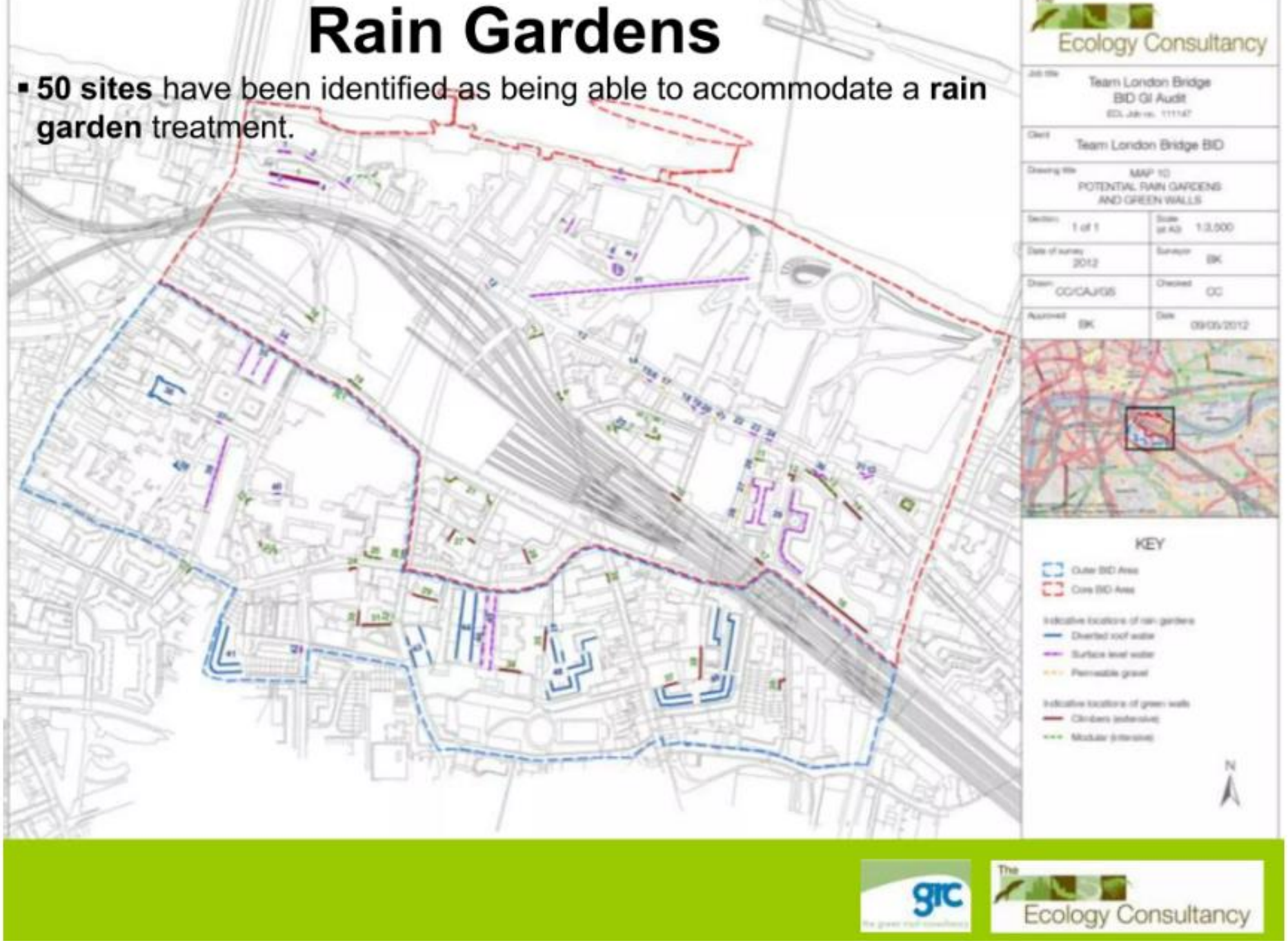
YAĞMUR SUYU VE SEDİMAN YÖNETİM PLANLARI (PEYZAJ DRENAJ PLANI)

Prof. Dr. Şükran Şahin


CHESAPEAKE BAY DRAINAGE

Rain Gardens

- **50 sites** have been identified as being able to accommodate a **rain garden** treatment.



https://greeninfrastructureconsultancy.com/green-infrastructure-social-housing/

ESTATE

A. MARY HOUSE DETAIL

1. Green roofs

Extensive green roof to the training centre and pram shed roofs

2. Hybrid green wall

A hybrid green wall to the end of Mary House combining a vertical rain garden (plants watered with rainwater), and climbing plants.

3. Grass swale

In times of heavy rainfall, rainwater will overflow from the base of the green wall (2) and be redirected into a grassy swale behind Mary House. Some water will infiltrate into the ground; the rest will flow to a shallow basin (4).

4. Grass basin

A shallow grass basin at the end of the swale will temporarily store water overflowing from the swale and allow it to infiltrate into the ground or pass back into the sewer.

5. De-paving

Paving slabs taken up to create new plant beds allowing more rain water to infiltrate into the ground.

6. Roadside rain Garden

A new plant bed will take rain water runoff from the road, allowing water to infiltrate into the soil. At times of high rainfall, water will overflow back into the sewer system.

7. Tree planting

A new tree will reinforce the tree line along the estate boundary and provide dappled shade in this area of hard standing.

isting planting
oposed ground-vel planting
oadside rain rden
Grass swale
Grass basin
Grass
Downpipe
Overflow to sewer
Water movement

N

ABC Waters Management Strategy

SINGAPUR

Traditional stormwater management

ABC Waters management strategy

ABC

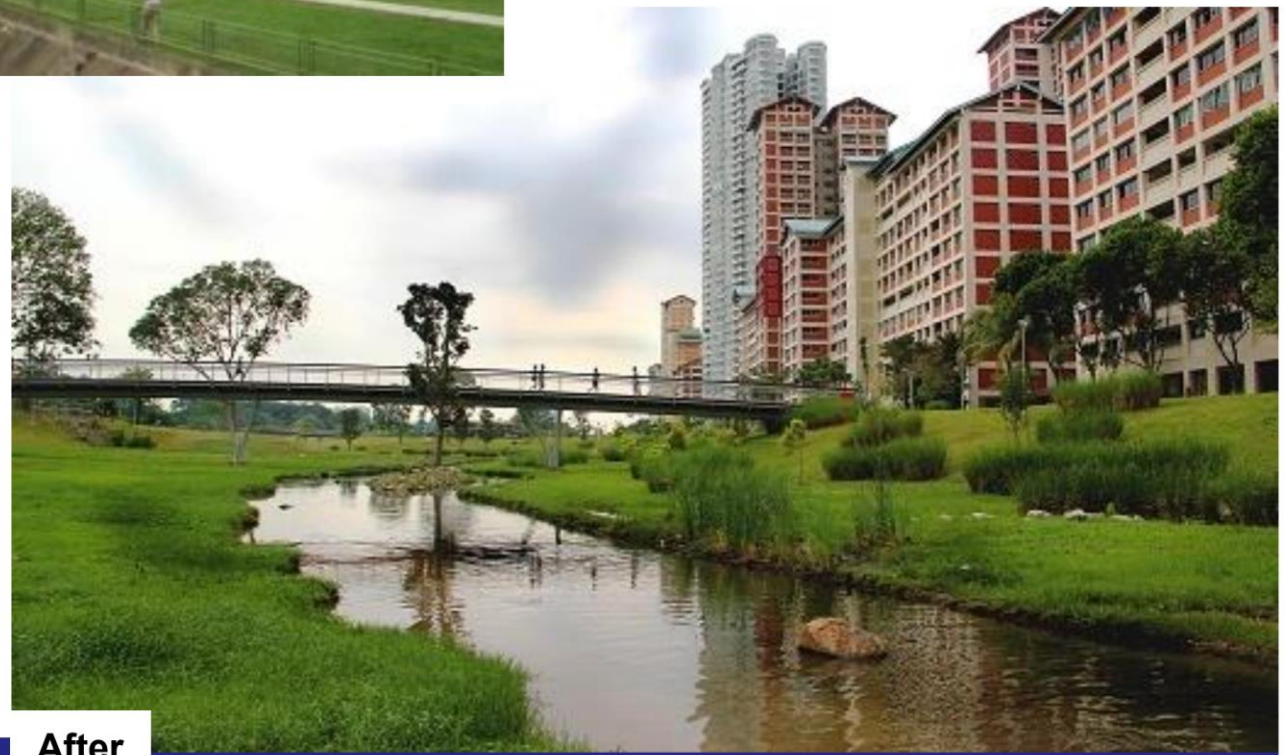
Water for All : Conserve, Value, Enjoy

PUB

ABC Waters programme

Active, Beautiful, Clean Waters: Kallang River @ Bishan-Ang Mo Kio Park

Before



After

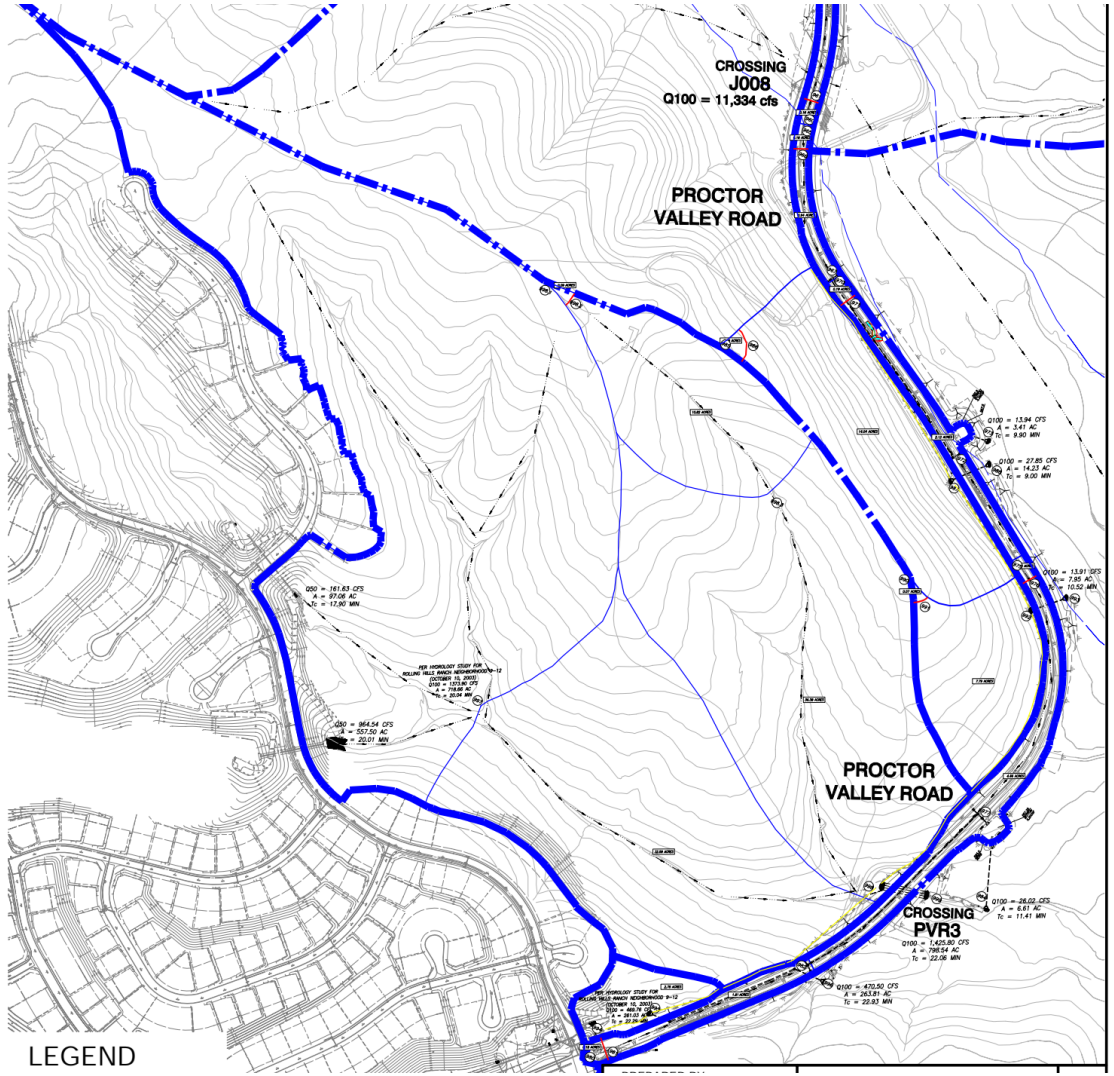
ABC Active, Beautiful, Clean Waters for All

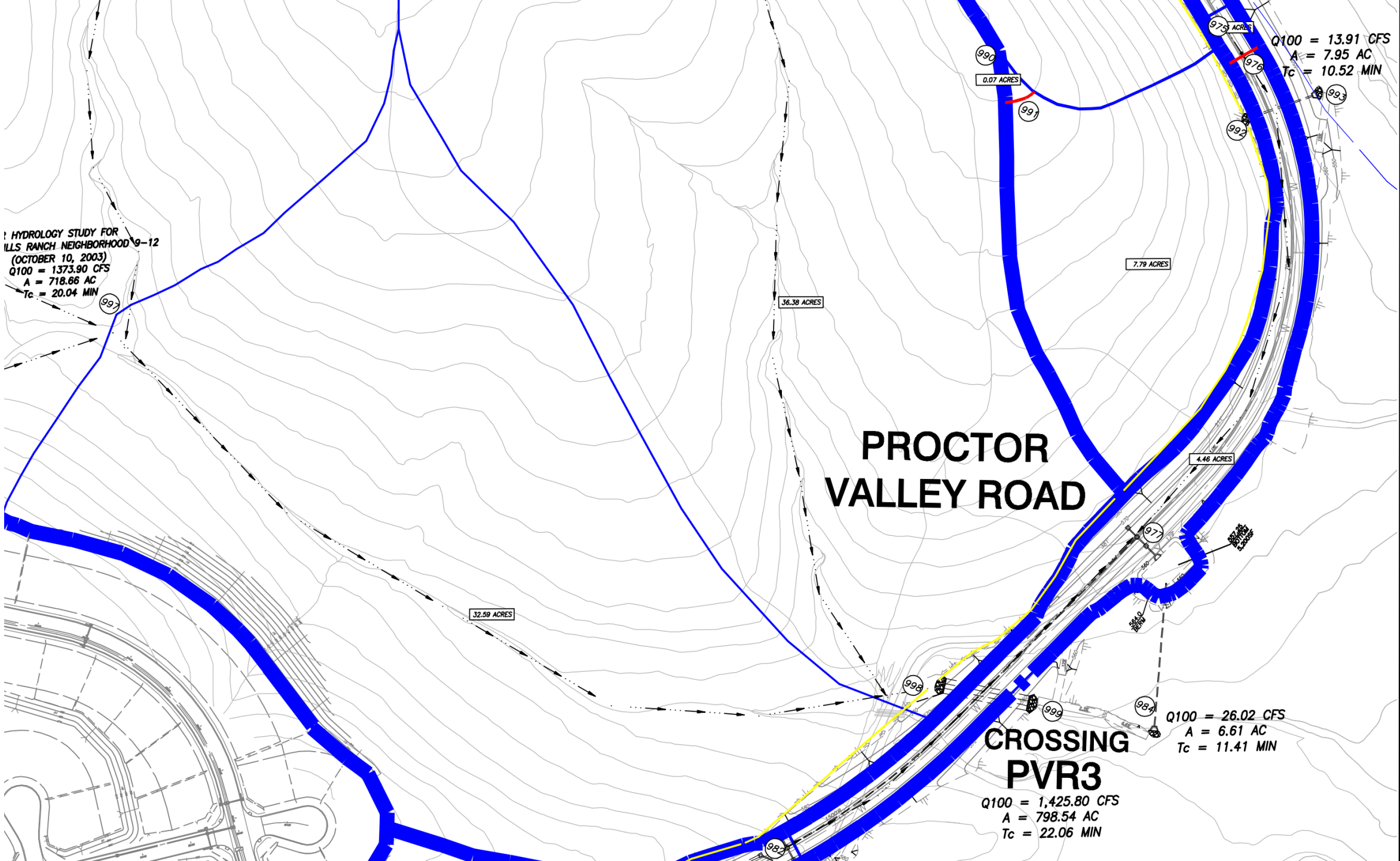
Water for All : Conserve, Value, Enjoy


N
Rolling Hills Ranch
86 m
Image Landsat / Copernicus
Google Earth
1985
Görüntü Tarihi: 11/18/2018 11 S 504828.65 d D 3613904.43 m K yükseklik 220 m göz hizası 562 m


N
Image Landsat / Copernicus
244 m
Google Earth


Rolling Hills Ranch
449 m
Google Earth
1985
Görüntü Tarihi: 11/18/2018
11 S 505030.12 d D 3613475.20 m K yükseklik 223 m
göz hizası 2.32 km


CROSSING
J008
Q100 = 11,334 cfs
PROCTOR
VALLEY ROAD
PROCTOR
VALLEY ROAD
CROSSING
PVR3
Q100 = 1,425.80 CFS
A = 796.54 AC
Tc = 22.06 MIN
LEGEND

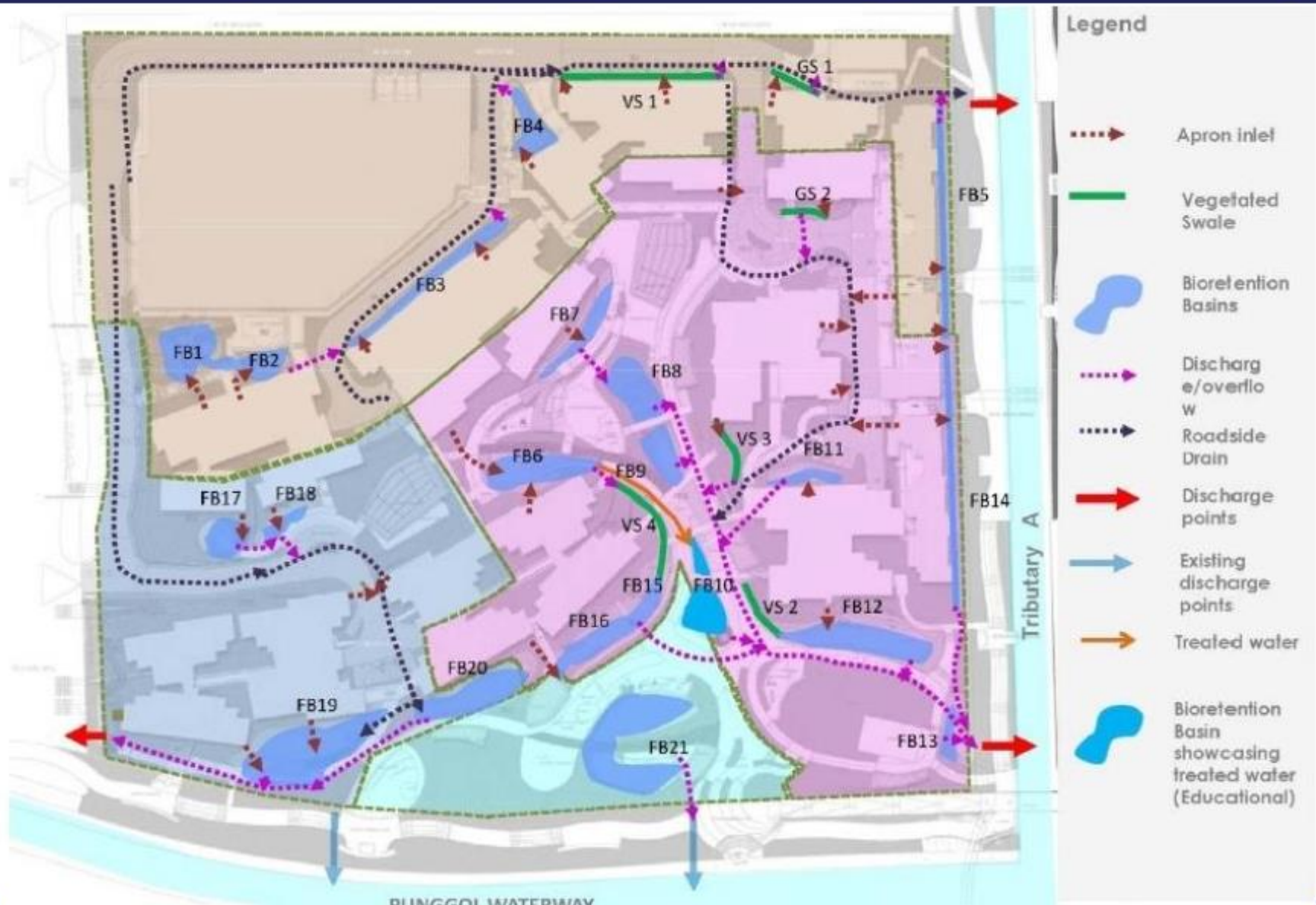

HYDROLOGY STUDY FOR
ILLS RANCH NEIGHBORHOOD 9-12
(OCTOBER 10, 2003)
Q100 = 1373.90 CFS
A = 718.66 AC
Tc = 20.04 MIN
997
36.38 ACRES
32.59 ACRES
7.79 ACRES
0.07 ACRES
975 ACRES
990
991
992
993
976
4.46 ACRES
PROCTOR
VALLEY ROAD
Q100 = 13.91 CFS
A = 7.95 AC
Tc = 10.52 MIN
977
998
999
984
982
CROSSING
PVR3
Q100 = 1,425.80 CFS
A = 798.54 AC
Tc = 22.06 MIN
Q100 = 26.02 CFS
A = 6.61 AC
Tc = 11.41 MIN

```
****************************************************************************
  FLOW PROCESS FROM NODE    997.00 TO NODE    998.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  3.135
  *USER SPECIFIED(SUBAREA):
  NATURAL DESERT LANDSCAPING RUNOFF COEFFICIENT = .3500
  S.C.S. CURVE NUMBER (AMC II) =   0
  AREA-AVERAGE RUNOFF COEFFICIENT = 0.5634
  SUBAREA AREA(ACRES) =   32.59   SUBAREA RUNOFF(CFS) =   35.76
  TOTAL AREA(ACRES) =      751.2   TOTAL RUNOFF(CFS) =    1373.90
  TC(MIN.) =   22.06
```

100 YILLIK YAĞIŞ ŞİDDETİ: 3.135
*KULLANICI TARAFINDAN BELİRLENMİŞ(ALT HAVZA):
DOĞAŞ ÇÖL PEYZAJI YÜZEY AKIŞI KATSAYISI= .3500
S.C.S. CURVE NUMBER/YÜZEY AKŞI EĞRİ NUMARASI (AMC II) =   0
ORTALAMA YÜZEY AKIŞI KATSAYISI = 0.5634
ALT HAVZA BÜYÜKLÜĞÜ =   32.59   ALT HAVZA YÜZEY AKIŞI(CFS) =   35.76
TOPLAM ALAN =   751.2   TOPLAM YÜZEY AKIŞI =   1373.90
TC(MIN.) =   22.06

```
****************************************************************************
  FLOW PROCESS FROM NODE    998.00 TO NODE    999.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   559.00  DOWNSTREAM(FEET) =   550.00
  FLOW LENGTH(FEET) =   210.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  90.0 INCH PIPE IS  68.0 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =  39.79
  ESTIMATED PIPE DIAMETER(INCH) =  90.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =    1425.80
  PIPE TRAVEL TIME(MIN.) =   0.09    Tc(MIN.) =   22.15
  LONGEST FLOWPATH FROM NODE    990.00 TO NODE    999.00 =    3912.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =      798.5  TC(MIN.) =     22.15
  PEAK FLOW RATE(CFS)   =    1425.80
============================================================================
============================================================================
```

Mainstreaming ABC Waters: Punggol C39 housing precinct & common green

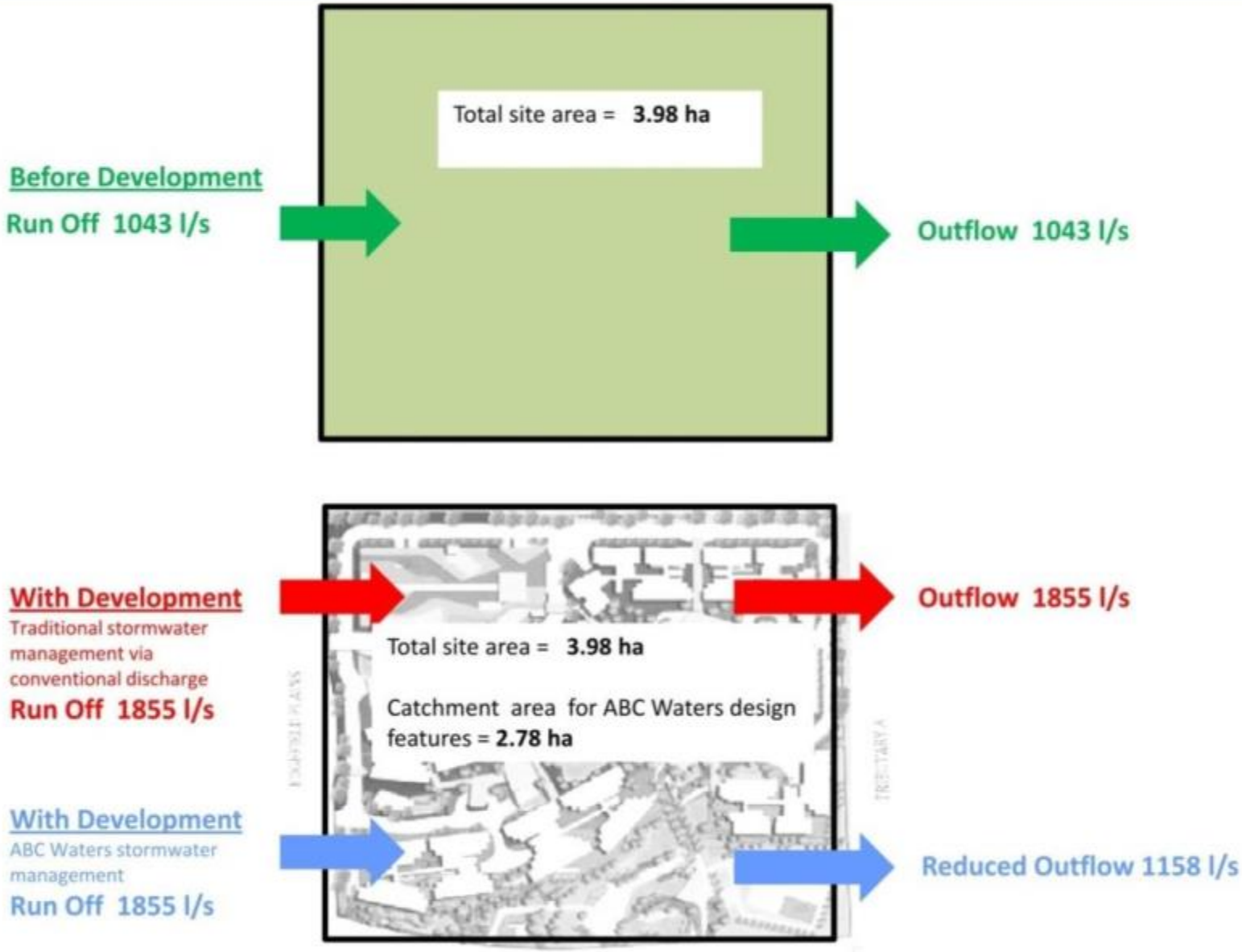


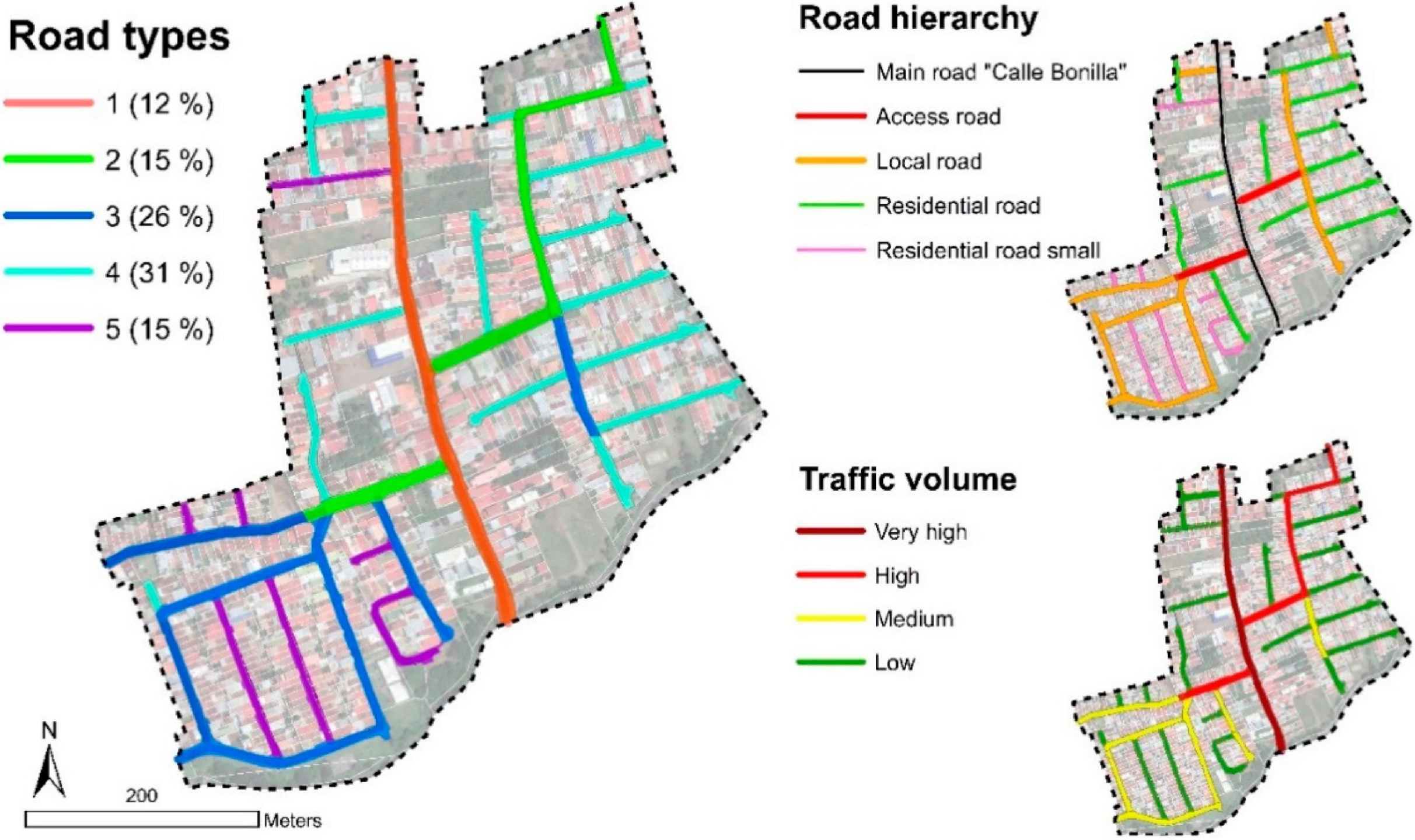
Water for All : Conserve, Value, Enjoy

PUB

https://edepot.wur.nl/315106

Mainstreaming ABC Waters: Punggol C39 housing precinct & common green




Road types
1 (12 %)
2 (15 %)
3 (26 %)
4 (31 %)
5 (15 %)
N
200
Meters
Road hierarchy
Main road "Calle Bonilla"
Access road
Local road
Residential road
Residential road small
Traffic volume
Very high
High
Medium
Low

Suitable areas for UGI placement

Road system

Recreational area

Vacant land

Riparian land

Study area

River "Quebrada Seca"

Example of section in the road system for UGI implementation

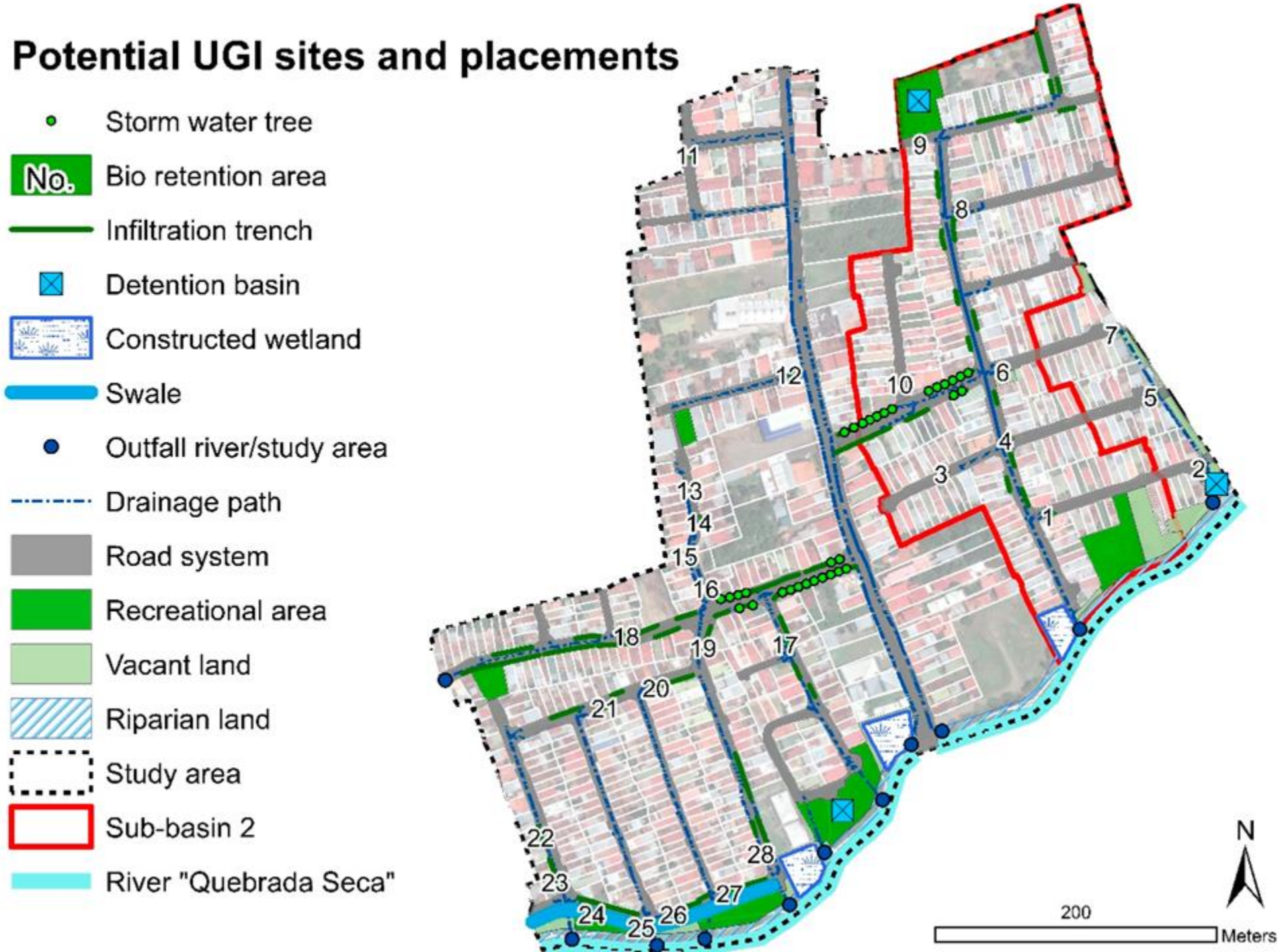
Example of open space for UGI implementation

N

300

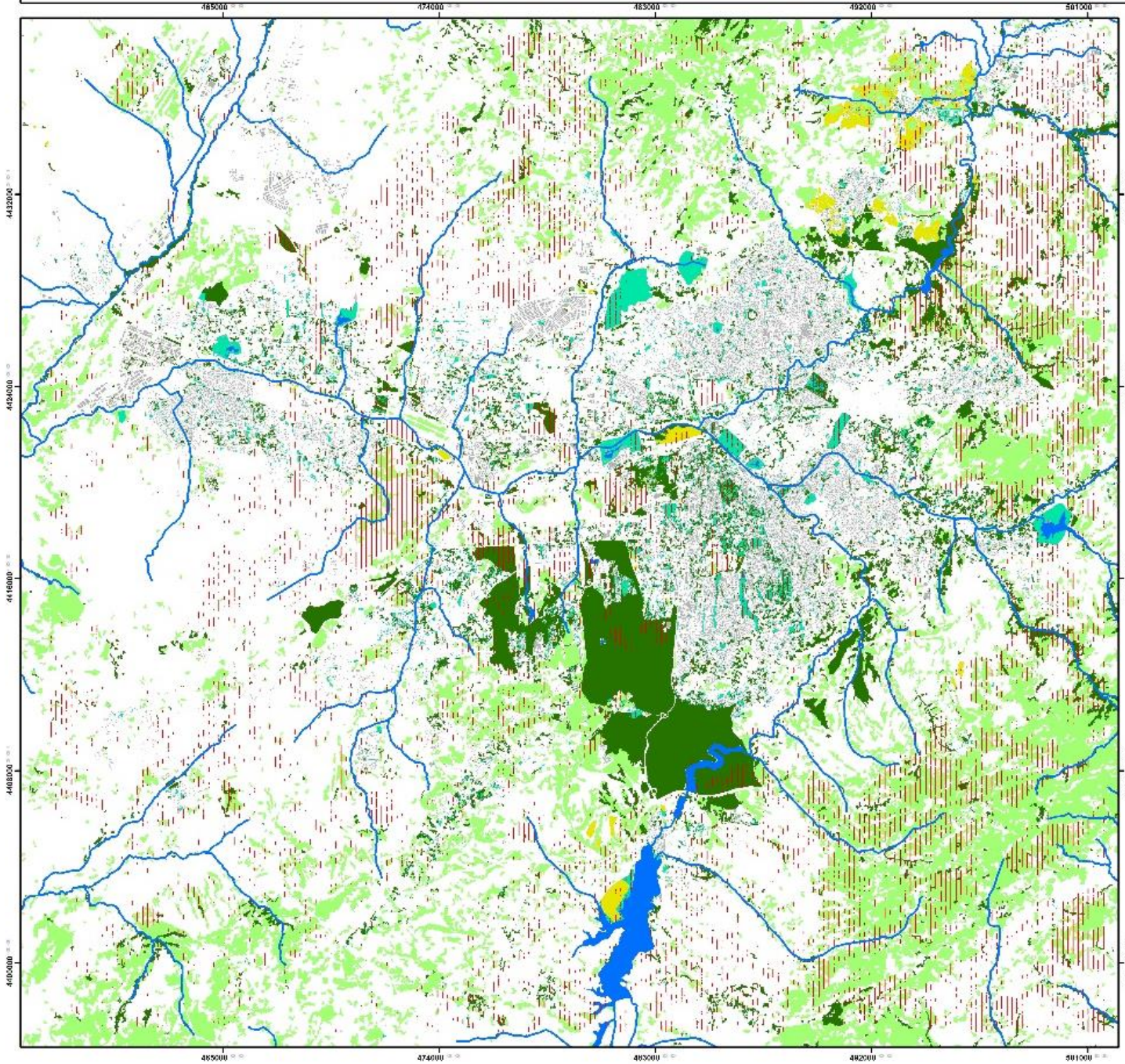
Meters

Potential UGI sites and placements



Redesign of the road system

ANKARA İLİ ÇALIŞMA SINIRI YERALTI SUYU BESLENİMİ AMAÇLI YEŞİL ALTYAPI PLANI GELİŞTİRİLECEK ALANLAR HARİTASI

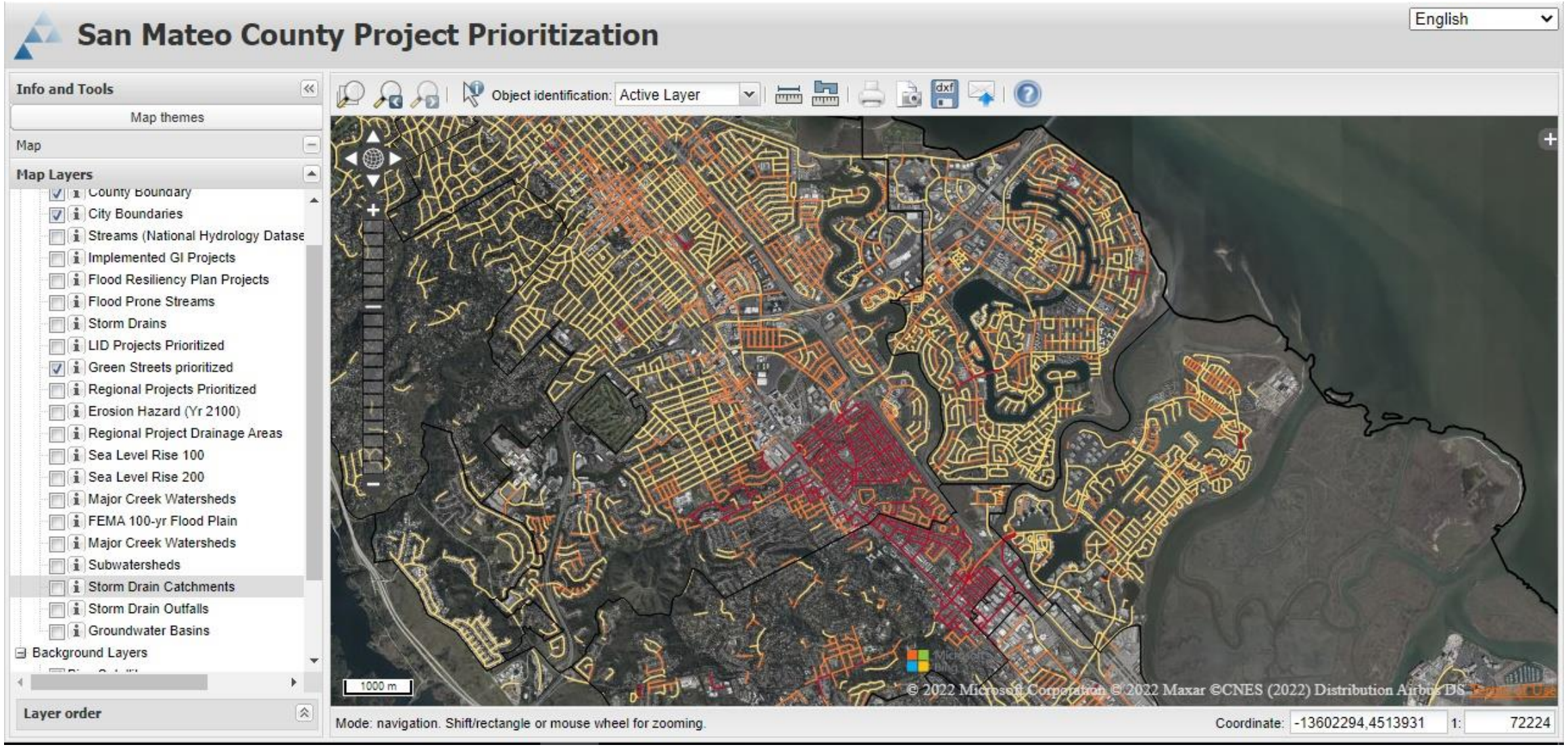


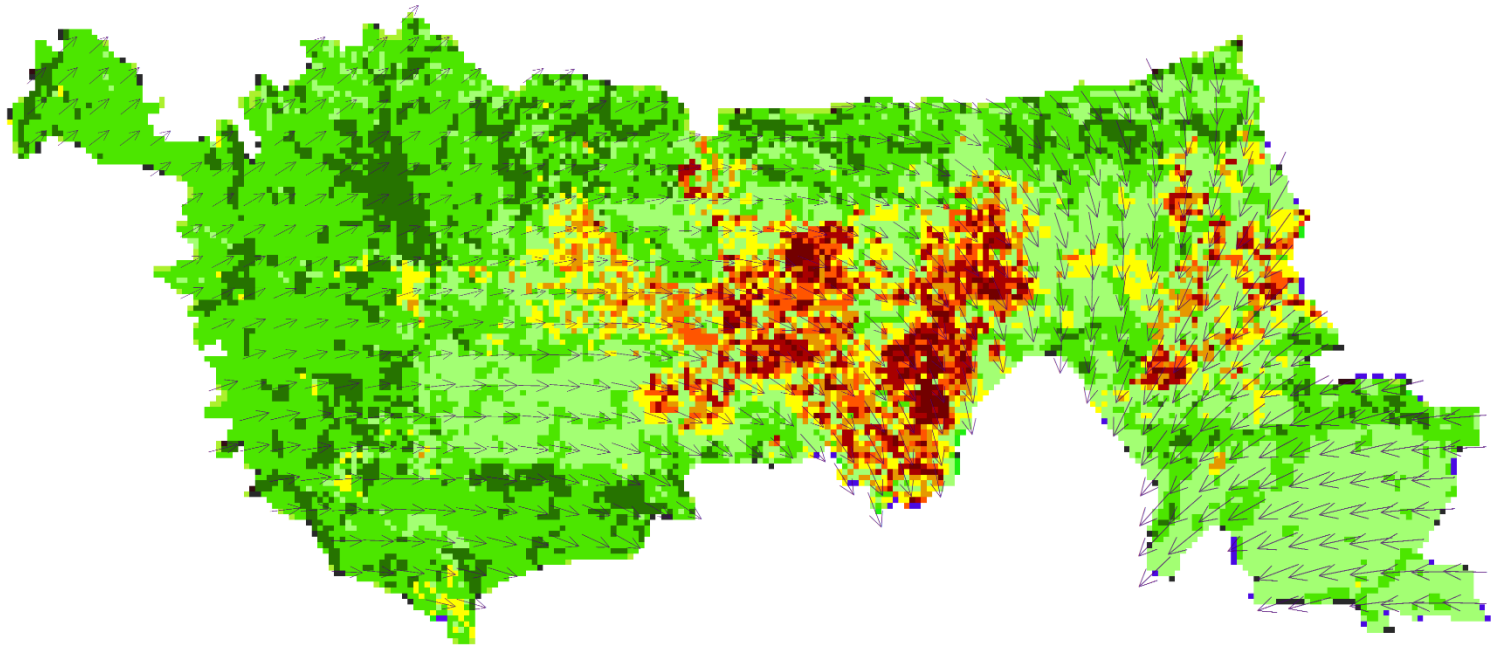
ANAHTAR

- SU YÜZEYLERİ
- AKARSU
- YERLEŞİM PEYZAJI
- YERALTI SUYU BESLENİMİ AMAÇLI YEŞİL ALTYAPI PLANI GELİŞTİRİLECEK ALANLAR (SU GEÇİRİMLİLİĞİ YÜKSEK YEŞİL ALANLAR)
- KENTSEL YEŞİL ALANLAR
- ORMAN ALANLARI
- MEYVE BAHÇELERİ VE ÇİFTLİKLER
- BAĞLAR
- OTSU ALANLAR

1:120.000

5,5 2,75 0 5,5 Kilometre


San Mateo County Project Prioritization
English
Info and Tools
Map themes
Map
Map Layers
County Boundary
City Boundaries
Streams (National Hydrology Datase
Implemented GI Projects
Flood Resiliency Plan Projects
Flood Prone Streams
Storm Drains
LID Projects Prioritized
Green Streets prioritized
Regional Projects Prioritized
Erosion Hazard (Yr 2100)
Regional Project Drainage Areas
Sea Level Rise 100
Sea Level Rise 200
Major Creek Watersheds
FEMA 100-yr Flood Plain
Major Creek Watersheds
Subwatersheds
Storm Drain Catchments
Storm Drain Outfalls
Groundwater Basins
Background Layers
Layer order
Object identification:
Active Layer
dxf
1000 m
© 2022 Microsoft Corporation © 2022 Maxar ©CNES (2022) Distribution Airbus DS
Mode: navigation. Shift/rectangle or mouse wheel for zooming.
Coordinate:
-13602294,4513931
1:
72224



Lefkoşa Kentsel İklim Haritası

İklim Sınıfları

- Sınıf 1
- Sınıf 2
- Sınıf 3
- Sınıf 4
- Sınıf 5
- Sınıf 6
- Sınıf 7
- Sınıf 8

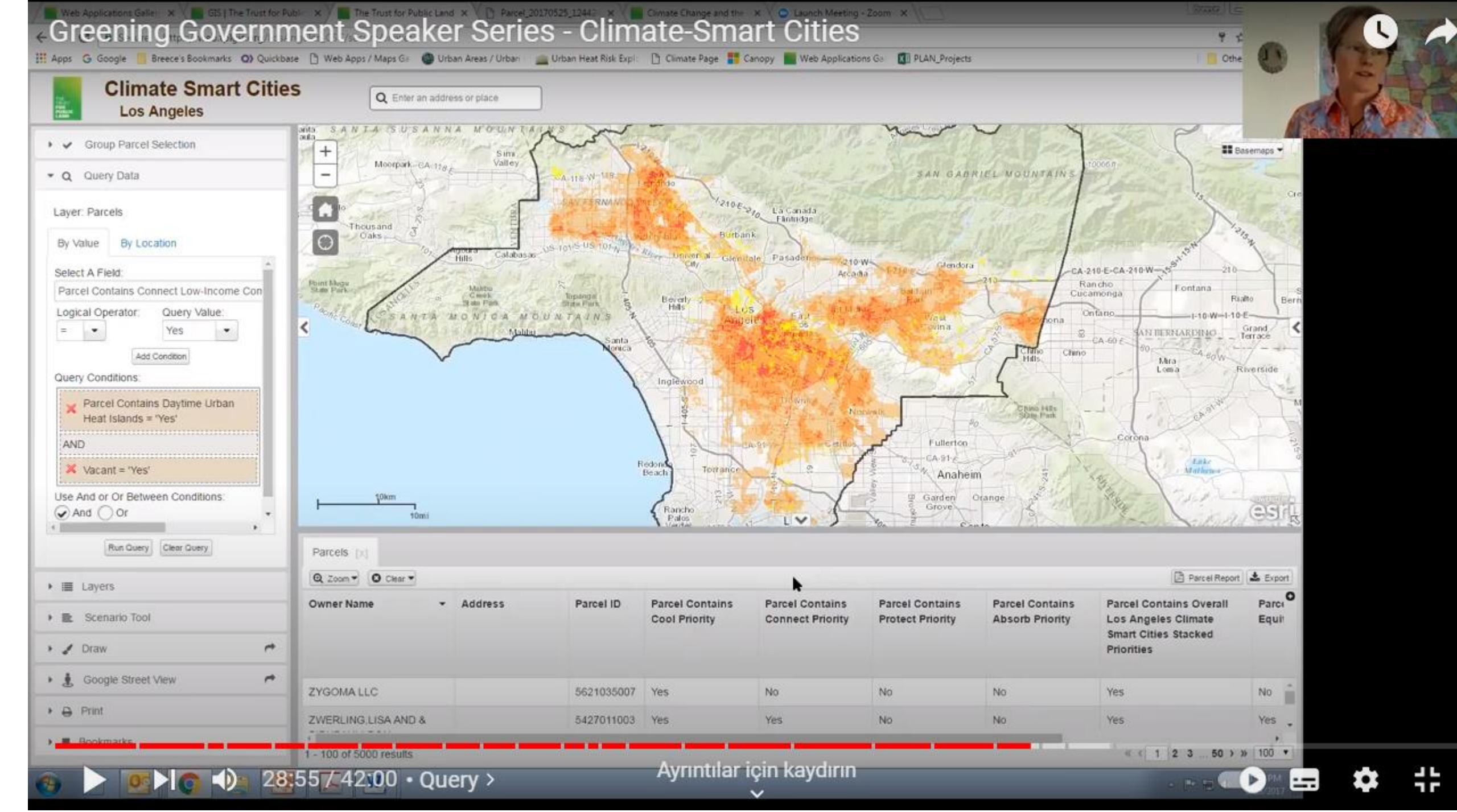
Yıllık Hakim Rüzgar Yönü/Hızı (km/sa) (2011-2020)

- 11,2- 12,2
- 12,2 - 13,2
- 13,2 - 14,5
- 14,5 - 15,8

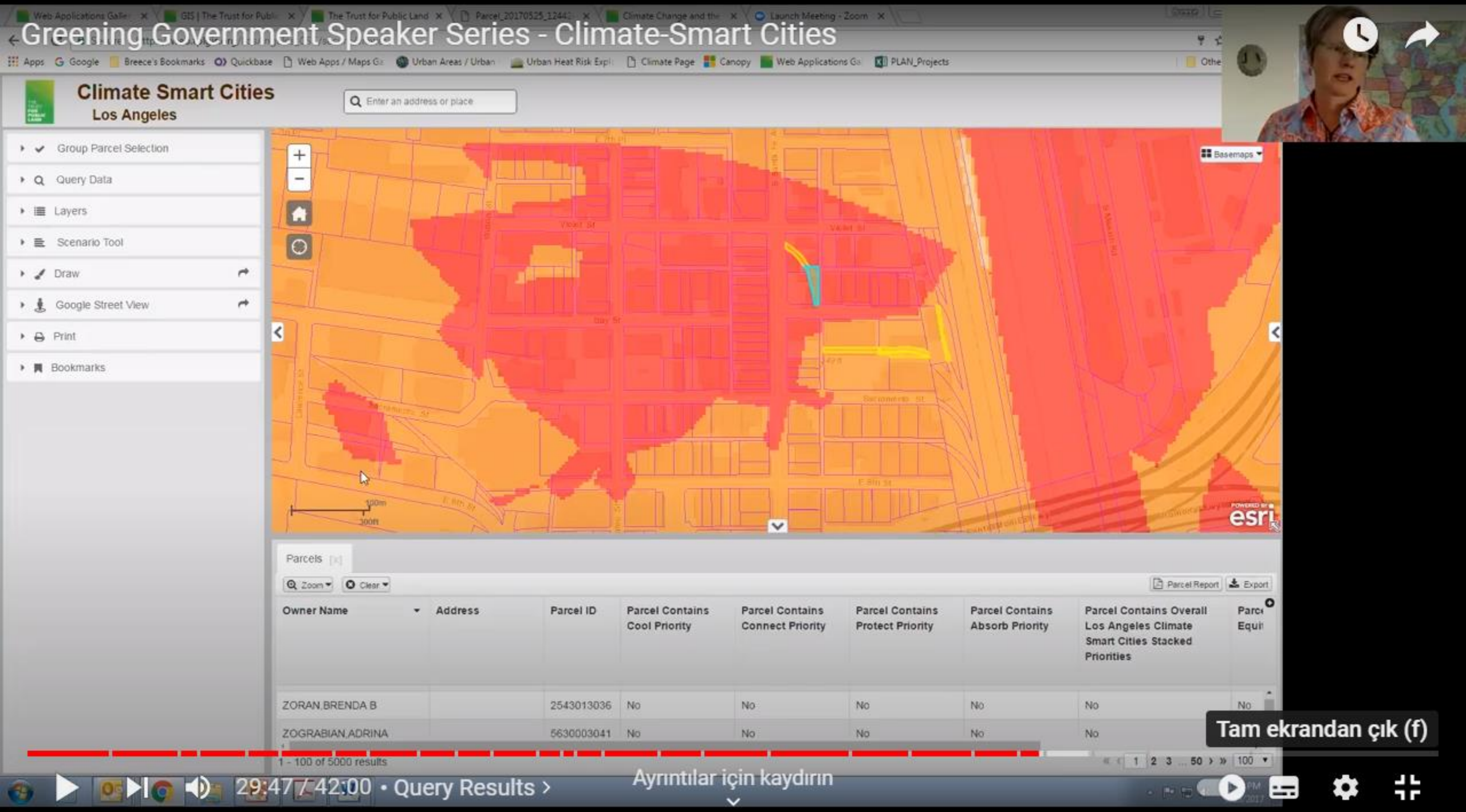
N
W
E
S

0 1 2 4 6 Km

Greening Government Speaker Series - Climate-Smart Cities



Greening Government Speaker Series - Climate-Smart Cities



Tam ekrandan çık (f)

29:47 / 42:00 • Query Results ›

Ayrıntılar için kaydırın