

March 30, 2009

Mr. Bruce Wolfe  
Executive Officer  
San Francisco Bay Regional Water Quality Control Board  
1515 Clay Street, Suite 1400  
Oakland, CA 94612

Subject: Comments from the City of Palo Alto on the Hydromodification Management Plan (HMP) Applicability Map contained in the Municipal Regional Permit Revised Tentative Order

Divisions

Administration  
650.329.2373  
650.329.2299 fax

Engineering  
650.329.2151  
650.329.2299 fax

Environmental Compliance  
650.329.2598  
650.494.3531 fax

Equipment Management  
650.496.6922  
650.496.6958 fax

Facilities Management  
650.496.6900  
650.496.6958 fax

Operations  
650.496.6974  
650.852.9289 fax

Regional Water Quality Control  
650.329.2598  
650.494.3531 fax

Dear Mr. Wolfe:

Thank you for the opportunity to submit comments on the Regional Water Board's Municipal Regional Permit (MRP) Revised Tentative Order dated February 11, 2009. City staff have reviewed the areas that are designated as "Areas Under Review" within the City of Palo Alto on the latest Hydromodification Management Plan (HMP) Applicability Map to determine whether or not there is justification for exempting these areas from the HMP requirements based on more detailed impervious area data maintained by the City.

The City has extensive impervious area records used as the basis for charging the monthly Storm Drainage Fee that is billed to each developed parcel in the City. The Storm Drainage Fee amount for each land parcel is based on the amount of impervious surface on the parcel. The Storm Drainage Fee billing unit is known as an "Equivalent Residential Unit (ERU)", which is equal to 2500 square feet of impervious surface. This figure is based on an analysis of impervious area data from a representative sample of single-family residential parcels, using aerial photogrammetry techniques. This analysis found that the typical single-family residential parcel in Palo Alto contains 2500 square feet of impervious area (including buildings, driveways, patios, walkways, etc.). The analysis also showed that there is a strong proportional relationship between parcel size impervious area. Based on this analysis, the City assesses the Storm Drainage Fee for single-family residential parcels in accordance with the following fee schedule:

SFR PARCEL SIZE (sq.ft.)	ERU
< 6,000 sq.ft.	0.8 ERU
6,000-11,000 sq.ft.	1.0 ERU
> 11,000 sq.ft.	1.4 ERU

For non-single-family residential parcels, the Storm Drainage Fee is based upon actual measurements of impervious area from either aerial photographs or approved improvement plans.

Staff used the City's billing system impervious area data and its Geographic Information System (GIS) to calculate the imperviousness of the catchment to the north of Downtown Palo Alto (see attached map). The impervious area study of this catchment yielded the following results:

PARCEL IMPERVIOUS AREA =	2598000	SQ FT
STREET/SIDEWALK IMPERVIOUS AREA =	2011633	SQ FT
TOTAL IMPERVIOUS AREA =	4609633	SQ FT
TOTAL AREA OF POLYGON =	6062536	SQ FT
PERCENT IMPERVIOUS =	<b>76.03%</b>	

The following is a description of the sources of the specific figures shown in the table above:

- Parcel impervious area (A): Summation of impervious area data for all land parcels within the catchment polygon, derived from the City's storm drain utility billing system database. Parcels are billed for storm drainage service based upon the amount of impervious area on the parcel.
- Street/sidewalk impervious area (B): Estimated impervious area based upon linear feet of street centerline within the catchment polygon, multiplied by an assumed total width of 50 feet (40-foot street width + 10-foot width of two 5-foot-wide sidewalks).
- Total impervious area (C): Sum of A + B
- Total area of polygon (D): Area of catchment polygon as calculated within the City's GIS application
- Percent impervious (E): Quotient of C/D

Based on this analysis demonstrating that the catchment immediately to the north of downtown Palo Alto is approximately 76% impervious, I hereby request that this catchment be changed to "red" (exempt) on the HMP Applicability Map to be adopted by the Water Board with the Municipal Regional Permit. If you have any questions or need further information, please contact me at (650) 329-2129 or [joe.teresi@cityofpaloalto.org](mailto:joe.teresi@cityofpaloalto.org).

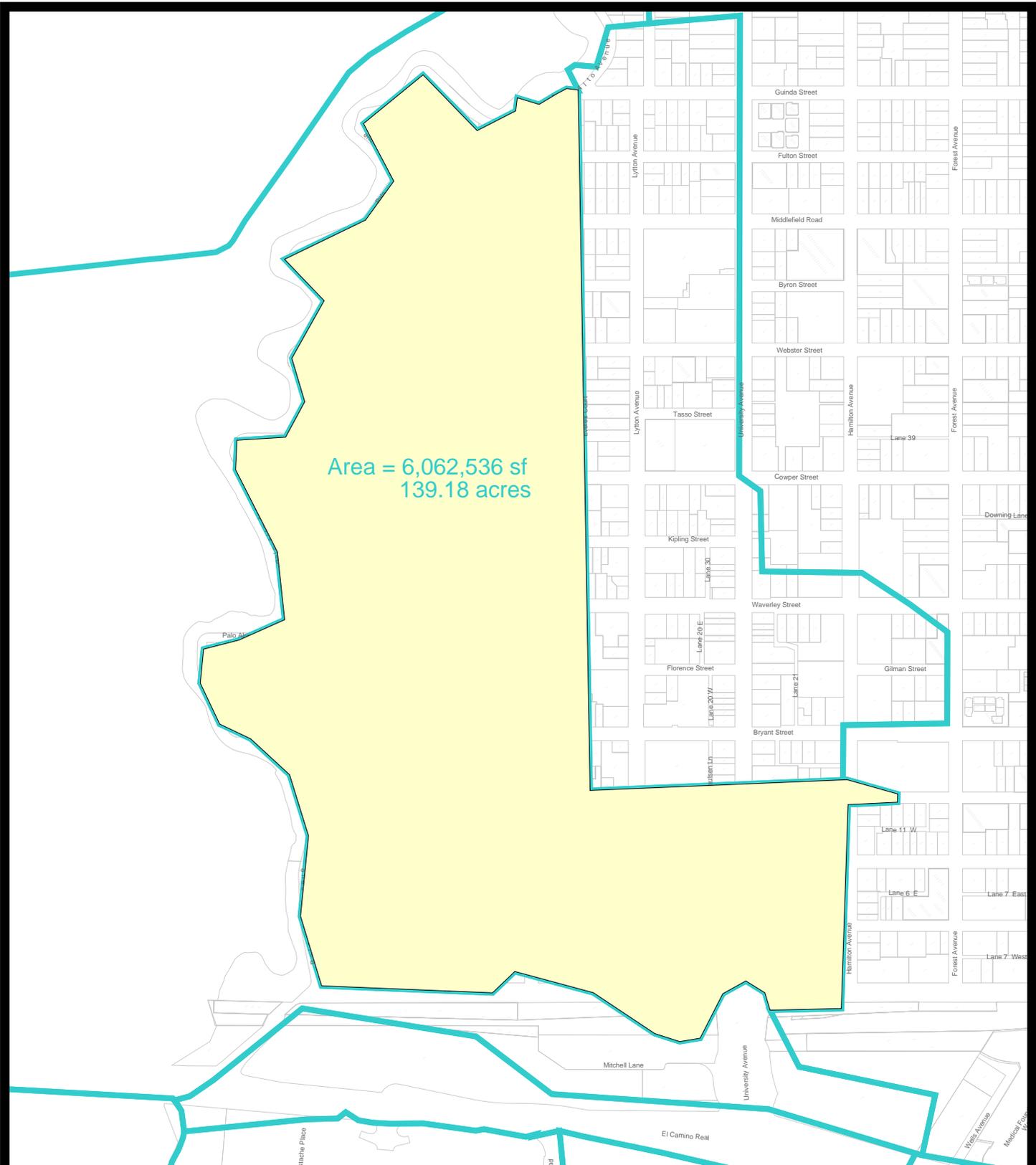
Sincerely,

A handwritten signature in cursive script that reads "Joe Teresi".

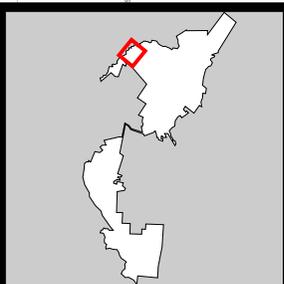
Joe Teresi  
Senior Engineer  
Public Works Engineering

Attachment

cc: Glenn Roberts  
Phil Bobel  
Mike Sartor  
Bob Morris  
Jill Bicknell, SCVURPPP



The City of  
Palo Alto



## Area of Catchment 386

This map is a product of the  
City of Palo Alto GIS

