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GEI Consultants

Memo

To: Milasol Gaslan, Susan Beeson, and Michael Perez
Santa Ana Regional Water Quality Control Board

From: Hadi Tabatabaee, County of Orange Building Official

Cc: Chris Crompton, Jung-Tsun Yean, and Jian Peng, County of Orange

Date: February 9, 2018

Re: Response to comments regarding the draft Local Agency Management Plan (LAMP) for the unincorporated Orange County

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Below we have detailed responses to each comment received from both the Santa Ana and San Diego Regional Water Quality Control Boards, as submitted in the letter dated October 21, 2016. The responses below include clarifications that do not require revisions to the LAMP itself, as well as those that resulted in revisions which are referenced by section numbers. The most notable changes to the LAMP document since last review are within sections 3.2, 4.5, 4.6, and 5.0.

Santa Ana Regional Water Quality Control Board:

1. Section 3.2, 2015 Survey and Evaluation Update: Gaps and Future Needs: The County identified the need to update the 2002-2003 inventory of septic systems…Please identify a schedule for updating the inventory and indicate in Section 5, Annual Reporting that a status report will be provided annually.

   County Response: Section 5.0 has been updated reflecting the status report submitted annually. The County intends to initiate electronic tracking of new or replacement OWTS upon adoption of this LAMP guidance. The records collected 2002-2003 through 2017 will need to be transferred from hardcopy to electronic format and will be updated as time and staffing permits.

2. Section 4.1.8 High Density Areas for OWTS: Please revise the following statement to state: " ... Also, OWTS inspections will should be completed every five years within these areas to ensure that all functioning systems remain in working order and do not meet the guidelines of a system requiring corrective action under Tier 4."

   County Response: Section 4.1.8 has been revised.

3. Section 4.1.9, Limits to Parcel Size: Currently the County has a one-half acre lot size requirement for new OWTS. The County LAMP proposes to increase the lot size requirement from 0.5-acre to 1-acre size. Along with the written rationale for the smaller lot sizes than the 2.5 acres established in the OWTS Policy as stated in the San Diego Water Board comments, please include a map of the developable areas with the unincorporated county that would require OWTS.

County Response: Counts have been formulated and maps representing the parcels 0.5 – 2.5 acres in size within the unincorporated areas of the County have been attached. We also have performed analysis related to the parcels within this dataset that are further constrained as a result of setback and/or maximum slope requirements. The key piece that is currently missing is the number of parcels within this dataset that already have a structure on them and therefore OWTS or sanitary sewer is assumed to be installed and maintained. GEI is in the process of acquiring additional GIS layers from the County which will enable this analysis to be finalized. Once completed, these data can be provided to the Regional Board(s). Justification for the smaller minimum lot will likely be supported by this final analysis, preliminary data suggests that there are a number of undeveloped parcels <2.5 acres in size within unincorporated areas. Should sanitary sewer hook-up not be available these parcels/developments would need to install OWTS. The County's smaller minimum lot size is meant to provide flexibility for these undeveloped parcels, should conditions be deemed suitable by a Qualified Professional.

4. Section 4.1.9, Limits to Parcel Size: The last paragraph of this section states:" For OWTS within Orange County that pre-date the adopted standards outlined in this document, the County will appropriately document these areas in a comprehensive database and provide education and outreach materials to the property owners of these parcels in order to explain why improving their systems will benefit local water quality and public health. The County will also provide these property owners with a succinct guide that includes new requirements and the effective path to permitting and installing an updated OWTS." We support this approach, please include this as a reporting element in Section 5, Annual Reporting, as part of program status updates.

   County Response: This has been added to Section 5 – Annual Reporting.

5. Section 4.1.10, Areas with OWTS that Predate Adopted Standards, paragraph 5: There was a reference to the Central Coast Regional Board. Please revise.

   County Response: Section 4.1.10 (now 4.1.9) has been revised.

6. Section 4.2, Scope of Coverage: Please revise paragraph 1, sentence 2, to include "Any systems with project flows surpassing 10,000-gpd are required to obtain waste discharge requirements from the Santa Ana Regional or the San Diego Regional Board."

   County Response: Section 4.2 has been revised.

7. Section 4.2 Scope of Coverage – This paragraph also states that "Cesspool storage is not included within these guidelines and every effort should be made to phase out these systems in a timely manner." Please describe specific tasks and projected schedule to phase out cesspools and include as status report element in Section 5, Annual Reporting.

   County Response: Section 4.2 has been revised to include requirements and Section 5.0 also details a reporting element specific to status of existing systems.

8. Section 4.2.3 Education and Outreach for OWTS Owners: This section describes the County's plan for public outreach to inform property owners who currently have an OWTS and qualified contractors and maintenance companies involved in siting, designing, inspecting, and maintaining OWTS, of the LAMP requirements. Please include this as a status reporting element in Section 5, Annual Reporting.

   County Response: Section 5.0 has been revised to include.

9. Section 4.2.4, Septage Disposal: This section reported the results of a survey of 34 certified septage haulers in 2002 that are located within Orange County. The survey found that the volume pumped exceeded the total annual capacity of the Orange County Sanitation District and concluded that the surplus 4.8 million gallons per year must have been hauled to another Publicly Owned Treatment Works or treated in another way. Please provide an updated assessment of the septage generation and adequacy of disposal capacity as part of the annual report. Also, please include the following reporting elements in Section 5, Annual Reporting: Information on the volume, location of disposal, and hauler for all liquid waste disposal of septage.

   County Response: Updated information has been collected from OCSD, capacity is currently adequate to support existing and future septage from permitted wastehaulers throughout the County, updates to LAMP are included in Section 4.2.4.

10. Section 4.3, Minimum Local Agency Management Responsibilities: In addition to the San Diego Water Board comments to this section of the draft LAMP, please revise paragraph 2, sentence 2 as follows: The monitoring protocol and results will be kept within the OWTS database with the County of Orange and used to generate annual reports to the San Diego and Santa Ana Regional Boards.

    County Response: Section 4.3 has been revised.

11. Section 4.3.2, Water Quality Assessment Program: Section 4.1.8 of the draft LAMP reported that the high density area within Yorba Linda has the greatest system density at 56 OWTS per square mile. Please explain why the Santa Ana River downstream of the City of Yorba Linda is not identified in the list of surface water to focus extensive water quality data collection in order to closely monitor the impacts of current OWTS on water quality.

    County Response: Water quality monitoring locations have been added to account for any gaps in the current program. Discrete monitoring locations have been added within the Santa Ana River downstream of Yorba Linda. A map detailing all OCSD groundwater well monitoring locations within the County is attached, data from OCSD monitoring will be shared with the County. Additional (surface) locations will be added on an as-needed basis, should failing systems be detected.

12. Section 4.3.2, Water Quality Assessment Program: Consistent with Section 9.2.8 of the OWTS Policy, please describe consideration given to the Salt Nutrient Management Plan for Orange County areas within Region 8.

County Response: Consideration was given, additional information has been included in Section 4.1.1.1 specific to the SNMP. The unincorporated regions of the County where OWTSs currently exist should not be in conflict with any of the groundwater basins designated as priority basins by the State Water Board's Groundwater Ambient Monitoring and Assessment (GAMA) program.

San Diego Regional Water Quality Control Board

1. Section 4.1.9 of draft LAMP: The LAMP increases the minimum lot size for new properties proposing to use OWTS from 0.5 acres to 1 acre. Section 7.8, Table 1 of the OWTS Policy establishes a minimum lot size of 2.5 acres in areas with an annual average rainfall between 0 to 15 inches. The LAMP should be revised to include a written rationale that justifies using smaller minimum lot sizes than those established in the OWTS Policy. It is the understanding of the San Diego Water Board that the lot size densities specified in the OWTS Policy are the minimum lot sizes required to ensure that an OWTS discharge will not cause the concentration of nitrate in groundwater to exceed 45 milligrams per liter.

   County Response: Reference is now to Section 4.1.8. Counts have been formulated and maps representing the developable parcels 0.5 – 2.5 acres in size within the unincorporated areas of the County has been attached.

2. Section 4.3 of draft LAMP: Please include an organizational chart or further clarify and describe the roles of the various departments of the County (i.e., OCPW, Orange County Health Care Agency, Orange County Development Services, etc.) in the permitting, installation, and maintenance and oversight of new and existing OWTS.

   County Response: Section 4.3, Table 6 has been added.

<u>Comments on Implementation of Specific Sections of the OWTS Policy</u>

1. Section 9.2.4 of the OWTS Policy: Please revise the draft LAMP to include any educational, training, certification, and/or licensing requirements that will be required of OWTS service providers, site evaluators, designers, installers, pumpers, maintenance contractors, and any other person relating to OWTS activities pursuant to Section 9.2.4 of the OWTS Policy. Also revise the draft LAMP to include OWTS service provider qualification requirements.

   County Response: The County utilizes the term "Qualified Professional" to indicate an individual that possess the licenses, certifications, training, etc. to perform the required work. The definition according to the State Board (included in Section 6.0 of the LAMP): *A Qualified Professional is an individual licensed or certified by a State of California agency to design OWTS and practice as professionals for other associated reports, as allowed under their license or registration. Depending on the work to be performed and various licensing and registration requirements, this may include an individual who possesses a registered environmental health specialist*

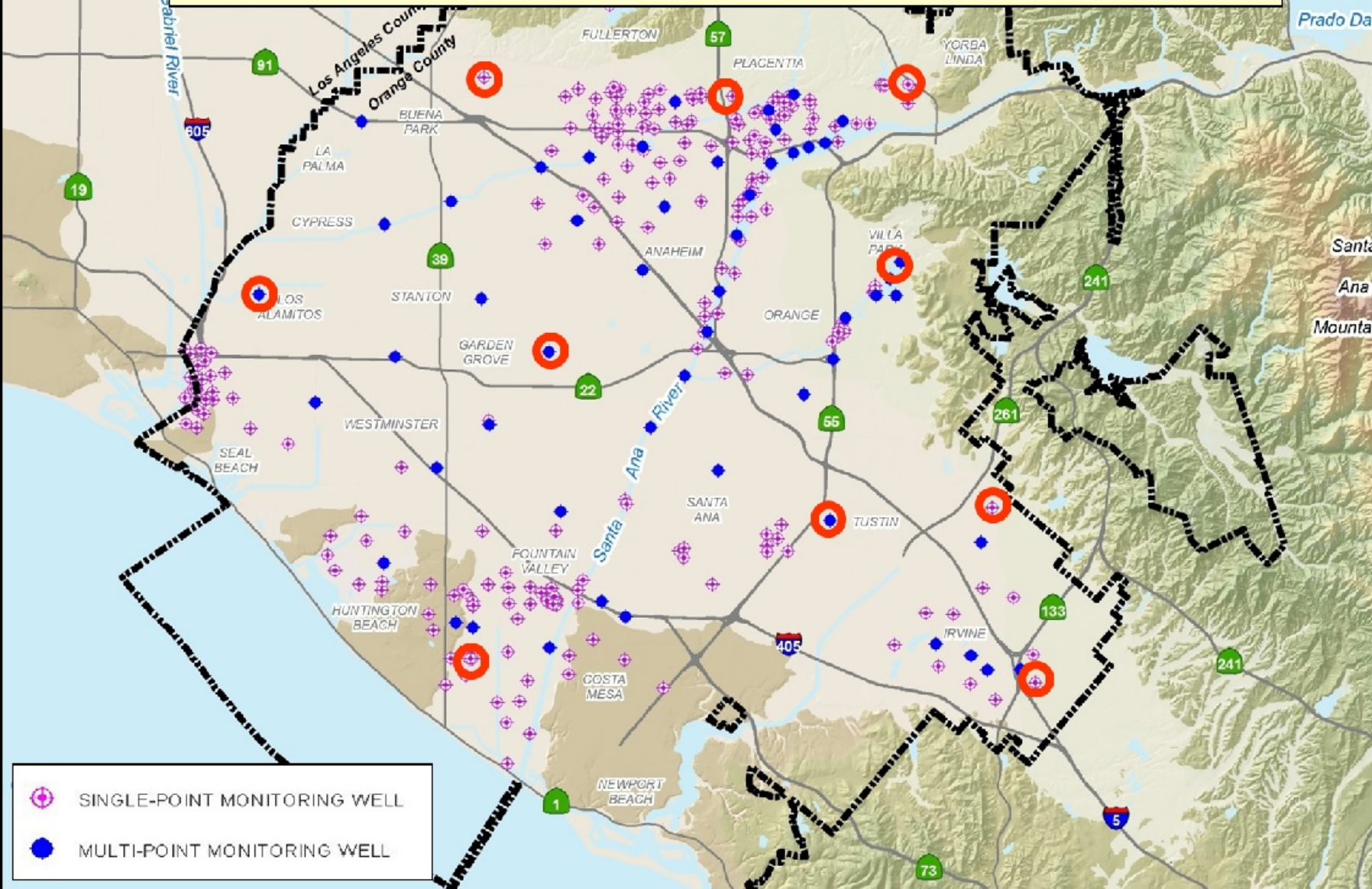
certificate or is currently licensed as a professional engineer or professional geologist. For the purposes of performing site evaluations, Soil Scientists certified by the Soil Science Society of America are considered Qualified Professionals.

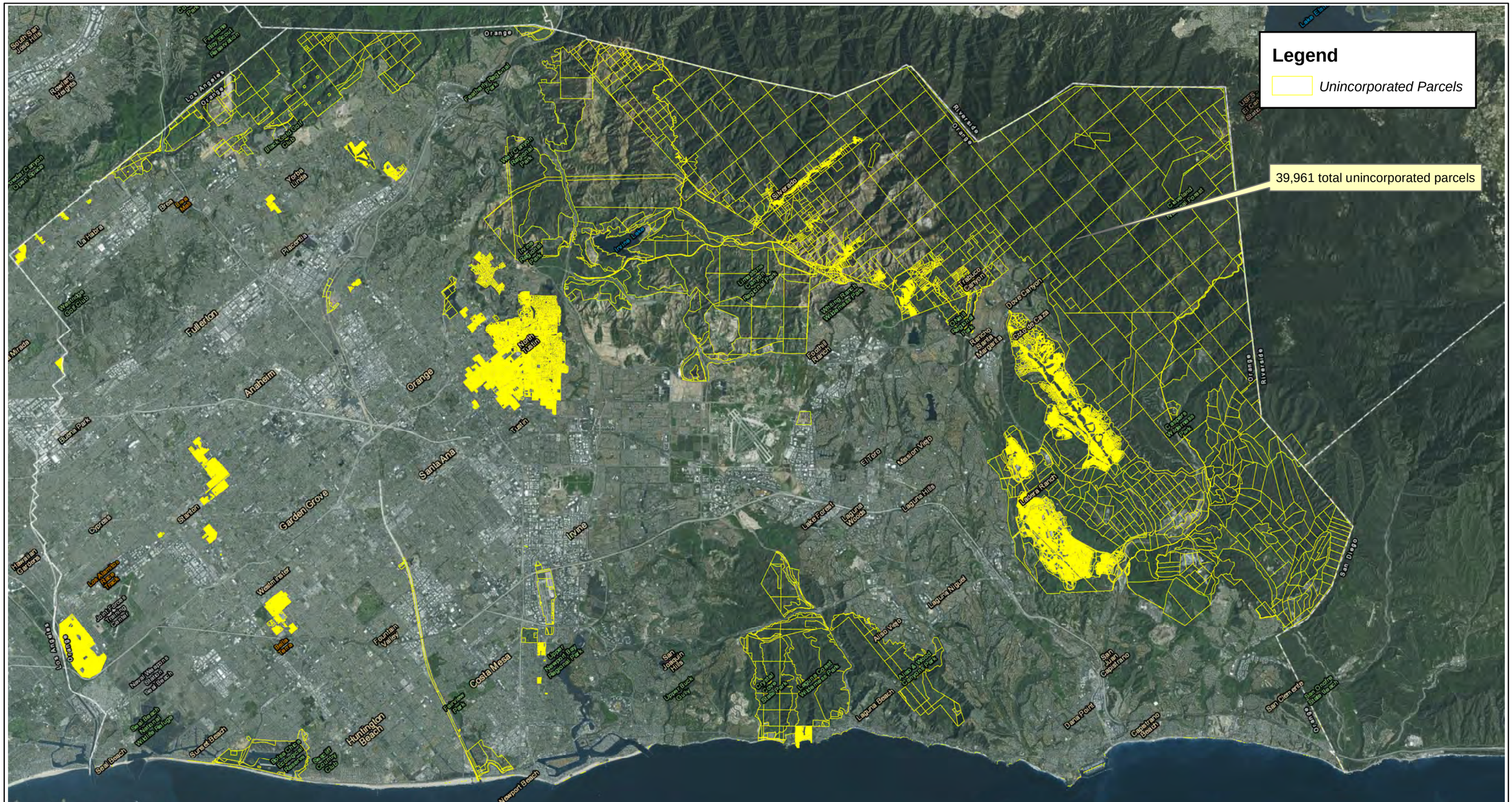
Let us know if this needs more detail.

2. Section 9.2.8 of the OWTS Policy: Please describe any consideration that was given to the implementation of South Orange County Wastewater Authority's Salt and Nutrient Management Plan for the San Juan groundwater basin in the development of the draft LAMP pursuant to section 9.2.8 of the OWTS Policy.

   County Response: Consideration was given, additional information has been included in Section 4.1.1.1 specific to the SNMP. The unincorporated regions of the County where OWTSs currently exist should not be in conflict with any of the groundwater basins designated as priority basins by the State Water Board's Groundwater Ambient Monitoring and Assessment (GAMA) program.

OCWD operates over 500 monitoring wells for water level and quality monitoring.





County of Orange Local Agency Management Plan

Orange County, California

Orange County Public Works

0 15,000 30,000 Feet

1 inch = 15,000 feet

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DRAFT - County of Orange Unincorporated Parcels

Project: 126380

Figure: 1

C:\Users\sprentice\Documents\Brent Run photos to SI\GIS\20180101_OrangeCounty_UnincoporatedParcels_AllParcels_11x17_Landscape.mxd

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

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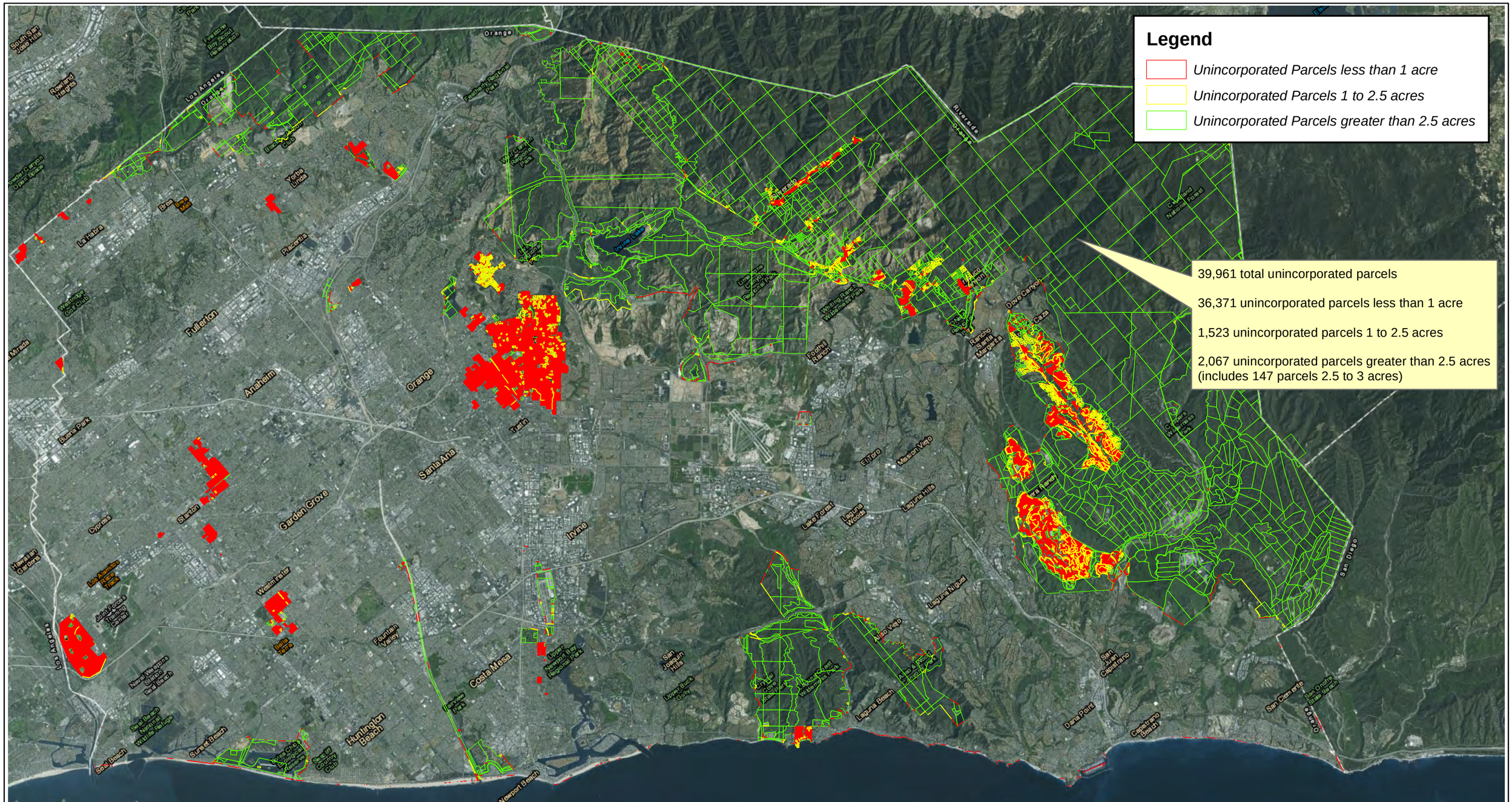

County of Orange Local Agency Management Plan

Orange County, California

Orange County Public Works

0 15,000 30,000 Feet

1 inch = 15,000 feet

GEI Consultants

DRAFT - County of Orange Unincorporated Parcels Selected by Parcel Size

Project: 126380

Figure: 2

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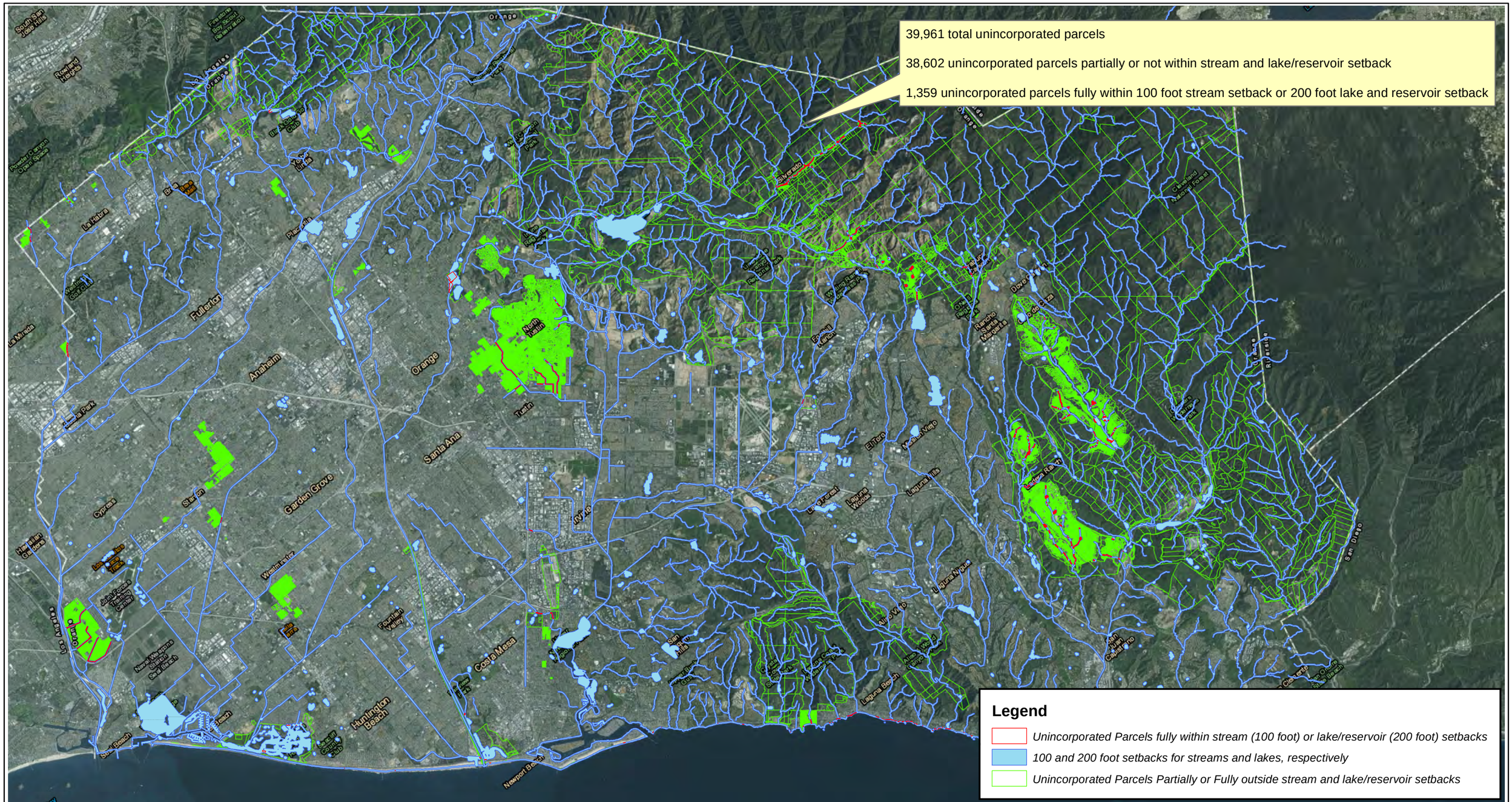

County of Orange Local Agency Management Plan

Orange County, California

Orange County Public Works

0 15,000 30,000 Feet

1 inch = 15,000 feet

GEI Consultants

DRAFT - County of Orange Unincorporated Parcels Selected by Waterbody Setback

Project: 126380

Figure: 3

C:\Users\sprentice\Documents\Brent Run photos to SI\GIS\20180101_OrangeCounty_UnincoporatedParcels_Setbacks_11x17_Landscape.mxd

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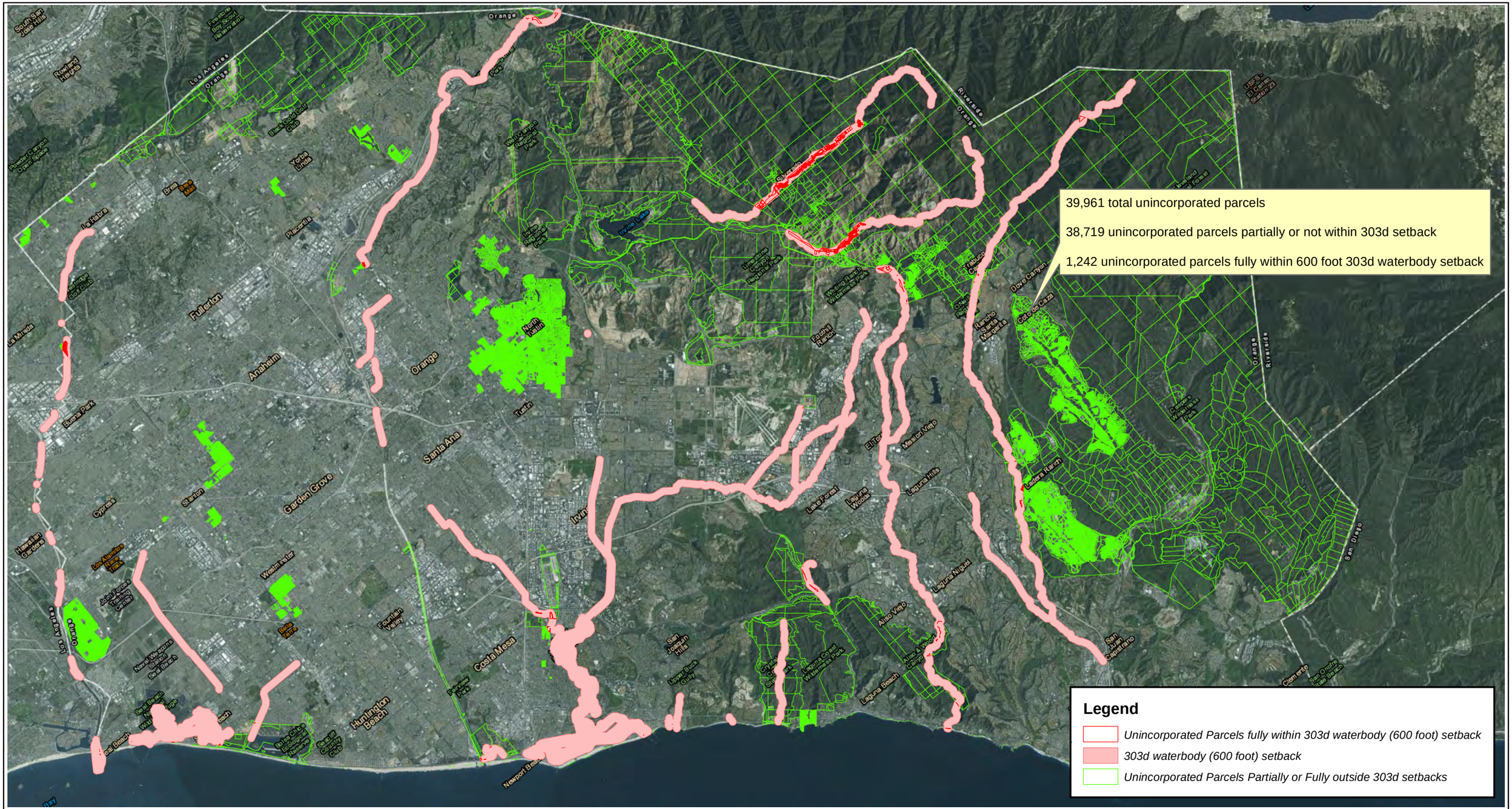

County of Orange Local Agency Management Plan

Orange County, California

Orange County Public Works

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1 inch = 15,000 feet

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DRAFT - County of Orange Unincorporated Parcels Selected by 303d Setback

Project: 126380

Figure: 4

C:\Users\sprentice\Documents\Brent Run photos to SI\GIS\20180101_OrangeCounty_UnincoporatedParcels_303dSetbacks_11x17_Landscape.mxd

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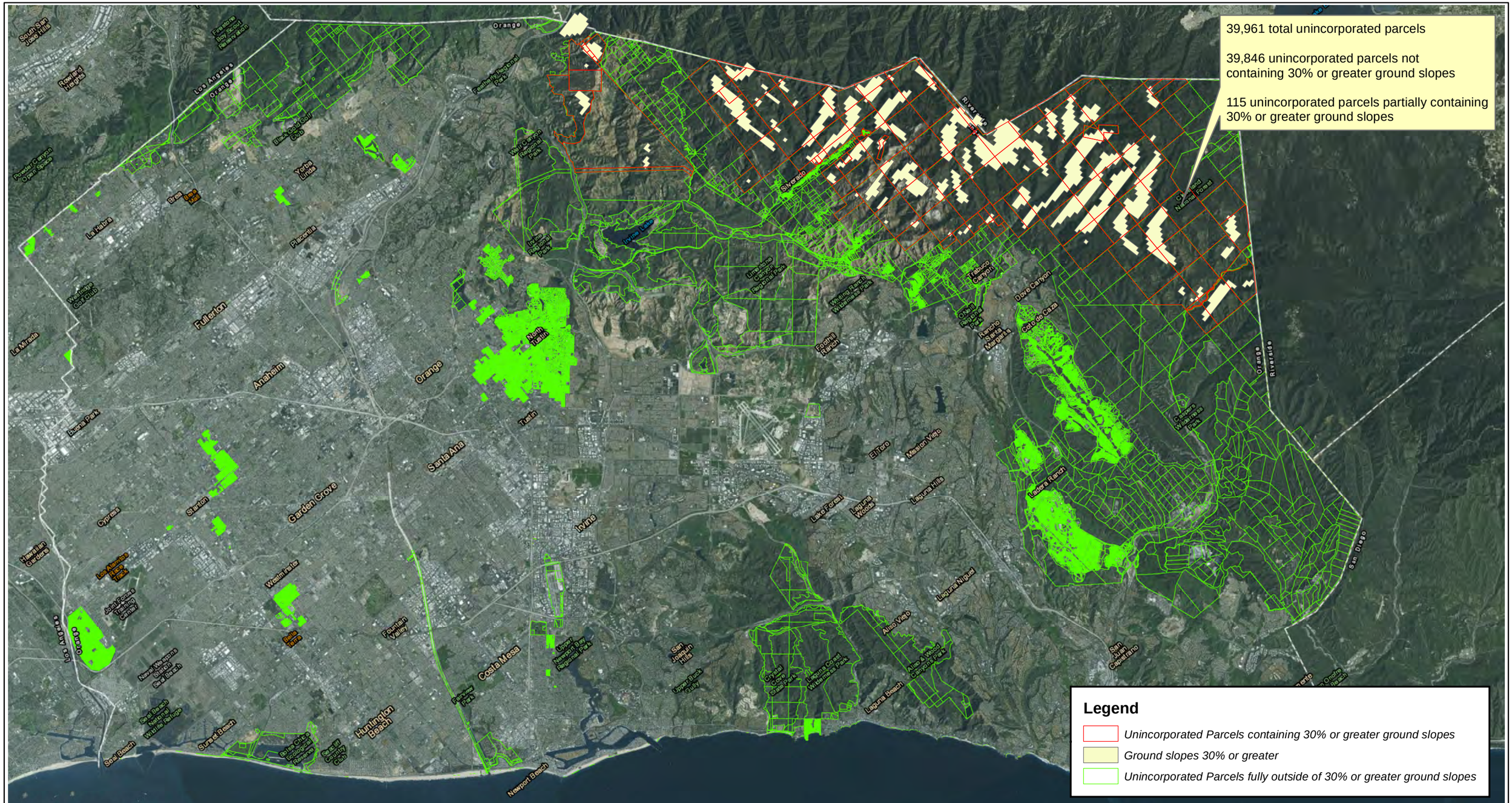

County of Orange Local Agency Management Plan

Orange County, California

Orange County Public Works

0 15,000 30,000 Feet

1 inch = 15,000 feet

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DRAFT - County of Orange Unincorporated Parcels Selected by Ground Slope

Project: 126380

Figure: 5

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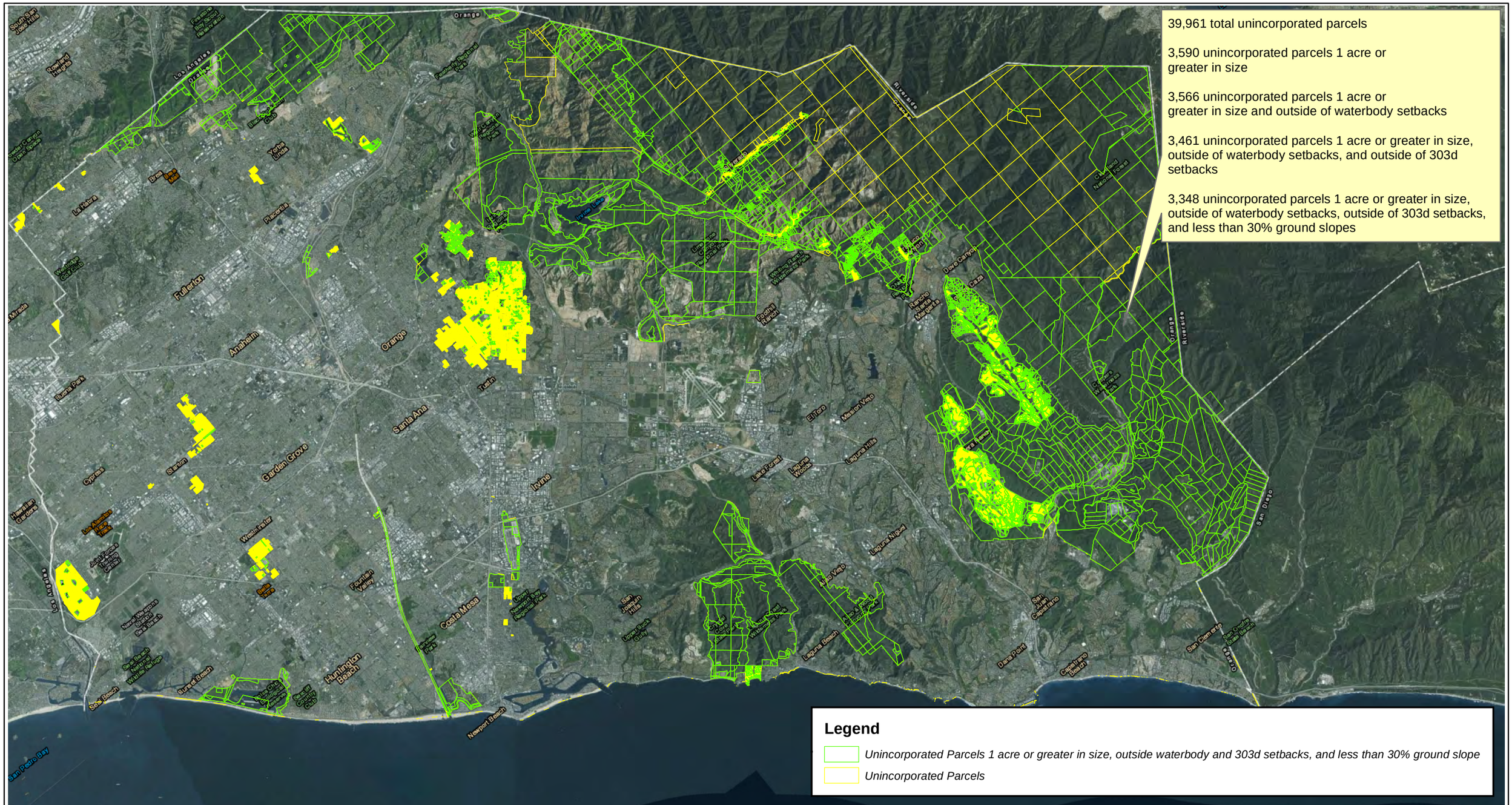

County of Orange Local Agency Management Plan

Orange County, California

Orange County Public Works

0 16,000 32,000 Feet

1 inch = 16,000 feet

GEI Consultants

DRAFT - County of Orange Unincorporated Parcels Selected by Parcel Size, Waterbody Setback, 303d Setback, and Ground Slope

Project: 126380

Figure: 6

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