



S A W P A

SANTA ANA WATERSHED PROJECT AUTHORITY
11615 Sterling Avenue, Riverside, California 92503 • (951) 354-4220

NOTICE OF REGULAR MEETING OF THE PROJECT AGREEMENT 22 COMMITTEE

Interregional Landscape Water Demand Reduction Program

Committee Members:
Joe Grindstaff, General Manager, Inland Empire Utilities Agency
Doug Headrick, General Manager, San Bernardino Valley Municipal Water District
Paul D. Jones, General Manager, Eastern Municipal Water District, Chair
Michael Markus, General Manager, Orange County Water District, Vice Chair
John Rossi, General Manager, Western Municipal Water District

THURSDAY, FEBRUARY 23, 2017 – 8:00 A.M.

AGENDA

1. **CALL TO ORDER** (Paul D. Jones, Chair)
2. **PUBLIC COMMENTS**
Members of the public may address the Committee on items within the jurisdiction of the Committee; however, no action may be taken on an item not appearing on the agenda unless the action is otherwise authorized by Government Code §54954.2(b).
3. **APPROVAL OF MEETING MINUTES: JANUARY 26, 2017** 3
Recommendation: Approve as posted.
4. **COMMITTEE DISCUSSION ITEMS**
 - A. **UPDATE ON STATE ACTION RELATED TO DROUGHT (PA22#2017.2)**..... 5
 - Staff Memo**Recommendation:** Receive and file.
 - B. **AERIAL MAPPING PROJECT DEAD VEGETATION CLASSIFICATION (PA22#2017.3)** 7
 - Staff Memo
 - Presentation
5. **FUTURE AGENDA ITEMS**

6. ADJOURNMENT

PLEASE NOTE:

Americans with Disabilities Act: Meeting rooms are wheelchair accessible. If you require any special disability related accommodations to participate in this meeting, please contact (951) 354-4220 or kberry@sawpa.org. Notification at least 48 hours prior to the meeting will enable staff to make reasonable arrangements to ensure accessibility for this meeting. Requests should specify the nature of the disability and the type of accommodation requested.

Materials related to an item on this agenda submitted to the Commission after distribution of the agenda packet are available for public inspection during normal business hours at the SAWPA office, 11615 Sterling Avenue, Riverside, and available at www.sawpa.org, subject to staff's ability to post documents prior to the meeting.

Declaration of Posting

I, Kelly Berry, Clerk of the Board of the Santa Ana Watershed Project Authority declare that on Thursday, February 16, 2017, a copy of this agenda has been uploaded to the SAWPA website at www.sawpa.org and posted in SAWPA's office at 11615 Sterling Avenue, Riverside, California.

/s/

Kelly Berry, CMC

2017 Project Agreement 22 Committee Regular Meetings

Fourth Thursday of Every Month

(Note: All meetings begin at 8:00 a.m., unless otherwise noticed, and are held at SAWPA.)

January 1/26/17 Regular Committee Meeting	February 2/23/17 Regular Committee Meeting
March 3/23/17 Regular Committee Meeting	April 4/27/17 Regular Committee Meeting
May 5/25/17 Regular Committee Meeting	June 6/22/17 Regular Committee Meeting
July 7/27/17 Regular Committee Meeting	August 8/24/17 Regular Committee Meeting
September 9/28/17 Regular Committee Meeting	October 10/26/17 Regular Committee Meeting
November 11/16/17* Regular Committee Meeting*	December 12/28/17 Regular Committee Meeting

*Meeting date adjusted due to conflicting holiday.



PROJECT AGREEMENT 22 COMMITTEE
Interregional Landscape Water Demand Reduction Program
REGULAR MEETING MINUTES
January 26, 2017

COMMITTEE MEMBERS PRESENT

Joseph P. Grindstaff, General Manager, Inland Empire Utilities Agency [Arrived at 8:30 a.m.]
Paul D. Jones, General Manager, Eastern Municipal Water District [Chair]
Michael Markus, General Manager, Orange County Water District [Vice Chair]

COMMITTEE MEMBERS ABSENT

Doug Headrick, General Manager, San Bernardino Valley Municipal Water District
John Rossi, General Manager, Western Municipal Water District

STAFF PRESENT

Larry McKenney, Mark Norton, Ian Achimore, Dean Unger, Zyanya Blancas

1. CALL TO ORDER

The meeting commenced at 8:15 a.m. by Chair Jones at the Santa Ana Watershed Project Authority, 11615 Sterling Avenue, Riverside, California. Due to lack of a quorum, the agenda was taken out of order; Agenda Item 4.A. was first considered.

4. COMMITTEE DISCUSSION ITEMS

A. PRESENTATION ON CALIFORNIA DATA COLLABORATIVE EXECUTIVE ORDER PROGRAMS

Ian Achimore introduced Patrick Atwater, Project Manager at The California Data Collaborative (CaDC) and stated that the CaDC is currently undertaking several projects related to the Executive Order B-37-16 (Executive Order) and implementation of an outdoor water efficiency survey. Achimore stated that the CaDC efforts focus on helping retail agencies with water use efficiency data and suggested it be considered as an organization to partner with when determining the use for the projected surplus under the Emergency Drought Grant Program or for the SARCCUP funding opportunity. Atwater followed the introduction with a PowerPoint presentation providing a brief background of CaDC, their Executive Order Programs, and Outdoor Water Efficiency Survey.

The CaDC was first launched in January 2016, and currently has 12 members and 19 partnerships. Its objectives are to deploy the efficiency explorer tool and to complete the study of turf removal program effectiveness.

The program related to the Executive Order included a landscape measurement analysis in partnership with Claremont Graduate University's Andrew Marx and the CaDC water efficiency explorer tool, both under development in early 2017. This water efficiency explorer tool allows water managers to see the impact of different efficiency standards on the water budget set for each agency.

CaDC's Outdoor Water Efficiency Survey's goal is to determine what motivates Californians to remove their lawns, establish what resources are the most useful for residents in adopting outdoor water efficient practices, and optimize water-agency conversion programs. The surveys will be conducted by trained volunteers, including the CivicSpark Fellows. Two thousand homes are estimated to be surveyed in the Inland Empire this spring.

The Committee agreed that the information provided would be of great value to assist agencies with the Executive Order. SAWPA staff will continue collaboration discussions with Atwater.

Joe Grindstaff arrived at 8:30 a.m. during the presentation of Agenda Item 4.A.

This item was for information purposes only; no action was taken on Agenda Item No. 4.A.

The Committee next considered Agenda Item 2.

2. **PUBLIC COMMENTS**

There were no public comments.

3. **APPROVAL OF MEETING MINUTES: December 22, 2016**

MOVED, approve the December 22, 2016 meeting minutes.

Result:	Adopted (Unanimously; 3-0)
Motion/Second:	Grindstaff/Markus
Ayes	Grindstaff, Jones, Markus
Nays:	None
Abstentions:	None
Absent:	Headrick, Rossi

4. **FUTURE AGENDA ITEMS**

There were no proposed future agenda items.

5. **ADJOURNMENT**

There being no further business for review, Chair Jones adjourned the meeting at 8:42 a.m.

**Approved at a Regular Meeting of the Project Agreement 22 Committee on Thursday,
February 23, 2017.**

Paul D. Jones II, Chair

Attest:

Kelly Berry, CMC
Clerk of the Board

PA 22 COMMITTEE MEMORANDUM NO. 2017.2

DATE: February 23, 2017

TO: SAWPA Project Agreement 22 Committee

SUBJECT: Update on State Action Related to the Drought

PREPARED BY: Ian Achimore, Senior Watershed Manager

RECOMMENDATION

Receive and file this update on recent State regulatory action related to the drought.

DISCUSSION

At the time this memo was drafted, the State has not released the final joint agency report per Executive Order B-37-16 Making Water Conservation a California Way of Life. The draft report was posted on November 30, 2016 thereby providing water agencies an opportunity to comment on the State's new regulatory framework. It has also helped SAWPA, the SAWPA Member Agencies, the Municipal Water District of Orange County (MWDOC) and Rancho California Water District craft concepts to assist retail water agencies in complying with the new regulatory framework using the projected grant surplus from the Proposition 84 2014 Drought Grant.

On February 8, 2017, the State Water Resources Control Board voted 5-0 to extend the emergency drought regulations. With that vote, urban water agencies will still be required to demonstrate they pass the "stress test" to demonstrate they have enough water supply in reserves to withstand three additional years of drought. The extension keeps in place monthly reporting by water agencies.

Going forward, SAWPA staff will track MWDOC's efforts to assist Orange County retail water agencies comply with Executive Order B-37-16 and possibly use a Request for Proposals the wholesaler is planning to use. SAWPA staff updated DWR on the possible Proposition 84 Drought Grant amendment, which would likely be required due to adding more time in the Grant Agreement's schedule to assist retail water agencies with the Executive Order, and their feedback was to wait till the joint agency final report was drafted to formally request the schedule change. SAWPA is also refining its cost estimate and scope of work for the application interface tool, which will allow retail water agencies without GIS capabilities to view SAWPA's 2015 aerial mapping data.

BACKGROUND

As shared in the December 2016 PA 22 Committee meeting, the Emergency Drought Grant Program was projected to have approximately \$1,000,000 to \$1,500,000 and approximately \$30,000 available in State Integrated Regional Water Management (IRWM) grant funding for the Santa Ana River Watershed and the Upper Santa Margarita Watershed respectively.

CRITICAL SUCCESS FACTORS

The following OWOW critical success factors are addressed by this action:

Data and information needed for decision-making is available to all.

RESOURCE IMPACTS

No impact.

PA 22 COMMITTEE MEMORANDUM NO. 2017.3

DATE: February 23, 2017

SUBJECT: AERIAL MAPPING PROJECT DEAD VEGETATION CLASSIFICATION

RECOMMENDATION

Approve Task Order SRI504-301-03 with Statistical Research, Inc. (SRI), in an amount not to exceed \$35,043 to provide dead vegetation calculations in the 15 flight areas that have been identified with high concentrations of natural open space, bringing the new total for SRI to \$245,521.

DISCUSSION

Agencies with greater areas of natural open space determine the potential irrigable area of a given parcel by combining the area of dead vegetation and green vegetation. The SAWPA GIS staff has uncovered 15 flight areas (of XX total areas) where dead vegetation area assessment was skewed by large areas of natural open space. The skewing occurs because large areas of dead vegetation overwhelm the histogram, causing objects that have similar color to dead veg to be placed in that category.

The 15 identified flight areas may impact 9 agencies; the majority of them are in the Inland Empire.

SAWPA anticipates receiving the dead vegetation classification for the 15 identified flight areas of the watershed starting in March 2017 and through April 2017. Thereafter, the dataset will be delivered to the impacted agencies for updated dead vegetation counts.

BACKGROUND

SRI was under contract to provide a vegetation classification for the Santa Ana River Watershed that includes categories for turf grass, trees and shrubs, pools, and other vegetation. In addition, SRI also calculates the square footage of each category and the total irrigated area at a parcel level, chiefly by summing “green” areas detected by the aerial camera. The total calculated irrigated area can be used by water retailers to implement conservation-based water rates.

Although SRI had been contracted only to provide irrigated area calculations, their modeling did capture dead vegetation area as well. In late October 2016 it came to our attention that agencies in the Inland Empire combine green vegetation and dead (“irrigatable”) vegetation measurements to create an irrigable area to calculate individual budgets. This method allows agencies in the Inland Empire to maintain a realistic measure of need, despite aggressive conservation efforts that have led to many customers letting vegetation go brown.

SAWPA GIS staff analyzed the 72 flight areas for dead vegetation, uncovering 11 flight areas with dead vegetation over-counts and 4 flight areas with dead vegetation under-counts. SAWPA staff completed this detailed analysis mid-January.

CRITICAL SUCCESS FACTORS

Vegetation Classification data meets the following critical success factors

- Distribution of benefits from the implementation of all integrated water resources management activities across the watershed in a fair and equitable fashion. Recognition that upstream conditions affect downstream water quality and quantity.
- A strong reputation and sufficient capacity within SAWPA staff for strategic facilitation, planning, communication, leadership and community engagement.
- Data and information needed for decision-making is available to all.

RESOURCE IMPACTS

Funding for the contract will come from the Proposition 84 IRWM Drought Grant shown in the PA 22 Committee implementation line item in the budget.

III. PERFORMANCE TIME FRAME

SRI shall begin work within five days of the date this Task Order is signed by the Authorized Officer and shall complete performance of such services by **May 1, 2017**

IV. SAWPA LIAISON

Dean Unger shall serve as liaison between SAWPA and Consultant.

V. COMPENSATION

For all services rendered by SRI pursuant to this Task Order, SRI shall receive a total **not-to-exceed sum of \$35,043** in accordance with the rate schedule. Funding for the services, provided by the State through a grant, will be provided within approximately 120 days upon receipt of invoice by SAWPA. The State shall withhold five percent (5.0%) until (date), and ten percent (10.0%), thereafter, of the funds requested by SAWPA for reimbursement of eligible costs. SRI shall provide each such invoice to SAWPA within 15 days after the end of the month in which the services were performed.

VI. CONTRACT DOCUMENTS PRECEDENCE

In the event of a conflict in terms between and among the contract documents herein, the document item highest in precedence shall control. The precedence shall be:

- a. The Agreement for Services by Independent Consultant.
- b. The Task Orders issued pursuant to the Agreement, in numerical order.
- c. Exhibits and Attachments attached to each Task Order, which may describe, among other things, the Scope of Work and compensation therefore.
- d. Specifications incorporated by reference.
- e. Drawings incorporated by reference.

In witness whereof, the parties have executed this Task Order on the date indicated below.

SANTA ANA WATERSHED PROJECT AUTHORITY

Celeste Cantú, General Manager

Date

STATISTICAL RESEARCH INC.

(Signature)

Date

Print or Type Name

Dead Vegetation Classification

15 flight Areas

Irrigated Areas

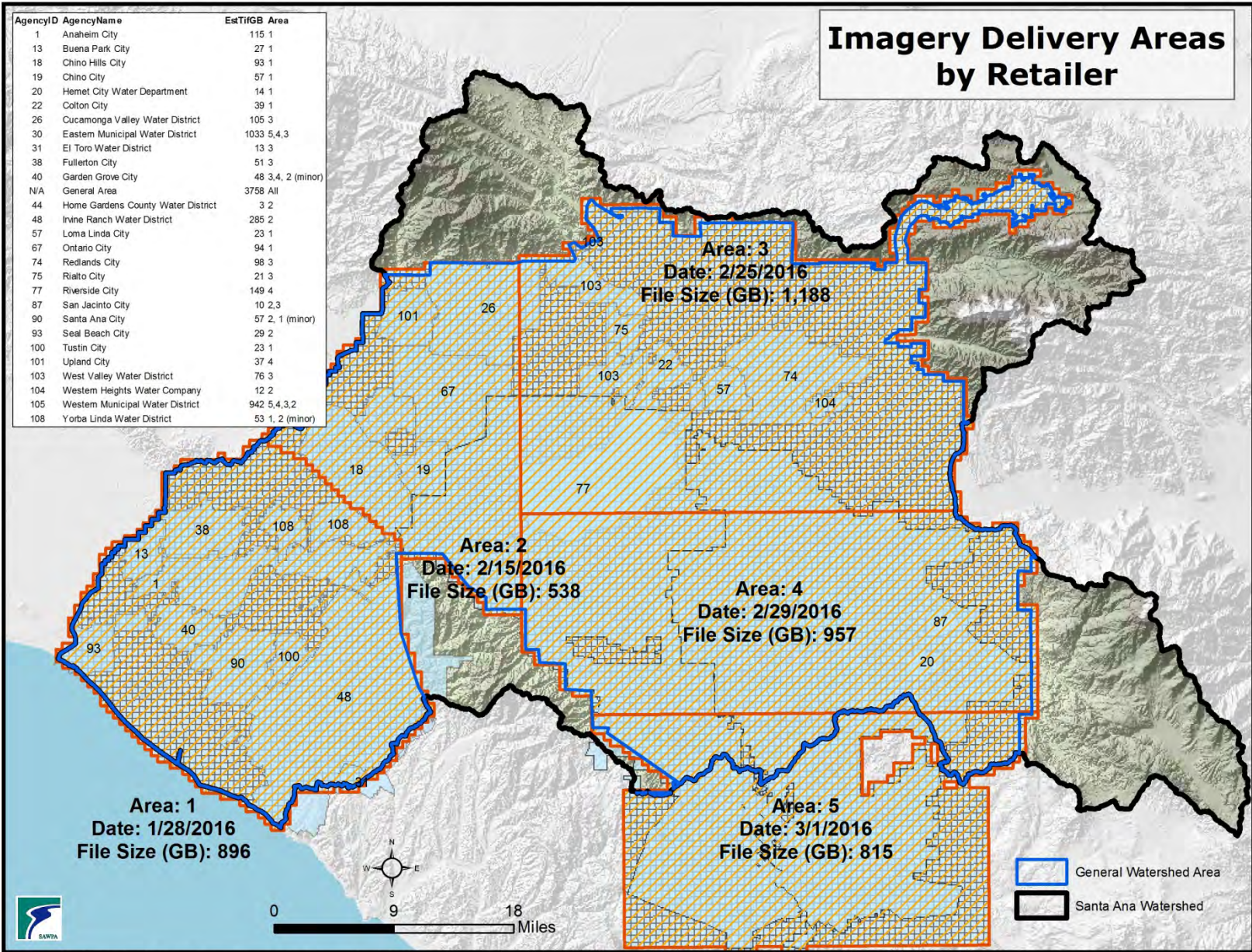
- Project focused on Green Vegetation Measurements
 - Turf
 - Trees and Shrubs
 - Pools
- Vendor did place dead vegetation into a category

Irrigable

- Irrigated area + Dead Vegetation

Imagery Delivery Areas by Retailer

AgencyID	AgencyName	EstTiGB Area
1	Anaheim City	115 1
13	Buena Park City	27 1
18	Chino Hills City	93 1
19	Chino City	57 1
20	Hemet City Water Department	14 1
22	Colton City	39 1
26	Cucamonga Valley Water District	105 3
30	Eastern Municipal Water District	1033 5,4,3
31	El Toro Water District	13 3
38	Fullerton City	51 3
40	Garden Grove City	48 3,4, 2 (minor)
N/A	General Area	3758 All
44	Home Gardens County Water District	3 2
48	Inrne Ranch Water District	285 2
57	Loma Linda City	23 1
67	Ontario City	94 1
74	Redlands City	98 3
75	Rialto City	21 3
77	Riverside City	149 4
87	San Jacinto City	10 2,3
90	Santa Ana City	57 2, 1 (minor)
93	Seal Beach City	29 2
100	Tustin City	23 1
101	Upland City	37 4
103	West Valley Water District	76 3
104	Western Heights Water Company	12 2
105	Western Municipal Water District	942 5,4,3,2
108	Yorba Linda Water District	53 1, 2 (minor)



K:\Interns\Alex\Flight Area\DeliveryAreasInterestedRetailers.mxd SW-2573

Table of Supplier Measurements

SAWPA and Supplier Measurement Comparison				
Agency	Supplier Measured	SAWPA Measurement	Dead Veg	All Veg -SAWPA Total
East ValleyWD	90,186,152	64,797,169	30,816,658	95,613,827
Eastern MWD	523,778,460	284,496,477	407,692,886	692,189,363
Irvine Ranch Water District	124,316,576	145,897,624	106,040,344	251,937,968
Western Municipal	199,823,127	94,792,904	105,894,147	200,687,051

Image IDs to Correct for Dead Veg

- Under Represented Re-Run (4)
- Over Represented Re-Run (11)
- Over Represented No Re-Run
- Priority Agencies
- Identified Over Represented Area

Image ID to ReRun

OverRepr	Image ID
10F	
10BB	24C
10C	24E
11A	25
16A	
18A	
18B	
22AB	
27A	
27B	
4C	

- Priority Agencies:
 Hemet City Water Department
 Cucamonga Valley Water District
 Garden Grove City
 Eastern Municipal Water District
 Western Municipal Water District
 Rancho California Water District
 Inland Empire Utilities Agency
 Riverside City
 Newport Beach City

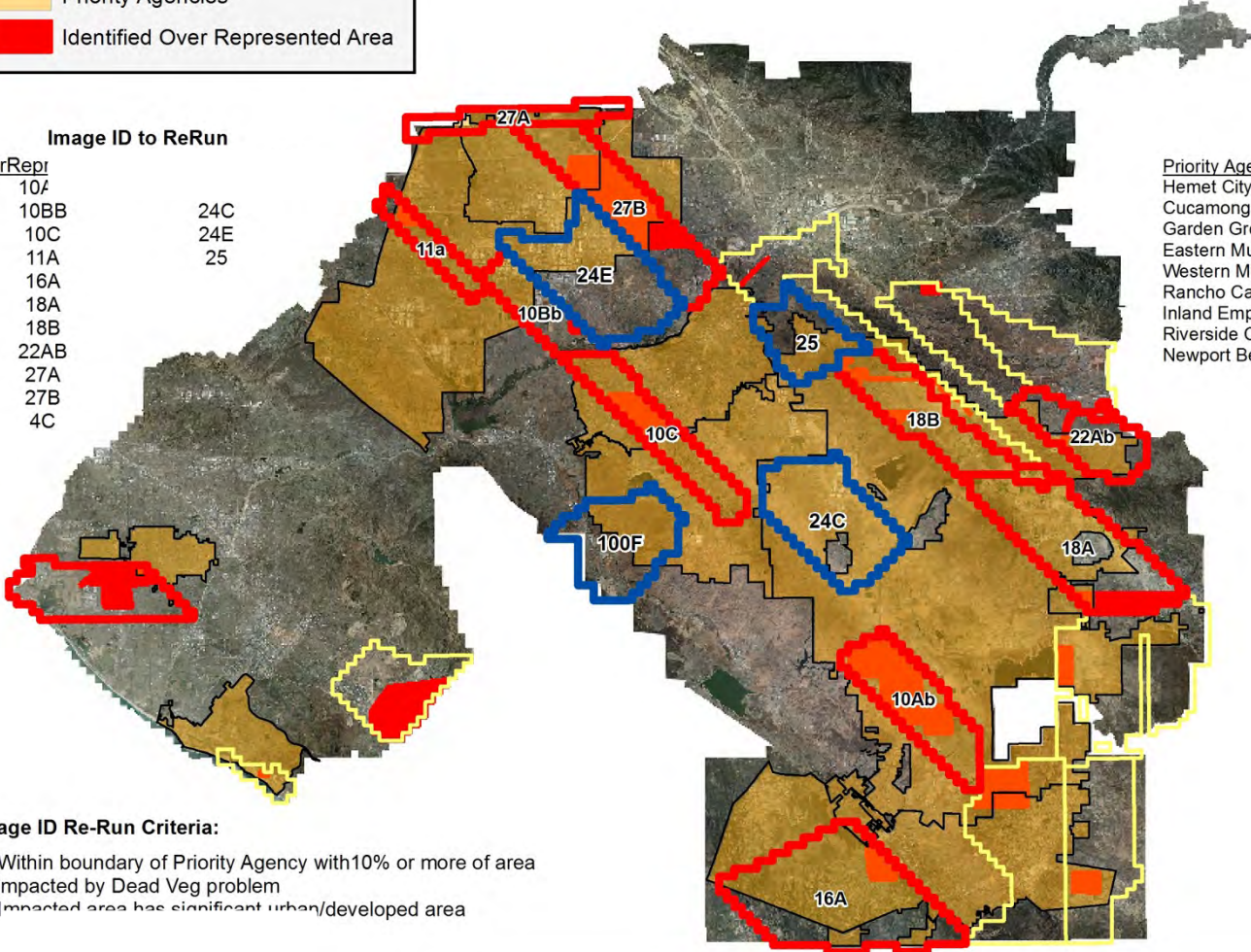
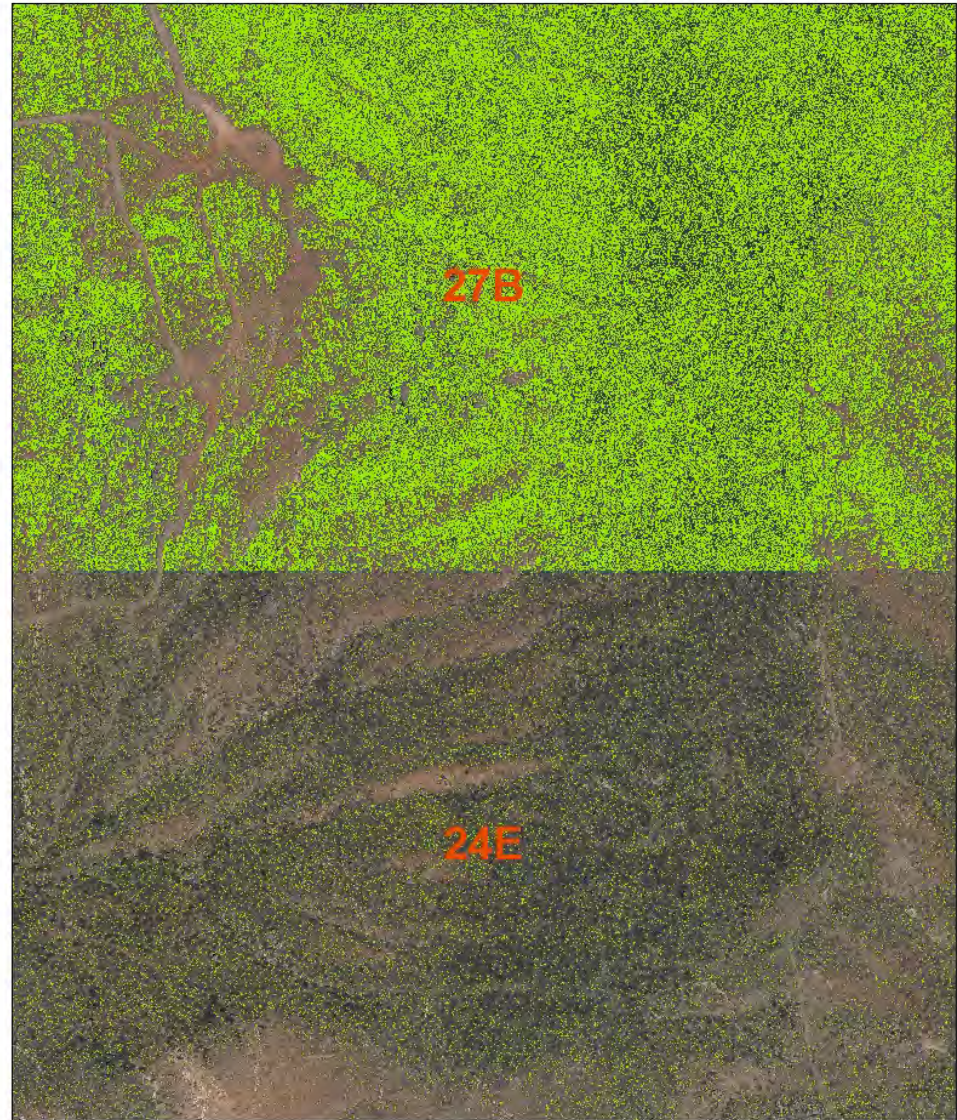


Image ID Re-Run Criteria:

- 1) Within boundary of Priority Agency with 10% or more of area impacted by Dead Veg problem
- 2) Impacted area has significant urban/developed area

Under Count



Overrepresented Dead Veg



Dead Vegetation Outliers



RECOMMENDATION

- Approve Task Order SRI504-301-03 with Statistical Research, Inc. (SRI), in an amount not to exceed \$35,043 to provide dead vegetation calculations in the 15 flight areas that have been identified with high concentrations of natural open space, bringing the new total for SRI to \$245,521.