



Office of the City Manager

## SUPPLEMENTAL AGENDA MATERIAL

**Meeting Date:** June 30, 2020

**Item Number:** 27

**Item Description:** Approval and Levy of 2018 Clean Stormwater Fee in FY 2021

**Supplemental/Revision Submitted By:** Phillip L. Harrington, Director of Public Works

**“Good of the City” Analysis:**

*The analysis below must demonstrate how accepting this supplement/revision is for the “good of the City” and outweighs the lack of time for citizen review or evaluation by the Council.*

The 2018 Clean Stormwater Fee- Fiscal Year 2021 Fee Adjustment Report, Attachment 2, is added to this Council Item. It is referred to in the Council Report and recommended Resolution. The Fee Adjustment Report demonstrates that the fee adjustments were calculated in accordance with the procedures adopted by the City Council in Fiscal Year 2018.

***Consideration of supplemental or revised agenda material is subject to approval by a two-thirds roll call vote of the City Council. (BMC 2.06.070)***

A minimum of **42 copies** must be submitted to the City Clerk for distribution at the Council meeting. This completed cover page must accompany every copy.

Copies of the supplemental/revised agenda material may be delivered to the City Clerk Department by 12:00 p.m. the day of the meeting. Copies that are ready after 12:00 p.m. must be delivered directly to the City Clerk at Council Chambers prior to the start of the meeting.

Supplements or Revisions submitted pursuant to BMC § 2.06.070 may only be revisions of the original report included in the Agenda Packet.

CITY OF BERKELEY

# **2018 CLEAN STORMWATER FEE**

Fiscal Year 2021  
Fee Adjustment Report

May 2020

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## **INTRODUCTION**

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### **OVERVIEW**

In 1991, the City of Berkeley was required to obtain a national Pollutant Discharge Elimination System (NPDES) permit from the San Francisco Bay Regional Water Quality Control Board to improve the water quality of urban runoff and discharge storm water runoff to the City's waterways. The permit requires that the City of Berkeley implement a stormwater control program and best management practices. The City adopted the Clean Stormwater Fee in 1991 to comply with clean water regulations and provide a secure funding source for stormwater operations, maintenance, and capital improvements. The program includes flood management, compliance with clean water requirements, operations and maintenance, and major capital improvements. Stormwater fees are paid by property owners and the fees have not been increased since the program's inception in 1991. The program has been running a deficit since 2014 attributable to basic operations, maintenance, and compliance with clean water regulations. The Stormwater program also faces a backlog in capital improvements, with more than \$208 million in project costs identified in the 2011 Watershed Management Plan<sup>1</sup>.

In order to increase revenues for the Stormwater program, the City adopted Resolutions No. 68,334-N.S. and Resolution No. 68,335-N.S., to initiate the property related fee process and establish balloting procedures for the 2018 Clean Stormwater Initiative consistent with California Constitution Article XIII D. A public hearing was conducted on April 3, 2018 at which a majority protest was not achieved, subsequently Resolution No. 68,381-N.S. was adopted ordering the mailing of fee ballots to all property owners of properties within the City subject to the fee. Following the tabulation of votes, and confirming approval of the measure, Council adopted Resolution No. 68,483-N.S., accepting the ballot tabulations and ordering the levy of the City of Berkeley's 2018 Clean Stormwater Fee.

As approved by voters, the 2018 Clean Stormwater Fee is subject to an annual adjustment tied to the Consumer Price Index-U for the San Francisco Bay Area as of December of each succeeding year (the "CPI"), with a maximum annual adjustment not to exceed 3%. Per the voter approved measure any increase in the CPI in excess of 3% shall be cumulatively reserved as the "Unused CPI" and shall be used to increase the maximum authorized rate in years in which the CPI is less than 3%. The maximum authorized rate is equal to the maximum rate in the first fiscal year the Fee was approved adjusted annually by the lower of either 3% or the increase in the CPI plus any Unused CPI as described above. In order for the City's dedicated storm drainage revenue sources to satisfy costs requirement into the future, the annual

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<sup>1</sup> Watershed Management Plan: [https://www.cityofberkeley.info/Public\\_Works/Sewers\\_-\\_Storm/Watershed\\_Management\\_Plan.aspx](https://www.cityofberkeley.info/Public_Works/Sewers_-_Storm/Watershed_Management_Plan.aspx)

adjustment for property may be calculated based upon the sum of the storm drainage fee and the existing Clean Storm Water Fee.

In accordance with Government Code Section §53739, adjustments for inflation pursuant to a clearly identified formula stated in the voter approved measure do not required further voter approval. Thus, the annual adjustment described above is exempt from the notice, protest, and hearing requirements of State Proposition 218 as set forth in Government Code Section §53753.5 (Article XII D, Sec. 5).

This abbreviated fee adjustment report, has been prepared by City staff to document the annual adjustment of the 2018 Clean Stormwater Fee for Fiscal Year 2021. The report also includes an abbreviated description of the storm drainage system, the program's funding sources, and a five-year fund forecast.

## **CITY'S FACILITIES**

The City operates and maintains a storm drainage system, as it is empowered to do so per Government Code Sections §38900 and §38901. It is comprised of an integrated system of storm drain pipes, culverts and ditches. Local creeks are not considered part of the City's storm drain system, although they receive most of the urban runoff and are impacted by how the City's storm drainage system functions.

The Berkeley area began experiencing residential development over one hundred years ago. As the community grew, the storm drainage system was developed along with the neighborhoods and commercial areas while still maintaining many native creek segments. Although the City is highly urbanized, there are a large number of open creek segments that cross streets, private properties and roadways through numerous culvert sections.

In the early 1990s, in response to the federal Clean Water Act amendment of 1987, municipalities were, for the first time, required to obtain an NPDES<sup>2</sup> permit from the California Regional Water Quality Control Board to address urban storm drainage runoff pollution. Under this permit, the City works to reduce stormwater pollution, protect and enhance its watersheds, preserve beneficial uses of local waterways, and implement State and federal water quality regulations within the limits of its jurisdiction. Over the years, the range of actions taken by the City has greatly increased in response to evolving regulatory requirements and community needs.

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<sup>2</sup> NPDES stands for the National Pollutant Discharge Elimination System as specified in the Federal Clean Water Act. The City is one of the co-permittees named on the Alameda County NPDES permit issued by the Regional Water Board. The most recent MRP was issued in November 2015, however, these permits typically are renewed every five years, with each new iteration containing additional requirements.

**STORM DRAINAGE FUNDING**

In response to the NPDES permit requirements, the City implemented a Clean Storm Water Fee in 1991 for all residences and businesses in the City. The City collects approximately \$2 million annually from this fee which has not been increased since its 1991 inception. In addition, the City receives an annual allocation from UC Berkeley's long-range development plan ("LRDP") of approximately \$300,000. Initially these revenues were sufficient to fund ongoing maintenance, operations and capital improvement projects. However, beginning in Fiscal Year 2014, the program began operating at a deficit. In response to this deficit, the City implemented the 2018 Clean Stormwater Fee.

## **FINANCIAL NEEDS SUMMARY**

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A summary budget for the Clean Stormwater Fund in FY 2021 is provided below as Table 1.

**Table 1- FY 2021 Budget Summary**

<b>Beginning Available Fund Balance Clean Stormwater Fund (616)</b>	<b>\$</b>	<b>2,783,879</b>
<b>Costs</b>		
<b>Personnel Costs</b>	<b>\$</b>	<b>1,856,110</b>
<b>Non-Personnel Costs</b>		
<i>Capital Improvement Program</i>	\$	1,260,000
<i>Storm Planning</i>	\$	525,000
<i>General Non-Personnel</i>	\$	719,022
<i>Indirect Costs</i>	\$	344,536
<i>Water Quality (NPDES) MRP</i>	\$	332,025
<i>Operations &amp; Maintenance</i>	\$	448,234
<i>Equipment &amp; Software</i>	\$	347,488
<b>Subtotal Non-Personnel Costs</b>	<b>\$</b>	<b>3,976,305</b>
<b>Total Costs</b>	<b>\$</b>	<b>5,832,415</b>
<b>Revenue</b>		
<i>Clean Stormwater Fee (1991)</i>	\$	1,918,304
<i>2018 Clean Stormwater Fee</i>	\$	2,603,043
<i>University in Lieu (LRPD)</i>	\$	302,519
<b>Total Revenue</b>	<b>\$</b>	<b>4,823,866</b>
<b>Annual Surplus/Shortfall</b>	<b>\$</b>	<b>(1,008,549)</b>
<b>Estimated End Balance Clean Stormwater Fund (616)</b>	<b>\$</b>	<b>1,775,330</b>

## **2018 CLEAN STORMWATER FEE RATE STRUCTURE ANALYSIS**

All properties which generate storm and urban runoff which flow into the City's MS4 are served by the system. The amount of use attributed to each parcel is proportional to the amount of storm and urban runoff flow contributed by the parcel, which is proportional to the amount of impervious surface area (e.g. building roofs, pavement, etc.) on a parcel.

In this Report, the median single-family residential parcel is used as the basic unit of measure, called the single-family equivalent, or "SFE." Accordingly, since the primary quantifiable attribute for this fee structure is impervious surface area, the amount of impervious surface area on the median SFR parcel serves as the basic unit of impervious area.

The basic unit of impervious area can be expressed by the following formula:

$$\begin{aligned} & \textit{Median SFR Parcel Area} \\ & \times \textit{Average SFR Impervious Percentage} \\ & = \textit{SFE Impervious Area} \end{aligned}$$

The median SFR parcel is 0.11 acres (4,792 square feet). Careful analysis revealed that the average percentage of impervious area ("%IA") of the medium class of SFR parcels is 44.82%. Therefore, the amount of impervious area for the SFE is 2,148 square feet. This becomes the basis for calculating the SFEs for all other types of land uses. In order to accomplish this, a representative sample of each land use category was studied through aerial photographs to measure the actual impervious area, which was, in turn, used to calculate the %IA for each land use category.

### **SINGLE-FAMILY RESIDENTIAL PARCELS**

Berkeley has a wide range of sizes of SFR parcels, which have varying levels of %IA. Generally, smaller parcels tend to have a higher proportion of impervious area than larger parcels, which tend to have a lower percentage of impervious area. (This can be best visualized by the fact that larger residential properties tend to have a larger proportion of pervious landscaping, and therefore less impervious area.) Therefore, the range of SFRs were broken into three size categories as shown in Table 4 below. Since the size of a parcel is considered in finite groups, the resultant SFEs were calculated on a per-parcel basis for each size category using the formula above.

It should be noted that the SFR category also includes multiplex parcels of two, three or four units, since their lot development characteristics do not vary significantly from the SFR parcels of similar size. In all, this includes the approximately 3,400 multiplex parcels in the City. Any residential structure with five or more units is categorized as multi-family residential ("MFR"), which is calculated separately. For parcels with multiple SFRs, analysis showed that those parcels contained 22% more impervious area than single-home SFRs within the same size category. Therefore, multiple-SFR parcels are computed separately.



### Special Notes On Condominiums

Condominium units are particularly difficult to categorize as they are often on very small individual parcels, yet share larger common areas that are made up of landscaped (pervious) areas; parking lots and shared roofs (impervious); and other recreational uses (either pervious or impervious). The data for these variables are not readily available, so it is assumed that overall their characteristics were most similar to the small lot make up. Overall, condominium units are smaller than the average SFR, and may include two or more stories of residences in some cases. When combined with the various common areas (which were exempted from the SFE process), the overall effect would be less runoff impact than the median size SFR. Thus, the Small SFR rate was used.

**Table 2- Summary of Single-Family Residential Parcels**

Lot Type	Parcel Size Range (sf)	Total Parcels	% Imperv Area	SFE per Parcel	
				Single Home	Multiple Homes
Small	Under 3,200	2,150	65.73%	0.80	0.98
Medium	3,200 to 7,200	16,647	44.82%	1.00	1.22
Large	7,200 and over	2,636	29.81%	1.21	1.48
Condos	n/a	2,433	n/a	0.80	n/a
<b>TOTAL</b>		<b>23,866</b>			

### NON-SINGLE-FAMILY RESIDENTIAL PARCELS

Unlike the SFR parcels, the non-SFR parcels can vary widely in size as well as characteristics. For this reason, the parcels have been grouped into land use categories according their %IA characteristics (as shown in Appendix B) so that SFE per acre can be computed for each category using the following formula:

$$\frac{(43,560 \text{ sf/acre}) \times \%IA}{2,148 \text{ sf/SFE}} = \text{SFE per Acre}$$

Where 2,148 square feet is the amount of the impermeable area in one SFE.

Table 3 below shows a summary of the non-single-family parcel SFEs for each non-SFR land use category.

**Table 3 – Summary of Non-SFR Parcels**

<b>Land Use Category</b>	<b>Total Parcels</b>	<b>% Imperv Area</b>	<b>SFE per Acre</b>
Multi-Family (Apartments)	1,447	86%	17.44
Commercial / Retail / Industrial	1,646	96%	19.47
Office	245	90%	18.25
Institutional / Church	222	82%	16.63
School / Hospital	98	75%	15.21
Recreational	33	58%	11.76
Vacant (developed)	596	5%	1.01
Open Space / Agricultural	n/a	Exempt	
	<b>4,287</b>		

Each individual parcel's SFE is then calculated by multiplying the parcel size (in acres<sup>3</sup>) times the SFE per acre for that land use category, as shown in the following formula:

#### **Developed Vacant Parcels**

Developed vacant parcels are distinguished from undeveloped vacant land by one of several characteristics. Typically, a developed vacant parcel has been graded to be ready for building construction (possibly as part of the original subdivision or adjacent street grading). In some cases, the parcel was previously improved, but the improvement has been removed. Although developed vacant parcels may have significant vegetative cover, the underlying soil conditions resulting from grading work can usually cause some rainfall to run off into the storm drainage system. The %IA for developed vacant parcels is conservatively assumed to be 5%. Vacant parcels that have significant impervious paving remaining from prior improvements may be classified as Commercial or some other classification best representing the %IA of the parcel.

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<sup>3</sup> Parcel size for non-single-family residential parcels is calculated to the tenth of an acre or portion thereof.

### **Open Space and Agricultural Parcels are Exempt**

The City's MS4 was developed in response to land development over the past several decades. Tracts of land that have not yet been developed, or have been used primarily for agricultural purposes, have not created an impact on the drainage system beyond the natural condition, and are therefore considered to receive no service from the MS4. In practical terms, these parcels generate no additional storm runoff beyond the natural condition. For these reasons, open space and agricultural parcels are exempt from the storm drainage fee.

Berkeley is a City with some open space land, which can be situated on portions of developed parcels. For parcels that have a significant portion that is considered open space (or agricultural), those portions have been taken into consideration in the calculations of the %IA and SFEs. For SFR parcels, these open space lands have been included in the sampled lots size when calculating the average %IA, which produced a lower %IA for the large parcel category, and, thus, a lower SFE and Fee to accommodate the open space areas. For non- SFR parcels the fees are calculated on individual acreage. However, the open space portion has been deducted from the acreage prior to all analyses including %IA as well as SFE and fee calculation.

### **EFFECTS OF LOW IMPACT DEVELOPMENT**

The current NPDES Permit requires certain properties to construct storm drainage treatment and attenuation facilities, also known as low impact development ("LID"). These facilities often are designed to capture a portion of the storm flows, retain them, and enable them to infiltrate into the ground. While this is intended to help filter pollutants from the water, it also can reduce the parcel's storm drainage runoff quantity to some extent. However, LID is designed to capture, retain and treat frequent, but low intensity storms. Conversely, the MS4 is designed around the infrequent, high intensity storms, those storms which will typically overflow most LID facilities. For this reason, no discount in the storm drainage fees is made available for parcels with LID facilities.

### **STORM DRAINAGE FEE CALCULATION**

The primary metric in this analysis is the SFE as illustrated above. To arrive at the fee amount for the various land use categories, the total SFEs must be divided into the total revenue requirement to arrive at the rate per SFE. That calculation is represented by the following formula:

$$\frac{\text{Total Assessments to be Collected}}{\text{Total SFEs}} = \text{SFE Rate}$$

The total assessment to be collected in FY 2021, includes an allowable adjustment. As described in the Overview section of this report, the fee is subject to an annual adjustment calculated by taking the sum of the 1991 Clean Stormwater Fee and the 2018 Clean Stormwater Fee and multiplying the sum by the allowable CPI increase not to exceed 3%. For the period beginning in December 2018 and ending in December 2019, the CPI increased by 2.45%. As discussed in the Overview section

of this report, “Unused CPI” balance from previous years can be used to increase the annual adjustment in years with CPI increases less than 3%. Using the current “Unused CPI” balance of 1.5%, the proposed adjustment for FY 2021 can be increased to the 3% threshold.

The SFE calculation can be rewritten as follows:

$$\frac{2018 \text{ Fee in FY 20} + (2018 \text{ Fee in FY 20} + 1991 \text{ Fee}) \times \% \text{ Increase}}{\text{Total SFEs}} = \text{SFE Rate in FY 21}$$

Or, using numbers from the analysis, the SFE Rate is:

$$\frac{\$2,471,482 + (\$2,471,482 + \$1,918,304) \times 0.03}{54,705.921 \text{ SFEs}} = \$47.58 \text{ per SFE}$$

This SFE rate amount is then multiplied by the SFE per parcel or SFE per acre for the various land use categories to arrive at the Storm Drainage Fee Rate Schedule shown in Table 4 below.

**Table 4 - Storm Drainage Fee Schedule**

Rate Category	SFE Rate	Proposed Fee	Unit
<b>Single-Family Residential</b>			
Small	0.79992	\$ 38.06	parcel
Medium	1.00000	\$ 47.58	parcel
Large	1.20933	\$ 57.54	parcel
Condominium	0.79992	\$ 38.06	parcel
Multiple SFR on a single parcel pay 22% higher rate			
<b>Non-Single-Family Residential**</b>			
Multi-Family Residential	17.44360	\$ 830.04	acre
Commercial / Industrial / Parking	19.47193	\$ 926.56	acre
Office	18.25493	\$ 868.66	acre
Institutional / Church	16.63227	\$ 791.44	acre
School / Hospital	15.21244	\$ 723.88	acre
Recreational	11.76429	\$ 559.80	acre
Vacant (developed)	1.01416	\$ 48.26	acre
Open Space / Agricultural		exempt	
* Single-Family Residential category also includes duplex, triplex and four-plex units.			
** Non-Single-Family Residential parcel size is calculated to the tenth of an acre or portion thereof			

The proposed \$47.58 SFE rate is well within the range of storm drainage rates adopted by other municipalities.