



Regional Water Authority

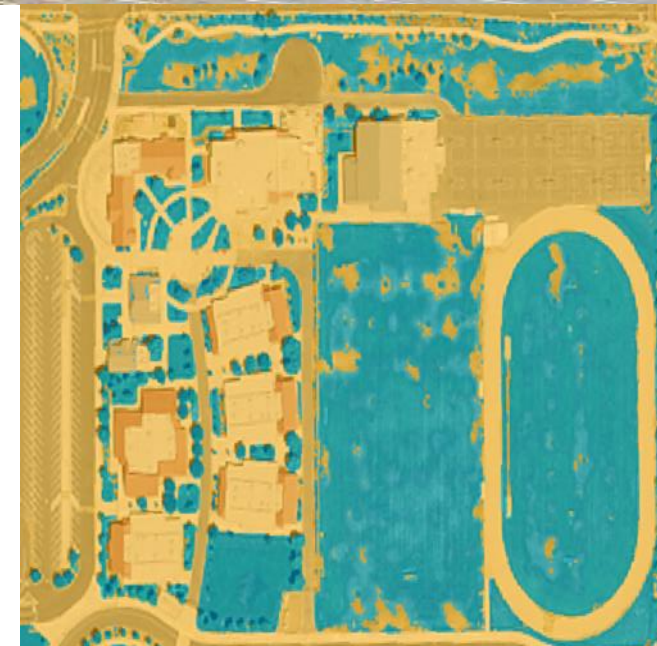
CII DIM Measurement Results



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OUTLINE



RESULTS OF
LAND IQ STUDY



NEXT STEPS



DWR MAPPING



PROPOSED
REGULATION

CII DIM LANDSCAPE STUDY

- Report w/ Accuracy Assessment
 - Methodology
 - Comment Response/Findings
 - Results
 - Deliverables

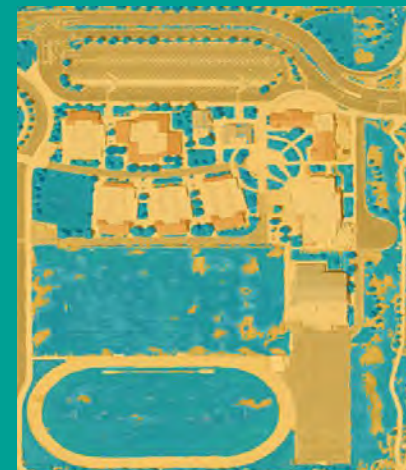
Commercial, Industrial and Institutional (CII) Dedicated
Irrigation Meter (DIM) Landscape Measurement Study

Prepared for
Regional Water Authority
RWA

Prepared by
LAND IQ
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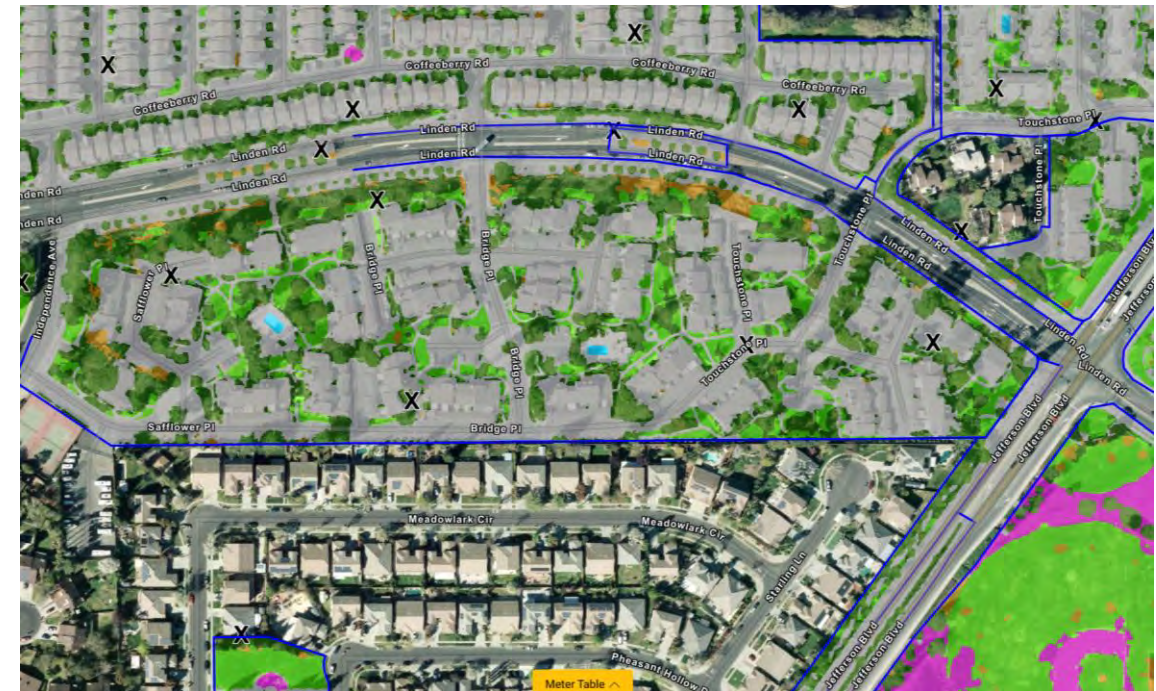
AUGUST 2023

AGENCY COMMENTS



COMMENTS

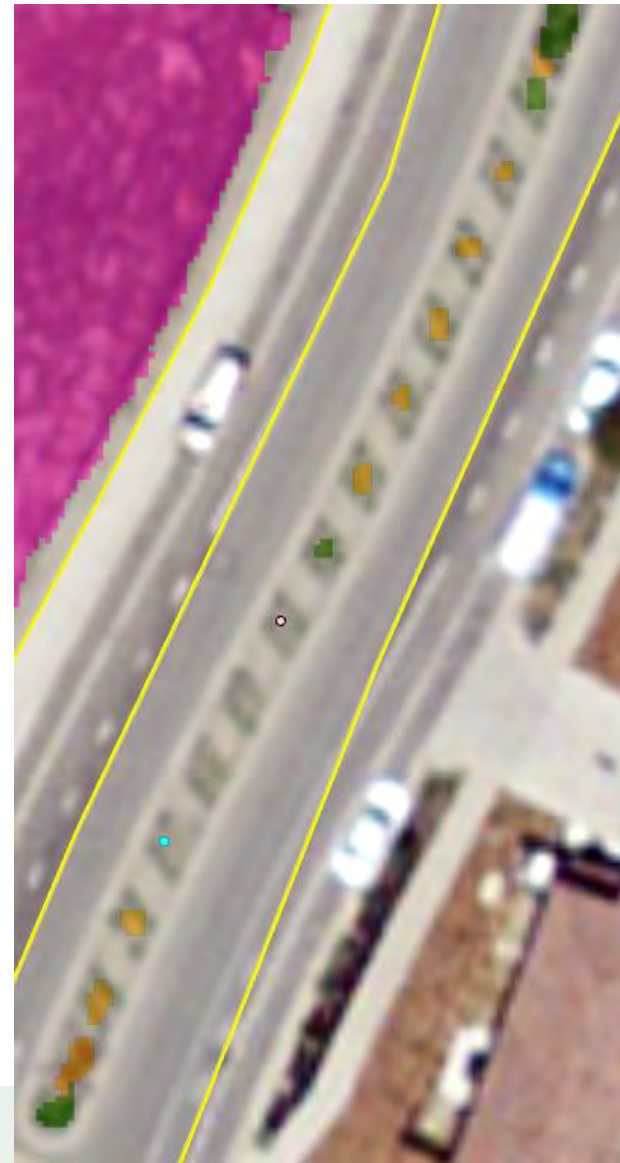
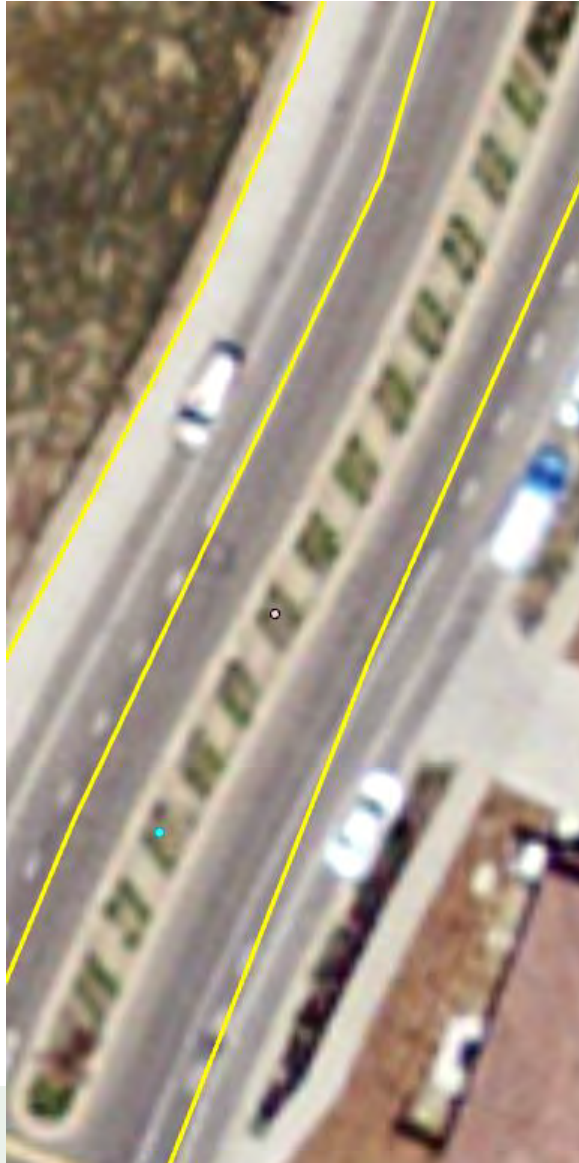
- 681 Comments Reviewed
 - AOI geometry change
 - Development after imagery used for analysis
 - Misclassified planters
 - Shadows



COMMENTS – NEW DEVELOPMENT



COMMENTS – MISCLASSIFIED PLANTERS



COMMENTS – SHADOWS



RESULTS OF LAND IQ STUDY



RESULTS

- 8,030 DIMS
- 5,914 associated AOIs
- Based on 2018 imagery (1-ft)
- Remote sensing legend
 - Landscape level
 - Irrigability level
- Web Tool to review results
- Special Landscape Area notation



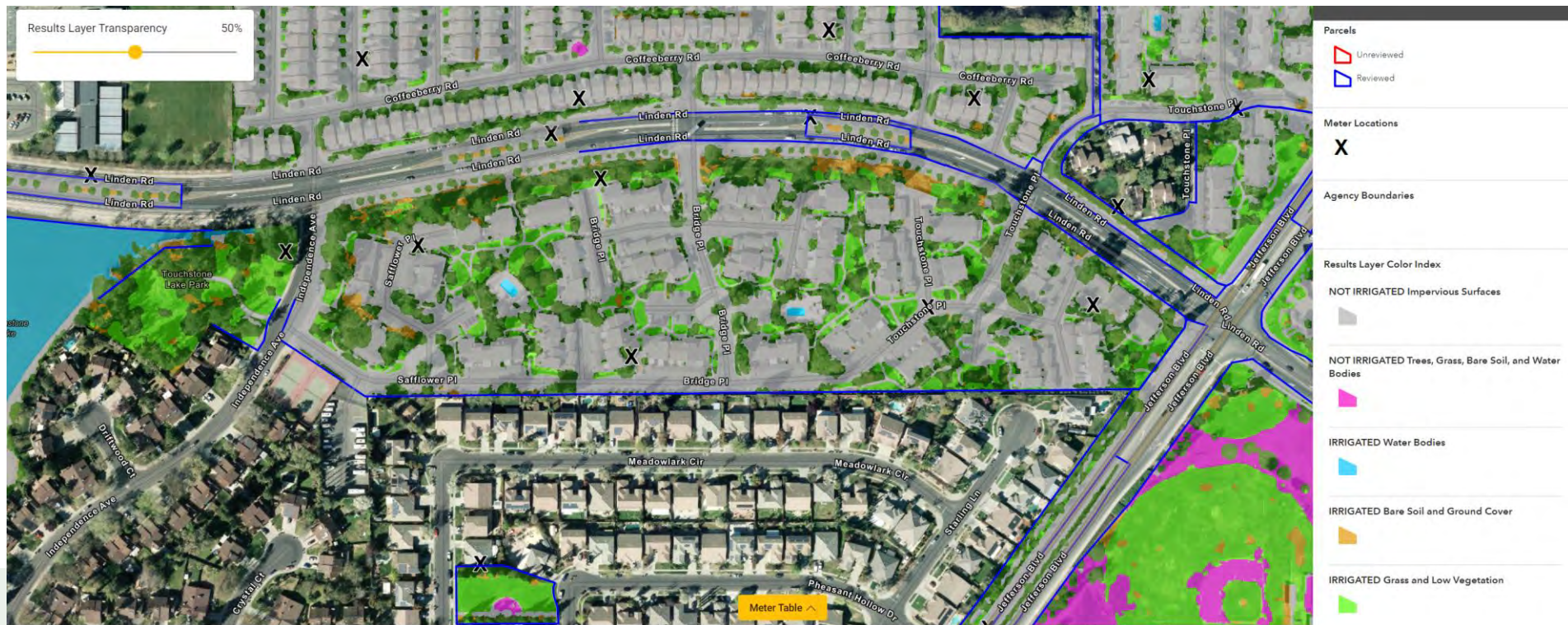
RESULTS - ACCURACY

- Land use level: 98.7%
- Irrigability level: 98.9%

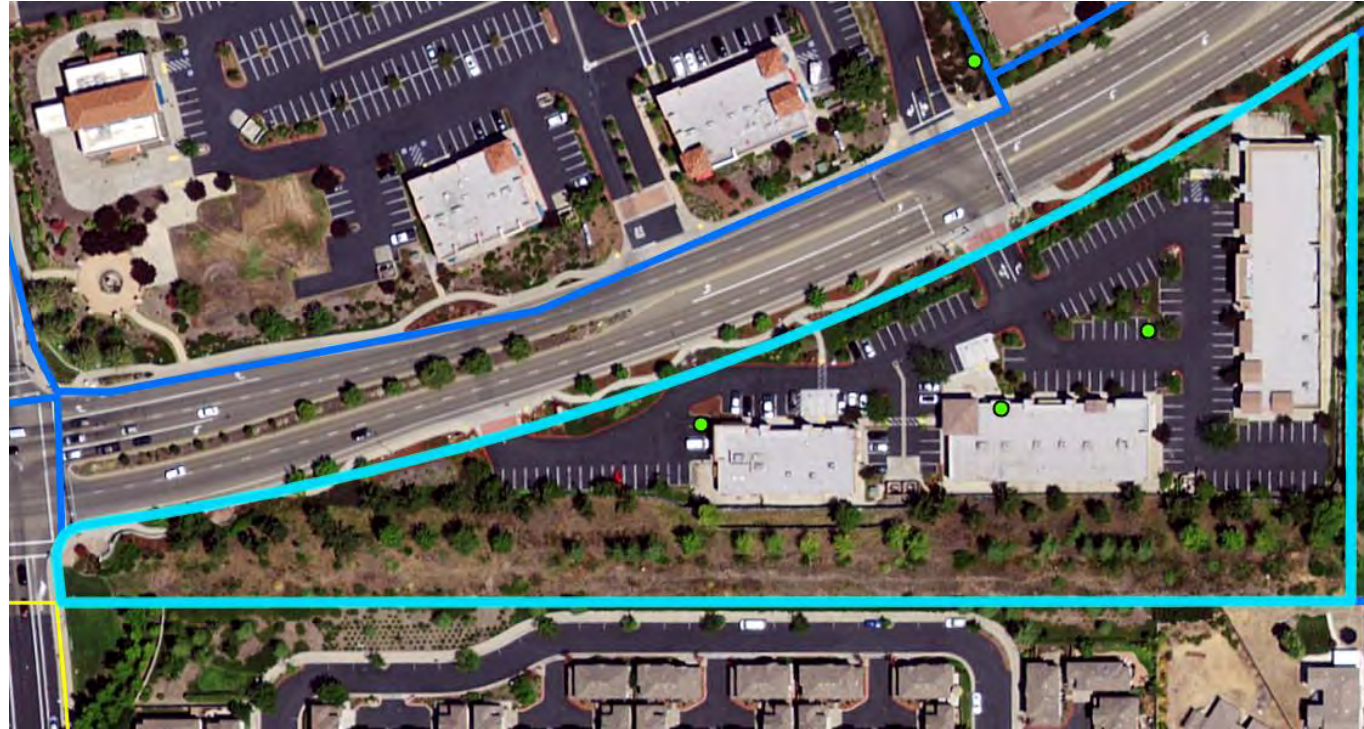
	Irrigable, Irrigated (II)	Not Irrigable (NI)
Class Accuracy	95.8%	99.7%
Overall Accuracy	98.9%	

WEB APP

- FINAL results will be published to Web App
- Will keep we app going for a while. Agencies should reach out if longer term access or application enhancements are desired.
- Continue to utilize for review



RESULTS – AOI SUMMARY



Meter_Cnt	Parcel_ID	Meter1_ID	Meter2_ID	Meter3_ID	Total_I	Total_NI
3	PRCL_3226	80261	80305	56925	111,843.62	104,359.35
2	PRCL_3775	44517	79719		4,149.47	6,832.1
2	PRCL_2866	60600	79597		86,667.38	355,295.02
2	PRCL_3625	78942	78827		0	150,801.03

PROPOSED REGULATORY TEXT

- CII DIM Landscape ET Factors
 - Current – 2028: just have to report water
 - 2028 – 2030: 0.80
 - 2030 – 2035: 0.63
 - 2035 – Beyond: **0.45**
 - New Landscapes: 0.45
 - SLA: 1.0
- DWR will provide mapping for CII parcels, but agencies will have to determine area served by DIMs for all by 2028



CII MIXED-USE THRESHOLD & CONVERSION

Threshold:

Estimate of landscape water use \geq **500,000 gallons** (ET factor of 0.76)

- Must identify which meters are over threshold by **1/1/2024**
- For landscapes over threshold, must install DIMs or in-lieu tech
 - 20% by 2026
 - 60% by 2028
 - 100% by 2030
- Problematic b/c of DWR's CII LAM timeline (2026)

DWR'S CII LAM

- Schedule beginning Fall 2023 – Summer 2026
- 2020, 1 ft, 4 – band imagery (same resolution)
- Measuring all CII PARCELS
- WILL NOT determine associated landscape extent of DIMs
- Will provide landscape segments



NEXT STEPS/RECOMMENDATIONS

1. DWR is mapping landscape within CII parcels, but not linking to DIMs or their AOIs
2. Recommend reviewing your AOIs to ensure correct area is outlined for each DIM
3. Cross reference CII areas with Residential LAM areas to make sure they aren't double counted
4. Landscape area for new development needs to be measured
5. Track future meter/landscape install dates
6. Continue SLA identification
7. Express shadow and small landscape planter concerns to DWR while their work is in progress

QUESTIONS

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SPECIAL LANDSCAPE AREAS

No longer any exemptions

- Bioengineered slopes
- Supplemental water for ponds/lakes, wildlife, etc.
- Plant collections, botanical gardens, arboretums
- Public swimming pools
- Cemeteries (pre – 2015)
- Edible plants (Community Gardens)
- Recreational areas
- Areas irrigated with recycled water



REPORTING

Begins Jan. 1, 2025 and every year following for UWUO budget

Beginning Jan. 1, 2024 must report for previous fiscal year

- Residential water use
- CII DIM water use
- Losses



NON-FUNCTIONAL TURF

Non-function turf irrigation on CII banned by 2025

- Exemption for tree and perennial health
- Exemption for low water use turf w/ plant factor of 0.3 or less and actual water use is 40% or less of reference ET, includes HOA common areas

CII DIM VARIANCES

Must be 5% or more of water budgets

- Emergency event water use
- Recycled water use with high TDS
- Water for lakes or ponds to sustain wildlife as required by existing regulation

URBAN WATER USE OBJECTIVE (UWUO)

- California SB 606 and AB 1668 require the creation of an UWUO
- UWUO Components
 1. Residential – Indoor
 2. Residential – Outdoor (e.g., LAM work)
 3. Commercial, Industrial, Institutional (CII) – Outdoor
 4. Water Losses
 5. Approved Variances
 6. Potable reuse water incentive
- Must also have CII Performance Measures (separate from UWUO)