRODUCTS, INC. | | 4,284.00 | 09-NOV-18 | 4,284.00 | Reconciled |
| 393066 | | 01-NOV-18 | DIRECTV INC | | 125.53 | 08-NOV-18 | 125.53 | Reconciled |
| 393067 | | 01-NOV-18 | DISCOUNT COURIER SERVICE INC. | | 72.24 | 06-NOV-18 | 72.24 | Reconciled |
| 393068 | | 01-NOV-18 | DISCOVERY SCIENCE CENTER OF ORANGE COUNTY | | 4,170.96 | 07-NOV-18 | 4,170.96 | Reconciled |
| 393069 | | 01-NOV-18 | EDWARD P BAKER III | | 333.00 | 27-NOV-18 | 333.00 | Reconciled |
| 393070 | | 01-NOV-18 | ENTERPRISE SECURITY, INC | | 3,088.12 | 05-NOV-18 | 3,088.12 | Reconciled |
| 393071 | | 01-NOV-18 | EVANTEC CORPORATION | | 1,386.43 | 06-NOV-18 | 1,386.43 | Reconciled |
| 393072 | | 01-NOV-18 | EXECUTIVE LIGHTING & ELECTRIC | | 753.77 | 06-NOV-18 | 753.77 | Reconciled |
| 393073 | | 01-NOV-18 | FARRELL & ASSOCIATES | | 241.18 | 05-NOV-18 | 241.18 | Reconciled |
| 393074 | | 01-NOV-18 | FEDEX | | 294.63 | 07-NOV-18 | 294.63 | Reconciled |
| 393075 | | 01-NOV-18 | FERGUSON ENTERPRISES, INC. | | 4,568.60 | 05-NOV-18 | 4,568.60 | Reconciled |
| 393076 | | 01-NOV-18 | FISHER SCIENTIFIC COMPANY LLC | | 2,883.97 | 05-NOV-18 | 2,883.97 | Reconciled |
| 393077 | | 01-NOV-18 | FLEET SOLUTIONS LLC | | 872.96 | 05-NOV-18 | 872.96 | Reconciled |
| 393078 | | 01-NOV-18 | FRONTIER CALIFORNIA INC. | | 273.35 | 09-NOV-18 | 273.35 | Reconciled |
| 393079 | | 01-NOV-18 | FUSCOE ENGINEERING, INC. | | 2,989.05 | 05-NOV-18 | 2,989.05 | Reconciled |
| 393080 | | 01-NOV-18 | GLENN LUKOS ASSOCIATES, INC | | 809.82 | 06-NOV-18 | 809.82 | Reconciled |
| 393081 | | 01-NOV-18 | GONG, XITONG | | 426.76 | | | Negotiable |
| 393082 | | 01-NOV-18 | GRAINGER | | 2,908.09 | 06-NOV-18 | 2,908.09 | Reconciled |
| 393083 | | 01-NOV-18 | GRAYBAR ELECTRIC COMPANY | | 276.05 | 05-NOV-18 | 276.05 | Reconciled |
| 393084 | | 01-NOV-18 | GRIGORIOU, DIMITRIS | | 29.40 | 05-NOV-18 | 29.40 | Reconciled |
| 393085 | | 01-NOV-18 | HAAKER EQUIPMENT COMPANY | | 782.09 | 06-NOV-18 | 782.09 | Reconciled |
| 393086 | | 01-NOV-18 | HABITAT RESTORATION SCIENCES, INC. | | 1,183.00 | 08-NOV-18 | 1,183.00 | Reconciled |

IRWD Ledger Upgrade
 BANK: Bank of America N.A. Branch : Los Angeles
 Bank Account Currency: USD (US Dollar)
 Payment Type: All

Payment Register For 01-NOV-18 To 30-NOV-18
 Account: Checking AP and PR
 Payment Currency: USD (US Dollar)
 Display Supplier Address: No

Report Date: 03-DEC-2018 15:24
 Page: 4

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|-------------------------------|--------------|-----------|------------------------------|------|----------------|--------------|----------------|------------|
| Payment Document : IRWD CHECK | | | | | | | | |
| 393087 | | 01-NOV-18 | HACH COMPANY | | 4,211.95 | 06-NOV-18 | 4,211.95 | Reconciled |
| 393088 | | 01-NOV-18 | HARDY & HARPER, INC. | | 17,810.00 | 06-NOV-18 | 17,810.00 | Reconciled |
| 393089 | | 01-NOV-18 | HARRIS & ASSOCIATES, INC. | | 1,490.00 | 05-NOV-18 | 1,490.00 | Reconciled |
| 393090 | | 01-NOV-18 | HDR ENGINEERING INC | | 157,136.93 | 08-NOV-18 | 157,136.93 | Reconciled |
| 393091 | | 01-NOV-18 | HELPMATES STAFFING | | 16,707.79 | 07-NOV-18 | 16,707.79 | Reconciled |

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|----------------|--------------|-----------|--|------|----------------|--------------|----------------|------------|
| 393092 | | 01-NOV-18 | SERVICES HILL BROTHERS CHEMICAL COMPANY | | 8,134.76 | 08-NOV-18 | 8,134.76 | Reconciled |
| 393093 | | 01-NOV-18 | HOME DEPOT USA INC | | 180.23 | 07-NOV-18 | 180.23 | Reconciled |
| 393094 | | 01-NOV-18 | HU, XIAOYUN | | 102.25 | 07-NOV-18 | 102.25 | Reconciled |
| 393095 | | 01-NOV-18 | INDUSTRIAL METAL SUPPLY CO | | 1,234.53 | 05-NOV-18 | 1,234.53 | Reconciled |
| 393096 | | 01-NOV-18 | IRVINE COMMUNITY DEVELOPMENT COMPANY LLC | | 1,596,498.45 | 08-NOV-18 | 1,596,498.45 | Reconciled |
| 393097 | | 01-NOV-18 | IRVINE PACIFIC | | 138.13 | 07-NOV-18 | 138.13 | Reconciled |
| 393098 | | 01-NOV-18 | IRVINE PIPE & SUPPLY INC | | 1,387.66 | 06-NOV-18 | 1,387.66 | Reconciled |
| 393099 | | 01-NOV-18 | JCI JONES CHEMICALS INC | | 9,042.15 | 07-NOV-18 | 9,042.15 | Reconciled |
| 393100 | | 01-NOV-18 | KAESER COMPRESSORS, INC. | | 2,685.68 | 06-NOV-18 | 2,685.68 | Reconciled |
| 393101 | | 01-NOV-18 | KAYAR, MELIH | | 257.40 | 06-NOV-18 | 257.40 | Reconciled |
| 393102 | | 01-NOV-18 | KOELLER NEBEKER CARLSON & HALUCK, LLP | | 280.00 | 05-NOV-18 | 280.00 | Reconciled |
| 393103 | | 01-NOV-18 | LAMONICA, JASON | | 19.82 | 13-NOV-18 | 19.82 | Reconciled |
| 393104 | | 01-NOV-18 | LANCER SALES USA, INC. | | 408.86 | 08-NOV-18 | 408.86 | Reconciled |
| 393105 | | 01-NOV-18 | LENNAR HOMES | | 583.86 | 26-NOV-18 | 583.86 | Reconciled |
| 393106 | | 01-NOV-18 | LEWIS BRISBOIS BISGAARD AND SMITH, LLP | | 110,579.73 | 09-NOV-18 | 110,579.73 | Reconciled |
| 393107 | | 01-NOV-18 | LEWIS, RALPH | | 465.93 | | | Negotiable |
| 393108 | | 01-NOV-18 | LILLESTRAND LEADERSHIP CONSULTING, INC. | | 957.32 | 19-NOV-18 | 957.32 | Reconciled |
| 393109 | | 01-NOV-18 | LUBRICATION ENGINEERS, INC. | | 6,240.91 | 06-NOV-18 | 6,240.91 | Reconciled |
| 393110 | | 01-NOV-18 | MARK HELLER AND XIAN GE | | 122.78 | 23-NOV-18 | 122.78 | Reconciled |
| 393111 | | 01-NOV-18 | MBC AQUATIC SCIENCES, INC. | | 4,050.00 | 08-NOV-18 | 4,050.00 | Reconciled |

IRWD Ledger Upgrade Payment Register For 01-NOV-18 To 30-NOV-18 Report Date: 03-DEC-2018 15:24
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 5
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|-------------------------------|--------------|-----------|--|------|----------------|--------------|----------------|------------|
| Payment Document : IRWD CHECK | | | | | | | | |
| 393112 | | 01-NOV-18 | MC FADDEN-DALE INDUSTRIAL | | 41.75 | 06-NOV-18 | 41.75 | Reconciled |
| 393113 | | 01-NOV-18 | MC MASTER CARR SUPPLY CO | | 32.36 | 05-NOV-18 | 32.36 | Reconciled |
| 393114 | | 01-NOV-18 | MERCH SOURCE | | 38.33 | | | Negotiable |
| 393115 | | 01-NOV-18 | MERRIMAC PETROLEUM, INC. | | 18,407.08 | 05-NOV-18 | 18,407.08 | Reconciled |
| 393116 | | 01-NOV-18 | MOHAMED, ASHRAF | | 39.12 | | | Negotiable |
| 393117 | | 01-NOV-18 | MULHOLAND, RYAN | | 43.07 | 06-NOV-18 | 43.07 | Reconciled |
| 393118 | | 01-NOV-18 | MUNICIPAL MAINTENANCE EQUIPMENT INC | | 7,734.75 | 05-NOV-18 | 7,734.75 | Reconciled |
| 393119 | | 01-NOV-18 | MUNICIPAL WATER DISTRICT OF ORANGE COUNTY | | 89,238.70 | 06-NOV-18 | 89,238.70 | Reconciled |
| 393120 | | 01-NOV-18 | MUTUAL PROPANE | | 11.46 | 07-NOV-18 | 11.46 | Reconciled |
| 393121 | | 01-NOV-18 | NATALIZIA, CARL | | 25.39 | 14-NOV-18 | 25.39 | Reconciled |
| 393122 | | 01-NOV-18 | NATIONAL READY MIXED CONCRETE CO. | | 1,064.09 | 05-NOV-18 | 1,064.09 | Reconciled |
| 393123 | | 01-NOV-18 | NGUYEN, ALLEEN | | 50.53 | 27-NOV-18 | 50.53 | Reconciled |
| 393124 | | 01-NOV-18 | NIKNAMI, MOHAMMAD | | 28.83 | | | Negotiable |
| 393125 | | 01-NOV-18 | NORTHERN TOOL & EQUIPMENT CATALOG COMPANY, INC | | 626.47 | 05-NOV-18 | 626.47 | Reconciled |
| 393126 | | 01-NOV-18 | OLIN CORPORATION | | 20,411.33 | 09-NOV-18 | 20,411.33 | Reconciled |
| 393127 | | 01-NOV-18 | OLSON ENGINEERING SYSTEM, INC. | | 2,812.50 | 06-NOV-18 | 2,812.50 | Reconciled |
| 393128 | | 01-NOV-18 | ONESOURCE DISTRIBUTORS LLC | | 12,048.54 | 07-NOV-18 | 12,048.54 | Reconciled |
| 393129 | | 01-NOV-18 | ORANGE COUNTY AUTO PARTS CO | | 202.03 | 07-NOV-18 | 202.03 | Reconciled |
| 393130 | | 01-NOV-18 | PACIFIC COAST BOLT CORP | | 1,573.50 | 07-NOV-18 | 1,573.50 | Reconciled |
| 393131 | | 01-NOV-18 | PADUA, ANDRE | | 45.84 | 09-NOV-18 | 45.84 | Reconciled |
| 393132 | | 01-NOV-18 | PANCHAL, AADIS | | 9.29 | | | Negotiable |
| 393133 | | 01-NOV-18 | PAREJA, IAN | | 45.82 | | | Negotiable |
| 393134 | | 01-NOV-18 | PARKHOUSE TIRE INC | | 2,547.77 | 06-NOV-18 | 2,547.77 | Reconciled |
| 393135 | | 01-NOV-18 | PEEFFER, ZACH | | 70.93 | | | Negotiable |
| 393136 | | 01-NOV-18 | PRAXAIR DISTRIBUTION INC | | 3,288.90 | 07-NOV-18 | 3,288.90 | Reconciled |
| 393137 | | 01-NOV-18 | PRO MOBILE AUTO DETAILING | | 300.00 | 05-NOV-18 | 300.00 | Reconciled |
| 393138 | | 01-NOV-18 | PSOMAS | | 325.00 | 06-NOV-18 | 325.00 | Reconciled |
| 393139 | | 01-NOV-18 | PTI SAND & GRAVEL INC | | 1,288.66 | 06-NOV-18 | 1,288.66 | Reconciled |
| 393140 | | 01-NOV-18 | QIAO, ZIYU | | 15.50 | | | Negotiable |

IRWD Ledger Upgrade Payment Register For 01-NOV-18 To 30-NOV-18 Report Date: 03-DEC-2018 15:24
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 6
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|-------------------------------|--------------|-----------|---|------|----------------|--------------|----------------|------------|
| Payment Document : IRWD CHECK | | | | | | | | |
| 393141 | | 01-NOV-18 | R&B AUTOMATION, INC. | | 19,541.70 | 13-NOV-18 | 19,541.70 | Reconciled |
| 393142 | | 01-NOV-18 | RAM AIR ENGINEERING INC | | 3,085.00 | 06-NOV-18 | 3,085.00 | Reconciled |
| 393143 | | 01-NOV-18 | RANCHO SANTA FE APTS | | 913.08 | 07-NOV-18 | 913.08 | Reconciled |
| 393144 | | 01-NOV-18 | RINCON TRUCK CENTER INC. | | 45.49 | 05-NOV-18 | 45.49 | Reconciled |
| 393145 | | 01-NOV-18 | RMC WATER AND ENVIRONMENT | | 584.63 | 05-NOV-18 | 584.63 | Reconciled |
| 393146 | | 01-NOV-18 | ROSEDALE - RIO BRAVO WATER STORAGE DISTRICT | | 156,649.59 | 14-NOV-18 | 156,649.59 | Reconciled |
| 393147 | | 01-NOV-18 | ROSEMOUNT INC. | | 10,312.93 | 08-NOV-18 | 10,312.93 | Reconciled |
| 393148 | | 01-NOV-18 | ROYAL INDUSTRIAL SOLUTIONS | | 3,720.99 | 05-NOV-18 | 3,720.99 | Reconciled |
| 393149 | | 01-NOV-18 | SAN MARCO APARTMENTS | | 32.89 | 07-NOV-18 | 32.89 | Reconciled |
| 393150 | | 01-NOV-18 | SANDERS PAVING INC | | 1,200.00 | 08-NOV-18 | 1,200.00 | Reconciled |
| 393151 | | 01-NOV-18 | SANTA ANA BLUE PRINT | | 365.97 | 07-NOV-18 | 365.97 | Reconciled |
| 393152 | | 01-NOV-18 | SANTA ROSA APARTMENTS | | 326.21 | 07-NOV-18 | 326.21 | Reconciled |
| 393153 | | 01-NOV-18 | SCHINDLER ELEVATOR CORPORATION | | 214.92 | 06-NOV-18 | 214.92 | Reconciled |
| 393154 | | 01-NOV-18 | SHANK, GREGORY | | 99.74 | | | Negotiable |
| 393155 | | 01-NOV-18 | SONG, YANG | | 437.07 | | | Negotiable |
| 393156 | | 01-NOV-18 | SOUTHERN CALIFORNIA EDISON COMPANY | | 447,191.00 | 05-NOV-18 | 447,191.00 | Reconciled |
| 393157 | | 01-NOV-18 | STANDARD REGISTER, INC. | | 1,204.11 | 06-NOV-18 | 1,204.11 | Reconciled |
| 393158 | | 01-NOV-18 | STANFORD COURT APARTMENTS | | 43.15 | 07-NOV-18 | 43.15 | Reconciled |
| 393159 | | 01-NOV-18 | STIFT, MICHELLE | | 186.55 | 06-NOV-18 | 186.55 | Reconciled |
| 393160 | | 01-NOV-18 | STONEGATE VILLAGE COMM ASSN | | 411.11 | 16-NOV-18 | 411.11 | Reconciled |
| 393161 | | 01-NOV-18 | STRADLING YOCCA CARLSON & RAUTH | | 340.80 | 05-NOV-18 | 340.80 | Reconciled |
| 393162 | | 01-NOV-18 | STREAKWAVE WIRELESS, INC. | | 1,163.08 | 06-NOV-18 | 1,163.08 | Reconciled |
| 393163 | | 01-NOV-18 | SUEZ TREATMENT SOLUTIONS INC. | | 541.15 | 05-NOV-18 | 541.15 | Reconciled |
| 393164 | | 01-NOV-18 | TA, LAC | | 16.98 | 13-NOV-18 | 16.98 | Reconciled |
| 393165 | | 01-NOV-18 | TEKDRAULICS | | 530.21 | 05-NOV-18 | 530.21 | Reconciled |
| 393166 | | 01-NOV-18 | TETRA TECH, INC | | 9,667.00 | 05-NOV-18 | 9,667.00 | Reconciled |

IRWD Ledger Upgrade Payment Register For 01-NOV-18 To 30-NOV-18 Report Date: 03-DEC-2018 15:24
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 7
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|-------------------------------|--------------|-----------|--|------|----------------|--------------|----------------|------------|
| Payment Document : IRWD CHECK | | | | | | | | |
| 393167 | | 01-NOV-18 | THYSSENKRUPP ELEVATOR CORPORATION | | 191.94 | 05-NOV-18 | 191.94 | Reconciled |
| 393168 | | 01-NOV-18 | TIC-OFFICE PROPERTIES | | 67.24 | 06-NOV-18 | 67.24 | Reconciled |
| 393169 | | 01-NOV-18 | TOLL BROS., INC. | | 176.97 | 13-NOV-18 | 176.97 | Reconciled |
| 393170 | | 01-NOV-18 | TORRES, MONICA | | 210.24 | 13-NOV-18 | 210.24 | Reconciled |
| 393171 | | 01-NOV-18 | TRI POINTE HOMES, INC. | | 151.84 | 13-NOV-18 | 151.84 | Reconciled |
| 393172 | | 01-NOV-18 | TRUCPARCO | | 497.68 | 13-NOV-18 | 497.68 | Reconciled |
| 393173 | | 01-NOV-18 | TUNG, DAVID | | 3,100.77 | 07-NOV-18 | 3,100.77 | Reconciled |
| 393174 | | 01-NOV-18 | TURTLE ROCK CANYON APTS | | 330.24 | 07-NOV-18 | 330.24 | Reconciled |
| 393175 | | 01-NOV-18 | UNITED PARCEL SERVICE INC | | 663.11 | 06-NOV-18 | 663.11 | Reconciled |
| 393176 | | 01-NOV-18 | US BANK NAT'L ASSOCIATION NORTH DAKOTA | | 66,338.70 | 13-NOV-18 | 66,338.70 | Reconciled |
| 393177 | | 01-NOV-18 | VALBUENA, STEPHEN | | 21,564.72 | 08-NOV-18 | 21,564.72 | Reconciled |
| 393178 | | 01-NOV-18 | VELEZ, DAINY | | 11.28 | 16-NOV-18 | 11.28 | Reconciled |
| 393179 | | 01-NOV-18 | VERIZON WIRELESS SERVICES LLC | | 12,689.49 | 07-NOV-18 | 12,689.49 | Reconciled |
| 393180 | | 01-NOV-18 | VESCO PLASTIC SALES | | 2,875.32 | | | Negotiable |
| 393181 | | 01-NOV-18 | VIBRALIGN INC. | | 1,053.42 | 07-NOV-18 | 1,053.42 | Reconciled |
| 393182 | | 01-NOV-18 | WANG, DANYANG | | 10.41 | 15-NOV-18 | 10.41 | Reconciled |
| 393183 | | 01-NOV-18 | WATERBORNE, INC | | 490.00 | 13-NOV-18 | 490.00 | Reconciled |

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|----------------|--------------|-----------|---------------------------------------|--------|----------------|--------------|----------------|------------|
| 393184 | | 01-NOV-18 | WATERLINE TECHNOLOGIES INC | | 2,840.00 | 05-NOV-18 | 2,840.00 | Reconciled |
| 393185 | | 01-NOV-18 | WAXIE'S ENTERPRISES, INC | | 3,521.58 | 05-NOV-18 | 3,521.58 | Reconciled |
| 393186 | | 01-NOV-18 | WECK LABORATORIES INC | | 295.00 | 06-NOV-18 | 295.00 | Reconciled |
| 393187 | | 01-NOV-18 | WILLIAM F. WRIGHT AND MARGARET WRIGHT | | 40.11 | 13-NOV-18 | 40.11 | Reconciled |
| 393188 | | 01-NOV-18 | WILLIAMS, KARYN L | | 12.79 | 13-NOV-18 | 12.79 | Reconciled |
| 393189 | | 01-NOV-18 | WOODRUFF, SPRADLIN & SMART APC | | 51.00 | 06-NOV-18 | 51.00 | Reconciled |
| 393190 | | 01-NOV-18 | XU, HAO YING | | 180.16 | 13-NOV-18 | 180.16 | Reconciled |
| 393191 | | 01-NOV-18 | YONEZAKI, KRIS | | 206.03 | | | Negotiable |
| 393192 | | 01-NOV-18 | YOO, DANIEL | | 253.65 | 09-NOV-18 | 253.65 | Reconciled |
| 393193 | | 01-NOV-18 | YUXUAN, SUN | | 23.53 | 09-NOV-18 | 23.53 | Reconciled |
| 393194 | | 01-NOV-18 | ZIMMERMAN, ANDRA | | 34.90 | | | Negotiable |
| 393195 | | 07-NOV-18 | JICI JONES CHEMICALS INC | NEWARK | 3,314.20 | 14-NOV-18 | 3,314.20 | Reconciled |

IRWD Ledger Upgrade Payment Register For 01-NOV-18 To 30-NOV-18 Report Date: 03-DEC-2018 15:24
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 8
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|-------------------------------|--------------|-----------|-------------------------------|------|----------------|--------------|----------------|------------|
| Payment Document : IRWD CHECK | | | | | | | | |
| 393196 | | 08-NOV-18 | Chandler, Michael J (Mike) | | 90.00 | 14-NOV-18 | 90.00 | Reconciled |
| 393197 | | 08-NOV-18 | Chauv, Denise | | 37.06 | 19-NOV-18 | 37.06 | Reconciled |
| 393198 | | 08-NOV-18 | Cho, Harry K (Harry) | | 122.27 | 14-NOV-18 | 122.27 | Reconciled |
| 393199 | | 08-NOV-18 | Compton, Christine A | | 131.54 | 13-NOV-18 | 131.54 | Reconciled |
| 393200 | | 08-NOV-18 | Fehser, Noah (Noah) | | 55.00 | 09-NOV-18 | 55.00 | Reconciled |
| 393201 | | 08-NOV-18 | Garcia, Dorys Elizabeth | | 2,714.33 | 14-NOV-18 | 2,714.33 | Reconciled |
| 393202 | | 08-NOV-18 | Hartoog, Jeremy | | 805.78 | | | Voided |
| 393203 | | 08-NOV-18 | Joseph, Brandon | | 188.00 | 14-NOV-18 | 188.00 | Reconciled |
| 393204 | | 08-NOV-18 | Lao, Richard S | | 53.70 | 15-NOV-18 | 53.70 | Reconciled |
| 393205 | | 08-NOV-18 | Malloy, Steven L (Steven) | | 115.00 | 09-NOV-18 | 115.00 | Reconciled |
| 393206 | | 08-NOV-18 | Mares, Michael | | 227.00 | 15-NOV-18 | 227.00 | Reconciled |
| 393207 | | 08-NOV-18 | Moeder, Jacob J (Jacob) | | 44.15 | | | Negotiable |
| 393208 | | 08-NOV-18 | Mossbarger, Anthony J (Tony) | | 162.51 | 08-NOV-18 | 162.51 | Reconciled |
| 393209 | | 08-NOV-18 | Paulson, David | | 105.00 | 14-NOV-18 | 105.00 | Reconciled |
| 393210 | | 08-NOV-18 | Perez, Rodolfo (Rudy) | | 33.39 | | | Negotiable |
| 393211 | | 08-NOV-18 | Pham, Elizabeth | | 121.00 | 27-NOV-18 | 121.00 | Reconciled |
| 393212 | | 08-NOV-18 | Pizanie, Nicholas B | | 255.00 | 14-NOV-18 | 255.00 | Reconciled |
| 393213 | | 08-NOV-18 | Rutherford, Allan | | 188.00 | 14-NOV-18 | 188.00 | Reconciled |
| 393214 | | 08-NOV-18 | Solis, Henry (Henry) | | 1,453.65 | 14-NOV-18 | 1,453.65 | Reconciled |
| 393215 | | 08-NOV-18 | Swan, Peer | | 2,789.19 | 13-NOV-18 | 2,789.19 | Reconciled |
| 393216 | | 08-NOV-18 | Torres, Richard P (Richard) | | 188.00 | 13-NOV-18 | 188.00 | Reconciled |
| 393217 | | 08-NOV-18 | AAF INTERNATIONAL | | 998.94 | 13-NOV-18 | 998.94 | Reconciled |
| 393218 | | 08-NOV-18 | ABM INDUSTRY GROUPS, LLC | | 18,915.01 | 15-NOV-18 | 18,915.01 | Reconciled |
| 393219 | | 08-NOV-18 | ACCUSTANDARD INC | | 319.10 | 16-NOV-18 | 319.10 | Reconciled |
| 393220 | | 08-NOV-18 | ADS LLC | | 2,160.00 | 13-NOV-18 | 2,160.00 | Reconciled |
| 393221 | | 08-NOV-18 | AHIMAHI ENTERPRISE, LLC | | 111.21 | 16-NOV-18 | 111.21 | Reconciled |
| 393222 | | 08-NOV-18 | AIRGAS, INC. | | 168.95 | 13-NOV-18 | 168.95 | Reconciled |
| 393223 | | 08-NOV-18 | ALI, TAMER | | 21.82 | 16-NOV-18 | 21.82 | Reconciled |
| 393224 | | 08-NOV-18 | ALLIANCE AG SERVICES, LLC | | 3,000.00 | 15-NOV-18 | 3,000.00 | Reconciled |
| 393225 | | 08-NOV-18 | AMAZON CAPITAL SERVICES, INC. | | 153.81 | 13-NOV-18 | 153.81 | Reconciled |

IRWD Ledger Upgrade Payment Register For 01-NOV-18 To 30-NOV-18 Report Date: 03-DEC-2018 15:24
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 9
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|-------------------------------|--------------|-----------|---------------------------------|------|----------------|--------------|----------------|------------|
| Payment Document : IRWD CHECK | | | | | | | | |
| 393226 | | 08-NOV-18 | AMERICAN WATER CHEMICALS, INC. | | 5,389.85 | 13-NOV-18 | 5,389.85 | Reconciled |
| 393227 | | 08-NOV-18 | AMIRMOKRI, NAMVAR | | 18.84 | 13-NOV-18 | 18.84 | Reconciled |
| 393228 | | 08-NOV-18 | APEX LIFE SCIENCES, LLC | | 4,760.00 | 13-NOV-18 | 4,760.00 | Reconciled |
| 393229 | | 08-NOV-18 | ASHFORD, WALT | | 485.80 | 26-NOV-18 | 485.80 | Reconciled |
| 393230 | | 08-NOV-18 | ASSOCIATION OF CALIFORNIA WATER | | 34,679.99 | 16-NOV-18 | 34,679.99 | Reconciled |

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|----------------|--------------|-----------|---|------|----------------|--------------|----------------|------------|
| 393231 | 08-NOV-18 | 08-NOV-18 | AGENCIES/JPIA AT&T | | 1,096.82 | 15-NOV-18 | 1,096.82 | Reconciled |
| 393232 | 08-NOV-18 | 08-NOV-18 | AUTOZONE PARTS, INC. | | 23.26 | 14-NOV-18 | 23.26 | Reconciled |
| 393233 | 08-NOV-18 | 08-NOV-18 | BATTERIES PLUS AND BATTERIES PLUS BULBS | | 6,996.17 | 14-NOV-18 | 6,996.17 | Reconciled |
| 393234 | 08-NOV-18 | 08-NOV-18 | BELSHIRE ENVIRONMENTAL SERVICES, INC. | | 1,172.20 | 13-NOV-18 | 1,172.20 | Reconciled |
| 393235 | 08-NOV-18 | 08-NOV-18 | BERGNER, BONNIE | | 61.06 | 19-NOV-18 | 61.06 | Reconciled |
| 393236 | 08-NOV-18 | 08-NOV-18 | BIOMAGIC INC | | 15,065.07 | 15-NOV-18 | 15,065.07 | Reconciled |
| 393237 | 08-NOV-18 | 08-NOV-18 | BOOT WORLD, INC. | | 1,128.63 | 28-NOV-18 | 1,128.63 | Reconciled |
| 393238 | 08-NOV-18 | 08-NOV-18 | BRENNTAG PACIFIC INC | | 2,070.00 | 13-NOV-18 | 2,070.00 | Reconciled |
| 393239 | 08-NOV-18 | 08-NOV-18 | BRIGHTVIEW LANDSCAPE DEVELOPMENT | | 371.39 | | | Negotiable |
| 393240 | 08-NOV-18 | 08-NOV-18 | BUREAU VERITAS NORTH AMERICA, INC | | 13,829.48 | 19-NOV-18 | 13,829.48 | Reconciled |
| 393241 | 08-NOV-18 | 08-NOV-18 | CALIFORNIA BARRICADE RENTAL, INC. | | 4,505.00 | 13-NOV-18 | 4,505.00 | Reconciled |
| 393242 | 08-NOV-18 | 08-NOV-18 | CALIFORNIA DEPT OF PUBLIC HEALTH | | 473.00 | 19-NOV-18 | 473.00 | Reconciled |
| 393243 | 08-NOV-18 | 08-NOV-18 | CANON FINANCIAL SERVICES, INC | | 401.91 | 13-NOV-18 | 401.91 | Reconciled |
| 393244 | 08-NOV-18 | 08-NOV-18 | CANON SOLUTIONS AMERICA, INC. | | 490.06 | 13-NOV-18 | 490.06 | Reconciled |
| 393245 | 08-NOV-18 | 08-NOV-18 | CANON SOLUTIONS AMERICA, INC. | | 1,167.24 | 13-NOV-18 | 1,167.24 | Reconciled |
| 393246 | 08-NOV-18 | 08-NOV-18 | CCL CONTRACTING INC. | | 160,133.90 | 21-NOV-18 | 160,133.90 | Reconciled |
| 393247 | 08-NOV-18 | 08-NOV-18 | CHARLES WILLIAM ROBLE, JR. | | 135.00 | 19-NOV-18 | 135.00 | Reconciled |
| 393248 | 08-NOV-18 | 08-NOV-18 | CHEM TECH INTERNATIONAL INC | | 6,934.40 | 16-NOV-18 | 6,934.40 | Reconciled |
| 393249 | 08-NOV-18 | 08-NOV-18 | CHEN, KAI | | 17.00 | | | Negotiable |

IRWD Ledger Upgrade
 BANK: Bank of America N.A. Branch : Los Angeles
 Bank Account Currency: USD (US Dollar)
 Payment Type: All

Payment Register For 01-NOV-18 To 30-NOV-18
 Account: Checking AP and PR
 Payment Currency: USD (US Dollar)
 Display Supplier Address: No

Report Date: 03-DEC-2018 15:24
 Page: 10

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|-------------------------------|--------------|-----------|---|------|----------------|--------------|----------------|------------|
| Payment Document : IRWD CHECK | | | | | | | | |
| 393250 | 08-NOV-18 | 08-NOV-18 | CHO DESIGN ASSOCIATES, INC | | 9,200.00 | 13-NOV-18 | 9,200.00 | Reconciled |
| 393251 | 08-NOV-18 | 08-NOV-18 | CHORI, YOUNG JUN | | 53.64 | | | Negotiable |
| 393252 | 08-NOV-18 | 08-NOV-18 | CITY OF TUSTIN | | 63,821.30 | 15-NOV-18 | 63,821.30 | Reconciled |
| 393253 | 08-NOV-18 | 08-NOV-18 | CLARIS STRATEGY INC. | | 14,637.00 | 16-NOV-18 | 14,637.00 | Reconciled |
| 393254 | 08-NOV-18 | 08-NOV-18 | CLIFFORD MORIYAMA | | 4,000.00 | 14-NOV-18 | 4,000.00 | Reconciled |
| 393255 | 08-NOV-18 | 08-NOV-18 | CNC ENGINEERING | | 1,987.50 | 16-NOV-18 | 1,987.50 | Reconciled |
| 393256 | 08-NOV-18 | 08-NOV-18 | COAST PLUMBING HEATING AND AIR, INC | | 155.00 | 13-NOV-18 | 155.00 | Reconciled |
| 393257 | 08-NOV-18 | 08-NOV-18 | COLE, JAMES R | | 2,392.83 | 13-NOV-18 | 2,392.83 | Reconciled |
| 393258 | 08-NOV-18 | 08-NOV-18 | CONSOLIDATED CONTRACTING SERVICES, INC. | | 193.35 | | | Negotiable |
| 393259 | 08-NOV-18 | 08-NOV-18 | CONSTELLATION NEWENERGY, INC. | | 17,542.16 | 15-NOV-18 | 17,542.16 | Reconciled |
| 393260 | 08-NOV-18 | 08-NOV-18 | CORRPRO COMPANIES, INC. | | 171,034.15 | 21-NOV-18 | 171,034.15 | Reconciled |
| 393261 | 08-NOV-18 | 08-NOV-18 | CUSTOM TRUCK ONE SOURCE, L.P. | | 3,780.00 | 19-NOV-18 | 3,780.00 | Reconciled |
| 393262 | 08-NOV-18 | 08-NOV-18 | CYNOGEN INCORPORATION | | 43.53 | 19-NOV-18 | 43.53 | Reconciled |
| 393263 | 08-NOV-18 | 08-NOV-18 | D & G SIGNS | | 1,435.69 | 14-NOV-18 | 1,435.69 | Reconciled |
| 393264 | 08-NOV-18 | 08-NOV-18 | DC FROST ASSOCIATES, INC. | | 5,641.21 | 14-NOV-18 | 5,641.21 | Reconciled |
| 393265 | 08-NOV-18 | 08-NOV-18 | DE GUZMAN, NORIA | | 16.24 | 20-NOV-18 | 16.24 | Reconciled |
| 393266 | 08-NOV-18 | 08-NOV-18 | DEACON, JANET | | 848.30 | 23-NOV-18 | 848.30 | Reconciled |
| 393267 | 08-NOV-18 | 08-NOV-18 | DEACON, JANET | | 936.54 | 23-NOV-18 | 936.54 | Reconciled |
| 393268 | 08-NOV-18 | 08-NOV-18 | DEE JASPAR & ASSOCIATES, INC. | | 185.40 | 15-NOV-18 | 185.40 | Reconciled |
| 393269 | 08-NOV-18 | 08-NOV-18 | DEMARIA ELECTRIC MOTOR SERVICES, INC. | | 5,722.14 | 15-NOV-18 | 5,722.14 | Reconciled |
| 393270 | 08-NOV-18 | 08-NOV-18 | DING, DONG | | 53.58 | | | Negotiable |
| 393271 | 08-NOV-18 | 08-NOV-18 | DISCOVERY SCIENCE CENTER OF ORANGE COUNTY | | 2,912.70 | 14-NOV-18 | 2,912.70 | Reconciled |
| 393272 | 08-NOV-18 | 08-NOV-18 | E.J. MEYER COMPANY, INC. | | 209,903.50 | 16-NOV-18 | 209,903.50 | Reconciled |
| 393273 | 08-NOV-18 | 08-NOV-18 | EAGLE PRINT DYNAMICS | | 4,754.47 | 14-NOV-18 | 4,754.47 | Reconciled |
| 393274 | 08-NOV-18 | 08-NOV-18 | EAST ORANGE COUNTY WATER DISTRICT | | 11,019.24 | 16-NOV-18 | 11,019.24 | Reconciled |
| 393275 | 08-NOV-18 | 08-NOV-18 | ECO SERVICES LLC | | 4,877.91 | 13-NOV-18 | 4,877.91 | Reconciled |
| 393276 | 08-NOV-18 | 08-NOV-18 | ELECTRABOND | | 5,232.00 | | | Negotiable |

IRWD Ledger Upgrade Payment Register For 01-NOV-18 To 30-NOV-18 Report Date: 03-DEC-2018 15:24
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 11
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|-------------------------------|--------------|-----------|--|------|----------------|--------------|----------------|------------|
| Payment Document : IRWD CHECK | | | | | | | | |
| 393277 | | 08-NOV-18 | ENTERPRISE SECURITY, INC | | 4,976.47 | 13-NOV-18 | 4,976.47 | Reconciled |
| 393278 | | 08-NOV-18 | ENVIRONMENTAL EXPRESS INC | | 2,086.41 | 14-NOV-18 | 2,086.41 | Reconciled |
| 393279 | | 08-NOV-18 | ENVIRONMENTAL SCIENCE ASSOCIATES | | 12,910.49 | 19-NOV-18 | 12,910.49 | Reconciled |
| 393280 | | 08-NOV-18 | EXECUTIVE LIGHTING & ELECTRIC | | 18,784.35 | 16-NOV-18 | 18,784.35 | Reconciled |
| 393281 | | 08-NOV-18 | FAN, YIREN | | 99.08 | | | Negotiable |
| 393282 | | 08-NOV-18 | FARRELL & ASSOCIATES | | 216.15 | 13-NOV-18 | 216.15 | Reconciled |
| 393283 | | 08-NOV-18 | FEDEX | | 221.02 | 14-NOV-18 | 221.02 | Reconciled |
| 393284 | | 08-NOV-18 | FERGUSON ENTERPRISES, INC. | | 2,281.07 | 13-NOV-18 | 2,281.07 | Reconciled |
| 393285 | | 08-NOV-18 | FIDELITY SECURITY LIFE INSURANCE COMPANY | | 7,226.01 | 19-NOV-18 | 7,226.01 | Reconciled |
| 393286 | | 08-NOV-18 | FIRE EXTINGUISHING SAFETY & SERVICE | | 537.07 | 13-NOV-18 | 537.07 | Reconciled |
| 393287 | | 08-NOV-18 | FISHER SCIENTIFIC COMPANY LLC | | 327.27 | 13-NOV-18 | 327.27 | Reconciled |
| 393288 | | 08-NOV-18 | FOUGHT, CYNTHIA J. | | 2,593.70 | 13-NOV-18 | 2,593.70 | Reconciled |
| 393289 | | 08-NOV-18 | FULLER-TRUCK ACCESSORIES | | 2,964.20 | 14-NOV-18 | 2,964.20 | Reconciled |
| 393290 | | 08-NOV-18 | FUSCOE ENGINEERING, INC. | | 9,598.75 | 13-NOV-18 | 9,598.75 | Reconciled |
| 393291 | | 08-NOV-18 | GANAHL LUMBER CO. | | 1,820.69 | 16-NOV-18 | 1,820.69 | Reconciled |
| 393292 | | 08-NOV-18 | GAO, GE | | 62.98 | | | Negotiable |
| 393293 | | 08-NOV-18 | GCI CONSTRUCTION, INC. | | 273,934.14 | 15-NOV-18 | 273,934.14 | Reconciled |
| 393294 | | 08-NOV-18 | GEE, JASON | | 74.18 | 16-NOV-18 | 74.18 | Reconciled |
| 393295 | | 08-NOV-18 | GHD INC. | | 1,257.62 | 14-NOV-18 | 1,257.62 | Reconciled |
| 393296 | | 08-NOV-18 | GRAINGER | | 7,593.32 | 13-NOV-18 | 7,593.32 | Reconciled |
| 393297 | | 08-NOV-18 | GRAYBAR ELECTRIC COMPANY | | 14,969.82 | 15-NOV-18 | 14,969.82 | Reconciled |
| 393298 | | 08-NOV-18 | GUAN, TIEBING | | 45.17 | 21-NOV-18 | 45.17 | Reconciled |
| 393299 | | 08-NOV-18 | GURAN, MARY | | 162.86 | 16-NOV-18 | 162.86 | Reconciled |
| 393300 | | 08-NOV-18 | HAAKER EQUIPMENT COMPANY | | 2,206.04 | 14-NOV-18 | 2,206.04 | Reconciled |
| 393301 | | 08-NOV-18 | HACH COMPANY | | 3,791.81 | 13-NOV-18 | 3,791.81 | Reconciled |
| 393302 | | 08-NOV-18 | HALDEMAN INC | | 5,603.00 | 13-NOV-18 | 5,603.00 | Reconciled |
| 393303 | | 08-NOV-18 | HARMSWORTH ASSOCIATES | | 953.00 | 23-NOV-18 | 953.00 | Reconciled |
| 393304 | | 08-NOV-18 | HARRINGTON INDUSTRIAL PLASTICS LLC | | 3,027.44 | 13-NOV-18 | 3,027.44 | Reconciled |

IRWD Ledger Upgrade Payment Register For 01-NOV-18 To 30-NOV-18 Report Date: 03-DEC-2018 15:24
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 12
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|-------------------------------|--------------|-----------|--------------------------------|------|----------------|--------------|----------------|------------|
| Payment Document : IRWD CHECK | | | | | | | | |
| 393305 | | 08-NOV-18 | HARRY H. KOBZEFF | | 11,495.00 | 16-NOV-18 | 11,495.00 | Reconciled |
| 393306 | | 08-NOV-18 | HEALEY, LUISE | | 35.25 | | | Negotiable |
| 393307 | | 08-NOV-18 | HELPMATES STAFFING SERVICES | | 8,756.52 | 13-NOV-18 | 8,756.52 | Reconciled |
| 393308 | | 08-NOV-18 | HERC RENTALS INC. | | 2,185.17 | 13-NOV-18 | 2,185.17 | Reconciled |
| 393309 | | 08-NOV-18 | HERITAGE FIELDS EL TORO, LLC | | 1,210.24 | 21-NOV-18 | 1,210.24 | Reconciled |
| 393310 | | 08-NOV-18 | HILL BROTHERS CHEMICAL COMPANY | | 5,805.31 | 19-NOV-18 | 5,805.31 | Reconciled |
| 393311 | | 08-NOV-18 | HILTS CONSULTING GROUP, INC. | | 36,474.47 | 16-NOV-18 | 36,474.47 | Reconciled |
| 393312 | | 08-NOV-18 | HOFFMAN, ROXANNE | | 38.71 | 23-NOV-18 | 38.71 | Reconciled |
| 393313 | | 08-NOV-18 | HOLLAND, TATE | | 23.40 | | | Negotiable |
| 393314 | | 08-NOV-18 | HOME DEPOT USA INC | | 123.38 | 15-NOV-18 | 123.38 | Reconciled |
| 393315 | | 08-NOV-18 | HORIZON LIGHTING, INC. | | 14,799.90 | 16-NOV-18 | 14,799.90 | Reconciled |
| 393316 | | 08-NOV-18 | HUMANA INSURANCE COMPANY | | 73.80 | 13-NOV-18 | 73.80 | Reconciled |
| 393317 | | 08-NOV-18 | INTEGRITY IT SOLUTIONS INC. | | 3,195.00 | | | Negotiable |
| 393318 | | 08-NOV-18 | IRVINE PIPE & SUPPLY INC | | 636.28 | 13-NOV-18 | 636.28 | Reconciled |
| 393319 | | 08-NOV-18 | JAGARLAPUDI, UJVAL | | 27.67 | | | Negotiable |
| 393320 | | 08-NOV-18 | JOHN MICHAEL COVAS | | 173.20 | | | Negotiable |
| 393321 | | 08-NOV-18 | KENT & AMY DAHLBERG | | 55,290.00 | 15-NOV-18 | 55,290.00 | Reconciled |
| 393322 | | 08-NOV-18 | KIM, NAM | | 463.02 | | | Negotiable |

| | | | | | | | |
|--------|-----------|--|--|-----------|-----------|-----------|------------|
| 393323 | 08-NOV-18 | KRONICK MOSKOVITZ TIEDEMANN & GIRARD | | 15,120.77 | 15-NOV-18 | 15,120.77 | Reconciled |
| 393324 | 08-NOV-18 | LA HABRA FENCE COMPANY INC | | 5,981.00 | 15-NOV-18 | 5,981.00 | Reconciled |
| 393325 | 08-NOV-18 | LAGUNA BEACH COUNTY WATER DISTRICT | | 3,303.06 | | | Negotiable |
| 393326 | 08-NOV-18 | LANDCARE HOLDINGS, INC. | | 10,686.38 | 19-NOV-18 | 10,686.38 | Reconciled |
| 393327 | 08-NOV-18 | LANDERS, JESSICA | | 46.66 | 28-NOV-18 | 46.66 | Reconciled |
| 393328 | 08-NOV-18 | LAU, NICHOLAS | | 51.43 | 16-NOV-18 | 51.43 | Reconciled |
| 393329 | 08-NOV-18 | LENNAR HOMES | | 96.78 | 28-NOV-18 | 96.78 | Reconciled |
| 393330 | 08-NOV-18 | LEVENE, DANIEL | | 178.86 | 19-NOV-18 | 178.86 | Reconciled |
| 393331 | 08-NOV-18 | LI, ZHAOXIA | | 36.60 | | | Negotiable |
| 393332 | 08-NOV-18 | LIU, SHUO | | 55.00 | | | Negotiable |
| 393333 | 08-NOV-18 | LU'S LIGHTHOUSE, INC. | | 756.28 | 15-NOV-18 | 756.28 | Reconciled |
| 393334 | 08-NOV-18 | MAILFINANCE INC | | 12,377.26 | 19-NOV-18 | 12,377.26 | Reconciled |

IRWD Ledger Upgrade
 BANK: Bank of America N.A. Branch : Los Angeles
 Bank Account Currency: USD (US Dollar)
 Payment Type: All

Payment Register For 01-NOV-18 To 30-NOV-18 Report Date: 03-DEC-2018 15:24
 Account: Checking AP and PR Page: 13
 Payment Currency: USD (US Dollar)
 Display Supplier Address: No

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|-------------------------------|--------------|-----------|---|------|----------------|--------------|----------------|------------|
| Payment Document : IRWD CHECK | | | | | | | | |
| 393335 | | 08-NOV-18 | MAP COMMUNICATIONS, INC. | | 955.63 | 26-NOV-18 | 955.63 | Reconciled |
| 393336 | | 08-NOV-18 | MENDOZA, DARRYL | | 37.19 | 21-NOV-18 | 37.19 | Reconciled |
| 393337 | | 08-NOV-18 | MERCH SOURCE | | 34.53 | | | Negotiable |
| 393338 | | 08-NOV-18 | MILLS, MICHAEL | | 43.23 | 19-NOV-18 | 43.23 | Reconciled |
| 393339 | | 08-NOV-18 | MPULSE MOBILE, INC | | 172.08 | 14-NOV-18 | 172.08 | Reconciled |
| 393340 | | 08-NOV-18 | MULLINS, MARK | | 57.25 | | | Negotiable |
| 393341 | | 08-NOV-18 | MUNICIPAL MAINTENANCE EQUIPMENT INC | | 1,963.76 | 14-NOV-18 | 1,963.76 | Reconciled |
| 393342 | | 08-NOV-18 | MUNICIPAL WATER DISTRICT OF ORANGE COUNTY | | 131.50 | 13-NOV-18 | 131.50 | Reconciled |
| 393343 | | 08-NOV-18 | NAKATSUKASA, NAKO | | 74.44 | 13-NOV-18 | 74.44 | Reconciled |
| 393344 | | 08-NOV-18 | NEAR, DONALD | | 17.14 | | | Negotiable |
| 393345 | | 08-NOV-18 | NEW PIG CORPORATION | | 1,096.62 | 14-NOV-18 | 1,096.62 | Reconciled |
| 393346 | | 08-NOV-18 | NEW RESOURCES GROUP INC | | 461.40 | 14-NOV-18 | 461.40 | Reconciled |
| 393347 | | 08-NOV-18 | NEWPORT REAL ESTATE SERVICES | | 13,100.00 | 19-NOV-18 | 13,100.00 | Reconciled |
| 393348 | | 08-NOV-18 | NINYO & MOORE | | 1,956.50 | 13-NOV-18 | 1,956.50 | Reconciled |
| 393349 | | 08-NOV-18 | O.C. SUPERIOR CUSTOM CLEANING SERVICES | | 1,040.00 | 13-NOV-18 | 1,040.00 | Reconciled |
| 393350 | | 08-NOV-18 | OLIN CORPORATION | | 40,435.47 | 19-NOV-18 | 40,435.47 | Reconciled |
| 393351 | | 08-NOV-18 | ONESOURCE DISTRIBUTORS LLC | | 9,616.07 | 13-NOV-18 | 9,616.07 | Reconciled |
| 393352 | | 08-NOV-18 | ORANGE COUNTY AUTO PARTS CO | | 1,345.13 | 13-NOV-18 | 1,345.13 | Reconciled |
| 393353 | | 08-NOV-18 | ORANGE COUNTY TREASURER | | 535.65 | 13-NOV-18 | 535.65 | Reconciled |
| 393354 | | 08-NOV-18 | PACIFIC COAST BOLT CORP | | 3,468.32 | 15-NOV-18 | 3,468.32 | Reconciled |
| 393355 | | 08-NOV-18 | PACIFIC HYDROTECH CORPORATION | | 232,663.65 | 16-NOV-18 | 232,663.65 | Reconciled |
| 393356 | | 08-NOV-18 | PACIFIC HYDROTECH CORPORATION | | 12,245.45 | 16-NOV-18 | 12,245.45 | Reconciled |
| 393357 | | 08-NOV-18 | PASCAL & LUDWIG CONSTRUCTORS | | 412,036.85 | 15-NOV-18 | 412,036.85 | Reconciled |
| 393358 | | 08-NOV-18 | PASCAL & LUDWIG CONSTRUCTORS | | 12,335.90 | 19-NOV-18 | 12,335.90 | Reconciled |
| 393359 | | 08-NOV-18 | PASCAL & LUDWIG CONSTRUCTORS | | 9,350.26 | 14-NOV-18 | 9,350.26 | Reconciled |

IRWD Ledger Upgrade
 BANK: Bank of America N.A. Branch : Los Angeles
 Bank Account Currency: USD (US Dollar)
 Payment Type: All

Payment Register For 01-NOV-18 To 30-NOV-18 Report Date: 03-DEC-2018 15:24
 Account: Checking AP and PR Page: 14
 Payment Currency: USD (US Dollar)
 Display Supplier Address: No

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|-------------------------------|--------------|-----------|------------------------------|------|----------------|--------------|----------------|------------|
| Payment Document : IRWD CHECK | | | | | | | | |
| 393360 | | 08-NOV-18 | PCB PIEZOTRONICS, INC | | 905.89 | 13-NOV-18 | 905.89 | Reconciled |
| 393361 | | 08-NOV-18 | PENG, ZUJAM | | 31.47 | | | Negotiable |
| 393362 | | 08-NOV-18 | PRIEGEL, MARK | | 38.73 | | | Negotiable |
| 393363 | | 08-NOV-18 | PRUDENTIAL OVERALL SUPPLY | | 791.46 | 14-NOV-18 | 791.46 | Reconciled |
| 393364 | | 08-NOV-18 | PURE EFFECT INC | | 7,553.50 | 14-NOV-18 | 7,553.50 | Reconciled |
| 393365 | | 08-NOV-18 | R&B AUTOMATION, INC. | | 2,000.00 | 19-NOV-18 | 2,000.00 | Reconciled |
| 393366 | | 08-NOV-18 | RASMUSSEN, METTE | | 23.13 | | | Negotiable |

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|--------|-----------|--|-----------|-----------|-----------|------------|
| 393367 | 08-NOV-18 | RED WING SHOE STORE | 200.00 | 14-NOV-18 | 200.00 | Reconciled |
| 393368 | 08-NOV-18 | RELIANCE STANDARD LIFE INSURANCE COMPANY | 30,549.44 | 19-NOV-18 | 30,549.44 | Reconciled |
| 393369 | 08-NOV-18 | RESPONSE ENVELOPE, INC | 2,801.28 | 13-NOV-18 | 2,801.28 | Reconciled |
| 393370 | 08-NOV-18 | RICHMOND AMERICAN HOMES OF MARYLAND, INC | 217.97 | 16-NOV-18 | 217.97 | Reconciled |
| 393371 | 08-NOV-18 | RINCON TRUCK CENTER INC. | 295.00 | 14-NOV-18 | 295.00 | Reconciled |
| 393372 | 08-NOV-18 | RLG ENTERPRISES, INC | 703.34 | 13-NOV-18 | 703.34 | Reconciled |
| 393373 | 08-NOV-18 | ROYAL INDUSTRIAL SOLUTIONS | 969.66 | 13-NOV-18 | 969.66 | Reconciled |
| 393374 | 08-NOV-18 | SANDERS PAVING INC | 27,275.00 | 15-NOV-18 | 27,275.00 | Reconciled |
| 393375 | 08-NOV-18 | SANDOVAL, JOSEPHINE | 172.47 | | | Negotiable |
| 393376 | 08-NOV-18 | SANTA ANA BLUE PRINT | 292.17 | 14-NOV-18 | 292.17 | Reconciled |
| 393377 | 08-NOV-18 | SANTA MARGARITA FORD | 1,138.64 | 14-NOV-18 | 1,138.64 | Reconciled |
| 393378 | 08-NOV-18 | SECURITAS SECURITY SERVICES USA, INC. | 61,460.29 | 15-NOV-18 | 61,460.29 | Reconciled |
| 393379 | 08-NOV-18 | SHAMROCK SUPPLY CO INC | 1,503.92 | 15-NOV-18 | 1,503.92 | Reconciled |
| 393380 | 08-NOV-18 | SHEA HOMES LP | 49.28 | 20-NOV-18 | 49.28 | Reconciled |
| 393381 | 08-NOV-18 | SHINEY, WILLIAM | 31.75 | | | Negotiable |
| 393382 | 08-NOV-18 | SHOETERIA | 218.17 | 14-NOV-18 | 218.17 | Reconciled |
| 393383 | 08-NOV-18 | SITMATIC | 635.83 | 15-NOV-18 | 635.83 | Reconciled |
| 393384 | 08-NOV-18 | SOUTH COAST WATER DISTRICT | 1,199.86 | 13-NOV-18 | 1,199.86 | Reconciled |
| 393385 | 08-NOV-18 | SOUTHERN CALIFORNIA EDISON COMPANY | 13,685.09 | 13-NOV-18 | 13,685.09 | Reconciled |

IRWD Ledger Upgrade Payment Register For 01-NOV-18 To 30-NOV-18 Report Date: 03-DEC-2018 15:24
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 15
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|-------------------------------|--------------|-----------|--|------|----------------|--------------|----------------|------------|
| Payment Document : IRWD CHECK | | | | | | | | |
| 393386 | | 08-NOV-18 | SS MECHANICAL CONSTRUCTION CORP | | 6,293.75 | 14-NOV-18 | 6,293.75 | Reconciled |
| 393387 | | 08-NOV-18 | STREAKWAVE WIRELESS, INC. | | 1,106.24 | 15-NOV-18 | 1,106.24 | Reconciled |
| 393388 | | 08-NOV-18 | SUNHAE PARK & SEUNGYOUB LEE | | 38.45 | 23-NOV-18 | 38.45 | Reconciled |
| 393389 | | 08-NOV-18 | SUSAN A. SIROTA | | 4,395.00 | 13-NOV-18 | 4,395.00 | Reconciled |
| 393390 | | 08-NOV-18 | TEMPLIN, PAM | | 100.00 | | | Negotiable |
| 393391 | | 08-NOV-18 | THE NEW HOME COMPANY SOUTHERN CALIFORNIA LLC | | 38.74 | | | Negotiable |
| 393392 | | 08-NOV-18 | THERMO ELECTRON NORTH AMERICA LLC | | 3,397.00 | 14-NOV-18 | 3,397.00 | Reconciled |
| 393393 | | 08-NOV-18 | TIC-RETAIL PROPERTIES | | 1,958.07 | 14-NOV-18 | 1,958.07 | Reconciled |
| 393394 | | 08-NOV-18 | TOLL BROS., INC. | | 1,088.08 | 20-NOV-18 | 1,088.08 | Reconciled |
| 393395 | | 08-NOV-18 | TOLL BROTHERS., INC | | 99.00 | 20-NOV-18 | 99.00 | Reconciled |
| 393396 | | 08-NOV-18 | TOTAL RESOURCE MANAGEMENT, INC. | | 59,002.88 | 20-NOV-18 | 59,002.88 | Reconciled |
| 393397 | | 08-NOV-18 | TRAINO, DAVID P | | 53.69 | 16-NOV-18 | 53.69 | Reconciled |
| 393398 | | 08-NOV-18 | TREE OF LIFE NURSERY | | 111.52 | 16-NOV-18 | 111.52 | Reconciled |
| 393399 | | 08-NOV-18 | TRI POINTE HOMES, INC. | | 165.54 | 20-NOV-18 | 165.54 | Reconciled |
| 393400 | | 08-NOV-18 | TRIPAC MARKETING INC | | 844.21 | 14-NOV-18 | 844.21 | Reconciled |
| 393401 | | 08-NOV-18 | TROPICAL PLAZA NURSERY INC | | 4,800.00 | 13-NOV-18 | 4,800.00 | Reconciled |
| 393402 | | 08-NOV-18 | TRUCPARCO | | 535.01 | 21-NOV-18 | 535.01 | Reconciled |
| 393403 | | 08-NOV-18 | ULINE INC | | 245.14 | 15-NOV-18 | 245.14 | Reconciled |
| 393404 | | 08-NOV-18 | UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA | | 1,343.20 | 16-NOV-18 | 1,343.20 | Reconciled |
| 393405 | | 08-NOV-18 | UNITED HEALTHCARE INSURANCE COMPANY | | 264.27 | 16-NOV-18 | 264.27 | Reconciled |
| 393406 | | 08-NOV-18 | UNITED PARCEL SERVICE INC | | 97.96 | 13-NOV-18 | 97.96 | Reconciled |
| 393407 | | 08-NOV-18 | VADKERTI, MARTIN | | 75.73 | 14-NOV-18 | 75.73 | Reconciled |
| 393408 | | 08-NOV-18 | VATANKHAHI, MASSOUD | | 359.70 | | | Negotiable |
| 393409 | | 08-NOV-18 | VERIZON WIRELESS SERVICES LLC | | 4,084.44 | 14-NOV-18 | 4,084.44 | Reconciled |
| 393410 | | 08-NOV-18 | VERTECH INDUSTRIAL SYSTEMS, LLC | | 21,574.85 | 19-NOV-18 | 21,574.85 | Reconciled |

IRWD Ledger Upgrade Payment Register For 01-NOV-18 To 30-NOV-18 Report Date: 03-DEC-2018 15:24
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 16

Bank Account Currency: USD (US Dollar)
 Payment Type: All

Payment Currency: USD (US Dollar)
 Display Supplier Address: No

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|-------------------------------|--------------|-----------|--|-----------------|----------------|--------------|----------------|------------|
| Payment Document : IRWD CHECK | | | | | | | | |
| 393411 | | 08-NOV-18 | VILLA SIENA APTS | | 9,862.40 | 16-NOV-18 | 9,862.40 | Reconciled |
| 393412 | | 08-NOV-18 | WASTE MANAGEMENT OF ORANGE COUNTY | | 4,483.32 | 13-NOV-18 | 4,483.32 | Reconciled |
| 393413 | | 08-NOV-18 | WAXIE'S ENTERPRISES, INC | | 756.30 | 13-NOV-18 | 756.30 | Reconciled |
| 393414 | | 08-NOV-18 | WECK LABORATORIES INC | | 5,900.00 | 16-NOV-18 | 5,900.00 | Reconciled |
| 393415 | | 08-NOV-18 | WINTER, WILLIAM | | 186.67 | 21-NOV-18 | 186.67 | Reconciled |
| 393416 | | 08-NOV-18 | WOODARD & CURRAN INC | | 19,958.38 | 23-NOV-18 | 19,958.38 | Reconciled |
| 393417 | | 08-NOV-18 | YI, CHEN | | 30.81 | 15-NOV-18 | 30.81 | Reconciled |
| 393418 | | 08-NOV-18 | YP LLC | | 96.07 | 14-NOV-18 | 96.07 | Reconciled |
| 393419 | | 08-NOV-18 | YU, CHUNBO | | 62.91 | 19-NOV-18 | 62.91 | Reconciled |
| 393420 | | 08-NOV-18 | ZEBRON CONTRACTING INC | | 22,376.66 | 19-NOV-18 | 22,376.66 | Reconciled |
| 393421 | | 09-NOV-18 | JCI JONES CHEMICALS INC | NEWARK | 7,738.02 | 16-NOV-18 | 7,738.02 | Reconciled |
| 393422 | | 09-NOV-18 | PERS LONG TERM CARE | PASADENA | 538.89 | 14-NOV-18 | 538.89 | Reconciled |
| 393423 | | 09-NOV-18 | INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS LOCAL 47 | DIAMOND BAR | 1,400.00 | | | Negotiable |
| 393424 | | 09-NOV-18 | FRANCHISE TAX BOARD 1 | SACRAMENTO | 150.00 | | | Negotiable |
| 393425 | | 09-NOV-18 | ORANGE COUNTY SHERIFF'S OFFICE | 4601 JAMBOREE | 224.50 | 15-NOV-18 | 224.50 | Reconciled |
| 393426 | | 12-NOV-18 | HARTFORD LIFE AND ACCIDENT INSURANCE COMPANY | ATLANTA | 72.30 | 16-NOV-18 | 72.30 | Reconciled |
| 393427 | | 12-NOV-18 | COLONIAL LIFE & ACCIDENT INSURANCE CO. | COLUMBIA | 1,215.37 | 20-NOV-18 | 1,215.37 | Reconciled |
| 393428 | | 12-NOV-18 | AFLAC | 1932 WYNNTON RD | 6,840.50 | | | Negotiable |
| 393429 | | 12-NOV-18 | AFLAC | PO BOX 84069 | 148.74 | 27-NOV-18 | 148.74 | Reconciled |
| 393430 | | 12-NOV-18 | PRE-PAID LEGAL SERVICES INC | PO BOX 2629 | 1,212.00 | 21-NOV-18 | 1,212.00 | Reconciled |
| 393431 | | 12-NOV-18 | PERS LONG TERM CARE | PASADENA | 538.89 | 15-NOV-18 | 538.89 | Reconciled |
| 393432 | | 12-NOV-18 | FRANCHISE TAX BOARD 1 | SACRAMENTO | 532.64 | | | Negotiable |

IRWD Ledger Upgrade Payment Register For 01-NOV-18 To 30-NOV-18 Report Date: 03-DEC-2018 15:24
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 17
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|-------------------------------|--------------|-----------|--|---------------|----------------|--------------|----------------|------------|
| Payment Document : IRWD CHECK | | | | | | | | |
| 393433 | | 12-NOV-18 | INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS LOCAL 47 | DIAMOND BAR | 1,400.00 | | | Negotiable |
| 393434 | | 12-NOV-18 | ORANGE COUNTY SHERIFF'S OFFICE | 4601 JAMBOREE | 224.50 | 19-NOV-18 | 224.50 | Reconciled |
| 393435 | | 14-NOV-18 | CITY OF IRVINE | IRVINE 1 | 9,847.52 | | | Negotiable |
| 393436 | | 15-NOV-18 | Beltran, Benjamin Vega | | 30.62 | 19-NOV-18 | 30.62 | Reconciled |
| 393437 | | 15-NOV-18 | Bornhoff, Mike (Mike) | | 290.00 | | | Negotiable |
| 393438 | | 15-NOV-18 | Borowski, Michael (Mike) | | 456.02 | 20-NOV-18 | 456.02 | Reconciled |
| 393439 | | 15-NOV-18 | Bowers, Marie | | 52.20 | | | Negotiable |
| 393440 | | 15-NOV-18 | Cotton, Derrien | | 146.26 | 20-NOV-18 | 146.26 | Reconciled |
| 393441 | | 15-NOV-18 | Drew, Michael A | | 90.00 | | | Negotiable |
| 393442 | | 15-NOV-18 | Ho, Connie | | 12.97 | | | Negotiable |
| 393443 | | 15-NOV-18 | Johnson, Dane | | 95.93 | 27-NOV-18 | 95.93 | Reconciled |
| 393444 | | 15-NOV-18 | Madrid, Adam | | 175.19 | 21-NOV-18 | 175.19 | Reconciled |
| 393445 | | 15-NOV-18 | McGehee, Joseph M (Joe) | | 353.16 | 16-NOV-18 | 353.16 | Reconciled |
| 393446 | | 15-NOV-18 | Meserlian, Barkev M | | 454.37 | 27-NOV-18 | 454.37 | Reconciled |
| 393447 | | 15-NOV-18 | Nicholson, Darin | | 39.68 | 19-NOV-18 | 39.68 | Reconciled |
| 393448 | | 15-NOV-18 | Seesangrit, Melody M | | 172.37 | 19-NOV-18 | 172.37 | Reconciled |
| 393449 | | 15-NOV-18 | ABOBAKER, MURHAF | | 31.77 | | | Negotiable |
| 393450 | | 15-NOV-18 | ADAM'S FALCONRY SERVICE, LLC | | 1,680.00 | 19-NOV-18 | 1,680.00 | Reconciled |
| 393451 | | 15-NOV-18 | AEGIS ENGINEERING MANAGEMENT, INC. | | 17,715.25 | 21-NOV-18 | 17,715.25 | Reconciled |
| 393452 | | 15-NOV-18 | AFLAC | | 6,913.16 | 28-NOV-18 | 6,913.16 | Reconciled |

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|--------|-----------|----------------------------------|-----------|-----------|-----------|------------|
| 393453 | 15-NOV-18 | AFLAC | 148.74 | 28-NOV-18 | 148.74 | Reconciled |
| 393454 | 15-NOV-18 | AIRGAS, INC. | 417.25 | 19-NOV-18 | 417.25 | Reconciled |
| 393455 | 15-NOV-18 | ALCATARA, KRISTINE | 37.66 | | | Negotiable |
| 393456 | 15-NOV-18 | ALI, ANMAR | 37.51 | | | Negotiable |
| 393457 | 15-NOV-18 | ALL STAR GLASS | 924.02 | 19-NOV-18 | 924.02 | Reconciled |
| 393458 | 15-NOV-18 | ALLIANCE RESOURCE CONSULTING LLC | 6,750.00 | 19-NOV-18 | 6,750.00 | Reconciled |
| 393459 | 15-NOV-18 | AMAZON CAPITAL SERVICES, INC. | 113.68 | 19-NOV-18 | 113.68 | Reconciled |
| 393460 | 15-NOV-18 | AMSELEM, WINSTON | 20.00 | 20-NOV-18 | 20.00 | Reconciled |
| 393461 | 15-NOV-18 | APEX LIFE SCIENCES, LLC | 13,804.00 | 23-NOV-18 | 13,804.00 | Reconciled |
| 393462 | 15-NOV-18 | ARCADIS U.S., INC. | 93,542.80 | 23-NOV-18 | 93,542.80 | Reconciled |
| 393463 | 15-NOV-18 | ARMSTRONG, HAL | 198.03 | 27-NOV-18 | 198.03 | Reconciled |

IRWD Ledger Upgrade
 BANK: Bank of America N.A. Branch : Los Angeles
 Bank Account Currency: USD (US Dollar)
 Payment Type: All

Payment Register For 01-NOV-18 To 30-NOV-18 Report Date: 03-DEC-2018 15:24
 Account: Checking AP and PR Page: 18
 Payment Currency: USD (US Dollar)
 Display Supplier Address: No

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|-------------------------------|--------------|-----------|--|------|----------------|--------------|----------------|------------|
| Payment Document : IRWD CHECK | | | | | | | | |
| 393464 | | 15-NOV-18 | AT&T | | 1,665.91 | 19-NOV-18 | 1,665.91 | Reconciled |
| 393465 | | 15-NOV-18 | ATHENS SERVICES | | 10,101.38 | 21-NOV-18 | 10,101.38 | Reconciled |
| 393466 | | 15-NOV-18 | AUSTIN HARDWOODS, INC | | 133.98 | 21-NOV-18 | 133.98 | Reconciled |
| 393467 | | 15-NOV-18 | AUTOZONE PARTS, INC. | | 1,376.65 | 20-NOV-18 | 1,376.65 | Reconciled |
| 393468 | | 15-NOV-18 | BATTERIES PLUS AND BATTERIES PLUS BULBS | | 779.01 | | | Negotiable |
| 393469 | | 15-NOV-18 | BDC SPECIAL WASTE | | 372.00 | 19-NOV-18 | 372.00 | Reconciled |
| 393470 | | 15-NOV-18 | BELSHIRE ENVIRONMENTAL SERVICES, INC. | | 1,300.00 | 16-NOV-18 | 1,300.00 | Reconciled |
| 393471 | | 15-NOV-18 | BENSON, CONNIE | | 31.79 | 21-NOV-18 | 31.79 | Reconciled |
| 393472 | | 15-NOV-18 | BROOKFIELD HOMES SO. CALIF LLC | | 104.17 | 20-NOV-18 | 104.17 | Reconciled |
| 393473 | | 15-NOV-18 | BROOKFIELD RESIDENTIAL | | 22.96 | 20-NOV-18 | 22.96 | Reconciled |
| 393474 | | 15-NOV-18 | BROWN, CAITLYN | | 681.72 | 19-NOV-18 | 681.72 | Reconciled |
| 393475 | | 15-NOV-18 | BURKE, WILLIAMS & SORENSEN, LLP | | 260.00 | 19-NOV-18 | 260.00 | Reconciled |
| 393476 | | 15-NOV-18 | BURLINGTON SAFETY LABORATORY OF CALIFORNIA INC | | 199.78 | 16-NOV-18 | 199.78 | Reconciled |
| 393477 | | 15-NOV-18 | CALIFORNIA BARRICADE RENTAL, INC. | | 4,940.00 | 16-NOV-18 | 4,940.00 | Reconciled |
| 393478 | | 15-NOV-18 | CALIFORNIA PACIFIC HOMES | | 182.11 | 20-NOV-18 | 182.11 | Reconciled |
| 393479 | | 15-NOV-18 | CALIFORNIA STATE UNIVERSITY, FULLERTON | | 4,536.00 | 21-NOV-18 | 4,536.00 | Reconciled |
| 393480 | | 15-NOV-18 | CDB INVESTMENTS, L.P. | | 603.37 | 20-NOV-18 | 603.37 | Reconciled |
| 393481 | | 15-NOV-18 | CHEN, GIN SHEN | | 24.17 | | | Negotiable |
| 393482 | | 15-NOV-18 | CHILDE, KEVIN | | 21.00 | 23-NOV-18 | 21.00 | Reconciled |
| 393483 | | 15-NOV-18 | CHRISTOS, DANIELA | | 29.29 | | | Negotiable |
| 393484 | | 15-NOV-18 | CHU, CHUN-I | | 41.00 | | | Negotiable |
| 393485 | | 15-NOV-18 | CHU, MIN H | | 3.89 | | | Negotiable |
| 393486 | | 15-NOV-18 | CITY CIRCUIT BREAKERS | | 3,367.19 | 20-NOV-18 | 3,367.19 | Reconciled |
| 393487 | | 15-NOV-18 | CLEAN ENERGY | | 5,866.55 | 27-NOV-18 | 5,866.55 | Reconciled |
| 393488 | | 15-NOV-18 | COLONIAL LIFE & ACCIDENT INSURANCE CO. | | 1,103.26 | 28-NOV-18 | 1,103.26 | Reconciled |

IRWD Ledger Upgrade
 BANK: Bank of America N.A. Branch : Los Angeles
 Bank Account Currency: USD (US Dollar)
 Payment Type: All

Payment Register For 01-NOV-18 To 30-NOV-18 Report Date: 03-DEC-2018 15:24
 Account: Checking AP and PR Page: 19
 Payment Currency: USD (US Dollar)
 Display Supplier Address: No

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|-------------------------------|--------------|-----------|--------------------------------------|------|----------------|--------------|----------------|------------|
| Payment Document : IRWD CHECK | | | | | | | | |
| 393489 | | 15-NOV-18 | COMMUTER VAN CONVERSION AND MORE INC | | 1,962.38 | 20-NOV-18 | 1,962.38 | Reconciled |
| 393490 | | 15-NOV-18 | CONSTELLATION NEWENERGY, INC. | | 15,928.06 | 21-NOV-18 | 15,928.06 | Reconciled |
| 393491 | | 15-NOV-18 | CONSUMERS PIPE & SUPPLY CO. | | 933.24 | 19-NOV-18 | 933.24 | Reconciled |
| 393492 | | 15-NOV-18 | COUNTY OF ORANGE | | 8,745.75 | 23-NOV-18 | 8,745.75 | Reconciled |
| 393493 | | 15-NOV-18 | COYNE, PHILIP | | 700.00 | 19-NOV-18 | 700.00 | Reconciled |
| 393494 | | 15-NOV-18 | CR & R INCORPORATED | | 389.96 | 19-NOV-18 | 389.96 | Reconciled |
| 393495 | | 15-NOV-18 | CULLIGAN OF SANTA ANA | | 11,000.00 | 26-NOV-18 | 11,000.00 | Reconciled |
| 393496 | | 15-NOV-18 | CUSTOM TRUCK ONE | | 1,395.58 | 26-NOV-18 | 1,395.58 | Reconciled |

| | | | | | | |
|--------|-----------|--|-----------|-----------|-----------|------------|
| 393497 | 15-NOV-18 | SOURCE, L.P. D & H WATER SYSTEMS INC. | 724.21 | 19-NOV-18 | 724.21 | Reconciled |
| 393498 | 15-NOV-18 | DC FROST ASSOCIATES, INC. | 4,509.82 | 20-NOV-18 | 4,509.82 | Reconciled |
| 393499 | 15-NOV-18 | DEE JASPAR & ASSOCIATES, INC. | 151.56 | | | Negotiable |
| 393500 | 15-NOV-18 | DIVITA BUILDERS, INC. | 853.51 | 20-NOV-18 | 853.51 | Reconciled |
| 393501 | 15-NOV-18 | DRIVELINES UNLIMITED | 454.38 | 20-NOV-18 | 454.38 | Reconciled |
| 393502 | 15-NOV-18 | DUKE CULTURAL RESOURCES MANAGEMENT, LLC | 1,191.25 | 16-NOV-18 | 1,191.25 | Reconciled |
| 393503 | 15-NOV-18 | EILERS, AARON | 290.00 | | | Negotiable |
| 393504 | 15-NOV-18 | ENDRESS AND HAUSER INC | 2,405.72 | 21-NOV-18 | 2,405.72 | Reconciled |
| 393505 | 15-NOV-18 | ENTERPRISE SECURITY, INC | 6,311.25 | 19-NOV-18 | 6,311.25 | Reconciled |
| 393506 | 15-NOV-18 | ENVIRONMENTAL EQUIPMENT SUPPLY | 231.30 | 27-NOV-18 | 231.30 | Reconciled |
| 393507 | 15-NOV-18 | ESL POWER SYSTEMS, INC. | 10,384.32 | 27-NOV-18 | 10,384.32 | Reconciled |
| 393508 | 15-NOV-18 | EXECUTIVE LIGHTING & ELECTRIC | 1,393.21 | 20-NOV-18 | 1,393.21 | Reconciled |
| 393509 | 15-NOV-18 | FARRELL & ASSOCIATES | 243.18 | 16-NOV-18 | 243.18 | Reconciled |
| 393510 | 15-NOV-18 | FEDEX | 340.83 | 19-NOV-18 | 340.83 | Reconciled |
| 393511 | 15-NOV-18 | FIRST CHOICE SERVICES | 723.91 | 19-NOV-18 | 723.91 | Reconciled |
| 393512 | 15-NOV-18 | FISERV | 292.80 | 19-NOV-18 | 292.80 | Reconciled |

IRWD Ledger Upgrade Payment Register For 01-NOV-18 To 30-NOV-18 Report Date: 03-DEC-2018 15:24
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 20
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|-------------------------------|--------------|-----------|--|------|----------------|--------------|----------------|------------|
| Payment Document : IRWD CHECK | | | | | | | | |
| 393513 | | 15-NOV-18 | FLEET SOLUTIONS LLC | | 4,530.50 | 20-NOV-18 | 4,530.50 | Reconciled |
| 393514 | | 15-NOV-18 | FOUGHT, CYNTHIA J. | | 119.49 | 19-NOV-18 | 119.49 | Reconciled |
| 393515 | | 15-NOV-18 | FRONTIER CALIFORNIA INC. | | 51.96 | 23-NOV-18 | 51.96 | Reconciled |
| 393516 | | 15-NOV-18 | FUENTESPINA, GERALDINE | | 87.08 | 21-NOV-18 | 87.08 | Reconciled |
| 393517 | | 15-NOV-18 | FUSCOE ENGINEERING, INC. | | 968.75 | 16-NOV-18 | 968.75 | Reconciled |
| 393518 | | 15-NOV-18 | GARCIA, LEONEL B | | 44.51 | 21-NOV-18 | 44.51 | Reconciled |
| 393519 | | 15-NOV-18 | GENTERRA CONSULTANTS INC | | 7,832.00 | 19-NOV-18 | 7,832.00 | Reconciled |
| 393520 | | 15-NOV-18 | GJ AUTOMOTIVE EQUIPMENT CO INC | | 764.83 | 23-NOV-18 | 764.83 | Reconciled |
| 393521 | | 15-NOV-18 | GRAINGER | | 3,996.26 | 20-NOV-18 | 3,996.26 | Reconciled |
| 393522 | | 15-NOV-18 | GRAYBAR ELECTRIC COMPANY | | 3,066.49 | 19-NOV-18 | 3,066.49 | Reconciled |
| 393523 | | 15-NOV-18 | HAAKER EQUIPMENT COMPANY | | 1,242.80 | 20-NOV-18 | 1,242.80 | Reconciled |
| 393524 | | 15-NOV-18 | HACH COMPANY | | 3,530.29 | 19-NOV-18 | 3,530.29 | Reconciled |
| 393525 | | 15-NOV-18 | HAMILTON, KURT | | 1,308.19 | 28-NOV-18 | 1,308.19 | Reconciled |
| 393526 | | 15-NOV-18 | HARMSWORTH ASSOCIATES | | 3,621.00 | 23-NOV-18 | 3,621.00 | Reconciled |
| 393527 | | 15-NOV-18 | HARTFORD LIFE AND ACCIDENT INSURANCE COMPANY | | 72.30 | 26-NOV-18 | 72.30 | Reconciled |
| 393528 | | 15-NOV-18 | HARVARD COURT APARTMENTS | | 111.21 | 26-NOV-18 | 111.21 | Reconciled |
| 393529 | | 15-NOV-18 | HELP/SYSTEMS, LLC | | 400.00 | 19-NOV-18 | 400.00 | Reconciled |
| 393530 | | 15-NOV-18 | HELPMATES STAFFING SERVICES | | 25,405.74 | 21-NOV-18 | 25,405.74 | Reconciled |
| 393531 | | 15-NOV-18 | HILL BROTHERS CHEMICAL COMPANY | | 10,753.75 | | | Negotiable |
| 393532 | | 15-NOV-18 | HOME DEPOT USA INC | | 1,202.28 | 19-NOV-18 | 1,202.28 | Reconciled |
| 393533 | | 15-NOV-18 | HSIAOFANGYEN, LILY | | 15.65 | | | Negotiable |
| 393534 | | 15-NOV-18 | INTEGRITY MUNICIPAL SERVICES LLC | | 2,045.00 | 28-NOV-18 | 2,045.00 | Reconciled |
| 393535 | | 15-NOV-18 | IRON MOUNTAIN INFORMATION MANAGEMENT INC | | 1,691.39 | 19-NOV-18 | 1,691.39 | Reconciled |
| 393536 | | 15-NOV-18 | IRVINE PACIFIC | | 132.15 | 27-NOV-18 | 132.15 | Reconciled |
| 393537 | | 15-NOV-18 | IRVINE PIPE & SUPPLY INC | | 1,693.21 | 16-NOV-18 | 1,693.21 | Reconciled |
| 393538 | | 15-NOV-18 | IRWD-PETTY CASH CUSTODIAN | | 733.86 | 20-NOV-18 | 733.86 | Reconciled |

IRWD Ledger Upgrade Payment Register For 01-NOV-18 To 30-NOV-18 Report Date: 03-DEC-2018 15:24
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 21
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Cleared

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Date | Cleared Amount | Status |
|-------------------------------|--------------|-----------|---------------------------------------|------|----------------|-----------|----------------|------------|
| Payment Document : IRWD CHECK | | | | | | | | |
| 393539 | | 15-NOV-18 | JIANG, HONG | | 45.48 | | | Negotiable |
| 393540 | | 15-NOV-18 | JIG CONSULTANTS | | 12,530.00 | | | Negotiable |
| 393541 | | 15-NOV-18 | KAPITANOV, IVAN | | 40.45 | 19-NOV-18 | 40.45 | Reconciled |
| 393542 | | 15-NOV-18 | KAUFMAN, MASAKO I | | 37.47 | 28-NOV-18 | 37.47 | Reconciled |
| 393543 | | 15-NOV-18 | KAYUGA SOLUTION INC | | 23,915.00 | 21-NOV-18 | 23,915.00 | Reconciled |
| 393544 | | 15-NOV-18 | KENT & AMY DAHLBERG | | 45,220.00 | 26-NOV-18 | 45,220.00 | Reconciled |
| 393545 | | 15-NOV-18 | KIM, SUNG | | 11.68 | | | Negotiable |
| 393546 | | 15-NOV-18 | KIMBALL MIDWEST | | 2,950.92 | 19-NOV-18 | 2,950.92 | Reconciled |
| 393547 | | 15-NOV-18 | LANDCARE HOLDINGS, INC. | | 520.00 | 19-NOV-18 | 520.00 | Reconciled |
| 393548 | | 15-NOV-18 | LEFTWICH, ROBIN | | 17.16 | | | Negotiable |
| 393549 | | 15-NOV-18 | LENNAR HOMES | | 174.97 | 26-NOV-18 | 174.97 | Reconciled |
| 393550 | | 15-NOV-18 | LI, GUIXIA | | 21.69 | | | Negotiable |
| 393551 | | 15-NOV-18 | LI, SHUJIE | | 31.04 | | | Negotiable |
| 393552 | | 15-NOV-18 | LIM, EDDY | | 38.90 | | | Negotiable |
| 393553 | | 15-NOV-18 | LINKEDIN CORPORATION | | 6,756.25 | 19-NOV-18 | 6,756.25 | Reconciled |
| 393554 | | 15-NOV-18 | LIU, KAIWEN | | 24.49 | 19-NOV-18 | 24.49 | Reconciled |
| 393555 | | 15-NOV-18 | LONE STAR BLOWER, INC | | 16,366.71 | 28-NOV-18 | 16,366.71 | Reconciled |
| 393556 | | 15-NOV-18 | LU JIANG AND PULSC GROUP LLC | | 280.91 | | | Negotiable |
| 393557 | | 15-NOV-18 | MADORSKY, RACHEL | | 210.41 | | | Negotiable |
| 393558 | | 15-NOV-18 | MAJIBZADEH, ALIREZA | | 383.86 | 23-NOV-18 | 383.86 | Reconciled |
| 393559 | | 15-NOV-18 | MARTIN, AARON | | 131.77 | 16-NOV-18 | 131.77 | Reconciled |
| 393560 | | 15-NOV-18 | MC FADDEN-DALE INDUSTRIAL | | 193.47 | 19-NOV-18 | 193.47 | Reconciled |
| 393561 | | 15-NOV-18 | MC MASTER CARR SUPPLY CO | | 1,701.39 | 19-NOV-18 | 1,701.39 | Reconciled |
| 393562 | | 15-NOV-18 | MERRIMAC PETROLEUM, INC. | | 25,392.59 | 19-NOV-18 | 25,392.59 | Reconciled |
| 393563 | | 15-NOV-18 | MICHAEL BAKER INTERNATIONAL, INC. | | 5,427.01 | 19-NOV-18 | 5,427.01 | Reconciled |
| 393564 | | 15-NOV-18 | MISSION COMMUNICATIONS, LLC | | 1,126.80 | 21-NOV-18 | 1,126.80 | Reconciled |
| 393565 | | 15-NOV-18 | MOBILE MODULAR MANAGEMENT CORPORATION | | 1,212.19 | 19-NOV-18 | 1,212.19 | Reconciled |
| 393566 | | 15-NOV-18 | MR CRANE INC | | 1,063.80 | 19-NOV-18 | 1,063.80 | Reconciled |
| 393567 | | 15-NOV-18 | MSC INDUSTRIAL SUPPLY CO | | 292.16 | 23-NOV-18 | 292.16 | Reconciled |

IRWD Ledger Upgrade Payment Register For 01-NOV-18 To 30-NOV-18 Report Date: 03-DEC-2018 15:24
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 22
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Date | Cleared Amount | Status |
|-------------------------------|--------------|-----------|--|------|----------------|-----------|----------------|------------|
| Payment Document : IRWD CHECK | | | | | | | | |
| 393568 | | 15-NOV-18 | MUGLIA-ARIAS, IRVING | | 14.67 | | | Negotiable |
| 393569 | | 15-NOV-18 | MUNICIPAL MAINTENANCE EQUIPMENT INC | | 1,025.27 | 26-NOV-18 | 1,025.27 | Reconciled |
| 393570 | | 15-NOV-18 | MUNICIPAL UNDERGROUND SERVICES INC | | 3,850.00 | 16-NOV-18 | 3,850.00 | Reconciled |
| 393571 | | 15-NOV-18 | MUNICIPAL WATER DISTRICT OF ORANGE COUNTY | | 9,257.00 | 16-NOV-18 | 9,257.00 | Reconciled |
| 393572 | | 15-NOV-18 | NATIONAL READY MIXED CONCRETE CO. | | 1,622.29 | 19-NOV-18 | 1,622.29 | Reconciled |
| 393573 | | 15-NOV-18 | NIGUEL POINT PROP | | 25.00 | 20-NOV-18 | 25.00 | Reconciled |
| 393574 | | 15-NOV-18 | NINYO & MOORE | | 5,436.25 | 19-NOV-18 | 5,436.25 | Reconciled |
| 393575 | | 15-NOV-18 | NOVACOAST INC | | 520.00 | 19-NOV-18 | 520.00 | Reconciled |
| 393576 | | 15-NOV-18 | O.C. SUPERIOR CUSTOM CLEANING SERVICES | | 3,600.00 | | | Negotiable |
| 393577 | | 15-NOV-18 | OLIN CORPORATION | | 20,331.80 | 26-NOV-18 | 20,331.80 | Reconciled |
| 393578 | | 15-NOV-18 | ONESOURCE | | 534.42 | 19-NOV-18 | 534.42 | Reconciled |
| 393579 | | 15-NOV-18 | DISTRIBUTORS LLC ORANGE COUNTY AUTO PARTS CO | | 799.91 | 16-NOV-18 | 799.91 | Reconciled |
| 393580 | | 15-NOV-18 | ORANGE COUNTY SANITATION DISTRICT | | 1,843.09 | 16-NOV-18 | 1,843.09 | Reconciled |
| 393581 | | 15-NOV-18 | PACIFIC HYDROTECH CORPORATION | | 31,102.63 | 23-NOV-18 | 31,102.63 | Reconciled |
| 393582 | | 15-NOV-18 | PACIFIC HYDROTECH CORPORATION | | 14,714.70 | 23-NOV-18 | 14,714.70 | Reconciled |
| 393583 | | 15-NOV-18 | PACIFIC HYDROTECH CORPORATION | | 870,529.17 | 23-NOV-18 | 870,529.17 | Reconciled |
| 393584 | | 15-NOV-18 | PAPER DEPOT | | 540.00 | 23-NOV-18 | 540.00 | Reconciled |

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|----------------|--------------|------|------------------------------|------|----------------|--------------|----------------|------------|
| 393585 | 15-NOV-18 | | DOCUMENT DESTRUCTION LLC | | 140.61 | 20-NOV-18 | 140.61 | Reconciled |
| 393586 | 15-NOV-18 | | PARKHOUSE TIRE INC | | 154,531.96 | | | Negotiable |
| 393587 | 15-NOV-18 | | PASCAL & LUDWIG CONSTRUCTORS | | 8,133.26 | 19-NOV-18 | 8,133.26 | Reconciled |
| 393588 | 15-NOV-18 | | PMC ENGINEERING LLC. | | 3,642.44 | 19-NOV-18 | 3,642.44 | Reconciled |
| 393589 | 15-NOV-18 | | PONNUCHAMY, KARTHI | | 1,990.00 | 20-NOV-18 | 1,990.00 | Reconciled |
| 393590 | 15-NOV-18 | | PRE-PAID LEGAL SERVICES INC | | 1,212.00 | | | Negotiable |

IRWD Ledger Upgrade
 BANK: Bank of America N.A. Branch : Los Angeles
 Bank Account Currency: USD (US Dollar)
 Payment Type: All

Payment Register For 01-NOV-18 To 30-NOV-18
 Account: Checking AP and PR
 Payment Currency: USD (US Dollar)
 Display Supplier Address: No

Report Date: 03-DEC-2018 15:24
 Page: 23

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|-------------------------------|--------------|------|---|------|----------------|--------------|----------------|------------|
| Payment Document : IRWD CHECK | | | | | | | | |
| 393591 | 15-NOV-18 | | PRO MOBILE AUTO DETAILING | | 600.00 | 20-NOV-18 | 600.00 | Reconciled |
| 393592 | 15-NOV-18 | | PROCARE WORK INJURY CENTER | | 7,515.00 | 20-NOV-18 | 7,515.00 | Reconciled |
| 393593 | 15-NOV-18 | | PRUDENTIAL OVERALL SUPPLY | | 5,364.52 | 19-NOV-18 | 5,364.52 | Reconciled |
| 393594 | 15-NOV-18 | | PSOMAS | | 818.02 | 19-NOV-18 | 818.02 | Reconciled |
| 393595 | 15-NOV-18 | | QUACKENBUSH, JENNIFER | | 19.36 | | | Negotiable |
| 393596 | 15-NOV-18 | | R.J. NOBLE COMPANY | | 326.05 | 19-NOV-18 | 326.05 | Reconciled |
| 393597 | 15-NOV-18 | | RAINBOW DISPOSAL CO INC | | 28.39 | 21-NOV-18 | 28.39 | Reconciled |
| 393598 | 15-NOV-18 | | RAM AIR ENGINEERING INC | | 9,646.16 | 19-NOV-18 | 9,646.16 | Reconciled |
| 393599 | 15-NOV-18 | | REAL WATER CONSULTANTS INC. | | 11,850.00 | | | Negotiable |
| 393600 | 15-NOV-18 | | RENTOKIL NORTH AMERICA, INC | | 165.00 | 21-NOV-18 | 165.00 | Reconciled |
| 393601 | 15-NOV-18 | | RLG ENTERPRISES, INC | | 734.10 | 16-NOV-18 | 734.10 | Reconciled |
| 393602 | 15-NOV-18 | | ROSEDALE - RIO BRAVO WATER STORAGE DISTRICT | | 47,236.44 | | | Negotiable |
| 393603 | 15-NOV-18 | | ROYAL INDUSTRIAL SOLUTIONS | | 1,698.42 | 19-NOV-18 | 1,698.42 | Reconciled |
| 393604 | 15-NOV-18 | | SAFETY-KLEEN SYSTEMS, INC | | 277.75 | 19-NOV-18 | 277.75 | Reconciled |
| 393605 | 15-NOV-18 | | SALA, VASILIKI | | 29.27 | | | Negotiable |
| 393606 | 15-NOV-18 | | SANDERS PAVING INC | | 17,656.25 | 27-NOV-18 | 17,656.25 | Reconciled |
| 393607 | 15-NOV-18 | | SANTA ANA BLUE PRINT | | 162.71 | 20-NOV-18 | 162.71 | Reconciled |
| 393608 | 15-NOV-18 | | SANTA MARGARITA FORD | | 690.05 | 26-NOV-18 | 690.05 | Reconciled |
| 393609 | 15-NOV-18 | | SEPARATION PROCESSES INC | | 850.00 | 19-NOV-18 | 850.00 | Reconciled |
| 393610 | 15-NOV-18 | | SEVEN GABLES PROPERTY MANAGEMENT | | 41.58 | 19-NOV-18 | 41.58 | Reconciled |
| 393611 | 15-NOV-18 | | SHERWIN WILLIAMS COMPANY | | 2,109.10 | 23-NOV-18 | 2,109.10 | Reconciled |
| 393612 | 15-NOV-18 | | SIMI VALLEY LANDFILL AND RECYCLING CENTER | | 264.10 | 19-NOV-18 | 264.10 | Reconciled |
| 393613 | 15-NOV-18 | | SNYDER LANGSTON L.P. | | 667.50 | | | Negotiable |

IRWD Ledger Upgrade
 BANK: Bank of America N.A. Branch : Los Angeles
 Bank Account Currency: USD (US Dollar)
 Payment Type: All

Payment Register For 01-NOV-18 To 30-NOV-18
 Account: Checking AP and PR
 Payment Currency: USD (US Dollar)
 Display Supplier Address: No

Report Date: 03-DEC-2018 15:24
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| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|-------------------------------|--------------|------|---|------|----------------|--------------|----------------|------------|
| Payment Document : IRWD CHECK | | | | | | | | |
| 393614 | 15-NOV-18 | | SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT | | 2,435.91 | 28-NOV-18 | 2,435.91 | Reconciled |
| 393615 | 15-NOV-18 | | SOUTH COAST WATER CO. | | 90.00 | 21-NOV-18 | 90.00 | Reconciled |
| 393616 | 15-NOV-18 | | SOUTHERN CALIFORNIA EDISON COMPANY | | 302,742.13 | 20-NOV-18 | 302,742.13 | Reconciled |
| 393617 | 15-NOV-18 | | SOUTHERN CALIFORNIA GAS COMPANY | | 4,835.20 | 20-NOV-18 | 4,835.20 | Reconciled |
| 393618 | 15-NOV-18 | | SPARKLETTTS | | 231.50 | 23-NOV-18 | 231.50 | Reconciled |
| 393619 | 15-NOV-18 | | SPATIAL WAVE, INC. | | 1,387.50 | 16-NOV-18 | 1,387.50 | Reconciled |
| 393620 | 15-NOV-18 | | STACY GARNER AND DANIELA PEREZ LOZADA | | 48.92 | | | Negotiable |

| | | | | | | |
|--------|-----------|-----------------------------------|-----------|-----------|-----------|------------|
| 393621 | 15-NOV-18 | STANDARD REGISTER, INC. | 2,635.92 | 19-NOV-18 | 2,635.92 | Reconciled |
| 393622 | 15-NOV-18 | STANTEC CONSULTING SERVICES INC. | 7,125.00 | 19-NOV-18 | 7,125.00 | Reconciled |
| 393623 | 15-NOV-18 | STETSON ENGINEERS INC. | 12,394.98 | 21-NOV-18 | 12,394.98 | Reconciled |
| 393624 | 15-NOV-18 | SUEZ TREATMENT SOLUTIONS INC. | 19,531.63 | 26-NOV-18 | 19,531.63 | Reconciled |
| 393625 | 15-NOV-18 | SUN, JINGQING | 37.76 | 27-NOV-18 | 37.76 | Reconciled |
| 393626 | 15-NOV-18 | T.E. ROBERTS, INC. | 58,425.00 | | | Negotiable |
| 393627 | 15-NOV-18 | TASHIRO, CAROLYN | 55.00 | 21-NOV-18 | 55.00 | Reconciled |
| 393628 | 15-NOV-18 | THERMO ELECTRON NORTH AMERICA LLC | 7,507.10 | 19-NOV-18 | 7,507.10 | Reconciled |
| 393629 | 15-NOV-18 | TIC-OFFICE PROPERTIES | 435.07 | 26-NOV-18 | 435.07 | Reconciled |
| 393630 | 15-NOV-18 | TOLL BROS., INC. | 398.57 | 20-NOV-18 | 398.57 | Reconciled |
| 393631 | 15-NOV-18 | TOP TEN REAL ESTATE INC | 50.04 | | | Negotiable |
| 393632 | 15-NOV-18 | TOTAL RESOURCE MANAGEMENT, INC. | 4,675.04 | 21-NOV-18 | 4,675.04 | Reconciled |
| 393633 | 15-NOV-18 | TOTALFUNDS | 4,000.00 | 19-NOV-18 | 4,000.00 | Reconciled |
| 393634 | 15-NOV-18 | TRAN, TRI DI | 670.41 | 16-NOV-18 | 670.41 | Reconciled |
| 393635 | 15-NOV-18 | TRI POINTE HOMES, INC. | 406.19 | | | Negotiable |
| 393636 | 15-NOV-18 | TROPICAL PLAZA NURSERY INC | 416.56 | 19-NOV-18 | 416.56 | Reconciled |
| 393637 | 15-NOV-18 | TRUCPARCO | 67.56 | 21-NOV-18 | 67.56 | Reconciled |
| 393638 | 15-NOV-18 | TURNER ROYALTY, LLC | 4,920.20 | 19-NOV-18 | 4,920.20 | Reconciled |

IRWD Ledger Upgrade Payment Register For 01-NOV-18 To 30-NOV-18 Report Date: 03-DEC-2018 15:24
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 25
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|-------------------------------|--------------|-----------|--|-------------|----------------|--------------|----------------|------------|
| Payment Document : IRWD CHECK | | | | | | | | |
| 393639 | | 15-NOV-18 | UNITED PARCEL SERVICE INC | | 40.40 | 19-NOV-18 | 40.40 | Reconciled |
| 393640 | | 15-NOV-18 | UNITED SITE SERVICES OF CALIFORNIA INC | | 665.15 | 20-NOV-18 | 665.15 | Reconciled |
| 393641 | | 15-NOV-18 | UNIVAR USA INC | | 5,343.30 | 19-NOV-18 | 5,343.30 | Reconciled |
| 393642 | | 15-NOV-18 | UNIVERSITY OF CALIFORNIA, IRVINE | | 2,174.14 | | | Negotiable |
| 393643 | | 15-NOV-18 | US BANK NAT'L ASSOC N.DAKOTA | | 1,375.00 | 20-NOV-18 | 1,375.00 | Reconciled |
| 393644 | | 15-NOV-18 | VILLA SIENA APTS | | 10,986.55 | 26-NOV-18 | 10,986.55 | Reconciled |
| 393645 | | 15-NOV-18 | VILLAGE AT PARK PLACE | | 735.67 | | | Negotiable |
| 393646 | | 15-NOV-18 | WANG, HUILAN | | 41.90 | | | Negotiable |
| 393647 | | 15-NOV-18 | WASTE MANAGEMENT OF ORANGE COUNTY | | 367.26 | 19-NOV-18 | 367.26 | Reconciled |
| 393648 | | 15-NOV-18 | WATER SYSTEMS OPTIMIZATION, INC. | | 1,920.00 | 27-NOV-18 | 1,920.00 | Reconciled |
| 393649 | | 15-NOV-18 | WATERSMART SOFTWARE, INC | | 13,597.50 | 21-NOV-18 | 13,597.50 | Reconciled |
| 393650 | | 15-NOV-18 | WATKINS, ROBERT | | 66.03 | 26-NOV-18 | 66.03 | Reconciled |
| 393651 | | 15-NOV-18 | WAXIE'S ENTERPRISES, INC | | 281.13 | 19-NOV-18 | 281.13 | Reconciled |
| 393652 | | 15-NOV-18 | WECK LABORATORIES INC | | 85.00 | | | Negotiable |
| 393653 | | 15-NOV-18 | WHITE, TODD | | 70.21 | 19-NOV-18 | 70.21 | Reconciled |
| 393654 | | 15-NOV-18 | WILLIAM LYON HOMES, INC. | | 11.73 | | | Negotiable |
| 393655 | | 15-NOV-18 | WIRELESS WATCHDOGS, LLC | | 1,016.00 | 27-NOV-18 | 1,016.00 | Reconciled |
| 393656 | | 15-NOV-18 | WONG, ERNEST | | 42.85 | 23-NOV-18 | 42.85 | Reconciled |
| 393657 | | 15-NOV-18 | WONG, HELEN | | 815.42 | 19-NOV-18 | 815.42 | Reconciled |
| 393658 | | 15-NOV-18 | WU, LINGLING | | 62.42 | | | Negotiable |
| 393659 | | 15-NOV-18 | XIAO, JINGRU | | 19.78 | 26-NOV-18 | 19.78 | Reconciled |
| 393660 | | 15-NOV-18 | XING, JIE | | 31.70 | 27-NOV-18 | 31.70 | Reconciled |
| 393661 | | 15-NOV-18 | YI, RANDY | | 450.00 | 19-NOV-18 | 450.00 | Reconciled |
| 393662 | | 15-NOV-18 | YILING CHEN AND ZHIWU YU | | 29.83 | 23-NOV-18 | 29.83 | Reconciled |
| 393663 | | 20-NOV-18 | JCI JONES CHEMICALS INC | NEWARK | 2,494.30 | 27-NOV-18 | 2,494.30 | Reconciled |
| 393664 | | 20-NOV-18 | ANTHEM BLUE CROSS | LOS ANGELES | 214.68 | 26-NOV-18 | 214.68 | Reconciled |
| 393665 | | 20-NOV-18 | ANTHEM BLUE CROSS | LOS ANGELES | 290.43 | 26-NOV-18 | 290.43 | Reconciled |
| 393666 | | 20-NOV-18 | ANTHEM BLUE CROSS | LOS ANGELES | 546.33 | 26-NOV-18 | 546.33 | Reconciled |

IRWD Ledger Upgrade Payment Register For 01-NOV-18 To 30-NOV-18 Report Date: 03-DEC-2018 15:24
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 26
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|----------------|--------------|------|---------------|------|----------------|--------------|----------------|--------|
|----------------|--------------|------|---------------|------|----------------|--------------|----------------|--------|

Payment Document : IRWD CHECK

| | | | | | | | |
|--------|-----------|--|-----------------|-----------|-----------|-----------|------------|
| 393667 | 20-NOV-18 | ANTHEM BLUE CROSS | LOS ANGELES | 546.33 | 26-NOV-18 | 546.33 | Reconciled |
| 393668 | 20-NOV-18 | ROJAS FISHERIES LLC | purchase | 20,700.00 | | | Negotiable |
| 393669 | 21-NOV-18 | REACH EMPLOYEE ASSISTANCE INC | PLACENTIA | 1,038.80 | 27-NOV-18 | 1,038.80 | Reconciled |
| 393670 | 21-NOV-18 | RELIANCE STANDARD LIFE INSURANCE COMPANY | SEATTLE | 30,778.71 | 28-NOV-18 | 30,778.71 | Reconciled |
| 393671 | 21-NOV-18 | HILLEBRECHT, WARREN K | PAY | 395.25 | 26-NOV-18 | 395.25 | Reconciled |
| 393672 | 21-NOV-18 | CALIFORNIA DEPARTMENT OF TAX AND FEE ADMINISTRATION | SACRAMENTO | 1,685.00 | | | Negotiable |
| 393673 | 21-NOV-18 | PERS LONG TERM CARE | PASADENA | 538.89 | 27-NOV-18 | 538.89 | Reconciled |
| 393674 | 21-NOV-18 | ORANGE COUNTY SHERIFF'S OFFICE | 4601 JAMBOREE | 224.50 | | | Negotiable |
| 393675 | 21-NOV-18 | FRANCHISE TAX BOARD | SACRAMENTO 1 | 150.00 | | | Negotiable |
| 393676 | 21-NOV-18 | INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS LOCAL 47 | DIAMOND BAR | 1,385.00 | | | Negotiable |
| 393677 | 27-NOV-18 | CITY OF SANTA ANA | SANTA ANA | 5,584.70 | | | Negotiable |
| 393678 | 27-NOV-18 | CITY OF SANTA ANA | PO BOX1988 M-36 | 15,000.00 | | | Negotiable |
| 393679 | 27-NOV-18 | Thatcher, Forrest R (Ray) | HOME | 519.71 | 27-NOV-18 | 519.71 | Reconciled |
| 393680 | 27-NOV-18 | THE IRVINE COMPANY | NEWPORT BEACH | 56,410.00 | | | Negotiable |
| 393681 | 28-NOV-18 | Bennett, Ray R (Ray) | | 185.04 | | | Negotiable |
| 393682 | 28-NOV-18 | Hankla, Jeremy | | 70.00 | | | Negotiable |
| 393683 | 28-NOV-18 | Hartoog, Jeremy | | 586.27 | | | Negotiable |
| 393684 | 28-NOV-18 | Kanady, Jacob | | 143.00 | | | Negotiable |
| 393685 | 28-NOV-18 | Llewellyn, Shana W | | 145.00 | | | Negotiable |
| 393686 | 28-NOV-18 | Malloy, Steven L (Steven) | | 135.00 | | | Negotiable |
| 393687 | 28-NOV-18 | McKinstry, Brian H (Brian) | | 305.89 | | | Negotiable |
| 393688 | 28-NOV-18 | Moeder, Jacob J (Jacob) | | 28.62 | | | Negotiable |
| 393689 | 28-NOV-18 | Pan, Jenny W (Jenny) | | 129.72 | | | Negotiable |

IRWD Ledger Upgrade
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Report Date: 03-DEC-2018 15:24
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar) Page: 27
 Payment Type: All Display Supplier Address: No

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|-------------------------------|--------------|-----------|---|--------|----------------|--------------|----------------|------------|
| Payment Document : IRWD CHECK | | | | | | | | |
| 393690 | | 28-NOV-18 | Pardee, Debra S | | 9.00 | | | Negotiable |
| 393691 | | 28-NOV-18 | Tran, Jason M (Jason) | | 135.00 | | | Negotiable |
| 393692 | | 28-NOV-18 | RED WING SHOE STORE | DALLAS | 2,529.92 | | | Negotiable |
| 393693 | | 28-NOV-18 | A, YINA | | 17.70 | | | Negotiable |
| 393694 | | 28-NOV-18 | ABC ICEHOUSE, INC. | | 151.59 | | | Negotiable |
| 393695 | | 28-NOV-18 | ABM INDUSTRY GROUPS, LLC | | 2,060.00 | | | Negotiable |
| 393696 | | 28-NOV-18 | AIRGAS, INC. | | 258.60 | | | Negotiable |
| 393697 | | 28-NOV-18 | ALARCON, TERESA | | 19.53 | | | Negotiable |
| 393698 | | 28-NOV-18 | ALLIANCE RESOURCE CONSULTING LLC | | 6,250.00 | | | Negotiable |
| 393699 | | 28-NOV-18 | ALSTON & BIRD LLP | | 89,203.42 | | | Negotiable |
| 393700 | | 28-NOV-18 | AMAZON CAPITAL SERVICES, INC. | | 937.43 | | | Negotiable |
| 393701 | | 28-NOV-18 | AMERICAN GEOTECHNICAL, INC. | | 9,911.25 | | | Negotiable |
| 393702 | | 28-NOV-18 | ANDERSONPENNA PARTNERS, INC | | 68,820.00 | | | Negotiable |
| 393703 | | 28-NOV-18 | ANTHONY N. LARSEN | | 450.00 | | | Negotiable |
| 393704 | | 28-NOV-18 | APEX LIFE SCIENCES, LLC | | 3,570.00 | | | Negotiable |
| 393705 | | 28-NOV-18 | AQUA-METRIC SALES COMPANY | | 54,716.00 | | | Negotiable |
| 393706 | | 28-NOV-18 | AQUINO, BRITTNEY | | 84.96 | | | Negotiable |
| 393707 | | 28-NOV-18 | ASHLEY, JENNIFER | | 52.06 | | | Negotiable |
| 393708 | | 28-NOV-18 | AT&T | | 49.38 | | | Negotiable |
| 393709 | | 28-NOV-18 | AT&T | | 10,705.73 | | | Negotiable |
| 393710 | | 28-NOV-18 | AT&T | | 173.53 | | | Negotiable |
| 393711 | | 28-NOV-18 | ATHENS SERVICES | | 601.54 | | | Negotiable |
| 393712 | | 28-NOV-18 | ATKINSON, ANDELSON, LOYA, RUUD AND ROMO | | 678.50 | | | Negotiable |
| 393713 | | 28-NOV-18 | AUTOMOTIVE MARKETING | | 3,680.00 | | | Negotiable |

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|--------|-----------|--|-----------|------------|
| 393714 | 28-NOV-18 | CONSULTANTS, INC. AXA EQUITABLE LIFE INSURANCE COMPANY | 9,780.00 | Negotiable |
| 393715 | 28-NOV-18 | BATTERIES PLUS AND BATTERIES PLUS BULBS | 1,045.74 | Negotiable |
| 393716 | 28-NOV-18 | BDC SPECIAL WASTE | 207.20 | Negotiable |
| 393717 | 28-NOV-18 | BILL'S SWEEPING SERVICE INC | 460.00 | Negotiable |
| 393718 | 28-NOV-18 | BIOMAGIC INC | 15,247.87 | Negotiable |

IRWD Ledger Upgrade
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Report Date: 03-DEC-2018 15:24
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar) Page: 28
 Payment Type: All Display Supplier Address: No

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|-------------------------------|--------------|-----------|---|------|----------------|--------------|----------------|------------|
| Payment Document : IRWD CHECK | | | | | | | | |
| 393719 | | 28-NOV-18 | BLACK & VEATCH CORPORATION | | 287,722.54 | | | Negotiable |
| 393720 | | 28-NOV-18 | BLACKHAWK NETWORK INC | | 29,952.00 | | | Negotiable |
| 393721 | | 28-NOV-18 | BOKHARI, TARIQ | | 318.60 | | | Negotiable |
| 393722 | | 28-NOV-18 | BORCHARD SURVEYING & MAPPING, INC. | | 8,662.50 | | | Negotiable |
| 393723 | | 28-NOV-18 | BROWN AND CALDWELL | | 16,625.86 | | | Negotiable |
| 393724 | | 28-NOV-18 | BRUCE NEWELL | | 1,250.00 | | | Negotiable |
| 393725 | | 28-NOV-18 | BSI SERVICES AND SOLUTIONS (WEST), INC. | | 2,462.24 | | | Negotiable |
| 393726 | | 28-NOV-18 | BUCCOLA LANDSCAPE SERVICES, INC. | | 231.21 | | | Negotiable |
| 393727 | | 28-NOV-18 | C WELLS PIPELINE MATERIALS INC | | 28,658.20 | | | Negotiable |
| 393728 | | 28-NOV-18 | CALIFORNIA BARRICADE RENTAL, INC. | | 4,240.00 | | | Negotiable |
| 393729 | | 28-NOV-18 | CANON FINANCIAL SERVICES, INC | | 11,021.22 | | | Negotiable |
| 393730 | | 28-NOV-18 | CDW GOVERNMENT LLC | | 34,574.20 | | | Negotiable |
| 393731 | | 28-NOV-18 | CHANG, CHIEN-MEI | | 67.78 | | | Negotiable |
| 393732 | | 28-NOV-18 | CHANG, TIFFANY | | 885.26 | | | Negotiable |
| 393733 | | 28-NOV-18 | CHARLES WILLIAM ROBLE, JR. | | 360.00 | | | Negotiable |
| 393734 | | 28-NOV-18 | CHEM SERVICE INC. | | 139.80 | | | Negotiable |
| 393735 | | 28-NOV-18 | CHEN, GANG | | 18.24 | | | Negotiable |
| 393736 | | 28-NOV-18 | CHO, JIEUN | | 12.34 | | | Negotiable |
| 393737 | | 28-NOV-18 | CHO, SO | | 40.06 | | | Negotiable |
| 393738 | | 28-NOV-18 | CITY OF IRVINE | | 880.52 | | | Negotiable |
| 393739 | | 28-NOV-18 | CITY OF IRVINE | | 1,875.20 | | | Negotiable |
| 393740 | | 28-NOV-18 | CITY OF NEWPORT BEACH | | 1,220.41 | | | Negotiable |
| 393741 | | 28-NOV-18 | CIVIL SOURCE, INC. | | 62,607.00 | | | Negotiable |
| 393742 | | 28-NOV-18 | CLARIS STRATEGY INC. | | 6,360.00 | | | Negotiable |
| 393743 | | 28-NOV-18 | COMMERCIAL COATING RESOURCE INC | | 3,460.00 | | | Negotiable |
| 393744 | | 28-NOV-18 | COMMUTER VAN CONVERSION AND MORE INC | | 981.19 | | | Negotiable |
| 393745 | | 28-NOV-18 | CONSTELLATION NEWENERGY, INC. | | 1,791.26 | | | Negotiable |
| 393746 | | 28-NOV-18 | CORE & MAIN LP | | 7,064.82 | | | Negotiable |
| 393747 | | 28-NOV-18 | COUNTY OF ORANGE | | 7,440.00 | | | Negotiable |

IRWD Ledger Upgrade
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Report Date: 03-DEC-2018 15:24
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar) Page: 29
 Payment Type: All Display Supplier Address: No

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|-------------------------------|--------------|-----------|----------------------------------|------|----------------|--------------|----------------|------------|
| Payment Document : IRWD CHECK | | | | | | | | |
| 393748 | | 28-NOV-18 | CRADE, CLAIRE | | 20.69 | | | Negotiable |
| 393749 | | 28-NOV-18 | CRIDER, NATHAN | | 3.70 | | | Negotiable |
| 393750 | | 28-NOV-18 | CS-AMSCO | | 3,331.86 | | | Negotiable |
| 393751 | | 28-NOV-18 | CUSTOM TRUCK ONE SOURCE, L.P. | | 380.00 | | | Negotiable |
| 393752 | | 28-NOV-18 | CVS PHARMACY, INC. | | 3,007.00 | | | Negotiable |
| 393753 | | 28-NOV-18 | D & H WATER SYSTEMS INC. | | 5,517.52 | | | Negotiable |
| 393754 | | 28-NOV-18 | DATA CLEAN CORPORATION | | 534.00 | | | Negotiable |
| 393755 | | 28-NOV-18 | DATASITE INC | | 5,234.00 | | | Negotiable |
| 393756 | | 28-NOV-18 | DAVID WILSON'S FORD OF ORANGE | | 36,510.75 | | | Negotiable |
| 393757 | | 28-NOV-18 | DB INDUSTRIAL SUPPLY CO | | 381.18 | | | Negotiable |
| 393758 | | 28-NOV-18 | DC FROST ASSOCIATES, INC. | | 9,284.36 | | | Negotiable |

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|--------|-----------|---|-----------|------------|
| 393759 | 28-NOV-18 | DELL MARKETING LP | 6,745.89 | Negotiable |
| 393760 | 28-NOV-18 | DIRECTV INC | 255.51 | Negotiable |
| 393761 | 28-NOV-18 | DISCOUTN COURIER SERVICE INC. | 99.00 | Negotiable |
| 393762 | 28-NOV-18 | DUDLEY RIDGE WATER DISTRICT | 87,097.31 | Negotiable |
| 393763 | 28-NOV-18 | EAGLE SYSTEMS INTERNATIONAL INC. | 39,077.76 | Negotiable |
| 393764 | 28-NOV-18 | EI&C ENGINEERING INC | 44,750.00 | Negotiable |
| 393765 | 28-NOV-18 | ELITE EQUIPMENT, INC. | 1,017.33 | Negotiable |
| 393766 | 28-NOV-18 | ENTERPRISE RIDESHARE | 38,044.01 | Negotiable |
| 393767 | 28-NOV-18 | ENVIRONMENTAL ENGINEERING AND CONTRACTING, INC. | 22,447.50 | Negotiable |
| 393768 | 28-NOV-18 | ENVIRONMENTAL RESOURCE ASSOCIATES | 212.00 | Negotiable |
| 393769 | 28-NOV-18 | ENVIRONMENTAL SCIENCE ASSOCIATES | 55,920.78 | Negotiable |
| 393770 | 28-NOV-18 | EVERETT DOREY LLP | 1,072.50 | Negotiable |
| 393771 | 28-NOV-18 | EXECUTIVE LIGHTING & ELECTRIC | 674.10 | Negotiable |
| 393772 | 28-NOV-18 | FAIRFIELD RESIDENTIAL VON KARMAN | 554.24 | Negotiable |

IRWD Ledger Upgrade Payment Register For 01-NOV-18 To 30-NOV-18 Report Date: 03-DEC-2018 15:24
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 30
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|-------------------------------|--------------|-----------|-------------------------------------|------|----------------|--------------|----------------|------------|
| Payment Document : IRWD CHECK | | | | | | | | |
| 393773 | | 28-NOV-18 | FERGUSON ENTERPRISES, INC. | | 3,717.92 | | | Negotiable |
| 393774 | | 28-NOV-18 | FIONA HUTTON & ASSOCIATES, INC. | | 9,291.25 | | | Negotiable |
| 393775 | | 28-NOV-18 | FIRE EXTINGUISHING SAFETY & SERVICE | | 654.04 | | | Negotiable |
| 393776 | | 28-NOV-18 | FIRST FINANCIAL ASSET MANAGEMENT | | 1,066.97 | | | Negotiable |
| 393777 | | 28-NOV-18 | FISERV | | 20,088.94 | | | Negotiable |
| 393778 | | 28-NOV-18 | FISHER SCIENTIFIC COMPANY LLC | | 8,336.14 | | | Negotiable |
| 393779 | | 28-NOV-18 | FRONTIER CALIFORNIA INC. | | 643.47 | | | Negotiable |
| 393780 | | 28-NOV-18 | GANAHL LUMBER CO. | | 232.27 | | | Negotiable |
| 393781 | | 28-NOV-18 | GEEL, STEPHEN | | 40.06 | | | Negotiable |
| 393782 | | 28-NOV-18 | GERMAN, JOHN | | 28.50 | | | Negotiable |
| 393783 | | 28-NOV-18 | GOLDSTONE, REBECCA | | 5,090.58 | | | Negotiable |
| 393784 | | 28-NOV-18 | GRAINGER | | 13,617.63 | | | Negotiable |
| 393785 | | 28-NOV-18 | GRAYBAR ELECTRIC COMPANY | | 380.61 | | | Negotiable |
| 393786 | | 28-NOV-18 | HAAKER EQUIPMENT COMPANY | | 1,202.26 | | | Negotiable |
| 393787 | | 28-NOV-18 | HACH COMPANY | | 8,277.45 | | | Negotiable |
| 393788 | | 28-NOV-18 | HALPERIN, LARRY | | 19.61 | | | Negotiable |
| 393789 | | 28-NOV-18 | HARBOR ALL GLASS & MIRROR INC. | | 129.30 | | | Negotiable |
| 393790 | | 28-NOV-18 | HARPER & ASSOCIATES ENGINEERING INC | | 3,040.00 | | | Negotiable |
| 393791 | | 28-NOV-18 | HARRINGTON INDUSTRIAL PLASTICS LLC | | 19,861.32 | | | Negotiable |
| 393792 | | 28-NOV-18 | HDR ENGINEERING INC | | 116,087.10 | | | Negotiable |
| 393793 | | 28-NOV-18 | HELPMATES STAFFING SERVICES | | 17,584.44 | | | Negotiable |
| 393794 | | 28-NOV-18 | HERITAGE FIELDS EL TORO, LLC | | 1,652.41 | | | Negotiable |
| 393795 | | 28-NOV-18 | HERNANDEZ, ROBERTO | | 28.55 | | | Negotiable |
| 393796 | | 28-NOV-18 | HILL BROTHERS CHEMICAL COMPANY | | 12,121.97 | | | Negotiable |
| 393797 | | 28-NOV-18 | HOME DEPOT USA INC | | 1,140.60 | | | Negotiable |
| 393798 | | 28-NOV-18 | IBM CORPORATION | | 2,970.00 | | | Negotiable |
| 393799 | | 28-NOV-18 | IDEXX DISTRIBUTION, INC | | 5,633.85 | | | Negotiable |
| 393800 | | 28-NOV-18 | INFOSYS LIMITED | | 24,480.00 | | | Negotiable |

IRWD Ledger Upgrade Payment Register For 01-NOV-18 To 30-NOV-18 Report Date: 03-DEC-2018 15:24
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 31
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|-------------------------------|--------------|------|---------------|------|----------------|--------------|----------------|--------|
| Payment Document : IRWD CHECK | | | | | | | | |

| | | | | |
|--------|-----------|--|-----------|------------|
| 393801 | 28-NOV-18 | IRVINE COMMUNITY DEVELOPMENT COMPANY LLC | 53,072.65 | Negotiable |
| 393802 | 28-NOV-18 | IRVINE PACIFIC | 360.80 | Negotiable |
| 393803 | 28-NOV-18 | IRVINE PIPE & SUPPLY INC | 4,400.39 | Negotiable |
| 393804 | 28-NOV-18 | IRWD-PETTY CASH CUSTODIAN | 1,434.21 | Negotiable |
| 393805 | 28-NOV-18 | JELINEK, JONATHAN | 200.00 | Negotiable |
| 393806 | 28-NOV-18 | JH TECHNOLOGIES, INC | 8,609.17 | Negotiable |
| 393807 | 28-NOV-18 | JOHNSTONE SUPPLY | 119.31 | Negotiable |
| 393808 | 28-NOV-18 | JUST ENERGY SOLUTIONS INC. | 49.94 | Negotiable |
| 393809 | 28-NOV-18 | KAZARIANS & ASSOCIATES, INC. | 2,096.52 | Negotiable |
| 393810 | 28-NOV-18 | KELLER, MICHELLE | 37.46 | Negotiable |
| 393811 | 28-NOV-18 | KENT & AMY DAHLBERG | 4,127.10 | Negotiable |
| 393812 | 28-NOV-18 | KIM, BOKYUNG | 27.53 | Negotiable |
| 393813 | 28-NOV-18 | KIM, KANGSEOK | 85.09 | Negotiable |
| 393814 | 28-NOV-18 | KLINE PROPERTY MANAGEMENT | 39.29 | Negotiable |
| 393815 | 28-NOV-18 | KO, JIM | 33.90 | Negotiable |
| 393816 | 28-NOV-18 | LA HABRA FENCE COMPANY INC | 2,543.00 | Negotiable |
| 393817 | 28-NOV-18 | LAMB, BAILEE | 23.58 | Negotiable |
| 393818 | 28-NOV-18 | LENNAR HOMES | 808.33 | Negotiable |
| 393819 | 28-NOV-18 | LEWIS BRISBOIS BISGAARD AND SMITH, LLP | 65,737.35 | Negotiable |
| 393820 | 28-NOV-18 | LI, YUANXI | 19.37 | Negotiable |
| 393821 | 28-NOV-18 | LU'S LIGHTHOUSE, INC. | 2,597.34 | Negotiable |
| 393822 | 28-NOV-18 | LU, HONGRU | 48.36 | Negotiable |
| 393823 | 28-NOV-18 | MA, MICHAEL | 45.68 | Negotiable |
| 393824 | 28-NOV-18 | MAC DERMOTT, SCOTT | 27.67 | Negotiable |
| 393825 | 28-NOV-18 | MACDUFF, CHRIS | 16.00 | Negotiable |
| 393826 | 28-NOV-18 | MBC AQUATIC SCIENCES, INC. | 1,350.00 | Negotiable |
| 393827 | 28-NOV-18 | MC FADDEN-DALE INDUSTRIAL | 132.75 | Negotiable |
| 393828 | 28-NOV-18 | MC MASTER CARR SUPPLY CO | 2,183.84 | Negotiable |
| 393829 | 28-NOV-18 | MCCARTHY, LEE ANN | 37.36 | Negotiable |
| 393830 | 28-NOV-18 | MCGOVERN, DENNIS | 34.09 | Negotiable |

IRWD Ledger Upgrade

BANK: Bank of America N.A.
 Bank Account Currency: USD (US Dollar)
 Payment Type: All

Branch : Los Angeles

Payment Register For 01-NOV-18 To 30-NOV-18

Account: Checking AP and PR

Report Date: 03-DEC-2018 15:24

Page: 32

Payment Currency: USD (US Dollar)

Display Supplier Address: No

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|-------------------------------|--------------|-----------|--|------|----------------|--------------|----------------|------------|
| Payment Document : IRWD CHECK | | | | | | | | |
| 393831 | | 28-NOV-18 | MERCADEL, HENRY | | 85.21 | | | Negotiable |
| 393832 | | 28-NOV-18 | MERRIMAC | | 71,484.34 | | | Negotiable |
| 393833 | | 28-NOV-18 | PETROLEUM, INC. MICHAEL BAKER INTERNATIONAL, INC. | | 4,676.00 | | | Negotiable |
| 393834 | | 28-NOV-18 | MOBILE MODULAR MANAGEMENT CORPORATION | | 87.19 | | | Negotiable |
| 393835 | | 28-NOV-18 | MOJARRO, YESENIA | | 42.68 | | | Negotiable |
| 393836 | | 28-NOV-18 | MOORE INDUSTRIES INTERNATIONAL, INC. | | 284.03 | | | Negotiable |
| 393837 | | 28-NOV-18 | MSC INDUSTRIAL SUPPLY CO | | 1,018.88 | | | Negotiable |
| 393838 | | 28-NOV-18 | MYERS & SONS HI-WAY SAFETY, INC. | | 2,605.40 | | | Negotiable |
| 393839 | | 28-NOV-18 | NATIONAL READY MIXED CONCRETE CO. | | 2,890.05 | | | Negotiable |
| 393840 | | 28-NOV-18 | NCH CORPORATION | | 195.89 | | | Negotiable |
| 393841 | | 28-NOV-18 | NEW PIG CORPORATION | | 645.00 | | | Negotiable |
| 393842 | | 28-NOV-18 | NEW STAR ENVIRONMENTAL, INC. | | 570.00 | | | Negotiable |
| 393843 | | 28-NOV-18 | NMG GEOTECHNICAL INC | | 12,416.10 | | | Negotiable |
| 393844 | | 28-NOV-18 | NOVACOAST INC | | 597.50 | | | Negotiable |
| 393845 | | 28-NOV-18 | NPG INC. | | 1,461.81 | | | Negotiable |
| 393846 | | 28-NOV-18 | OFFICE DEPOT INC | | 316.83 | | | Negotiable |
| 393847 | | 28-NOV-18 | OLIN CORPORATION | | 51,887.08 | | | Negotiable |
| 393848 | | 28-NOV-18 | OLSON, HAGEL & FISHBURN, LLP | | 530.50 | | | Negotiable |
| 393849 | | 28-NOV-18 | ONESOURCE DISTRIBUTORS LLC | | 1,129.57 | | | Negotiable |
| 393850 | | 28-NOV-18 | ORACLE AMERICA, INC. | | 19,380.90 | | | Negotiable |

| | | | | | |
|--------|-----------|-----------------------------------|--|----------|------------|
| 393851 | 28-NOV-18 | ORANGE COUNTY AUTO PARTS CO | | 2,173.10 | Negotiable |
| 393852 | 28-NOV-18 | ORANGE COUNTY SANITATION DISTRICT | | 238.86 | Negotiable |
| 393853 | 28-NOV-18 | ORANGE LINE OIL COMPANY | | 933.32 | Negotiable |
| 393854 | 28-NOV-18 | PACIFIC COAST BOLT CORP | | 732.17 | Negotiable |

IRWD Ledger Upgrade
 BANK: Bank of America N.A. Branch : Los Angeles Payment Register For 01-NOV-18 To 30-NOV-18 Report Date: 03-DEC-2018 15:24
 Bank Account Currency: USD (US Dollar) Account: Checking AP and PR Page: 33
 Payment Type: All Payment Currency: USD (US Dollar) Display Supplier Address: No

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|-------------------------------|--------------|-----------|-----------------------------------|------|----------------|--------------|----------------|------------|
| Payment Document : IRWD CHECK | | | | | | | | |
| 393855 | | 28-NOV-18 | PACIFIC PARTS & CONTROLS INC | | 2,772.25 | | | Negotiable |
| 393856 | | 28-NOV-18 | PACIFIC SURVEYS, LLC | | 1,195.00 | | | Negotiable |
| 393857 | | 28-NOV-18 | PARKHOUSE TIRE INC | | 5,941.65 | | | Negotiable |
| 393858 | | 28-NOV-18 | PARKWAY LAWNMOWER SHOP | | 214.42 | | | Negotiable |
| 393859 | | 28-NOV-18 | PERKINELMER HEALTH SCIENCES INC | | 600.85 | | | Negotiable |
| 393860 | | 28-NOV-18 | PINNACLE TOWERS LLC | | 720.39 | | | Negotiable |
| 393861 | | 28-NOV-18 | PIVOT INTERIORS INC | | 480.00 | | | Negotiable |
| 393862 | | 28-NOV-18 | POWER, JOHN | | 62.69 | | | Negotiable |
| 393863 | | 28-NOV-18 | PRAXAIR DISTRIBUTION INC | | 1,821.29 | | | Negotiable |
| 393864 | | 28-NOV-18 | PRIME CONTROLS COMPANY INC | | 3,243.77 | | | Negotiable |
| 393865 | | 28-NOV-18 | PSOMAS | | 2,020.00 | | | Negotiable |
| 393866 | | 28-NOV-18 | PTI SAND & GRAVEL INC | | 2,967.92 | | | Negotiable |
| 393867 | | 28-NOV-18 | PULTE HOMES | | 143.46 | | | Negotiable |
| 393868 | | 28-NOV-18 | R&B AUTOMATION, INC. | | 2,000.00 | | | Negotiable |
| 393869 | | 28-NOV-18 | RAM AIR ENGINEERING INC | | 35,111.89 | | | Negotiable |
| 393870 | | 28-NOV-18 | RCE CONSULTANTS, INC. | | 8,162.40 | | | Negotiable |
| 393871 | | 28-NOV-18 | RED WING SHOE STORE | | 2,630.39 | | | Negotiable |
| 393872 | | 28-NOV-18 | RELEVANT SOLUTIONS | | 6,575.08 | | | Negotiable |
| 393873 | | 28-NOV-18 | RELIANCE SAFETY CONSULTANTS, INC. | | 5,700.00 | | | Negotiable |
| 393874 | | 28-NOV-18 | RIEDEL, JANE | | 33.46 | | | Negotiable |
| 393875 | | 28-NOV-18 | RINCON TRUCK CENTER INC. | | 1,146.72 | | | Negotiable |
| 393876 | | 28-NOV-18 | ROYAL INDUSTRIAL SOLUTIONS | | 442.17 | | | Negotiable |
| 393877 | | 28-NOV-18 | RS HUGHES COMPANY, INC. | | 3,409.22 | | | Negotiable |
| 393878 | | 28-NOV-18 | SAFETY CENTER INCORPORATED | | 1,400.00 | | | Negotiable |
| 393879 | | 28-NOV-18 | SANDERS PAVING INC | | 104,457.50 | | | Negotiable |
| 393880 | | 28-NOV-18 | SANTA ANA BLUE PRINT | | 1,015.46 | | | Negotiable |

IRWD Ledger Upgrade
 BANK: Bank of America N.A. Branch : Los Angeles Payment Register For 01-NOV-18 To 30-NOV-18 Report Date: 03-DEC-2018 15:24
 Bank Account Currency: USD (US Dollar) Account: Checking AP and PR Page: 34
 Payment Type: All Payment Currency: USD (US Dollar) Display Supplier Address: No

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|-------------------------------|--------------|-----------|---|------|----------------|--------------|----------------|------------|
| Payment Document : IRWD CHECK | | | | | | | | |
| 393881 | | 28-NOV-18 | SANTA MARGARITA FORD | | 290.34 | | | Negotiable |
| 393882 | | 28-NOV-18 | SANTIAGO AQUEDUCT COMMISSION | | 600.00 | | | Negotiable |
| 393883 | | 28-NOV-18 | SANTIAGO, ITZHEL | | 33.57 | | | Negotiable |
| 393884 | | 28-NOV-18 | SCHWEITZER ENGINEERING LABORATORIES, INC. | | 7,747.23 | | | Negotiable |
| 393885 | | 28-NOV-18 | SEAL ANALYTICAL INC | | 1,996.57 | | | Negotiable |
| 393886 | | 28-NOV-18 | SENGCHAN, VILA | | 33.86 | | | Negotiable |
| 393887 | | 28-NOV-18 | SHAMROCK SUPPLY CO INC | | 1,085.07 | | | Negotiable |
| 393888 | | 28-NOV-18 | SHEA HOMES LP | | 136.15 | | | Negotiable |
| 393889 | | 28-NOV-18 | SHOETERIA | | 189.09 | | | Negotiable |
| 393890 | | 28-NOV-18 | SIRIUS COMPUTER SOLUTIONS INC | | 57,956.06 | | | Negotiable |
| 393891 | | 28-NOV-18 | SITMATIC | | 635.83 | | | Negotiable |
| 393892 | | 28-NOV-18 | SKORUZ | | 20,196.00 | | | Negotiable |

| | | | | |
|--------|-----------|---|------------|------------|
| 393893 | 28-NOV-18 | TECHNOLOGIES INC SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT | 2,836.11 | Negotiable |
| 393894 | 28-NOV-18 | SOUTH ORANGE COUNTY WASTEWATER AUTHORITY | 53,688.00 | Negotiable |
| 393895 | 28-NOV-18 | SOUTHERN CALIFORNIA EDISON COMPANY | 296,477.38 | Negotiable |
| 393896 | 28-NOV-18 | SOUTHERN CALIFORNIA EDISON COMPANY | 43.68 | Negotiable |
| 393897 | 28-NOV-18 | SOUTHERN CALIFORNIA GAS COMPANY | 1,370.72 | Negotiable |
| 393898 | 28-NOV-18 | SPARKLETT'S | 141.54 | Negotiable |
| 393899 | 28-NOV-18 | STANTEC CONSULTING SERVICES INC. | 12,240.18 | Negotiable |
| 393900 | 28-NOV-18 | STREAKWAVE WIRELESS, INC. | 1,735.96 | Negotiable |
| 393901 | 28-NOV-18 | SUNSHINE SUPPLY COMPANY, INC. | 2,734.70 | Negotiable |
| 393902 | 28-NOV-18 | SURTERRE PROPERTY MANAGEMENT | 34.90 | Negotiable |
| 393903 | 28-NOV-18 | T.E. ROBERTS, INC. | 106,951.00 | Negotiable |
| 393904 | 28-NOV-18 | TALLEY INC | 2,973.92 | Negotiable |

IRWD Ledger Upgrade Payment Register For 01-NOV-18 To 30-NOV-18 Report Date: 03-DEC-2018 15:24
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 35
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|-------------------------------|--------------|-----------|--|------|----------------|--------------|----------------|------------|
| Payment Document : IRWD CHECK | | | | | | | | |
| 393905 | | 28-NOV-18 | TEKDRAULICS | | 4,021.14 | | | Negotiable |
| 393906 | | 28-NOV-18 | TELEDYNE INSTRUMENTS, INC. | | 730.59 | | | Negotiable |
| 393907 | | 28-NOV-18 | TESTAMERICA LABORATORIES, INC | | 192.15 | | | Negotiable |
| 393908 | | 28-NOV-18 | THE FURMAN GROUP, INC. | | 12,540.00 | | | Negotiable |
| 393909 | | 28-NOV-18 | THERMO ELECTRON NORTH AMERICA LLC | | 1,119.91 | | | Negotiable |
| 393910 | | 28-NOV-18 | TOLL BROS., INC. | | 724.08 | | | Negotiable |
| 393911 | | 28-NOV-18 | TRAN, LYNDA | | 77.74 | | | Negotiable |
| 393912 | | 28-NOV-18 | TROPICAL PLAZA NURSERY INC | | 67,914.65 | | | Negotiable |
| 393913 | | 28-NOV-18 | TRUCPARCO | | 497.02 | | | Negotiable |
| 393914 | | 28-NOV-18 | TUTTLE-CLICK FORD LINCOLN | | 23,992.82 | | | Negotiable |
| 393915 | | 28-NOV-18 | UECHI, WILLIAM | | 21.74 | | | Negotiable |
| 393916 | | 28-NOV-18 | ULINE INC | | 86.06 | | | Negotiable |
| 393917 | | 28-NOV-18 | UNITED PARCEL SERVICE INC | | 82.21 | | | Negotiable |
| 393918 | | 28-NOV-18 | US BANK NAT'L ASSOCIATION NORTH DAKOTA | | 65,301.67 | | | Negotiable |
| 393919 | | 28-NOV-18 | V&A CONSULTING ENGINEERS | | 29,992.99 | | | Negotiable |
| 393920 | | 28-NOV-18 | VERIZON WIRELESS SERVICES LLC | | 1,778.97 | | | Negotiable |
| 393921 | | 28-NOV-18 | VIRTUAL GRAFFITI, INC. | | 20,076.27 | | | Negotiable |
| 393922 | | 28-NOV-18 | VULCAN MATERIALS COMPANY | | 1,439.18 | | | Negotiable |
| 393923 | | 28-NOV-18 | VWR INTERNATIONAL, LLC | | 4,273.19 | | | Negotiable |
| 393924 | | 28-NOV-18 | WACO FILTERS CORPORATION | | 3,276.81 | | | Negotiable |
| 393925 | | 28-NOV-18 | WALTERS WHOLESALE ELECTRIC | | 7,198.20 | | | Negotiable |
| 393926 | | 28-NOV-18 | WARE MALCOMB | | 5,517.75 | | | Negotiable |
| 393927 | | 28-NOV-18 | WARMINGTON RESIDENTIAL | | 45.70 | | | Negotiable |
| 393928 | | 28-NOV-18 | WATER RESEARCH FOUNDATION | | 25,000.00 | | | Negotiable |
| 393929 | | 28-NOV-18 | WAXIE'S ENTERPRISES, INC | | 1,676.02 | | | Negotiable |
| 393930 | | 28-NOV-18 | WECK LABORATORIES INC | | 2,364.00 | | | Negotiable |

IRWD Ledger Upgrade Payment Register For 01-NOV-18 To 30-NOV-18 Report Date: 03-DEC-2018 15:24
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 36
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|-------------------------------|--------------|------|---------------|------|----------------|--------------|----------------|--------|
| Payment Document : IRWD CHECK | | | | | | | | |

| | | | | | |
|--------|-----------|-----------------------------------|------------------|-----------|------------|
| 393931 | 28-NOV-18 | WESSEL, ROBERT | | 47.47 | Negotiable |
| 393932 | 28-NOV-18 | WEST COAST SAFETY SUPPLY INC | | 13,323.36 | Negotiable |
| 393933 | 28-NOV-18 | WILHELM, KRIS | | 50.54 | Negotiable |
| 393934 | 28-NOV-18 | WILKINS, BARBARA | | 17.03 | Negotiable |
| 393935 | 28-NOV-18 | WILSON, JEFF | | 145.35 | Negotiable |
| 393936 | 28-NOV-18 | WOODRUFF, SPRADLIN & SMART APC | | 76.10 | Negotiable |
| 393937 | 28-NOV-18 | YI, SIYING | | 93.44 | Negotiable |
| 393938 | 28-NOV-18 | ZHOU, SUYUE | | 86.67 | Negotiable |
| 393939 | 28-NOV-18 | ZOLMAJDI, MAJID | | 43.05 | Negotiable |
| 393940 | 28-NOV-18 | SINFIELD, LILY | PAY | 19.99 | Voided |
| 393941 | 28-NOV-18 | WATERSMART SOFTWARE, INC | SAN FRANCISCO | 13,597.50 | Negotiable |
| 393942 | 29-NOV-18 | JCI JONES CHEMICALS INC | NEWARK | 2,494.30 | Negotiable |

Payment Document Subtotal: 11,313,730.04 8,016,532.12

Payment Document : IRWD Wire

| | | | | | |
|-------|-----------|---|-----------------|--------------|------------|
| 12848 | 09-NOV-18 | YORK INSURANCE SERVICES GROUP INC - CA | PAY | 4,596.11 | Negotiable |
| 12849 | 19-NOV-18 | RODGERS, MELANIE | PAY | 20.82 | Negotiable |
| 12850 | 19-NOV-18 | VASHIST, DEEPAK | PAY | 78.15 | Negotiable |
| 12851 | 19-NOV-18 | WILLIAMS, TROY | PAY | 39.67 | Negotiable |
| 12852 | 20-NOV-18 | YORK INSURANCE SERVICES GROUP INC - CA | PAY | 12,654.48 | Negotiable |
| 12853 | 20-NOV-18 | BANK OF NEW YORK MELLON TRUST COMPANY NA | NEWARK | 42,595.11 | Negotiable |
| 12854 | 20-NOV-18 | MUNICIPAL WATER DISTRICT OF ORANGEVALLEY COUNTY | FOUNTAIN | 1,646,563.09 | Negotiable |
| 12855 | 20-NOV-18 | YORK INSURANCE SERVICES GROUP INC - CA | PAY | 6,543.86 | Negotiable |
| 12856 | 20-NOV-18 | CALPERS | SACRAMENTO 1 | 2,802.27 | Negotiable |
| 12857 | 20-NOV-18 | CALPERS | SACRAMENTO 1 | 502,186.78 | Negotiable |
| 12858 | 20-NOV-18 | FILANC-BALFOUR BEATTY JV | WEST COVINA | 630,196.50 | Negotiable |

IRWD Ledger Upgrade

BANK: Bank of America N.A. Branch : Los Angeles Payment Register For 01-NOV-18 To 30-NOV-18 Report Date: 03-DEC-2018 15:24
 Bank Account Currency: USD (US Dollar) Account: Checking AP and PR Page: 37
 Payment Type: All Payment Currency: USD (US Dollar) Display Supplier Address: No

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|------------------------------|--------------|-----------|--|------------------|----------------|--------------|----------------|------------|
| Payment Document : IRWD Wire | | | | | | | | |
| 12859 | | 20-NOV-18 | FILANC-BALFOUR BEATTY JV | ESR 211084000 | 7,610.27 | | | Negotiable |
| 12860 | | 20-NOV-18 | U.S. BANK NATIONALST. ASSOCIATION | LOUIS | 8,718.12 | | | Negotiable |
| 12861 | | 21-NOV-18 | EMPLOYEE BENEFIT SPECIALISTS, INC. | PO BOX 11657 | 12,722.39 | | | Negotiable |
| 12862 | | 21-NOV-18 | EMPLOYEE BENEFIT SPECIALISTS, INC. | PO BOX 11657 | 12,653.16 | | | Negotiable |
| 12863 | | 21-NOV-18 | EMPLOYEE BENEFIT SPECIALISTS, INC. | PO BOX 11657 | 1,570.00 | | | Negotiable |
| 12864 | | 21-NOV-18 | EMPLOYEE BENEFIT SPECIALISTS, INC. | PO BOX 11657 | 26,615.54 | | | Negotiable |
| 12865 | | 21-NOV-18 | CALPERS | SACRAMENTO | 191,397.05 | | | Negotiable |
| 12866 | | 21-NOV-18 | CALPERS | SACRAMENTO | 1,064.56 | | | Negotiable |
| 12867 | | 21-NOV-18 | CALPERS | SACRAMENTO | 192,830.34 | | | Negotiable |
| 12868 | | 21-NOV-18 | CALPERS | SACRAMENTO | 1,276.26 | | | Negotiable |
| 12869 | | 27-NOV-18 | YORK INSURANCE SERVICES GROUP INC - CA | PAY | 982.30 | | | Negotiable |
| 12870 | | 28-NOV-18 | BANK OF NEW YORK MELLON TRUST COMPANY NA | NEWARK | 13,422.22 | | | Negotiable |
| 12871 | | 28-NOV-18 | U.S. BANK NATIONALST. ASSOCIATION | LOUIS | 30,629.07 | | | Negotiable |
| 12872 | | 28-NOV-18 | SUMITOMO MITSUI BANKING CORPORATION | NEW YORK | 54,904.11 | | | Negotiable |
| 12873 | | 28-NOV-18 | BANK OF NEW YORK MELLON TRUST COMPANY NA | NEWARK | 105,687.45 | | | Negotiable |
| 12874 | | 28-NOV-18 | U.S. BANK NATIONALST. ASSOCIATION | LOUIS | 58,397.89 | | | Negotiable |
| 12875 | | 28-NOV-18 | BANK OF AMERICA | SAN FRANCISCO | 58,949.29 | | | Negotiable |
| 12876 | | 28-NOV-18 | INTERNAL REVENUE SERVICE | FRESNO | 220,054.40 | | | Negotiable |
| 12877 | | 28-NOV-18 | FRANCHISE TAX BOARD | SACRAMENTO | 69,409.70 | | | Negotiable |

| | | | | | |
|-------|-----------|---|--------------|-----------|------------|
| 12878 | 28-NOV-18 | EMPLOYMENT DEVELOPMENT DEPARTMENT | W SACRAMENTO | 11,783.04 | Negotiable |
| 12879 | 28-NOV-18 | CALIFORNIA DEPARTMENT OF CHILD SUPPORT SERVICES | SACRAMENTO | 1,729.50 | Negotiable |

IRWD Ledger Upgrade
 BANK: Bank of America N.A. Branch : Los Angeles
 Bank Account Currency: USD (US Dollar)
 Payment Type: All

Payment Register For 01-NOV-18 To 30-NOV-18
 Account: Checking AP and PR
 Payment Currency: USD (US Dollar)
 Display Supplier Address: No

Report Date: 03-DEC-2018 15:24
 Page: 38

| Payment Number | Sequence Num | Date | Supplier Name | Site | Payment Amount | Cleared Date | Cleared Amount | Status |
|------------------------------|--------------|-----------|---|--------------|----------------|--------------|----------------|------------|
| Payment Document : IRWD Wire | | | | | | | | |
| 12880 | | 28-NOV-18 | GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY | DENVER | 163,406.42 | | | Negotiable |
| 12881 | | 29-NOV-18 | INTERNAL REVENUE SERVICE | FRESNO | 202,490.57 | | | Negotiable |
| 12882 | | 29-NOV-18 | FRANCHISE TAX BOARD | SACRAMENTO | 62,664.59 | | | Negotiable |
| 12883 | | 29-NOV-18 | EMPLOYMENT DEVELOPMENT DEPARTMENT | W SACRAMENTO | 10,452.63 | | | Negotiable |
| 12884 | | 29-NOV-18 | CALIFORNIA DEPARTMENT OF CHILD SUPPORT SERVICES | SACRAMENTO | 1,729.50 | | | Negotiable |
| 12885 | | 29-NOV-18 | GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY | DENVER | 123,544.75 | | | Negotiable |
| 12886 | | 29-NOV-18 | CALPERS | SACRAMENTO | 192,875.83 | | | Negotiable |
| 12887 | | 29-NOV-18 | BANK OF AMERICA MERRILL LYNCH | CHICAGO | 19,656.65 | | | Negotiable |
| 12888 | | 29-NOV-18 | EMPLOYMENT DEVELOPMENT DEPARTMENT | W SACRAMENTO | 1,288.46 | | | Negotiable |

Payment Document Subtotal: 4,708,792.90

Bank Account Subtotal : 16,022,522.94 8,016,532.12

Report Count : 979 Report Total: 16,022,522.94 8,016,532.12

Disbursements

*** End of Report ***

\$ 16,022,522.94 Disbursements
~~<15,740.08>~~ Voids
 \$ 16,006,782.86 Total voids and disbursements


Exhibit "E"

IRWD Gov Code 53065.5 Disclosure Report

Payment or Reimbursements for Individual charges of \$100 or more per transaction for services or product received.

01-NOV-18 to 30-NOV-18

| NAME | CHECK NO. | CHECK | AMOUNT | ITEM DESCRIPTION | EXPENSE JUSTIFICATION |
|-----------------------|-----------|-----------|-------------------|-----------------------|---|
| Bennett, Ray | 393681 | 28-Nov-18 | 170.04 | Mileage | Monthly Rosedale-Rio Bravo DRP Project Tour/Inspection |
| Bornhoff, Mike | 393437 | 15-Nov-18 | 290.00 | Certification Renewal | CWEA Electrical/Instrumentation Grade IV |
| Borowski, Michael | 393438 | 15-Nov-18 | 188.00 | Membership Renewal | CWEA membership |
| Cho, Harry | 393198 | 8-Nov-18 | 112.27 | Mileage | Attended AWWA Annual Fall Conf., Rancho Mirage, CA - Oct. 23, 2018 |
| Compton, Christine | 393199 | 8-Nov-18 | 119.90 | Mileage | Attended CSDA Annual Conf., Indian Wells, CA - Sept. 24-27, 2018 |
| Cortez, Malcolm | 393006 | 1-Nov-18 | 115.00 | Membership Renewal | Principal Engineers License renewal |
| Cotton, Derrien | 393440 | 15-Nov-18 | 146.26 | Other(Misc) | Meeting supplies |
| Joseph, Brandon | 393203 | 8-Nov-18 | 188.00 | Membership Renewal | CWEA membership |
| Kanady, Jacob | 393684 | 28-Nov-18 | 143.00 | Membership Renewal | CWEA membership |
| Madrid, Adam | 393444 | 15-Nov-18 | 175.19 | Other(Misc) | Safety shoe reimbursement |
| Malloy, Steven | 393205 | 8-Nov-18 | 115.00 | Membership Renewal | Principal Engineers License renewal |
| Malloy, Steven | 393686 | 28-Nov-18 | 105.00 | Membership Renewal | 2019 ASCE membership |
| Mares, Michael | 393206 | 8-Nov-18 | 105.00 | Certification Renewal | SWRCB Water Distribution Operator Grade D5 |
| McElroy, Dorien | 393009 | 1-Nov-18 | 110.00 | Certification Renewal | SWRCB Waterwater Treatment Operator Grade II |
| McGehee, Joe | 393445 | 15-Nov-18 | 353.16 | Mileage | Zone 1 Reservoir Nevada Nursery, Mesquite, NV - Nov. 8, 2018 |
| McKinstry, Brian | 393687 | 28-Nov-18 | 224.40 | Other(Misc) | Parts for NetApp and WiFi |
| Meserlian, Barkev | 393446 | 15-Nov-18 | 454.37 | Other(Misc) | Meeting supplies |
| Mossbarger, Tony | 393208 | 8-Nov-18 | 162.51 | Other(Misc) | Meeting supplies |
| Pan, Jenny | 393689 | 28-Nov-18 | 123.18 | Other(Misc) | Meeting supplies |
| Paulson, David | 393209 | 8-Nov-18 | 105.00 | Certification Renewal | SWRCB Water Distribution Operator Grade D5 |
| Pizanie, Nicholas | 393212 | 8-Nov-18 | 155.00 | Certification Renewal | SWRCB Water Distribution Operator Grade D5 |
| Pizanie, Nicholas | 393212 | 8-Nov-18 | 100.00 | Certification Renewal | SWRCB Water Treatment Operator Grade III |
| Rutherford, Allan | 393213 | 8-Nov-18 | 188.00 | Membership Renewal | CWEA membership |
| Saini, Mohit | 393013 | 1-Nov-18 | 115.60 | Other(Misc) | Meeting supplies |
| Saini, Mohit | 393013 | 1-Nov-18 | 122.54 | Other(Misc) | Meeting supplies |
| Seesangrit, Melody | 393448 | 15-Nov-18 | 101.70 | Lodging | Attended WaterSmart Innovations Conf., Las Vegas, NV - Oct. 4, 2018 |
| Smithson, Christopher | 393014 | 1-Nov-18 | 103.50 | Other(Misc) | Meeting supplies |
| Swan, Peer | 393215 | 8-Nov-18 | 409.12 | Lodging | Attended CASA Conf., Monterey, CA - Aug. 7, 2018 |
| Swan, Peer | 393215 | 8-Nov-18 | 405.98 | Mileage | Attended CASA Conf., Monterey, CA - Aug. 7-9, 2018 |
| Swan, Peer | 393215 | 8-Nov-18 | 298.40 | Lodging | Attended CASA Conf., Monterey, CA - Aug. 8, 2018 |
| Swan, Peer | 393215 | 8-Nov-18 | 298.40 | Lodging | Attended CASA Conf., Monterey, CA - Aug. 9, 2018 |
| Swan, Peer | 393215 | 8-Nov-18 | 231.02 | Lodging | Attended Urban Water Institute Conf., San Diego, CA - Aug. 23, 2018 |
| Swan, Peer | 393215 | 8-Nov-18 | 563.96 | Airfare | Attended ACWA Energy Committee meeting, Folsom, CA - Aug. 28, 2018 |
| Torres, Richard | 393216 | 8-Nov-18 | 188.00 | Membership Renewal | CWEA membership |
| Tran, Jason | 393691 | 28-Nov-18 | 135.00 | Certification Renewal | ICML certification |
| Total Amount: | | | \$6,921.50 | | |

December 10, 2018
Prepared by: A. Murphy/M. Cortez
Submitted by: K. Burton
Approved by: Paul A. Cook 

CONSENT CALENDAR

ELDERWOOD SEWER UPSIZING FINAL ACCEPTANCE

SUMMARY:

The Elderwood Sewer Upsizing project is complete. The contractor, GCI Construction, completed the required work and all punch list items. The project has received final inspection and acceptance of construction is recommended.

BACKGROUND:

This project upsized an existing eight-inch sewer segment to a 10-inch sewer to accommodate projected future flow rates and installed a cured-in-place-pipe liner in the sewer segment immediately downstream to mitigate circumferential cracking of the existing pipe.

Staff completed the design in May 2018. GCI Construction was awarded the construction contract on June 26, 2018, mobilized in September 2018 and completed construction of all improvements on November 8, 2018.

| | |
|---------------------------------|--------------------------|
| Project Title: | Elderwood Sewer Upsizing |
| Project No.: | 10095 |
| Design Engineer: | Psomas |
| Construction Management by: | IRWD Staff |
| Contractor: | GCI Construction |
| Original Contract Cost: | \$183,260.00 |
| Final Contract Cost: | \$195,558.24 |
| Original Contract Days: | 90 |
| Final Contract Days: | 135 |
| Final Change Order Approved On: | November 28, 2018 |

FISCAL IMPACTS:

Project 10095 is included in the FY 2018-19 Capital Budget. The existing budget is sufficient to fund the final payment for the project.

ENVIRONMENTAL COMPLIANCE:

This project is exempt from the California Environmental Quality Act (CEQA) and in conformance with California Code of Regulation, Title 14, Chapter 3, Section 15282 in that the installation of new pipeline or maintenance, repair restoration, removal, or demolition of an existing pipeline as set forth in Section 21080.21 of the Public Resources Code, as long as the project does not exceed one mile in length. A Notice of Exemption for the project was prepared and filed with the County of Orange on June 12, 2018.

COMMITTEE STATUS:

This item was not reviewed by a Committee.

RECOMMENDATION:

THAT THE BOARD ACCEPT CONSTRUCTION OF THE ELDERWOOD SEWER UPSIZING, PROJECT 10095; AUTHORIZE THE GENERAL MANAGER TO FILE A NOTICE OF COMPLETION; AND AUTHORIZE THE PAYMENT OF THE RETENTION 35 DAYS AFTER THE DATE OF RECORDING THE NOTICE OF COMPLETION.

LIST OF EXHIBITS:

None.

December 10, 2018

Prepared and

Submitted by: J. Roney

Approved by: Paul A. Cook



CONSENT CALENDAR

ADOPTION OF A REVISED DISTRICT SCHEDULE OF POSITIONS AND SALARY RATE RANGES

SUMMARY:

Staff recommends that the Board adopt a revised District Schedule of Positions and Salary Rate Ranges by resolution, effective December 10, 2018, as attached in Exhibit "A".

BACKGROUND:

Each year during the process of developing the Operating Budget, staff reviews the current budgeted positions to determine the necessary staffing levels necessary to accomplish the District's goals and strategic objectives and to deliver efficient, effective service to our customers. The justifications for staffing and organizational changes and the associated costs and cost savings have been incorporated in the FY 2018-19 Operating Budget, adopted by the Board on April 23, 2018.

Staff is recommending that a revised District Schedule of Positions and Salary Rate Ranges be adopted, with changes becoming effective as of December 10, 2018, to incorporate the following changes:

- Delete Regulatory Compliance Manager position (U18.E)
- Add Director of Water Quality and Regulatory Compliance position (U27.E)

While the changes to the positions and salary grades listed above are allowable under the General Manager's authority, CalPERS requires that each employment position and pay rate be identified in a publicly available pay schedule (CalPERS Regulations, 2 CCR 570.5).

FISCAL IMPACTS:

The fiscal impacts of this item were included in the FY 2018-19 Operating Budget adopted by the Board of Directors on April 23, 2018.

ENVIRONMENTAL COMPLIANCE:

This item is not a project as defined in the California Environmental Quality Act and California Code of Regulations, Title 14, Chapter 3, Section 15378.

COMMITTEE STATUS:

This item was not reviewed by a Committee.

RECOMMENDATION:

THAT THE BOARD ADOPT THE FOLLOWING RESOLUTION BY TITLE:

RESOLUTION NO. 2018 - _____

RESOLUTION OF THE BOARD OF DIRECTORS OF THE
IRVINE RANCH WATER DISTRICT RESCINDING
RESOLUTION NO. 2018-24 AND ADOPTING A REVISED
SCHEDULE OF POSITIONS AND SALARY RATE RANGES

LIST OF EXHIBITS:

Exhibit "A" – Resolution of the Board of Directors of the Irvine Ranch Water District adopting a revised Schedule of Positions and Salary Rate Ranges effective as of December 10, 2018.

EXHIBIT "A"

RESOLUTION NO. 2018 -

RESOLUTION OF THE BOARD OF DIRECTORS
OF IRVINE RANCH WATER DISTRICT,
RESCINDING RESOLUTION NO. 2018-24 AND
ADOPTING A REVISED SCHEDULE OF POSITIONS
AND SALARY RATE RANGES

The Board of Directors of Irvine Ranch Water District, by adoption of Resolution No. 2018-24 on August 13, 2018, established a Schedule of Positions and Salary Rate Ranges of the Irvine Ranch Water District; and

The Board of Directors of Irvine Ranch Water District has reviewed the Schedule of Positions and Salary Rate Ranges and desires to make revisions thereto.

The Board of Directors of Irvine Ranch Water District therefore resolves as follows:

Section 1. That the Schedule of Positions and Salary Rate Ranges adopted by Resolution No. 2018-24 on August 13, 2018 is hereby rescinded, effective December 10, 2018.

Section 2. That the Schedule of Positions and Salary Rate Ranges for the Irvine Ranch Water District as set forth in Schedule I to this Resolution, be and hereby is approved and adopted.

ADOPTED, SIGNED and APPROVED on December 10, 2018.

President, IRVINE RANCH WATER DISTRICT

Secretary, IRVINE RANCH WATER DISTRICT

APPROVED AS TO FORM:
Lewis Brisbois Bisgaard & Smith LLP

By: _____
District Counsel

IRVINE RANCH WATER DISTRICT
MONTHLY SALARY GRADE SCHEDULE

Managers, Exempt Supervisors, Confidential & Exempt Employees

Effective December 10, 2018

| NON-EXEMPT | MINIMUM | MAXIMUM | EXCEPTIONAL PERFORMANCE TOP OF RANGE |
|---------------------|----------------|----------------|---|
| Salary Grade U 1.N | 2,937 | 3,642 | 3,823 |
| Salary Grade U 2.N | 3,001 | 3,742 | 3,929 |
| Salary Grade U 3.N | 3,064 | 3,844 | 4,037 |
| Salary Grade U 4.N | 3,120 | 3,956 | 4,154 |
| Salary Grade U 5.N | 3,192 | 4,066 | 4,269 |
| Salary Grade U 6.N | 3,254 | 4,184 | 4,393 |
| Salary Grade U 7.N | 3,319 | 4,300 | 4,516 |
| Salary Grade U 8.N | 3,391 | 4,423 | 4,644 |
| Salary Grade U 9.N | 3,456 | 4,545 | 4,774 |
| Salary Grade U 10.N | 3,528 | 4,670 | 4,902 |
| Salary Grade U 11.N | 3,596 | 4,789 | 5,026 |
| Salary Grade U 12.N | 3,667 | 4,929 | 5,177 |
| Salary Grade U 13.N | 3,736 | 5,070 | 5,326 |
| Salary Grade U 14.N | 3,820 | 5,214 | 5,475 |
| Salary Grade U 15.N | 3,902 | 5,352 | 5,620 |
| Salary Grade U 16.N | 3,994 | 5,502 | 5,776 |
| Salary Grade U 17.N | 4,079 | 5,640 | 5,922 |
| Salary Grade U 18.N | 4,168 | 5,791 | 6,082 |
| Salary Grade U 19.N | 4,263 | 5,937 | 6,236 |

| NON-EXEMPT | MINIMUM | MAXIMUM | EXCEPTIONAL PERFORMANCE TOP OF RANGE |
|---|----------------|----------------|---|
| Safety Assistant | | | |
| Salary Grade U 20.N | 4,377 | 6,130 | 6,437 |
| Salary Grade U 21.N | 4,501 | 6,315 | 6,633 |
| Salary Grade U 22.N | 4,625 | 6,514 | 6,840 |
| Executive Secretary Human Resources Assistant | | | |
| Salary Grade U 23.N | 4,747 | 6,711 | 7,045 |
| Salary Grade U 24.N | 4,882 | 6,920 | 7,266 |
| Salary Grade U 25.N | 5,010 | 7,132 | 7,491 |
| Human Resources Technician | | | |
| Salary Grade U 26.N | 5,166 | 7,346 | 7,713 |
| Executive Assistant | | | |
| Salary Grade U 27.N | 5,314 | 7,561 | 7,939 |
| Salary Grade U 28.N | 5,469 | 7,785 | 8,176 |
| Salary Grade U 29.N | 5,632 | 8,012 | 8,413 |
| Administrative Assistant Safety Specialist | | | |
| Salary Grade U 30.N | 5,803 | 8,249 | 8,662 |
| Salary Grade U 31.N | 5,975 | 8,498 | 8,922 |
| Human Resources Analyst | | | |
| Salary Grade U 32.N | 6,146 | 8,748 | 9,186 |
| User Support Administrator Network Administrator | | | |
| Salary Grade U 33.N | 6,325 | 9,003 | 9,454 |
| Salary Grade U 34.N | 6,514 | 9,252 | 9,716 |
| Salary Grade U 35.N | 6,710 | 9,530 | 10,007 |

| EXEMPT | MINIMUM | MAXIMUM | EXCEPTIONAL PERFORMANCE TOP OF RANGE |
|--|----------------|----------------|---|
| Salary Grade U 1.E | 4,723 | 6,068 | 6,371 |
| Salary Grade U 2.E | 4,881 | 6,303 | 6,619 |
| Salary Grade U 3.E | 5,037 | 6,538 | 6,867 |
| Salary Grade U 4.E | 5,194 | 6,790 | 7,128 |
| Salary Grade U 5.E | 5,352 | 7,041 | 7,394 |
| Salary Grade U 6.E | 5,537 | 7,314 | 7,680 |
| Salary Grade U 7.E | 5,714 | 7,585 | 7,962 |
| Salary Grade U 8.E | 5,900 | 7,881 | 8,275 |
| Salary Grade U 9.E | 6,080 | 8,170 | 8,577 |
| Salary Grade U 10.E | 6,283 | 8,479 | 8,903 |
| Asset Systems Analyst Assistant Engineer Customer Service Supervisor Development Services Supervisor Management Analyst Public Affairs Analyst Regulatory Compliance Analyst Senior Public Affairs Specialist | | | |
| Salary Grade U 11.E | 6,484 | 8,792 | 9,233 |
| Financial Analyst Purchasing Supervisor Senior Accountant Water Efficiency Supervisor | | | |
| Salary Grade U 12.E | 6,694 | 9,131 | 9,585 |
| Energy Analyst Source Control Program Administrator Treasury Analyst | | | |
| Salary Grade U 13.E | 6,911 | 9,462 | 9,933 |
| Accounting Supervisor GIS Supervisor Legislative Analyst Right of Way Agent Senior Human Resources Analyst Water Resources Planner | | | |

| EXEMPT | MINIMUM | MAXIMUM | EXCEPTIONAL PERFORMANCE TOP OF RANGE |
|---|---------|---------|--|
| Salary Grade U 14.E Associate Engineer District Secretary QA/QC Compliance Administrator | 7,135 | 9,826 | 10,317 |
| Salary Grade U 15.E Applications Analyst Automation Programmer Laboratory Supervisor Senior Network Administrator | 7,362 | 10,194 | 10,702 |
| Salary Grade U 16.E | 7,608 | 10,579 | 11,109 |
| Salary Grade U 17.E Asset Systems Manager Automation Manager Collection Systems Manager Construction Inspection Manager Construction Services Manager Customer Service Manager Electrical and Instrumentation Manager Engineer Facilities/Fleet Manager Field Services Manager Natural Resources Manager Purchasing Manager Safety Manager Water Efficiency Manager | 7,850 | 10,968 | 11,515 |
| Salary Grade U 18.E Manager of Risk & Contracts Administration Public Affairs Manager Regulatory Compliance Manager Senior Applications Analyst Senior Applications Developer Senior Database Administrator Treasury Manager User Support Manager Water Quality Manager | 8,105 | 11,386 | 11,954 |

| <u>EXEMPT</u> | <u>MINIMUM</u> | <u>MAXIMUM</u> | <u>EXCEPTIONAL PERFORMANCE TOP OF RANGE</u> |
|---|----------------|----------------|---|
| Salary Grade U 19.E Operations Manager Mechanical Services Manager Recycled Water Development Manager Water Resources Manager | 8,362 | 11,806 | 12,398 |
| Salary Grade U 20.E Controller Manager of Strategic Planning and Analysis Network and Cybersecurity Manager Senior Engineer | 8,622 | 12,244 | 12,856 |
| Salary Grade U 21.E | 8,885 | 12,686 | 13,321 |
| Salary Grade U 22.E Applications Manager | 9,170 | 13,158 | 13,817 |
| Salary Grade U 23.E Government Relations Officer Principal Engineer | 9,461 | 13,634 | 14,317 |
| Salary Grade U 24.E | 9,717 | 14,184 | 14,891 |
| Salary Grade U 25.E | 10,017 | 14,720 | 15,455 |
| Salary Grade U 26.E | 10,474 | 15,499 | 16,273 |
| Salary Grade U 27.E Director of Administrative Services Director of Human Resources Director of Maintenance Director of Public Affairs Director of Recycling Operations Director of Water Operations Director of Water Quality & Regulatory Compliance Director of Water Resources Treasurer/Director of Risk Management | 10,954 | 16,320 | 17,135 |
| Salary Grade U 28.E | 11,457 | 17,179 | 18,038 |
| Salary Grade U 29.E | 11,980 | 18,088 | 18,992 |
| Salary Grade U 30.E | 12,533 | 19,049 | 20,000 |

| <u>EXEMPT</u> | <u>MINIMUM</u> | <u>MAXIMUM</u> | <u>EXCEPTIONAL PERFORMANCE TOP OF RANGE</u> |
|--|----------------|----------------|---|
| Executive Director of Finance Executive Director of Engineering & Water Quality Executive Director of Operations Executive Director of Water Policy | | | |
| Salary Grade U 31.E | 13,157 | 20,129 | 21,135 |
| Salary Grade U 32.E | 13,816 | 21,275 | 22,339 |
| Salary Grade U 33.E | 14,503 | 22,483 | 23,607 |
| Salary Grade U 34.E General Manager | 15,231 | 23,759 | 26,281 |

IRVINE RANCH WATER DISTRICT
MONTHLY SALARY GRADE SCHEDULE
General Employees Unit
Effective December 10, 2018

| NON-EXEMPT | MINIMUM | MAXIMUM | EXCEPTIONAL PERFORMANCE TOP OF RANGE |
|--|---------|---------|--|
| Salary Grade 1.N | \$2,818 | \$3,495 | \$3,669 |
| Salary Grade 2.N | \$2,879 | \$3,590 | \$3,770 |
| Salary Grade 3.N | \$2,941 | \$3,689 | \$3,874 |
| Salary Grade 4.N | \$2,994 | \$3,796 | \$3,986 |
| Salary Grade 5.N | \$3,062 | \$3,902 | \$4,097 |
| Salary Grade 6.N | \$3,123 | \$4,015 | \$4,215 |
| Office Assistant Mail Coordinator | | | |
| Salary Grade 7.N | \$3,184 | \$4,126 | \$4,333 |
| Salary Grade 8.N | \$3,255 | \$4,245 | \$4,457 |
| Salary Grade 9.N | \$3,318 | \$4,362 | \$4,580 |
| Salary Grade 10.N | \$3,385 | \$4,480 | \$4,703 |
| Salary Grade 11.N | \$3,451 | \$4,596 | \$4,824 |
| Maintenance Apprentice Material Control Clerk I Utility Worker | | | |
| Salary Grade 12.N | \$3,519 | \$4,730 | \$4,968 |
| Salary Grade 13.N | \$3,585 | \$4,866 | \$5,109 |
| Customer Service Specialist I Support Specialist | | | |
| Salary Grade 14.N | \$3,665 | \$5,002 | \$5,253 |
| Salary Grade 15.N | \$3,744 | \$5,137 | \$5,394 |
| Collection Systems Technician I Office Specialist | | | |

| NON-EXEMPT | MINIMUM | MAXIMUM | EXCEPTIONAL PERFORMANCE TOP OF RANGE |
|---|---------|---------|--|
| Accounting Clerk Customer Service Field Technician Laboratory Analyst Metering Systems Technician I Water Efficiency Field Technician Water Maintenance Technician I | | | |
| Salary Grade 17.N | \$3,914 | \$5,411 | \$5,681 |
| Customer Service Specialist II | | | |
| Salary Grade 18.N | \$3,999 | \$5,558 | \$5,835 |
| Material Control Clerk II Senior Support Specialist | | | |
| Salary Grade 19.N | \$4,091 | \$5,698 | \$5,984 |
| Development Services Specialist Purchasing Coordinator Senior Office Specialist | | | |
| Salary Grade 20.N | \$4,200 | \$5,881 | \$6,176 |
| Collection Systems Technician II Engineering Technician I GIS Technician I Operator I Senior Accounting Clerk | | | |
| Salary Grade 21.N | \$4,319 | \$6,059 | \$6,364 |
| Collection Systems CCTV Technician Customer Service Specialist III Senior Customer Service Field Technician Senior Water Efficiency Field Technician | | | |
| Salary Grade 22.N | \$4,438 | \$6,250 | \$6,564 |
| Facilities Services Technician Maintenance Mechanic Metering Systems Technician II Recycled Water Specialist Senior Purchasing Coordinator Vehicle/Equipment Mechanic Water Maintenance Technician II | | | |

| NON-EXEMPT | MINIMUM | MAXIMUM | EXCEPTIONAL PERFORMANCE TOP OF RANGE |
|--|---------|---------|--|
| Salary Grade 23.N | \$4,555 | \$6,439 | \$6,761 |
| Salary Grade 24.N | \$4,684 | \$6,641 | \$6,973 |
| Buyer Cross Connection Specialist Public Affairs Assistant Water Efficiency Specialist Water Resources Specialist Wetlands Specialist | | | |
| Salary Grade 25.N | \$4,807 | \$6,845 | \$7,188 |
| Engineering Technician II GIS Technician II Senior Collection Systems CCTV Technician Senior Collection Systems Technician | | | |
| Salary Grade 26.N | \$4,955 | \$7,049 | \$7,400 |
| Metering Systems Technician III Water Maintenance Technician III | | | |
| Salary Grade 27.N | \$5,099 | \$7,255 | \$7,618 |
| Accountant Senior Vehicle/Equipment Maintenance Mechanic Senior Facilities Services Technician Operator II Senior Maintenance Mechanic Senior Recycled Water Specialist | | | |
| Salary Grade 28.N | \$5,249 | \$7,472 | \$7,846 |
| Construction Inspector Automation Technician Landscape Contracts Administrator Electrical Technician Instrumentation Technician Scientist | | | |

| NON-EXEMPT | MINIMUM | MAXIMUM | EXCEPTIONAL PERFORMANCE TOP OF RANGE |
|--|----------------|----------------|---|
| Salary Grade 29.N Senior Buyer Engineering Technician III GIS Technician III Senior Wetlands Specialist Operator III Lead Maintenance Mechanic Recycled Water Project Specialist Senior Water Efficiency Specialist Public Affairs Specialist | \$5,405 | \$7,689 | \$8,072 |
| Salary Grade 30.N Risk Analyst Senior Electrical Technician Senior Instrumentation Technician Environmental Compliance Specialist Graphic Design Specialist | \$5,568 | \$7,915 | \$8,313 |
| Salary Grade 31.N Information Services Coordinator Senior Construction Inspector Water Efficiency Analyst Payroll Administrator | \$5,732 | \$8,155 | \$8,561 |
| Salary Grade 32.N Wetlands Scientist Automation Specialist Process Specialist Senior Scientist Asset Maintenance Coordinator | \$5,898 | \$8,395 | \$8,815 |
| Salary Grade 33.N Operations Coordinator | \$6,070 | \$8,639 | \$9,071 |
| Salary Grade 34.N Electrical/Instrumentation Designer | \$6,250 | \$8,878 | \$9,323 |
| Salary Grade 35.N | \$6,438 | \$9,144 | \$9,602 |

IRVINE RANCH WATER DISTRICT
MONTHLY SALARY GRADE SCHEDULE
Non-Exempt Supervisors Unit
Effective December 10, 2018

| NON-EXEMPT | MINIMUM | MAXIMUM | EXCEPTIONAL PERFORMANCE TOP OF RANGE |
|---|----------------|----------------|---|
| Salary Grade S 26.N | 4,967 | 7,063 | 7,416 |
| Salary Grade S 27.N | 5,110 | 7,270 | 7,634 |
| Salary Grade S 28.N | 5,259 | 7,486 | 7,862 |
| Salary Grade S 29.N | 5,415 | 7,704 | 8,089 |
| Salary Grade S 30.N | 5,580 | 7,932 | 8,329 |
| Salary Grade S 31.N Cross Connection Supervisor Facilities Services Supervisor Fleet Supervisor | 5,745 | 8,171 | 8,579 |
| Salary Grade S 32.N Collection Systems Supervisor Mechanical Services Supervisor | 5,910 | 8,412 | 8,833 |
| Salary Grade S 33.N Water Maintenance Supervisor | 6,082 | 8,657 | 9,090 |
| Salary Grade S 34.N Construction Inspection Supervisor Automation Supervisor Electrical Supervisor Instrumentation Supervisor | 6,263 | 8,896 | 9,342 |
| Salary Grade S 35.N Operations Supervisor | 6,452 | 9,163 | 9,622 |

December 10, 2018

Prepared by: M. Tetterer

Submitted by: P. Weghorst *P.W.*

Approved by: Paul A. Cook *P.A. Cook*

CONSENT CALENDAR

ADOPTION OF THE 2018 SOUTH ORANGE COUNTY INTEGRATED REGIONAL WATER MANAGEMENT PLAN

SUMMARY:

In 2010, Irvine Ranch Water District became a member of the Executive Committee for the South Orange County Watershed Management Area (SOCWMA) and adopted the 2005 South Orange County Integrated Regional Water Management Plan (IRWMP). The IRWD Board passed a resolution in 2013 adopting an update to the IRWMP that complied with Proposition 84 guidelines. In 2018, the County of Orange, with input from the SOCWMA Executive Committee member agencies and stakeholders, updated the IRWMP to comply with Proposition 1 guidelines. As a result of this update, the County of Orange is asking each member agency to adopt the updated IRWMP. Staff recommends that the Board adopt a resolution adopting the 2018 update to the IRWMP for the South Orange County Watershed Management Area.

BACKGROUND:

In June 2005, the IRWMP for the SOCWMA was adopted, accepted and/or supported by the City Councils and Boards of all agencies participating in the process. In 2010, the County of Orange led an effort to create a cooperative entity similar to the Newport Bay Watershed Executive Committee. This south Orange County cooperative, called the SOCWMA Executive Committee, now has 22 public member agencies including the County of Orange, 11 cities and 10 water agencies. IRWD joined this new group in 2010, and adopted the 2005 version of the IRWMP.

California voters passed Proposition 84, the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act in November 2006, which required that Integrated Regional Water Management Plans be updated to comply with new guidelines to be eligible for Proposition 84 grant funding. The IRWMP was updated in 2013 to comply with Proposition 84 Plan Standards issued by the California Department of Water Resources (DWR). The 2013 IRWMP was adopted July 18, 2013, by unanimous vote of the SOCWMA Executive Committee. IRWD adopted the updated IRWMP on August 26, 2013. Under the 2013 IRWMP, IRWD received a \$500,000 grant from Proposition 84 to help fund the Baker Water Treatment Plant.

Proposition 1 passed in November 2014 and is known as the Water Quality, Supply and Infrastructure Improvement Act of 2014 and similarly requires that IRWMPs be updated to be eligible for Proposition 1 grant funding. Over the past year, numerous meetings and workshops were held which focused on updating the plan to make it more current and to meet DWR standards. These updates included describing a new data management system, adding a Stormwater Resource Plan, updating the Climate Change analysis to meet new standards, describing the water needs assessment process and providing technical revisions to the Salt and Nutrient Management Plan.

At its May 3, 2018 meeting, the SOCWMA Executive Committee voted to adopt the 2018 IRWMP after a member agency and stakeholder update process, which included several meetings and

workshops. In accordance with Proposition 1 Guidelines and Plan Standards, agencies that will receive grant funding must also adopt the 2018 IRWM Plan. Following approval and adoption of the 2018 IRWM Plan, County staff will work with member agencies and stakeholders to develop a slate of projects for submittal to DWR for Proposition 1 IRWM grant funding. The County, on behalf of the SOCWMA, recently released a call for projects.

Staff recommends the Board adopt a resolution adopting the 2018 South Orange County Integrated Regional Water Management Plan. The draft resolution is attached as Exhibit "A". Exhibit "B" is the Introduction of the 2018 South Orange County Integrated Regional Water Management Plan.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

This item was reviewed at the December 4, 2018, Water Resources Policy and Communications Committee Meeting.

RECOMMENDATION:

THAT THE BOARD ADOPT THE FOLLOWING RESOLUTION BY TITLE:

Resolution No. 2018 -

RESOLUTION OF THE BOARD OF DIRECTORS OF THE
IRVINE RANCH WATER DISTRICT
ADOPTING THE 2018 SOUTH ORANGE COUNTY
INTEGRATED REGIONAL WATER MANAGEMENT PLAN

LIST OF EXHIBITS:

Exhibit "A" – Resolution Adopting the 2018 South Orange County Integrated Regional Water Management Plan

Exhibit "B" – Introduction to the 2018 South Orange County Integrated Regional Water Management Plan

EXHIBIT "A"

RESOLUTION NO. 2018 -

**RESOLUTION OF THE BOARD OF DIRECTORS OF THE
IRVINE RANCH WATER DISTRICT
ADOPTING THE 2018 SOUTH ORANGE COUNTY
INTEGRATED REGIONAL WATER MANAGEMENT PLAN**

Regional planning serves an important function in watersheds throughout California as regional stakeholders work to solve watershed challenges in a collaborative fashion.

In 2004, the County of Orange, cities, and water agencies formed a regional watershed management group that would later be known as the South Orange County Watershed Management Area (SOCWMA) Executive Committee, which in 2005 prepared an Integrated Regional Water Management Plan (IRWMP).

In 2010, Irvine Ranch Water District became a member of the SOCWMA Executive Committee and adopted the 2005 IRWMP.

In 2013, the SOCWMA Executive Committee adopted an updated IRWMP, which was revised to comply with Proposition 84 guidelines. Irvine Ranch Water District thereafter adopted the 2013 IRWMP.

In 2018, the SOCWMA Executive Committee adopted an updated IRWMP, which was revised to comply with Proposition 1 guidelines. These updates included describing a new data management system, adding a Stormwater Resource Plan, updating the Climate Change analysis to meet new standards, describing the water needs assessment process, and providing technical revisions to the Salt and Nutrient Management Plan. Each member agency must adopt the updated IRWMP in order for that agency to be eligible for IRWM Proposition 1 grant funding.

Irvine Ranch Water District supports the SOCWMA Executive Committee and the continual improvement of the IRWMP for the benefit of South Orange County Watershed Management Planning Area.

The Board of Directors of the Irvine Ranch Water District therefore resolves as follows:

The Irvine Ranch Water District hereby adopts the 2018 South Orange County Integrated Regional Water Management Plan as the integrated watershed plan for the area referred to by the County of Orange as the South Orange County Watershed Management Area.

ADOPTED, SIGNED and APPROVED December 10, 2018.

President, IRVINE RANCH WATER DISTRICT
and of the Board of Directors thereof

Secretary, IRVINE RANCH WATER DISTRICT
and of the Board of Directors thereof

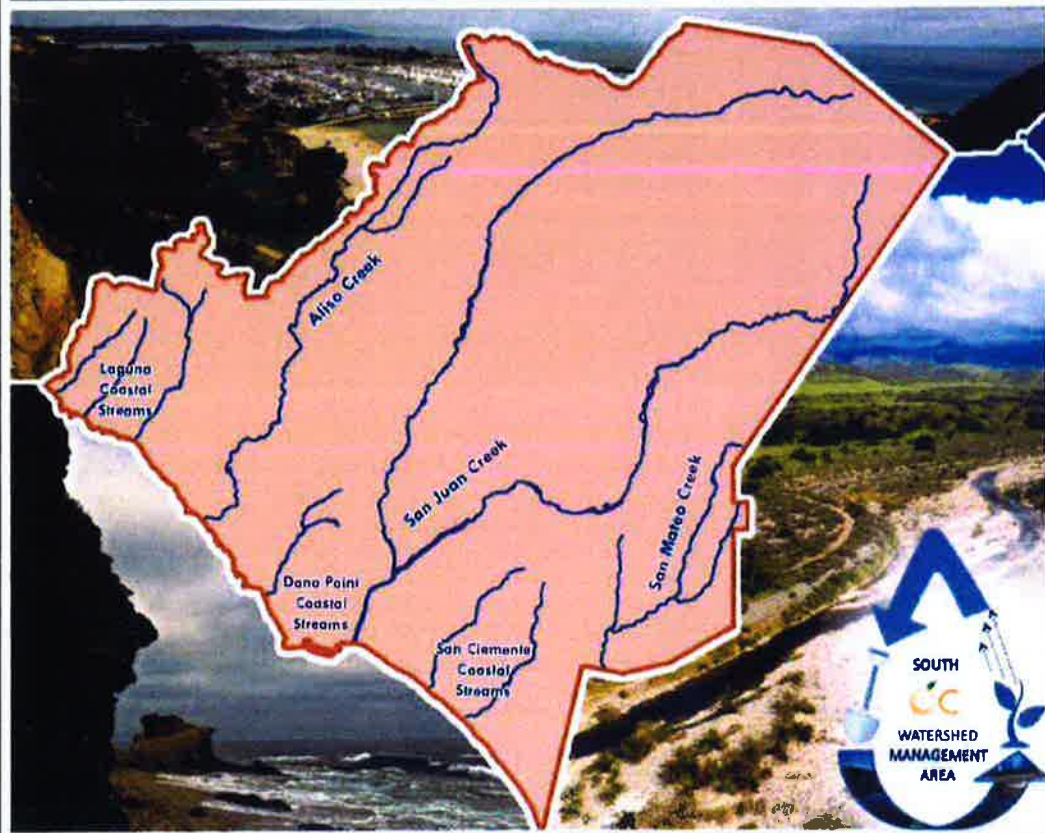
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Lewis Brisbois Bisgaard & Smith, LLP

By _____
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Exhibit "B"

INTEGRATED REGIONAL WATER MANAGEMENT PLAN

FOR SOUTH ORANGE COUNTY



Cover art courtesy of Orange County Water District

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LIST OF ACRONYMS

| | |
|--------|--|
| § | subsection |
| AB | Assembly Bill |
| ABBRA | American Boat Builders & Repairers Association |
| AFY | Acre Feet per Year |
| ALERT | Automatic Local Evaluation on Real Time |
| AMP | Allen-McColloch Pipeline |
| AOGCM | Atmosphere Ocean General Circulation Models |
| ASBS | Areas of Special Biological Significance |
| ATM | Aufdenkamp Transmission Main |
| BLRP | Bacteria Load Reduction Plans |
| BMP | Best Management Practice |
| BOS | Board of Supervisors |
| CARB | California Air Resources Board |
| CBP | Clean Beach Project |
| CCA | Critical Coastal Area |
| CDFW | California Department of Fish and Wildlife |
| CDP | Census Designated Place |
| CEC | Constituents of Emerging Concern |
| CEDEN | California Environmental Data Exchange Network |
| CEFCAC | City Engineers Flood Control Advisory Committee |
| CEIC | California Environmental Information Catalog |
| CEQA | California Environmental Quality Act |
| CERES | California Environmental Resources Evaluation System |
| cfs | Cubic Feet per Second |
| CIP | Capital Improvement Program |
| CLRP | Comprehensive Load Reduction Plan |
| CLWC | California Latino Water Coalition |
| CRA | Colorado River Aqueduct |
| CSRM | Constantly Stirred Reactor Model |
| CTP | Coastal Treatment Plan |
| CWA | Clean Water Act |
| CWC | California Water Code |
| CWP | California Water Plan |
| CWRP | Chiquita Water Reclamation Plant |
| CUWCC | California Urban Water Conservation Council |
| DAC | Disadvantaged Communities |
| DAMP | Drainage Area Management Plan |
| DMS | Data Management System |
| DRPP | Demand, Runoff, and Pollution Prevention |
| DWR | Department of Water Resources |
| EC | Executive Committee |
| EDA | Economically Distressed Areas |

LIST OF ACRONYMS

| | |
|-------|---|
| EIR | Environmental Impact Report |
| EO | Executive Order |
| EPA | Environmental Protection Agency |
| ET | Evapotranspiration |
| ETWD | El Toro Water District |
| FACC | Funding Area Coordination Committee |
| FEMA | Federal Emergency Management Agency |
| FEIR | Final Environmental Impact Report |
| FIB | Fecal Indicator Bacteria |
| FOG | Fats, Oil and Grease |
| GAC | Granular Activated Carbon |
| GAMA | Groundwater Ambient Monitoring and Assessment |
| GCM | Global Climate Model |
| GERA | Gobernadora Ecological Resource Area |
| GIS | Geographic Information System |
| GHG | Greenhouse Gas |
| GPCD | Gallons per Capita Daily |
| GPM | Gallons per Minute |
| GRF | Groundwater Recovery Facility |
| GSWC | Golden State Water Company |
| GWFMP | Groundwater and Facilities Management Plan |
| GWRP | Groundwater Recovery Project |
| HCP | Habitat Conservation Plan |
| HECW | High Efficiency Clothes Washer |
| HET | High Efficiency Toilet |
| HMP | Hydromodification Management Plan |
| HPWQC | Highest Priority Water Quality Conditions |
| HRMP | Habitat Reserve Management Program |
| HSA | Hydrologic Subarea |
| IRP | Integrated Water Resources Plan |
| IRWD | Irvine Ranch Water District |
| IRWM | Integrated Regional Water Management |
| JRTM | Joint Regional Tri-Cities Transmission Main |
| JRTP | Joint Regional Treatment Plant |
| LAWRP | Los Alisos Water Reclamation Plant |
| LBCWD | Laguna Beach County Water District |
| LHA | Latino Health Access |
| LIP | Local Implementation Plan |
| LRP | Local Resources Program |
| MEP | Maximum Extent Practicable |
| MC | Management Committee |
| MCL | Maximum Contaminant Level |

LIST OF ACRONYMS

| | |
|---------|--|
| MGD | Million gallons per day |
| MHI | Median Household Income |
| MNWD | Moulton Niguel Water District |
| MOU | Memorandum of Understanding |
| MPA | Marine Protected Area |
| MS4 | Municipal Separate Storm Sewer System |
| MSCP | Multiple Species Conservation Program |
| MSHCP | Multi-Species Habitat Conservation Plan |
| MST | Microbial Source Tracking |
| MTBE | Methyl Tert-Butyl Ether |
| MET | Metropolitan Water District of Southern California |
| MWDOC | Municipal Water District of Orange County |
| MWRP | Michelson Water Reclamation Plant |
| NCC | Natural Communities Coalition |
| NCCP | Natural Communities Conservation Plan |
| NCI | North Coast Interceptor |
| NFIP | National Flood Insurance Program |
| NGO | Non-Government Organization |
| NHEC | National Hispanic Environmental Council |
| NOAA | National Oceanic and Atmospheric Administration |
| NPDES | National Pollutant Discharge Elimination System |
| NRCS | Natural Resource Conservation Service |
| NROC | Nature Reserve of Orange County |
| OCFD | Orange County Flood Control District |
| OCHCA | Orange County Health Care Agency |
| OCSD | Orange County Sanitation District |
| OCSP | Orange County Stormwater Program |
| OCTA | Orange County Transportation Authority |
| OCWD | Orange County Water District |
| OPR | Office of Planning and Research |
| PEA | Program Effective Assessment |
| POTWs | Publicly Owned Treatment Works |
| QA/QC | Quality Assurance/Quality Control |
| RAC | Regional Action Committee |
| RAP | Regional Action Project |
| RCFCWCD | Riverside County Flood Control and Water Conservation District |
| RCWD | Rancho California Water District |
| RMS | Resource Management Strategies |
| RMV | Rancho Mission Viejo, LLC |
| RO | Reverse Osmosis |
| ROWD | Report of Wastewater Discharge |
| RRWRP | Robinson Ranch Water Reclamation Plant |

LIST OF ACRONYMS

| | |
|-----------|---|
| RTP | Regional Treatment Plant |
| RWVG | Regional Watershed Management Group |
| RWQCB | Regional Water Quality Control Board |
| SAMP | Special Area Management Plan |
| SANDAG | San Diego Association of Governments |
| SARWQCB | Santa Ana Regional Water Quality Control Board |
| SB | Senate Bill |
| SBPAT | Structural BMP Prioritization and Analysis Tool |
| SCAG | Southern California Association of Governments |
| SCCWRP | Southern California Coastal Water Research Project |
| SCCWRRS | Southern California Comprehensive Water Reclamation and Reuse Study |
| SCWD | South Coast Water District |
| SDCWA | San Diego County Water Authority |
| SDGE | San Diego Gas and Electric |
| SDP | Seawater Desalination Program |
| SDRWQCB | San Diego Regional Water Quality Control Board |
| SEP | Supplemental Environmental Project |
| SERRA | South East Regional Reclamation Authority |
| SFHA | Special Flood Hazard Area |
| SIPP | Source Identification Protocol Project |
| SJBA | San Juan Basin Authority |
| SJHU | San Juan Hydrologic Unit |
| SJVGB | San Juan Valley Groundwater Basin |
| SmarTimer | Weather-Based Irrigation Controller |
| SMC | Stormwater Monitoring Coalition |
| SMWD | Santa Margarita Water District |
| SNMP | Salt and Nutrient Management Plan |
| SOCWA | South Orange County Wastewater Authority |
| SOCWRS | South Orange County Water Reliability Study |
| SWAMP | Surface Water Ambient Monitoring Program |
| SWRCB | State Water Resources Quality Control Board |
| SWRP | Stormwater Resource Plan |
| TAF | Thousand-Acre-Feet |
| TBA | Tert Butyl Alcohol |
| TCE | Trichloroethylene |
| TCWD | Trabuco Canyon Water District |
| TDS | Total Dissolved Solids |
| TMDL | Total Maximum Daily Load |
| USACE | United States Army Corps of Engineers (The Corps) |
| USBOR | United States Bureau of Reclamation |
| USDA | United States Department of Agriculture |
| USFWS | United States Fish and Wildlife Service |

LIST OF ACRONYMS

| | |
|-------|--|
| USGS | United States Geological Survey |
| UST | Underground Storage Tanks |
| UV | Ultraviolet |
| UWMP | Urban Water Management Plan |
| VOC | Volatile Organic Compound |
| WAP | Watershed Action Plan |
| WDL | Water Data Library |
| WEI | Wildermuth Environmental, Inc. |
| WMA | Watershed Management Area |
| WSL | Water Smart Landscape |
| WQIP | Water Quality Improvement Plan |
| WQMP | Water Quality Management Plan |
| WRCOG | Western Riverside Council of Governments |
| WUE | Water Use Efficiency |

**SOUTH ORANGE COUNTY WATERSHED MANAGEMENT AREA
2017 INTEGRATED REGIONAL WATER MANAGEMENT PLAN
*An Integrated, Healthy and Balanced Watershed***

The South Orange County Integrated Regional Water Management (IRWM) Plan has been developed from, and coordinates with, existing plans and research documents provided by the participating agencies in a manner that identifies and integrates regional projects to improve water supply, protect water quality, enhance the environment, and provide flood risk management. This Plan establishes a priority ranking to help further regional efforts to investigate the feasibility of, and identify funding for, these projects. Individual projects, however will go through the appropriate environmental review and permitting process as funding is secured.

1 INTRODUCTION

Located along the scenic and temperate southern coast of California, South Orange County is rich with history. Legacies passed on from native societies, once expansive cattle ranches, and twentieth-century entrepreneurial farmers remain a part of the area's culture today. From the landmark Mission San Juan Capistrano near the stunning western coastline to the United States Department of Agriculture (USDA), Forest Service, Cleveland National Forest in the east, South Orange County continues to be a destination known for beauty and a high quality of life.

Following the national migration trends after World War II that drew citizens to Sunbelt cities, the region transitioned into one of the newest areas of urban development in the early 1960's. Several cities have been incorporated over the subsequent decades during which population increased to approximately 600,000 residents. Most of the coastline is developed and additional urbanization is anticipated in the backcountry ranch land over the next 20- years. Today, the region's social and cultural makeup includes a unique mix of equestrian lifestyle, authentic Mexican/Hispanic culture, and a progressive business industry.

The Juaneño Band of Mission Indians traditionally known as the Acjachemen nation is the indigenous Native American Indian tribe of the lands now known as Orange and San Diego Counties. The Acjachemen territory extended from Las Pulgas Creek in northern San Diego County, up into the San Joaquin Hills along the Orange County's central coast, and inland from the Pacific Ocean up into the Santa Ana Mountains. The bulk of the population occupied the outlets of two large creeks, San Juan Creek and San Mateo Creek. The Juaneño Band of Mission Indians is on the contact list maintained by the Native American Heritage Commission and they are included in this Plan as a South Orange County stakeholder; however, the Juaneño Band is not federally recognized, nor is the tribe land owning. They are headquartered in the City of San Juan Capistrano.

The region's economy has come into its own from the shadows of Los Angeles to the north and San Diego to the south with a unique technological and business infrastructure. This is demonstrated by the diversity of industries represented – from medical devices to construction – as well as intellectual resources to support this diversity. Stakeholders in the area are comprised of residents, businesses, and water agencies/Cities as described in **Section 2.3 Regional Water Management Responsibilities**. **Figure 1-1** on the following page shows a map of South Orange County.

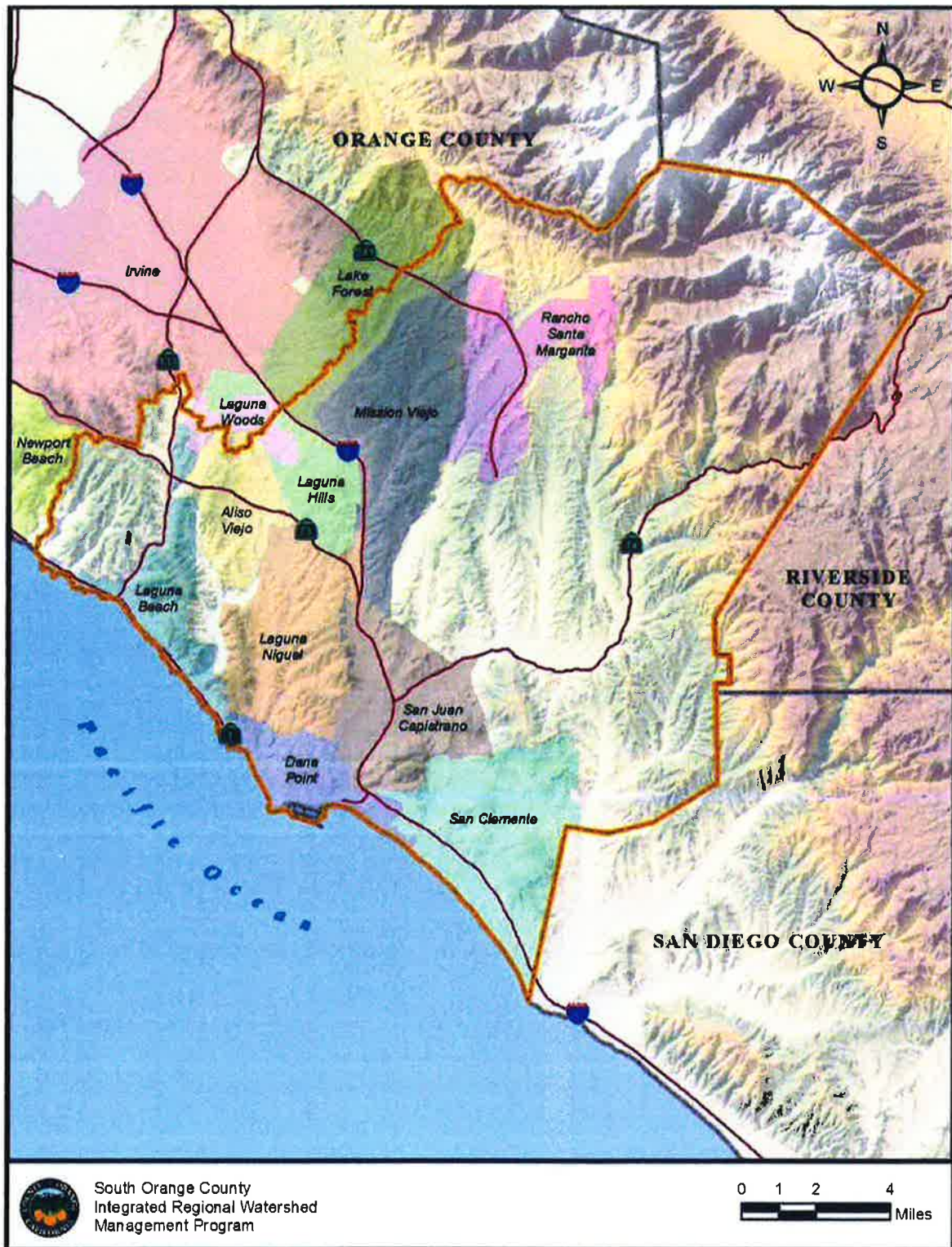


Figure 1-1: South Orange County Map

Water is the key element for sustaining the South Orange County economy, allowing the region to thrive. Significant local investments in water, sewer, and flood infrastructure have been made in the past to serve the area on a reliable basis. Planning and associated investments to carry the region through the next 25-year planning horizon are central to preserving the quality of life in South Orange County. Planning for flood management; surface runoff management; watershed management; water use efficiency (WUE); water supply and reliability; recycled water; habitat preservation, conservation and restoration; water quality protection and improvement; resource stewardship; and related water resource management strategies (RMSs) is critical. **Figure 1-2** shows the South Orange County IRWM Plan Goals, which are discussed in further detail below and in **Section 4 Objectives**.

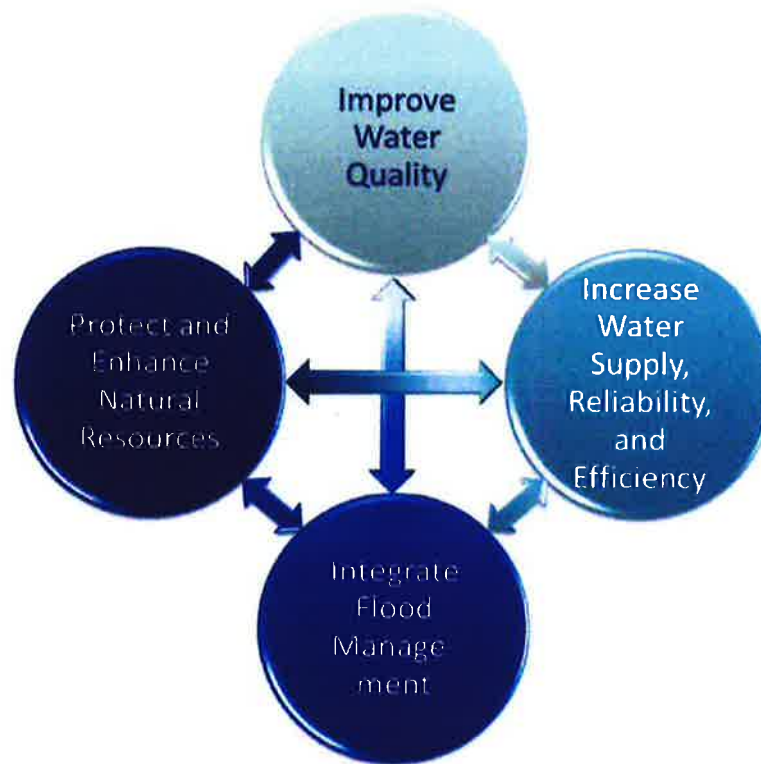


Figure 1-2: South Orange County IRWM Plan Goals

Water Resource Planning in South Orange County

Water quality improvement efforts over the last decade have resulted in significant improvements in coastal water quality along the County's beaches. The Heal the Bay Annual Report (2016) states that the County grades for year-round dry weather were excellent and wet weather grades fair, besting the five-year average for dry weather. Coastal and surface water quality remains an important component of the region's IRWM planning. Key goals for the region include reducing runoff and improving the water quality in streams and along beaches.

Another key goal of the region is expansion, protection and efficient use of local and regional water supplies, as described in **Section 4.1.2**. As a whole, South Orange County water supply is predominately from imported sources, making the region subject to outside conditions and agencies. The South Orange County IRWM Plan is aimed at diversifying water sources by developing a variety of local opportunities to decrease reliance on imported sources. For example, the local San Juan Groundwater Basin¹ has been the subject of multiple management programs for treating brackish waters and managing wet year supplies for use during dry year conditions. South Orange County agencies are leaders in implementing water recycling projects to turn wastewater into a resource. Urban water reuse projects are being developed to reduce runoff and utilize local resources. Additionally, water use efficiency projects have become a standard for water management, including Weather-Based Irrigation Controllers (SmarTimer), drip irrigation, rain barrel and landscape retrofit programs. Indeed, a clear nexus exists between projects needs for water quality and water supply. Protection of surface water quality beneficial uses can align with opportunities to enhance local supply through water reclamation, conservation, stormwater capture/treatment, and groundwater and seawater desalination.

South Orange County agencies and stakeholders place a strong emphasis on watershed planning and integration. Over the past decade, the County, cities, water and wastewater agencies and public stakeholders have participated in watershed-level studies and plans to assess and develop projects to enhance the overall health of South Orange County watersheds (Aliso Creek, Dana Point Coastal Streams, Laguna Coastal Streams, San Juan Creek, San Clemente Coastal Streams, and San Mateo Creek). Water quality efforts are described in **Sections 3.3.4, 4.3.2, 5.4.2, and 13.4**. These efforts include, but are not limited to:

- **Watershed Management Plans** were completed for the Aliso Creek, and San Juan Creek watersheds. These were among the first efforts to study overall watershed health and included recommendations and actions for implementation on a collective basis among the many watershed partners. **Watershed Workplans**² were developed and updated through 2014 for the watersheds in the San Diego Region to comply with Directive G of the San Diego Regional Water Quality Control Board's (SDRWQCB) Order (Regional Board Order No. R9-2009-0002). The Watershed Workplans described the Watershed Permittees' development and implementation of a collective watershed strategy to assess and prioritize the water quality challenges within the watershed's receiving waters, identify and model sources of the highest priority water quality problem(s), develop a watershed-wide Best Management Practices (BMP) implementation strategy to abate highest priority water quality problems, and a monitoring strategy to evaluate BMP effectiveness and changing water quality prioritization in the watershed.

¹ State Department of Water Resources California's Groundwater Bulletin 118 refers to the "San Juan Valley Groundwater Basin" for the South Coast Hydrologic Region.

² OC Watersheds, Watershed Workplans, available online 6/28/16:
<http://prg.ocpublicworks.com/DocmgmtInternet/Search.aspx>

- Comprehensive water quality analyses for South Orange County watersheds, including annual water quality analyses for Aliso Creek watershed³, a San Juan Creek Watershed Bacterial Study⁴, and the 2014 Report of Waste Discharge State of the Environment Report⁵ which provided a comprehensive watershed-based review of TMDL and NPDES compliance over several years and utilized indices of watershed health apart from water quality exceedances.
- Watershed Infiltration Hydromodification Management Plan (WIHMP) mapping tools developed in 2014-15 provided an initial GIS screening tool for infiltration BMP site suitability at a watershed and sub-watershed level; analysis considered land use, soils, slope, ownership, channel morphology and drainage⁶.
- A Water Quality Improvement Plan (WQIP) was developed by the County and South Orange County cities for all watersheds in South Orange County (the San Juan Hydrologic Unit) and submitted in April 2017 to comply with SDRWQCB Order No. R9-2013-0001 as amended by R9-2015-0001 and R9-2015-0100 (CAS0109266, also referred to as the Fifth Term MS4 NPDES Permit). The WQIP establishes water quality priorities for the watershed area based upon a comprehensive watershed-based geospatial and index-based analysis of water quality, geomorphic and hydrologic data⁷. The WQIP development process provided for extensive stakeholder and public input and review; WQIP implementation will continue to involve stakeholders.
- An Orange County Stormwater Resource Plan (OC SWRP) was produced to meet functional equivalency for SB 985 and to provide watershed-based planning for stormwater projects in Orange County. The OC SWRP aligns with the South Orange County IRWM Plan in many ways, including watershed planning, identification and prioritization of projects and establishing watershed-based priorities inclusive of water quality, water supply, natural resources and flood management. The OC SWRP has been included in the IRWM Plan as **Appendix L**. For more information about the OC SWRP, please visit the [webpage](#).

Another example of the region's progressive approach to water management is the Municipal Water District of Orange County (MWDOC) and the South Orange County water districts' ongoing commitment to water supply system reliability. MWDOC completed a new Orange County Reliability Study in December 2016. Phase 1 of the study completed in December 2015 estimated supply and system gaps between forecasted water demands and existing/planned water supplies, with water demand forecast and supply gap analysis, Orange County supply simulation modeling, and Orange County basin simulation modeling. Phase 2 of the study

³ Annual water quality assessments for [Aliso Creek](#)

⁴ [San Juan Creek Watershed Bacterial Study](#)

⁵ [2014 Report of Waste Discharge – San Diego Region State of the Environment](#)

⁶ WIHMP mapping data available at [OC Environmental Resources GIS Portal](#)

⁷ The [WQIP](#) was submitted to the SDRWQCB on April 1, 2017; the WQIP will not be in effect until receipt of SDRWQCB approval. Stakeholder and public involvement is described [here](#).

develops and evaluates illustrative portfolios of additional supply projects that could be implemented by the Metropolitan Water District of Southern California (MET) and MET member agencies, which includes all Orange County agencies. Phase 2 was completed in August 2016 and the final report completed in December 2016. The study is highly collaborative, involving over 25 meetings of a workgroup made up of managers from MWDOC, MWDOC member agencies, Orange County Water District (OCWD), and the cities of Anaheim, Fullerton, and Santa Ana.

IRWM Planning in South Orange County & Protection of Water Resources

The region embraced the IRWM Planning Act of 2002 to enhance forward planning in an even more coordinated fashion. In 2008, SBX2-1 (Perata) repealed and replaced the IRWM Planning Act and appropriated funding from two initiatives passed by voters in 2006 - Proposition 84 and Proposition 1E.

The County of Orange, cities, and water and wastewater agencies of South Orange County formed the South Orange County IRWM Group in 2004 and subsequently developed and adopted the South Orange County IRWM Plan in 2005. The IRWM Group established the South Orange County IRWM region as a cooperative framework for planning and implementing water management strategies in the region.

The South Orange County IRWM Group was recognized as a region during the Proposition 50 IRWM Program Implementation Grant effort in 2005. In 2007, the South Orange County IRWM Region was awarded Proposition 50 funding. Subsequently in 2009 the South Orange County Watershed Management Area (WMA) was recognized as a region during Department of Water Resources (DWR) Regional Acceptance Process.

The South Orange County IRWM Group embraces the IRWM model because it brings together short term and long term management strategies that will protect and enhance water resources in the WMA. The South Orange County agencies maintain the belief that water management strategies can, and should be, integrated to provide a reliable water supply, protect and improve water quality, and achieve other objectives.

The IRWM Plan is designed to help local agencies and governments manage their water, wastewater, and ecological resources. The purpose of the IRWM Group in developing this Plan is to identify potential projects intended to improve water quality and supply in order to investigate their feasibility, engage in long range water planning, establish priorities among the proposals of the member entities and obtain potential funding. As the IRWM Plan is implemented, the County, as agent of the State of California, will serve as a conduit for funding to the individual agencies proposing the projects. This IRWM Plan does not commit any resources to implementation of any project nor does its creation constitute a commitment by the County or any member entity to carry out any of the proposed projects. Determinations to proceed with individual projects and required environmental review under the California Environmental Quality Act (CEQA) will be performed by the individual agencies prior to approval of funding.

Agencies within the coastal zone of South Orange County face unique environmental challenges relative to inland areas, including the protection of millions of visitors who utilize the ocean for recreation each year, as well as protection of the unique marine resources from polluted runoff. This IRWM Plan includes strategies to comply with the Porter-Cologne Act and Clean Water Act (CWA), and protect beneficial uses of receiving waters to improve water quality of the coastline. Within the South Orange County WMA, the County coastline includes one Area of Special Biological Significance (ASBS) and Heisler Park Ecological Reserve. In addition, there are three locations within the South Orange County WMA that are on the California's Critical Coastal Areas (CCA) list – San Juan Creek, Aliso Creek, and Heisler Park Ecological Reserve.

This IRWM Plan supports the state priorities that relate to the California Water Plan (CWP) Update 2013, the Delta Stewardship Council, the DWR Water Recycling Task Force Recommendations, the State Water Resources Control Board (SWRCB) Recycled Water Policy, Governor Schwarzenegger's 20x2020 Water Conservation Plan of 2010, Greenhouse Gas (GHG) emissions reduction goals of AB 32, the Water Desalination Task Force Recommendations, the California Ocean Plan, the California Watershed Action Plan, the TMDL List, the comprehensive Orange County Drainage Area Management Plan (DAMP) and subsequent Reports of Wastewater Discharge (ROWD), and the Regional Water Boards Watershed Management Initiative Chapters.

The 2018 IRWM Plan update further addresses updated Climate Change Standards, CEQA Tribal Consultation changes, amendments to the IRWM Planning Act related to IRWMs with nitrate, arsenic, perchlorate, or hexavalent chromium contamination (AB 1249), incorporation of the Orange County Stormwater Resource Plan (OC SWRP) per SB 985, and amended standards for determining Economically Distressed Areas (EDAs). The Plan considers IRWM planning concepts and aforementioned State standards/legislation through the integration of projects and programs that incorporate a wide range of water management strategies. Beneficial effects from implementation of proposed projects and programs will contribute to the goals and objectives of the local, regional and statewide priorities.

In addition to State Standards and goals, this IRWM Plan incorporates the 2016 South Orange County WMA regional priorities developed by the Executive Committee through an extensive strategic visioning process to: 1) Develop sustainable water supplies, 2) Cultivate storage for potable and recycled water, and stormwater/low flow capture, and 3) Foster regional projects to maximize water resources. These regional priorities support the Region's IRWM Plan Goals by closely aligning with the Statewide Priorities discussed in **Section 4.1.1** and the RMS discussed in **Section 5**. IRWM Plan Objectives discussed in **Section 4** also support these priorities. As the strategic visioning process was intended to capture priorities based upon known current conditions, the priorities will be updated as needs shift within WMA.

December 10, 2018

Prepared by: Eileen Lin *EL*

Submitted by: Clary Clary *CC*

Approved by: Paul A. Cook *PAC*

CONSENT CALENDAR

FY 2017-18 COMPREHENSIVE ANNUAL FINANCIAL REPORT

SUMMARY:

The District's auditor, Davis Farr LLP has completed its annual audit of the District's financial statements for the Fiscal Year (FY) ended June 30, 2018. As stated in its report, Davis Farr concluded that in all material aspects, the statements fairly present the District's financial position as of June 30, 2018 and conform with generally accepted accounting principles.

A draft of the Comprehensive Annual Financial Report (CAFR), including the Introductory Section, audited financial statements, accompanying auditor's report, Management's Discussion and Analysis, and Statistical Section is attached as Exhibit "A".

BACKGROUND:

At the Committee meeting, Davis Farr will present its required Auditor Communication pursuant to Statement on Auditing Standards 114 *The Auditor's Communication with Those Charged with Governance*. This letter, attached as Exhibit "B", reflects the auditor's understanding of key management assumptions and practices and indicates that there were no disagreements with management during the scope of the audit. The auditors have also provided a *Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards*, attached as Exhibit "C", which states that the audit did not identify any material weakness deficiencies in internal control. In addition, the report states that the result of the audit disclosed no instances of noncompliance or other matters that were required to be reported under government auditing standards.

The IRWD Comprehensive Annual Financial Report:

The FY 2017-18 CAFR is being prepared for the fifteenth consecutive year by the District. All of IRWD's previous CAFRs have won awards from the Government Finance Officers Association (GFOA), which encourages state and local governments to prepare and publish expanded financial reports in conformity with generally accepted accounting principles (GAAP) and provides awards to recognize contributions to the practice of government finance that exemplify outstanding financial management. The awards stress practical, documented work that offers leadership to the profession and promotes improved public finance.

Staff will continue to produce an enhanced electronic version with key references hyperlinked throughout the document. The CAFR will be made available on the IRWD website.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

This item is not a project as defined in the California Environmental Quality Act (CEQA), Code of Regulations, Title 14, Chapter 3, Section 15378.

COMMITTEE STATUS:

This item was reviewed by the Finance and Personnel Committee on November 6, 2018.

RECOMMENDATION:

RECEIVE AND FILE.

LIST OF EXHIBITS:

Exhibit "A" – Draft FY 2017-18 Comprehensive Annual Financial Report

Exhibit "B" – SAS 114 Auditor's Communication with Those Charged with Governance from
Davis Farr LLP

Exhibit "C" – Report on Internal Control over Financial Reporting and on Compliance and Other
Matters Based on an Audit of Financial Statements Performed in Accordance with
Government Auditing Standards from Davis Farr LLP

EXHIBIT "A"

COMPREHENSIVE ANNUAL FINANCIAL REPORT FOR FISCAL YEAR ENDED JUNE 30, 2018

See District Secretary to obtain a copy
(document is 136 pages)

Exhibit “B”



Davis Farr LLP
2301 Dupont Drive | Suite 200 | Irvine, CA 92612
Main: 949.474.2020 | Fax: 949.263.5520

Board of Directors
Irvine Ranch Water District
Irvine, California

Communication with Those Charged with Governance at the Conclusion of the Audit

We have audited the financial statements of Irvine Ranch Water District (the “District”) for the year ended June 30, 2018. Professional standards require that we provide you with information about our responsibilities under generally accepted auditing standards and *Government Auditing Standards*, as well as certain information related to the planned scope and timing of our audit. We have communicated such information in our letter to you dated June 18, 2018. Professional standards also require that we communicate to you the following information related to our audit.

Significant Audit Findings

Qualitative Aspects of Accounting Practices

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by Irvine Ranch Water District are described in Note 1 to the financial statements. As described in Note 18 to the financial statements, the District implemented Governmental Accounting Standards Board (GASB) Statement No. 75 related to Other Post Employment Benefit (OPEB) obligations and GASB Implementation Guide 2017-1 related to reporting of the net pension liability and Pension Benefit Trust. The cumulative effect of the Implementation of GASB Statement No. 75 and Implementation Guide 2017-1 as of the beginning of the year is described further in Note 18 to the financial statements. Also, as described in Note 6 to the financial statements, the District implemented GASB 89 related to capitalized interest costs. We noted no transactions entered into by Irvine Ranch Water District during the year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Accounting estimates are an integral part of the financial statements prepared by management and are based on management’s knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected.

Examples of significant judgments and estimates reflected in the District’s financial statements include:

- Judgments concerning which capital project expenditures should be capitalized and depreciated versus expensed in the financial statements and judgments concerning which projects should be placed in service.
- Judgements regarding the fair value of real estate investments.
- Judgments regarding the fair value of interest rate swap agreements.
- Judgements involving the estimated net pension liability

- Judgements involving the estimated OPEB liability

Difficulties Encountered in Performing the Audit

We encountered no significant difficulties in dealing with management in performing and completing our audit.

Corrected and Uncorrected Misstatements

Professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those that are clearly trivial, and communicate them to the appropriate level of management. An immaterial adjustment to reclassify a project from Construction in Process to in service was not recorded. Management has determined that the effect is immaterial, both individually and in the aggregate, to the financial statement taken as a whole.

Disagreements with Management

For purposes of this letter, a disagreement with management is a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements or the auditor's report. We are pleased to report that no such disagreements arose during the course of our audit.

Management Representations

We have requested certain representations from management that are included in the management representation letter dated November 12, 2018.

Management Consultations with Other Independent Accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to Irvine Ranch Water District's financial statements or a determination of the type of auditor's opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

Other Audit Findings or Issues

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as Irvine Ranch Water District's auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

Other Matters

We applied certain limited procedures to *Management's Discussion and Analysis, Schedule of Changes in the Net Pension Liability and Related Ratio, Schedule of Contributions – Defined Benefit Pension Plan, Schedule of Changes in the OPEB Liability and Related Ratio, Schedule of Contributions – OPEB*, which are required supplementary information (RSI) that supplements the

basic financial statements. Our procedures consisted of inquiries of management regarding the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We did not audit the RSI and do not express an opinion or provide any assurance on the RSI.

We were not engaged to report on the Introduction and Statistical Section, which accompany the financial statements but are not RSI. We did not audit or perform other procedures on this other information and we do not express an opinion or provide any assurance on it.

Restriction on Use

This information is intended solely for the use of Board of Directors and management of Irvine Ranch Water District and is not intended to be, and should not be, used by anyone other than these specified parties.

A handwritten signature in blue ink that reads "David Fenwick".

Irvine, California
November 12, 2018

Exhibit “C”



Davis Farr LLP
2301 Dupont Drive | Suite 200 | Irvine, CA 92612
Main: 949.474.2020 | Fax: 949.263.5520

Finance Personnel Committee
Irvine Ranch Water District
Irvine, California

Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance With Government Auditing Standards

Independent Auditor’s Report

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States the financial statements of Irvine Ranch Water District (the “District”) as of and for the year ended June 30, 2018, and the related notes to the financial statements, which collectively comprise the District’s basic financial statements, and have issued our report thereon dated November 12, 2018.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered the District’s internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the District’s internal control. Accordingly, we do not express an opinion on the effectiveness of the District’s internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity’s financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the District’s financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances

of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

A handwritten signature in blue ink that reads "David Kim CP". The signature is written in a cursive style.

Irvine, California
November 12, 2018

December 10, 2018

Prepared by: C. Smithson

Submitted by: C. Clary

Approved by: Paul A. Cook



CONSENT CALENDAR

IRWD TWO-YEAR OPERATING BUDGET AND RATES SETTING CYCLE

SUMMARY:

Historically, the District has utilized a single year operating budget and rate setting cycle, accompanied by the required Proposition 218 noticing. This year, staff is recommending that the District implement a two-year operating budget and rate setting cycle which aligns the appropriate level of detail with a strategic policy oriented approach. This change will save time and effort and it will also save on costs associated with the annual Proposition 218 noticing.

BACKGROUND:

For the past several years, the Board has approved an annual operating budget and a single-year rate setting cycle. The District has recently completed or will soon complete several significant projects, such as major new facilities and administrative improvements. For example, the Oracle Financial System has provided increased analytical capabilities and visibility into the District's cost structure. These changes caused staff to consider options for increasing the length of the operating budget and rate setting cycles such that efficiencies can be increase while maintaining significant budgetary oversight and transparency.

To preserve the existing level of transparency and oversight, staff will continue to prepare the following reports for the Board's review:

- Quarterly operating results;
- Forecast budgets for quarters two through four; and
- Analysis of budgeted rates versus actual results.

Staff recommends the Board approve moving to a two year operating budget and rate setting process.

FISCAL IMPACTS:

A two-year budget and rate setting practice will reduce staff, Committee, and Board time as well as costs associated with the mailing and noticing of the Proposition 218 notices.

COMMITTEE STATUS:

This item was reviewed by the Finance and Personnel Committee on December 5, 2018.

RECOMMENDATION:

THAT THE BOARD APPROVE UTILIZING A TWO-YEAR BUDGET RATE SETTING CYCLE, STARTING WITH FISCAL YEAR 2019-20 AND 2020-21 PERIOD.

LIST OF EXHIBITS:

None

December 10, 2018 *PKM*
Prepared by: S. Toland/R. Mori
Submitted by: K. Burton *(KLB)*
Approved by: Paul A. Cook */ G.C.*

ACTION CALENDAR

MICHELSON WATER RECYCLING PLANT EMERGENCY RECYCLED WATER DIVERSION TO SAN DIEGO CREEK CONSTRUCTION AWARD

SUMMARY:

The Michelson Water Recycling Plant (MWRP) Emergency Recycled Water Diversion to San Diego Creek project includes construction of a dechlorination facility, 24-inch steel pipeline to convey dechlorinated tertiary effluent to San Diego Creek, and associated instrumentation and controls. Staff recommends that the Board authorize the General Manager to execute a construction contract with PCL Construction, in the amount of \$981,465 for the MWRP Emergency Recycled Water Diversion to San Diego Creek project.

BACKGROUND:

In September 2018, the Regional Water Quality Control Board approved an MWRP permit amendment allowing the emergency discharge of dechlorinated tertiary effluent to San Diego Creek under certain emergency conditions. This project will construct the facilities needed to accomplish the emergency diversion to the creek. Facilities include a sodium bisulfite storage and feed system for dechlorination, concrete chemical containment structure, flow metering, conveyance piping and valving, and associated chlorine analyzers and instrumentation. The design utilizes the existing MWRP effluent pumps to deliver tertiary recycled water to the new dechlorination facility prior to its discharge into San Diego Creek through the existing 24-inch stormwater pump station outlet pipeline. The dechlorination facilities are sized to accommodate the 33 million gallons per day (MGD) anticipated maximum production capacity of MWRP, but the existing discharge piping to San Diego Creek may require upsizing to deliver that amount of flow should high velocities in the existing pipeline become problematic. However, with the expected infrequent operation of this facility, staff anticipates that the existing discharge piping can adequately accommodate the high velocities associated with the anticipated maximum flow of 33 MGD for short periods of time. Construction is estimated to be complete in summer of 2019 allowing the facilities to be ready for service in the winter of 2019-20.

Construction Award:

The project was advertised for construction bids on September 18, 2018 to a select list of nine contractors including Gateway Pacific Contractors, GSE Construction Company, Olsson Construction, Pacific Hydrotech Corporation, Pascal & Ludwig Constructors, PCL Construction, R.C. Foster Corporation, Schuler Constructors, and SS Mechanical Construction.

The bid opening was held November 29, 2018 with bids received from Pacific Hydrotech Corporation, PCL Construction, and R.C. Foster Corporation. PCL Construction is the apparent low bidder with a bid amount of \$981,465. The remaining bids were \$1,044,072.70 and \$1,550,722.70. The engineer's estimate, prepared by HDR, was \$830,000. Although all three

bids were higher than the engineer's estimate, with only a difference of six percent between the apparent low bid and the second low bid, staff believes that the bid costs are reasonable given the current construction climate. The bid summary is attached as Exhibit "A".

Staff reviewed PCL's bid and has determined that it is responsive. Staff recommends that the Board authorize the General Manager to award a construction contract to PCL Construction Inc., in the amount of \$981,465.

FISCAL IMPACTS:

The MWRP Emergency Recycled Water Diversion to San Diego Creek, Project 10093, is included in the FY 2018-19 Capital Budget and will be funded through regional sewer funds. The existing budget is sufficient to fund the recommendation presented herein.

ENVIRONMENTAL COMPLIANCE:

The IRWD Board of Directors approved the Michelson Water Recycling Plant Final Environmental Impact Report (FEIR) on February 27, 2006. Section 15164 of the CEQA Guidelines provides for the preparation of an addendum to a previously certified EIR if some changes or additions to the project are necessary but none of the conditions described in CEQA call for preparation of a subsequent EIR have occurred. IRWD Board of Directors approved Addendum No. 1 to the FEIR in March 2008, Addendum No. 2 to the FEIR was approved in August 2009, and Addendum No. 3 to the FEIR was approved in June 2010. Addendum No. 4 to the EIR, which evaluated the environmental effects of the emergency recycled water diversion to San Diego Creek, was approved by IRWD's Board on March 26, 2018. A Notice of Determination was filed with the County of Orange and the State Clearinghouse on March 27, 2018.

COMMITTEE STATUS:

Construction awards are not routinely taken to Committee prior to submittal to the Board.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE A CONSTRUCTION CONTRACT WITH PCL CONSTRUCTION INC., IN THE AMOUNT OF \$981,465, FOR THE MICHELSON WATER RECYCLING PLANT EMERGENCY RECYCLED WATER DIVERSION TO SAN DIEGO CREEK, PROJECT 10093.

LIST OF EXHIBITS:

Exhibit "A" – Bid Summary

Irvine Ranch Water District
 Bid Summary
 For
 Michelson Water Recycling Plant Emergency Recycled Water Diversion to the San Diego Creek
 Project Number 10093

| | | | | Engineer's Estimate | | 1 PCL Construction, Inc. Long Beach, CA | | 2 Pacific Hydrotech Corporation Perris, CA | | 3 R C Foster Corporation Corona, CA | |
|---|---|-----|------|---------------------|---------------------|---|---------------------|---|-----------------------|---|-----------------------|
| Item No. | Description | Qty | Unit | Unit Price | Total Amount | Unit Price | Total Amount | Unit Price | Total Amount | Unit Price | Total Amount |
| Base Bid Items | | | | | | | | | | | |
| 1 | Furnish all labor, materials, equipment, services and appurtenant work, except for items 2 through 7 below, for the construction of the MWRP Emergency RW Discharge to the San Diego Creek Project. | 1 | LS | \$592,077.30 | \$592,077.30 | \$730,482.30 | \$730,482.30 | \$802,100.00 | \$802,100.00 | \$1,295,000.00 | \$1,295,000.00 |
| 2 | Payment and performance bonds and insurance | 1 | LS | \$13,000.00 | \$13,000.00 | \$10,000.00 | \$10,000.00 | \$17,000.00 | \$17,000.00 | \$25,000.00 | \$25,000.00 |
| 3 | Mobilization, demobilization and clean up (Not to exceed 4% of total amount of bid) | 1 | LS | \$33,200.00 | \$33,200.00 | \$39,260.00 | \$39,260.00 | \$40,000.00 | \$40,000.00 | \$37,000.00 | \$37,000.00 |
| 4 | Pre-negotiated vendor package: Superior Water Technologies | 1 | LS | \$166,722.70 | \$166,722.70 | \$166,722.70 | \$166,722.70 | \$166,722.70 | \$166,722.70 | \$166,722.70 | \$166,722.70 |
| 5 | Trench Safety Measures | 1 | LS | \$5,000.00 | \$5,000.00 | \$10,000.00 | \$10,000.00 | \$250.00 | \$250.00 | \$5,000.00 | \$5,000.00 |
| 6 | Startup & Testing | 1 | LS | \$10,000.00 | \$10,000.00 | \$15,000.00 | \$15,000.00 | \$8,000.00 | \$8,000.00 | \$12,000.00 | \$12,000.00 |
| 7 | Final Record Drawings | 1 | LS | \$10,000.00 | \$10,000.00 | \$10,000.00 | \$10,000.00 | \$10,000.00 | \$10,000.00 | \$10,000.00 | \$10,000.00 |
| SUBTOTAL, Base Bid Items (1 through 7) | | | | | \$830,000.00 | | \$981,465.00 | | \$1,044,072.70 | | \$1,550,722.70 |
| Adjustment (+ or -) | | | | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 |
| TOTAL AMOUNT OF BID | | | | | \$830,000.00 | | \$981,465.00 | | \$1,044,072.70 | | \$1,550,722.70 |
| NOTES: | | | | | | Subcontractors: | | Subcontractors: | | Subcontractors: | |
| 1 - PCL Construction's bid amount of \$981,515.00 contained a mathematical error in the summation of the bid items. The corrected bid amount of \$981,465.00 is reflected herein. | | | | | | Painting - Parada Painting, Inc. | | Coatings - Parada Painting, Inc. | | Painting - Parada Painting, Inc. | |
| | | | | | | Electrical - ACS Electrical, Inc. | | Electrical & Instrumentation - Hydrotech Electric | | Electrical - Hydrotech Electric | |
| | | | | | | Rebar - CMC Commercial Metals | | Rebar - Zuko Steel Reinforcing | | | |
| | | | | | | Asphalt - Hardy & Harper, Inc. | | Landscape - Zuniga Scapes | | | |

December 10, 2018
Prepared by: Tony Mossbarger
Submitted by: Cheryl Clary
Approved by: Paul Cook

ACTION CALENDAR

ENTERPRISE SERVER AND STORAGE REPLACEMENT

SUMMARY:

Staff requested proposals from three firms for enterprise server and storage replacement equipment. Based on a thorough evaluation of the proposals, staff recommends Board approval of a General Plant budget increase and expenditure of \$340,000 with Sirius Computer Solutions for the purchase, installation, and configuration of enterprise server and storage replacement equipment.

BACKGROUND:

The current enterprise server and storage equipment, purchased and installed in 2012 provides server processing and storage for the District’s enterprise applications and files is nearing the end of service life. The applications on this server include Oracle Financials, Oracle Business Intelligence, Oracle Customer Care and Billing, Maximo, Micro Focus file storage services, and several others.

The Board approved a general plant expenditure in August 2018 for enterprise server and storage equipment for \$335,000 to replace end of life equipment purchased in 2011. Due to reliability issues recently experienced with the remaining equipment, staff recommends replacement sooner than originally expected in FY 2019-20. Early replacement will also reduce the amount of time staff spends dealing with repairs and prevent future outages.

Staff requested proposals for enterprise server and storage equipment from three pre-qualified vendors that are certified providers of Nutanix server and storage equipment. Nutanix is a leader in hyper-converged systems which provide both virtual memory processing and storage services. The District currently uses virtualized servers as part of its existing infrastructure and hyper-converged systems and are the newest enterprise technology. Proposals were received from Carahsoft Technology Corp, Sirius Computer Solutions, and Nutanix Inc. The results were as follows:

| <u>Vendor</u> | <u>Proposal Amount</u> |
|---------------------------|------------------------|
| Sirius Computer Solutions | \$340,000 |
| Carahsoft Technology Corp | \$690,000 |
| Nutanix Inc | \$727,000 |

Sirius Computer Solutions had the best overall pricing for the enterprise server and storage replacement equipment, providing the District significant discounts from list pricing and has extensive experience providing equipment installation and implementation services to the District.

FISCAL IMPACTS:

Funds for the enterprise server and storage replacement included in the FY 2018-19 Capital Budget for General Plant replacement are not sufficient and a budget increase of \$340,000 is requested.

ENVIRONMENTAL COMPLIANCE:

This item is not a project as defined in the California Environmental Quality Act Code of Regulations, Title 14, Chapter 3, Section 15378.

COMMITTEE STATUS:


This item was reviewed by the Finance and Personnel Committee on December 5, 2018.

RECOMMENDATION:

THAT THE BOARD APPROVE A GENERAL PLANT BUDGET INCREASE AND EXPENDITURE OF \$340,000 WITH SIRIUS COMPUTER SOLUTIONS TO PURCHASE AND IMPLEMENT THE ENTERPRISE SERVER AND STORAGE REPLACEMENT EQUIPMENT.

EXHIBITS:

None.

December 10, 2018
Prepared and
Submitted by: L. Bonkowski
Approved by: Paul Cook 

ACTION CALENDAR

ELECTION OF OFFICERS FOR 2019

SUMMARY:

The Bylaws of the District provide that the President and Vice President shall be elected by the Board from among its members. The term of office of the President and Vice President is one year, or until the election and qualification of their successors. On December 11, 2017, Director Douglas Reinhart was elected to the office of President and Director Steve LaMar was elected to the office of Vice President for calendar year 2018.

While there are no formal election procedures set forth in the Bylaws, it is suggested that the General Manager be appointed temporary Chairman to conduct the election of President. The temporary Chairman would open nominations, accept nominations which need not be seconded, accept a motion to close the nominations, and conduct the balloting by voice vote. The President would then conduct the election of the Vice President in a similar manner.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

Not applicable.

RECOMMENDATION:

THAT AN ELECTION BE CONDUCTED OF THE PRESIDENT AND VICE PRESIDENT OF THE BOARD OF DIRECTORS OF THE IRVINE RANCH WATER DISTRICT.

LIST OF EXHIBITS:

None.