



One Water & Stewardship Committee

Update on Metropolitan's Activities on Non-Functional Turf

Item 6d

April 10, 2023

Non-Functional Turf (NFT) Efforts

Advancing Regional Non-functional Removal

- Incentives-based
 - Grants
- Sample ordinance / Board resolution
 - Passed in 2022
- New water allocation methodology for NFT in drought emergency
 - Data gathering underway
- State legislation
 - Part of 2023 legislative strategic plan

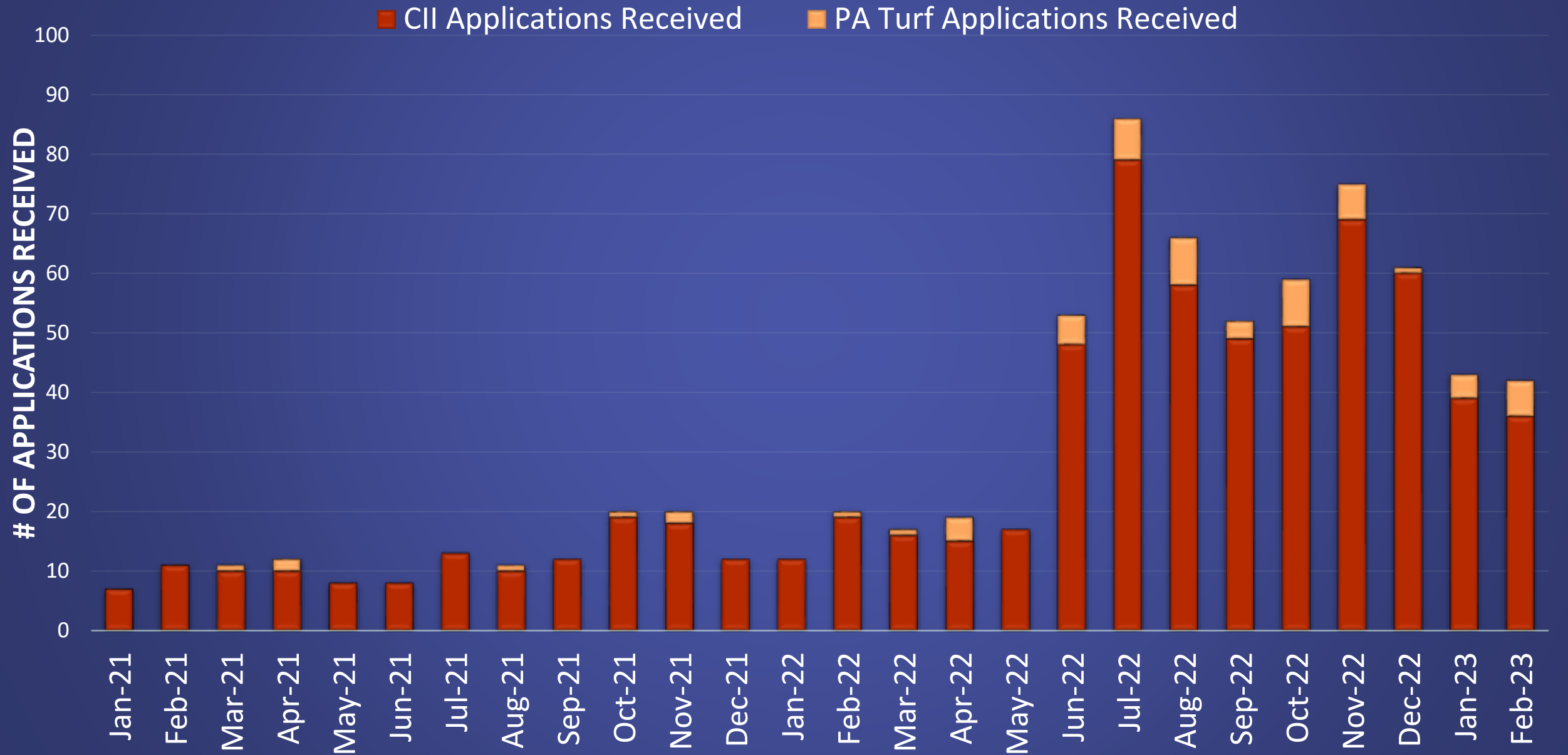
Non-functional Turf Removal Incentives

Turf Replacement Program Incentive Structure Change

Potential Increase in Turf Replacement Incentive

- \$4 million in grants received to increase incentive
 - CII - \$3 sq.ft.
 - Funding exhausted within 30 days
 - Public Agency - \$4 sq.ft.
- Continue to seek outside funding to achieve effort

CII and Public Agency Turf Replacement Applications Received (2021-2023)



Non-functional Turf Ordinance Development

Non- Functional Turf Ordinance Development

What Did Metropolitan do to Encourage Ordinance Adoption?

- Cities have water efficiency ordinances
 - Most have permanent ban section
- Metropolitan provided sample language to be added
- Metropolitan Board resolution encouraging adoption of ordinance language

Planetscape AI Turf Dashboard

Planetscape AI Turf Dashboard

Understanding Turf Prevalence in MWD Service Area

- Utilize turf dashboard development by Planetscape AI for future planning
 - How much turf is there?
 - Where is it located?
 - How much is really NFT?
- Second year agreement to refine dashboard and add retailer data

Approximately 9.5 Billion Square Feet of Established Turf within MWD service area

Land Cover Platform

This system provides an interactive series of tools for program officers to estimate the amount of land cover in a service area

Total Non-Functional Turf*

1.18B sqft

*includes industrial, commercial, utility, facilities and general office

Total Functional Turf*

8.3B sqft

*includes all other land uses except open space, vacant, agriculture, or protected land

New Users

Home

Water conservation remains the most cost-efficient means to reduce water consumption.

In response this insights and analysis platform was created to provide a definitive baseline of non-functional turf in Metropolitan's service area, providing estimates by member agency and land use. These estimates allow program officers to test how different scenarios will meet the expected outcome and budget of a non-functional turf removal program.

The platform contains a series of interactive dashboards providing access to aerial imagery, land cover classifications and land uses. By selecting what land uses are non-functions (e.g commercial, industrial and utility), users can interactively query the amount of turf in those areas as well as what parcel groups contain the most turf.

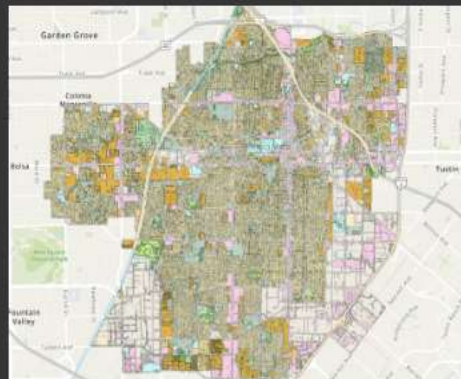
Once those land uses are selected, the dashboard calculates the amount of turf in those areas as well as what parcel groups contain the most turf. These can be investigated on the center map or the results can be downloaded as a CSV.



Targeted Turf Removal Program

What is the Dashboard?
How to use this application.

Agencies



Land Cover by Agency.

Metropolitan



Service-wide stats and analysis.

Information

Data|Decisions
IMPACT.

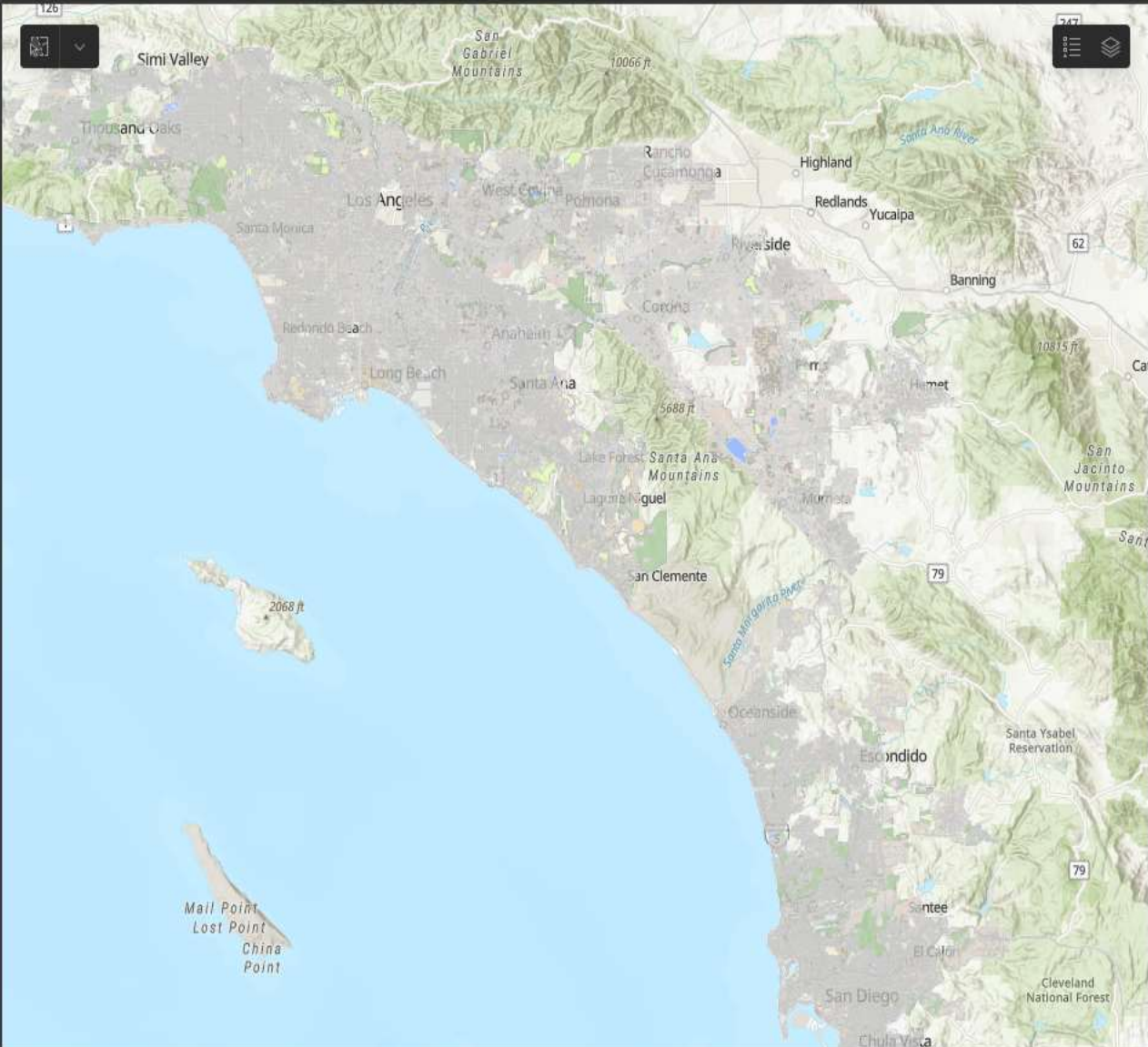
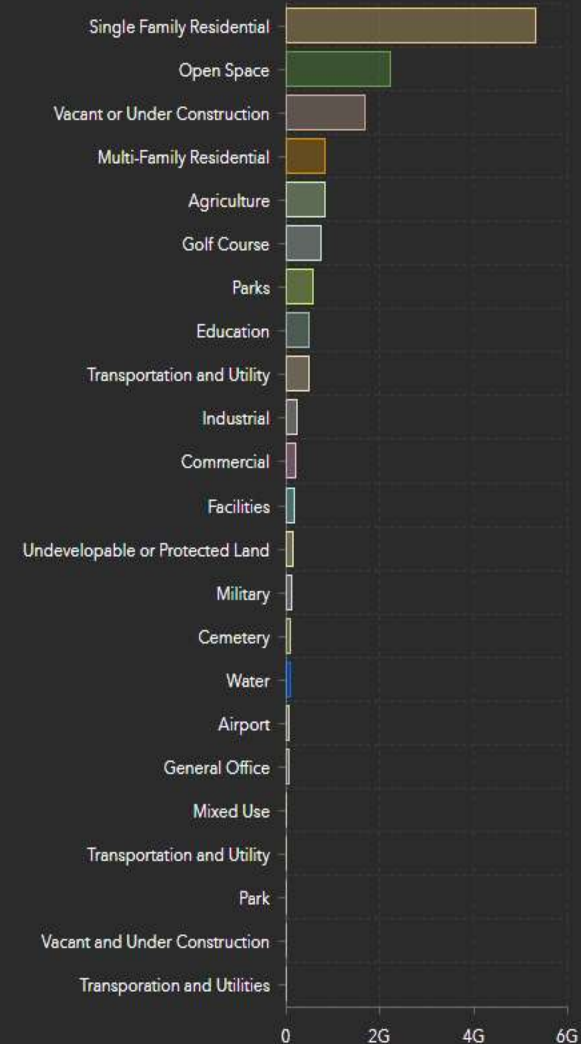
Learning, understanding, and analyzing data to inform and impact decisions.



Information on Sources
and Methodology.

Output Tables Listed in Order of Highest Use

Step 1: Select Land Uses



Step 2: Explore by Parcel Group

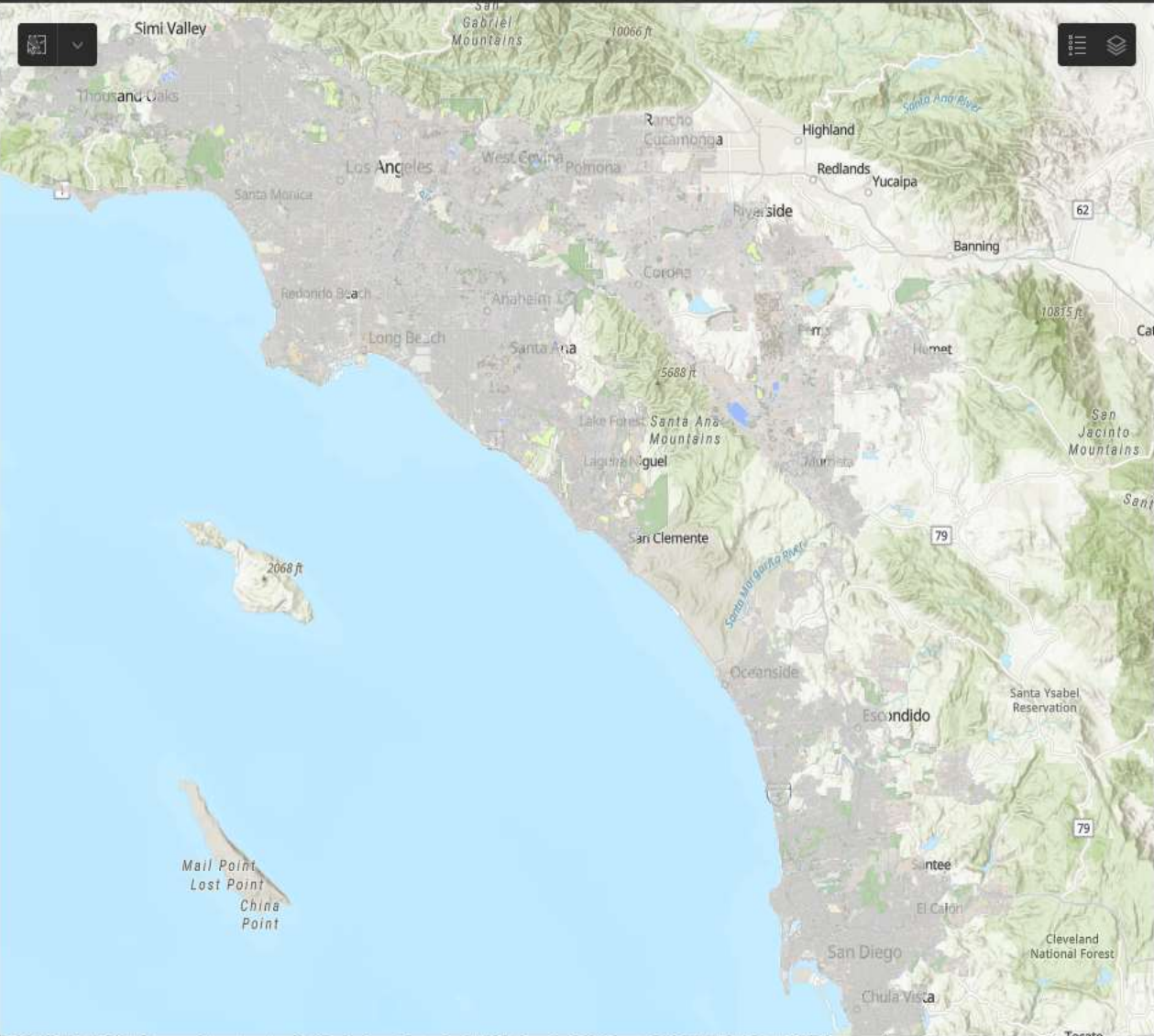
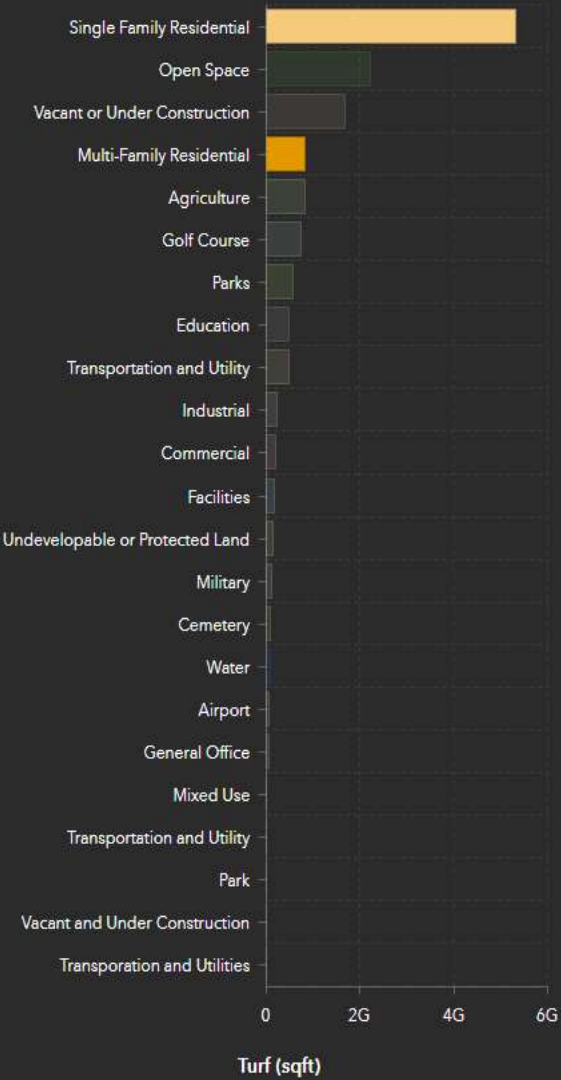
Open Space #250192:	119,731,873
MWDOC	
Open Space #454528:	106,460,857
Los Angeles	
Open Space #204687:	73,161,010
Inland_Empire	
Open Space #105611:	38,656,918
Calleguas	
Open Space #169220:	37,116,382
Eastern	
Vacant or Under Construction #216829:	30,938,996
Inland_Empire	
Single Family Residential #269069:	24,123,306
MWDOC	

Step 3: Output Table

Land Use	Turf (sqft)
Single Family Residential	5,325,956,681
Open Space	2,207,636,385
Vacant or Under Construction	1,667,992,205
Multi-Family Residential	823,057,521
Agriculture	811,175,130
Golf Course	726,501,759
Total	14,316,701,007

Over Half of Established Turf is on Residential Property

Step 1: Select Land Uses



Esri, CGIAR, USGS | County of Los Angeles, California State Parks, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management... Powered by Esri

Overview | Map legend | Turf By Parcel Group

Step 2: Explore by Parcel Group

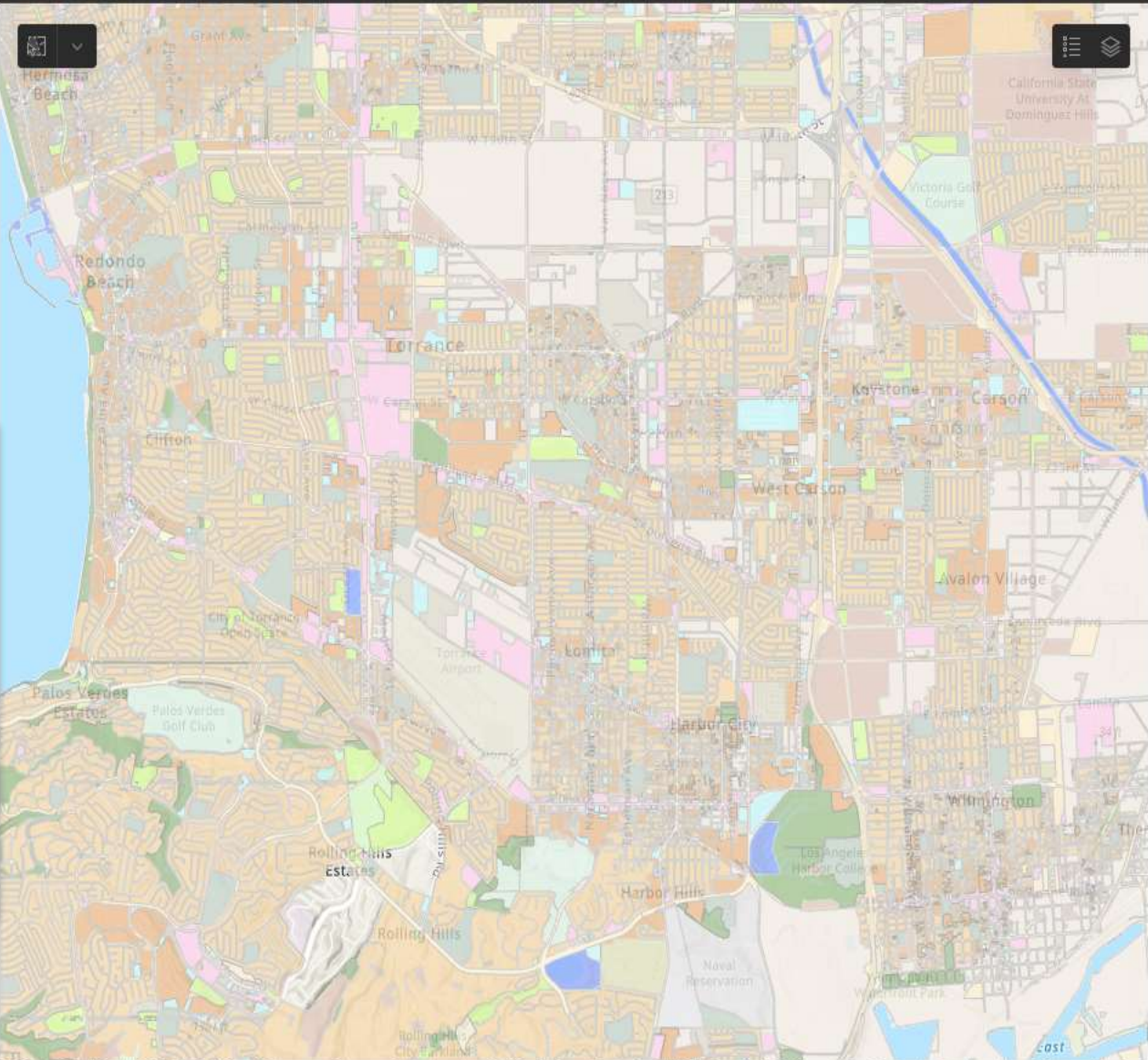
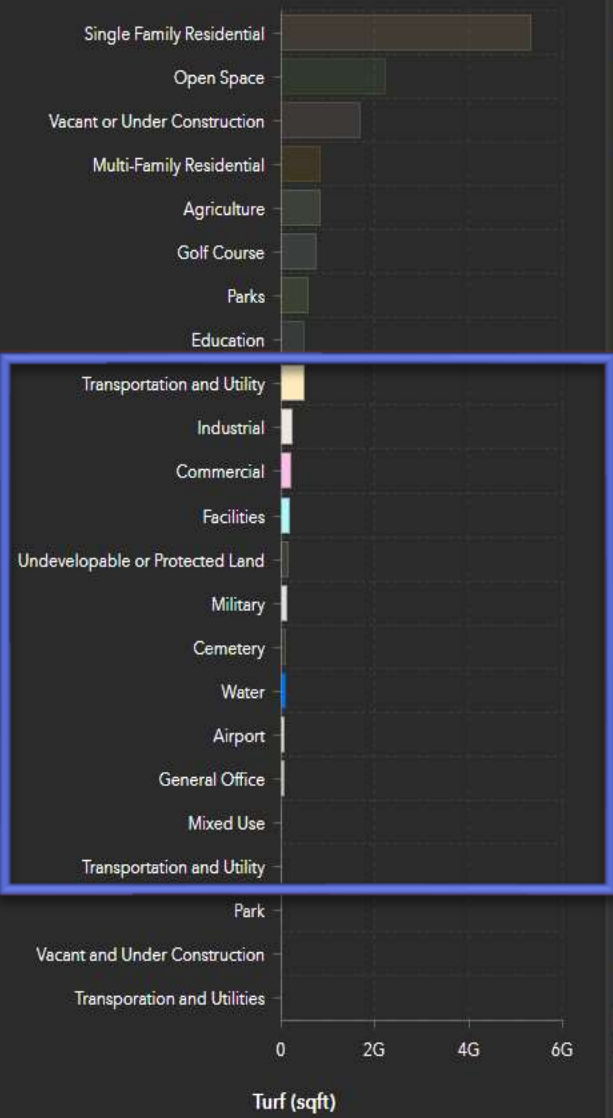
Single Family Residential #269069:	24,123,306
MWDOC	
Single Family Residential #56102:	20,787,161
SDCWA	
Single Family Residential #253456:	14,680,166
MWDOC	
Single Family Residential #267514:	12,613,166
MWDOC	
Single Family Residential #295681:	12,124,626
Three_Valleys	
Single Family Residential #64287:	10,828,372
SDCWA	
Single Family Residential #267655:	10,005,397
MWDOC	

Step 3: Output Table

Land Use	Turf (sqft)
Single Family Residential	5,325,956,681
Multi-Family Residential	823,057,521
Total	6,149,014,202

Category Selection Allows for Customized NFT Calculations

Step 1: Select Land Uses



Step 2: Explore by Parcel Group

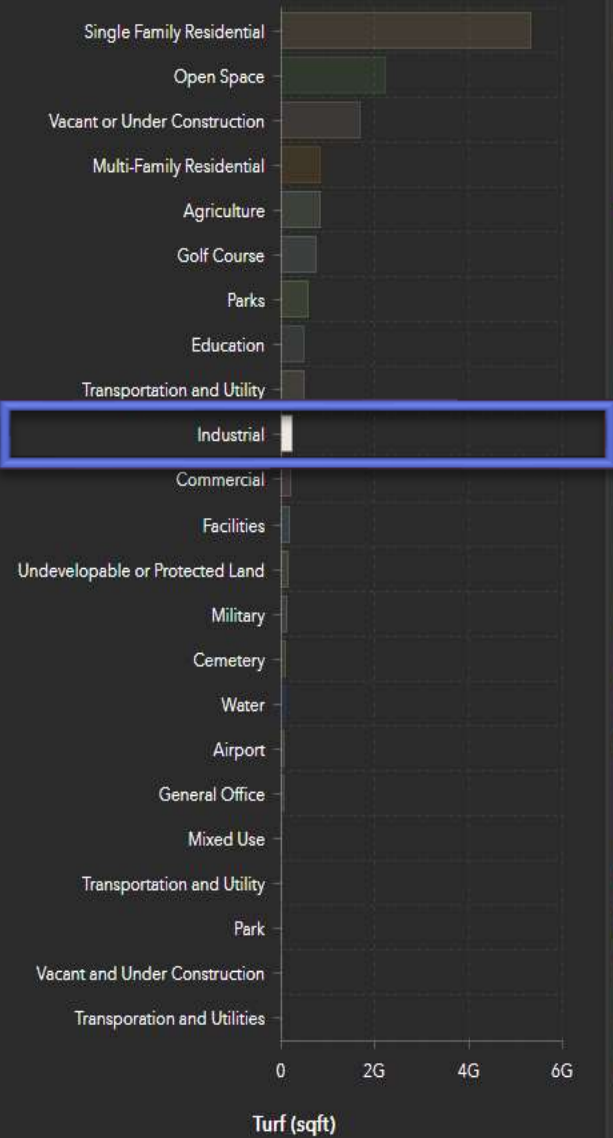
Military #13737:	21,809,147
SDCWA	
Airport #352956:	12,359,507
Western	
Military #242456:	11,160,857
MWDOC	
Military #242450:	10,522,406
MWDOC	
Airport #352960:	7,787,947
Western	
Military #242459:	7,787,822
MWDOC	
Airport #234820:	7,682,137
MWDOC	

Step 3: Output Table

Land Use	Turf (sqft)
Transportation and Utility	480,328,467
Industrial	238,124,812
Commercial	209,506,157
Facilities	180,594,546
Military	105,201,828
Water	86,343,649
Total	1,456,661,353

Parcel Groups Listed by Turf Square Footage

Step 1: Select Land Uses



Esri, NASA, NGA, USGS, FEMA | Esri Community Maps Contributors, City of West Covina, County of Los Angeles, California State Parks, © OpenStreetM... Powered by Esri

Overview Map legend Turf By Parcel Group

Step 2: Explore by Parcel Group

Industrial #322807: 4,733,728
Upper_San_Gabriel

Industrial #330001: 1,764,274
West_Basin

Industrial #97488: 1,428,845
Calleguas

Industrial #356639: 1,366,750
Western

Industrial #13326: 1,288,166
SDCWA

Industrial #416017: 1,139,733
Los Angeles

Industrial #356805: 1,098,409
Western

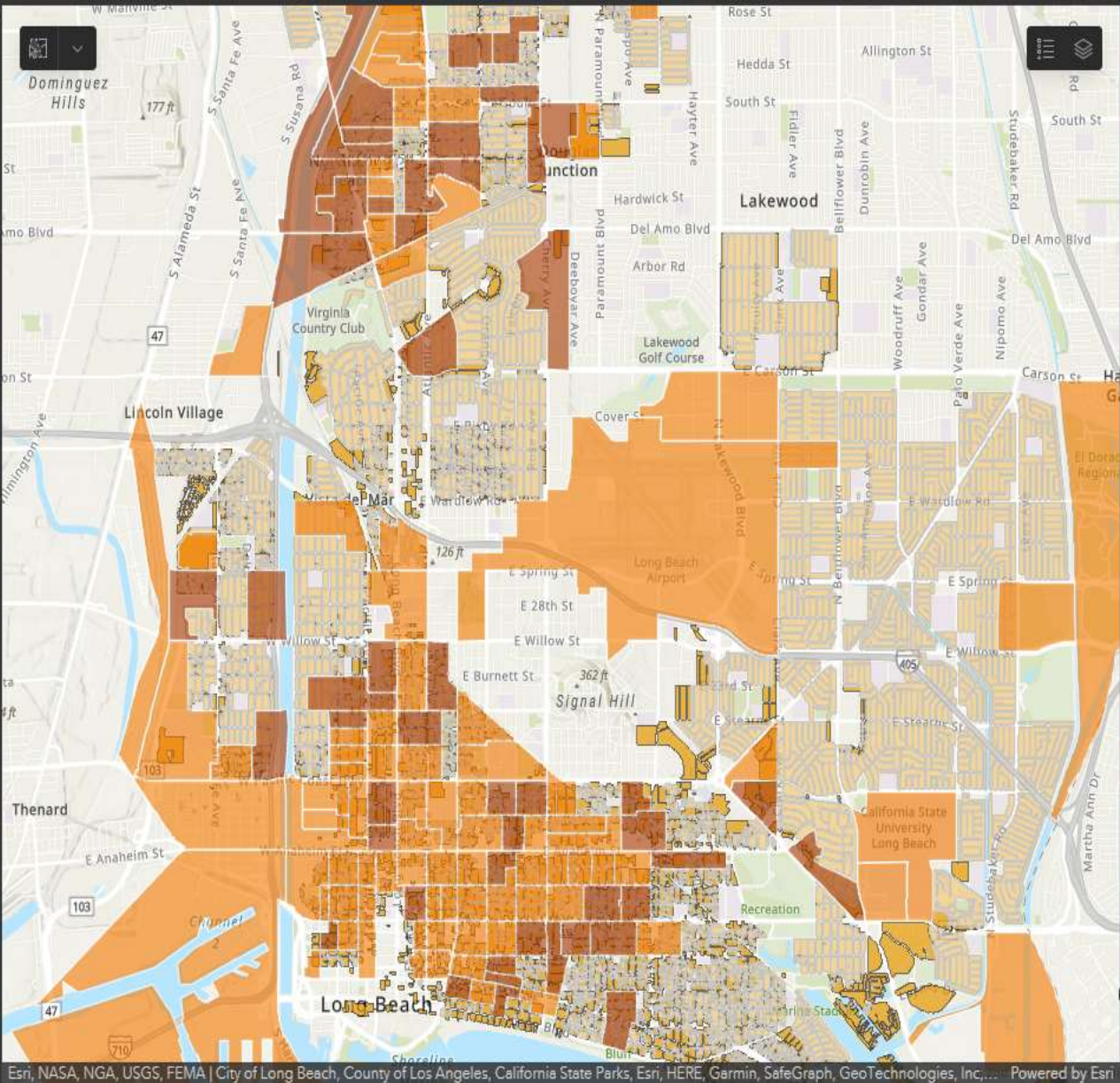
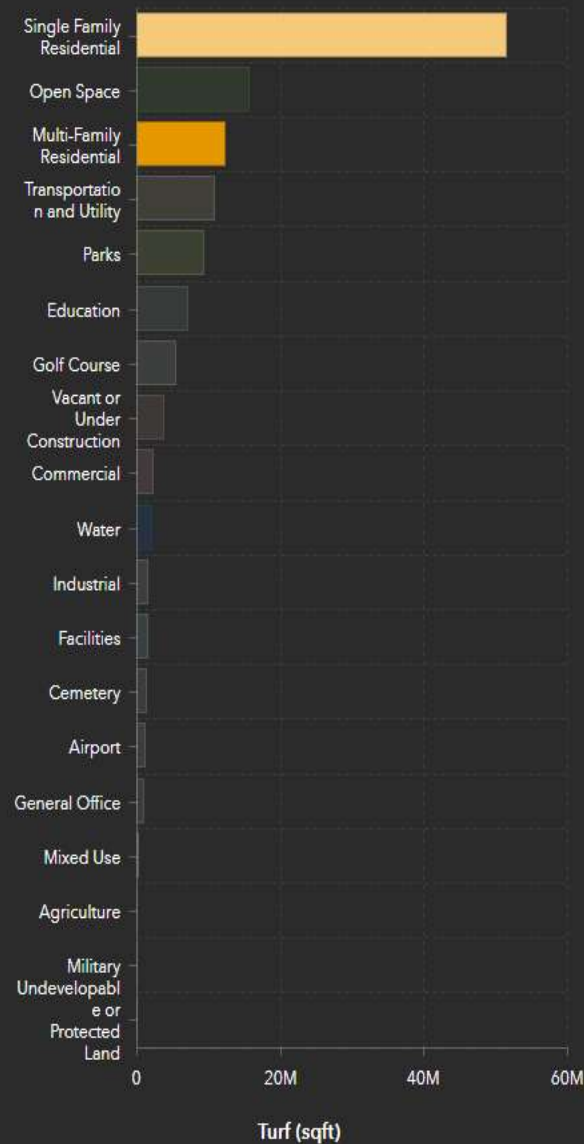
Step 3: Output Table

Land Use	Turf (sqft)
Industrial	4,733,728
Total	4,733,728



Underserved Community Overlay Available

Step 1: Select Land Uses



Step 2: Explore by Parcel Group

- Single Family Residential #12175: 316,851
- Multi-Family Residential #3831: 209,686
- Single Family Residential #13174: 205,623
- Multi-Family Residential #6575: 178,044
- Single Family Residential #13175: 169,693
- Single Family Residential #12185: 162,915
- Single Family Residential #12752: 161,773
- Multi-Family Residential #5922: 157,260
- Multi-Family Residential #5191: 152,224
- Single Family Residential #12203: 101,893
- Single Family Residential #10351: 99,617

Step 3: Output Table

Land Use	Turf (sqft)
Single Family Residential	51,415,392
Multi-Family Residential	12,280,605
Total	63,695,997

Legislation to Ban Watering of Non-Functional Turf

Non- Functional Turf Legislation

AB 1572

- Introduced by Assembly Member Friedman
- Bans the use of potable water for the irrigation of NFT on CII properties
 - Requires SWRCB to develop compliance and certification procedures
 - Requires annual compliance audits for two hydrologic regions
- NFT is defined as turf not designated by a property owner or government agency for recreational use or public assembly

Next Steps

- Continue to seek outside funding for turf replacement incentives
- Continue to promote draft ordinance language to member agencies and retailers
- Continue work with Planetscape AI to refine turf dashboard
- Discuss possible support of AB 1572 with Board and member agency staff

