



# **RECLAMATION DISTRICT 2059**

## **(BRADFORD ISLAND)**

### **LEVEE AND FLOOD CONTROL FACILITIES IMPROVEMENT ASSESSMENT**

## **FINAL ENGINEER'S REPORT**

JULY 2020

PURSUANT TO CALIFORNIA GOVERNMENT CODE SECTION 53750, 54710 ET SEQ.,  
AND ARTICLE XIII D OF THE CALIFORNIA CONSTITUTION

ENGINEER OF WORK:  
**SCIConsultingGroup**  
4745 MANGELS BOULEVARD  
FAIRFIELD, CALIFORNIA 94534  
PHONE 707.430.4300  
FAX 707.430.4319  
[WWW.SCI-CG.COM](http://WWW.SCI-CG.COM)

## **RECLAMATION DISTRICT 2059**

---

### **DISTRICT BOARD**

Robert Davies, President/Treasurer  
Smith Cunningham  
Brian Elliff  
Kevin Finta  
William Hall

### **DISTRICT COUNSEL**

Katie Lucchesi, Terpstra Henderson

### **DISTRICT ENGINEER**

Blake Johnson, P.E. MGE Engineers

### **ASSESSMENT ENGINEER OF WORK**

John Bliss, P.E., SCI Consulting Group

## TABLE OF CONTENTS

---

<b>INTRODUCTION.....</b>	<b>5</b>
LEGAL AUTHORITY.....	7
<b>DESCRIPTION OF FACILITIES IMPROVEMENTS .....</b>	<b>9</b>
IMPROVED MAINTENANCE AND OPERATIONS .....	9
<b>COST AND BUDGET ESTIMATE .....</b>	<b>13</b>
<b>METHOD OF APPORTIONMENT.....</b>	<b>14</b>
DISCUSSION OF BENEFIT.....	14
FLOOD CONTROL IS A SPECIAL BENEFIT .....	15
BENEFIT FACTORS.....	16
GENERAL VERSUS SPECIAL BENEFIT .....	17
SPECIAL NOTE ON GENERAL BENEFIT TO THE NEARBY LOCAL, STATE AND FEDERAL WATER PROJECTS .....	20
ASSESSMENT APPORTIONMENT .....	20
METHOD OF ASSESSMENT.....	20
ZONES OF BENEFIT.....	22
FLOOD RISK FACTORS (PARCEL SPECIFIC FACTOR I) .....	22
FLOOD DAMAGE FACTORS (PARCEL SPECIFIC FACTOR II) .....	23
SHARED FACILITY FACTORS (PARCEL SPECIFIC FACTOR III) .....	23
WEIGHTED PARCEL FACTOR SUBTOTALS .....	23
LAND USE FACTORS TO DETERMINE REPLACEMENT FACTORS .....	24
SUMMARY OF SFEs AND RATES FOR VARIOUS LAND USES.....	27
CRITERIA AND POLICIES .....	28
<b>ASSESSMENT .....</b>	<b>30</b>
<b>ASSESSMENT DIAGRAM.....</b>	<b>33</b>
<b>APPENDICES .....</b>	<b>34</b>
APPENDIX A – ASSESSMENT ROLL, FY 2020-21.....	34

**LIST OF TABLES**

---

TABLE 1 – FISCAL YEAR 2020-21 PROPOSED BUDGET .....	13
TABLE 2 – EQUATIONS.....	21
TABLE 3 – FACTORS.....	21
TABLE 4 – FLOOD RISK FACTORS .....	22
TABLE 5 – FLOOD DAMAGE FACTORS .....	23
TABLE 6 – SHARED FACILITY FACTORS .....	23
TABLE 7 – TOTAL RELATIVE PARCEL FACTORS .....	24
TABLE 8 – LAND USE FACTORS FOR PROPERTY TYPES .....	24
TABLE 9 – MINERAL RIGHTS PARCELS AND ASSOCIATED RELATIVE SPECIAL BENEFIT .....	25
TABLE 10 – SUMMARY OF SFES AND RATES FOR VARIOUS LAND USES .....	28

**LIST OF FIGURES**

---

FIGURE 1 – LEVEES MAINTAINED BY RD 2059 ..... 6

FIGURE 2 – VARIOUS LAND USE TYPES ON RD 2059..... 27

FIGURE 3 – RECLAMATION DISTRICT 2059 ASSESSMENT DIAGRAM FY 2020-21..... 33

## INTRODUCTION

---

The purpose of this Engineer's Report ("Report") is to estimate and justify the need for Reclamation District No. 2059 ("RD 2059" or "District") to form a Levee and Flood Control Facilities Improvement Assessment beginning in fiscal year 2020-21. This report is based upon a review of the operations of the District, its current funding mechanisms, and its near-term projected funding needs to evaluate the total costs to be incurred by the District in providing its services.

The District has been funded primarily by DWR subventions and two assessments: the initial assessment, which generated \$158,257.80 last year, and does not have an expiration; and a second overlay assessment, formed in 2015, which generated \$232,406.90 last year but expires on June 30, 2020.

The funds to be generated by this proposed assessment are intended to replace the revenue generated from the expiring 2015 assessment – the proposed budget for 2020-21 is less than \$232,406.90 budget for 2019-20 (see Table 1), so the overall assessment is less. This Report details the methodology for levying an assessment upon parcels that receive a special benefit from the District's flood control, internal drainage and levee maintenance services. This Report and the proposed assessment have also been made pursuant to the California Government Code section 53750, 54710 et seq. and Article XIID of the California Constitution.

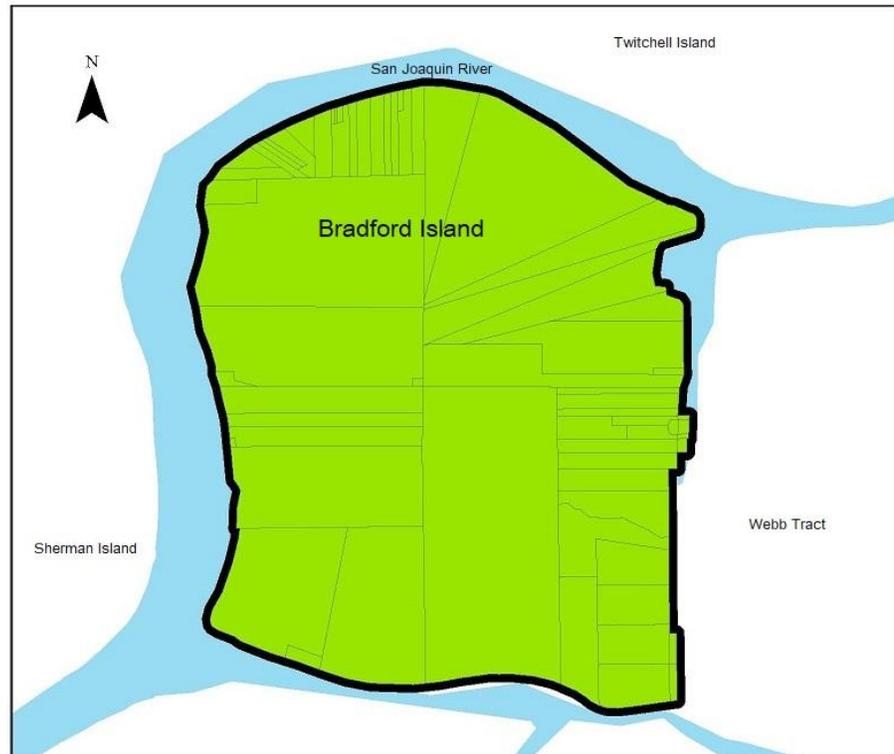
### BACKGROUND

RD 2059 is an independent special district, responsible for the maintenance, operation, capital repair of the levee and flood control system, including internal drainage, on Bradford Island in the Sacramento River Delta. Bradford Island is in the far north-eastern portion of the Contra Costa County, just north of Jersey Island and Bethel Island. RD 2059's levee and flood control system protects life and property from potential flooding from San Joaquin River to the north and west, the False River to the south and Fisherman's Cut to the east. RD 2059 is protected by non-project levees.

The District encompasses approximately 2,385 acres of predominately agricultural and recreational land. It is home to a population of about 3 permanent residents, approximately 11 houses and 22 "vacant lot" parcels created to potentially allow for construction of a house. There are active natural gas wells operating on the island. RD 2059 maintains and operates about 7.5 miles of levees, one pump station and about 7 miles of associated internal drainage canals, and other flood control infrastructure. The District is a member of the Delta Ferry Authority, which provides ferry service from Jersey Island to Bradford Island and Webb Tract.

A map of Bradford Island is shown in Figure 1, below:

FIGURE 1 – LEVEES MAINTAINED BY RD 2059



RD 2059 was formed in 1921 by a special act of the State Legislature and the Contra Costa County Board of Supervisors in response to destructive flooding in the 1860s. Much of the District's flood protection system was constructed during this time. RD 2059 area is at a high risk of flooding due to the following factors:

- **Topography and Regional Geography:** RD 2059 is within eastern Contra Costa County which itself includes portions of the "Sacramento–San Joaquin River Delta," or "California Delta" has a history of significant flooding due to its relatively flat terrain and numerous rivers and creeks fed by potentially intense Sierra snow melt runoff.
- **Local Soil Conditions and Non-Engineered Levees:** The local levees were traditionally constructed by farmers and other early settlers with readily available local materials. Accordingly, these levees were built of permeable materials common in Contra Costa and Sacramento Counties. This permeable material allows water from the flood-swollen rivers to seep under the levees. During recent

significant high water events adjacent to the RD 2059 levees, there has been considerable evidence of under-seepage which is often a precursor to failure.

In order to attain its service goals for operations and maintenance, and repairs, the District needs to establish a reliable, annual funding source that will generate approximately \$213,705 per year, in addition to the approximately \$158,000 from the initial assessment, and \$25,000 other sources. This Engineer's Report supports the establishment of such a revenue source, through the formation of a Proposition 218-compliant, balloted Assessment District that if approved by property owners, would replace the existing, expiring assessment roll revenue source.

The proposed rates for fiscal year 2020-21 for the proposed RD 2059 Levee and Flood Control Improvement Assessment District are:

Single Family Residential	\$154.68 each + up to 0.25 acres
Commercial/Industrial (incl natural gas wells)	\$197.06 per acre
Agricultural	\$ 68.38 per acre
Vacant	\$ 28.02 each + up to 0.25 acres
Non Assessable	\$ 0.00 per acre

(Typical costs to maintain levees in the area range from \$25,000 to \$80,000 per levee mile, whereas the RD 2059 proposed budget included in this Engineer's Report is approximately \$32,000 per levee mile.)

## LEGAL AUTHORITY

The proposed benefit assessment is being formed by RD 2059 under the authority of the Benefit Assessment Act of 1982 (Gov. Code, §§ 54703-54719). Specifically, section 54710, authorizes any local agency able to provide flood control services, which includes RD 2059, to impose a benefit assessment pursuant to the Benefit Assessment Act. (Gov. Code, § 54710(a)(2).) Such assessments are levied annually, based on a budget for expenditures.

All benefit assessments must also comply with Article XIIC and XIID of the California Constitution (often referred to as "Proposition 218"), and the Proposition 218 Omnibus Implementation Act (Government Code, § 53750, et seq.). Proposition 218 allows for benefit assessments to be levied to fund the cost of providing services and improvements, as well as maintenance and operation expenses of a public improvement which provides a special benefit to the assessed property.

Proposition 218 imposes a number of important requirements, including property-owner balloting, for the formation and continuation of assessments, and these requirements are satisfied by the process being used to establish this proposed assessment.

## ASSESSMENT PROCESS AND FUTURE CONTINUATION OF ASSESSMENT

Following submittal of this Report to RD 2059 for preliminary approval, the Board of Directors of RD 2059 (the "Board") may, by Resolution, call for an assessment ballot proceeding and

public hearing on the proposed establishment of a Levee and Flood Control Facilities Improvement Assessment.

If the Board approves such a Resolution, a notice of assessment and assessment ballot shall be mailed to each property owner within the proposed Assessment District boundaries who will be subject to the proposed assessment. Such notice will include a description of the services and improvements to be funded by the proposed assessments, the total amount of the proposed assessment chargeable to the entire Assessment District and the amount chargeable to the specific owner's parcel, the reasons for the proposed assessments and the basis upon which they were calculated, and an explanation of the process for submitting a ballot. Each notice would also include a postage prepaid return envelope and a ballot on which the property owner may mark his or her approval or disapproval of the proposed assessments as well as affix his or her signature.

After the ballots are mailed to property owners in the Assessment District, a minimum 45-day time period must be provided for the return of the assessment ballots. Following this balloting time period, a public hearing must be held for the purpose of allowing public testimony regarding the proposed assessments. At the public hearing, the public will have the opportunity to speak on the issue. The Public Hearing is currently scheduled for July 28, 2020.

If it is determined that the assessment ballots submitted in opposition to the proposed assessments do not exceed the assessment ballots submitted in favor of the assessments (weighted by the proportional financial obligation of the property for which ballots are submitted), the Board may take action to approve the imposition of assessments for fiscal year 2020-21 and each fiscal year thereafter. The levy and collection of the assessments would continue year-to-year until terminated by the Board.

The authority granted by the ballot proceeding would be for a maximum assessment rate of \$154.68 per single family home and \$68.38 per acre for agriculture, increased each subsequent year the United States Department of Labor Northern California Consumer Price Index (CPI) (also known as the "San Francisco Bay Area CPI").

As outlined in Government Code section 53739, the Board may levy the assessment in future years without conducting a new vote procedure, as long as the assessments are within the authorized inflation-adjusted range authorized in the original balloting procedure. If the assessment amount is enough to fund the preliminarily approved budget, a CPI adjustment will not be included. At this meeting, the Board will also call for the publication in a local newspaper of a legal notice of the intent to continue the assessments for the next fiscal year and set the date for the noticed public hearing. At the annual public hearing, members of the public can provide input to the Board prior to the Board's decision on continuing the services and assessments for the next fiscal year.

## DESCRIPTION OF FACILITIES IMPROVEMENTS

---

RD 2059 provides a range of levee and drainage construction, repair, operations, maintenance and flood prevention activities and services (the “Services”) within its boundary.

The maintenance, operations, repairs and improvements proposed to be undertaken by RD 2059 and the cost thereof paid from the levy of the annual assessment provide special benefit to Assessor Parcels within the proposed Assessment District as defined in the Method of Assessment herein. In addition to the definitions provided by the California Government Code Section 54710 et seq., (the “Code”) the maintenance, operations and improvements activities are generally described in the following sections.

This proposed benefit assessment would provide funding for the major areas of service improvement for its operations.

- Operations and maintenance of flood protection facilities
- Maintenance of Levees to HMP Standard
- Operations of pump station and maintenance of internal drainage

Due to the expiration of the 2015 assessment combined with pre-existing inadequate funding, the level of flood protection in the proposed Assessment District would be expected to fall below the desired level of service. In other words, the projected baseline level of service for 2020-21, and beyond (without this proposed assessment) would be inadequate to fund the desired service level, and this baseline would diminish over time. If the proposed assessment is approved, it will fund improved and enhanced Services over and above the baseline level of service.

The formula below describes the relationship between the final level of Services, the baseline level of Service if the assessment is not instituted, and the enhanced level of services funded by the assessment.

<b>Final Level of Service</b>	=	<b>Baseline Level of Service</b>	+	<b>Enhanced Level of Service</b>
-----------------------------------	---	--------------------------------------	---	--------------------------------------

Below is a more detailed description of these improvements that are proposed to be provided for the special benefit of property in the Assessment District.

### IMPROVED MAINTENANCE AND OPERATIONS

Specifically, as described in the District’s 2018- 2019 Final Subventions Claim presented to the California Department of Water Resources, the improved flood control maintenance and operations activities include:

## “ANNUAL ROUTINE LEVEE MAINTENANCE

### ▪ A. General

- 1. The annual routine and regular maintenance of levees under the District’s jurisdiction will consist of continuing with regularly planned and scheduled maintenance activities.
- 2. The District’s planned and budgeted activities and work items may require adjustment, elimination, increase, or decrease of certain line items in response to any or all of the following circumstances:
  - Unforeseen levee site conditions.
  - Changes in State and Federal standards and regulations.
  - Changes in levee maintenance and rehabilitation requirements, and/or
  - Environmental Programs.
  - District budget/cash flow constraints.
- 3. Maintenance activities are performed district wide on an as needed basis and in accordance with the District’s “Agreement for Annual Routine Levee Maintenance” as required by DFG Code Section 1601. The District will notify the Subventions Program Staff in advance of activities that will impact overall habitat values.

### ▪ B. Maintenance Activities

- 1. Levee Inspection – Routine and joint levee inspections to check on maintenance activities, discover any changes in levee conditions, and report conditions that need repairs or further engineering investigations.
- 2. Rodent Control – Extermination of burrowing rodents and filling of burrows with compacted material, as needed. No filling of burrows in burrowing owl areas, as designated by DFG, shall take place during the period of March 15 through August 15, with the exception of the filling of beaver and muskrat dens near the waterline. Application of County permitted and restricted bait materials or any other approved method of rodent eradication, in accordance with labeled instructions and regulations.
- 3. Shaping Levee Crown to Drain Freely – As needed the levee crown will be maintained to have a uniform shape, which will drain water equally throughout the surface without allowing pocketing or excess runoff locations. Repair and Grade Patrol/Access Roads and Ramps – Repair, grade, and shape levee crown, as needed. Levee patrol road areas may require placement of road surfacing for wet weather accessibility. Work will be performed in a manner that will keep dust to a minimum and prevent siltation into the adjacent waterways.
- 4. Repair Minor Slipouts, Erosion, or Subsidence of the Levee Section – Repair of active levee slip outs, erosion, rodent burrows, subsidence, or other site specific conditions that threaten the safety and stability of the levee, as determined by engineering investigations. Levee cavities

- that require considerable slope rebuilding will be backfilled with clean earthen materials and compacted.
- 5. Removal of Drift Deposits and Debris from Levee and Berm – Removal of flood deposited woody or herbaceous vegetation and associated debris to alleviate significantly reduced channel capacities, threatened levee safety, and liability to the District and the public.
  - 6. Seepage/Boil Control – Repair of active seeps where necessary to maintain levee safety and structural integrity. repair sites will be covered with clean quarry stone riprap or other suitable revetment materials. All site repairs that are contracted out and exceed the lengths set forth in the District’s DFG Annual Routine Maintenance Permit Agreement will be applied for under a separate “Site Specific” DFG 1601 Agreement.
  - 7. Cleaning Drains and Toe Ditches Adjacent to the Landside Levee Toe – Cleaning of toe ditches, as needed, when they become ineffective and/or clogged, preventing proper levee seepage and drainage and impairing levee safety.
  - 8. Vegetation Control – Continuation of annual weed/vegetation/Arundo donax
  - (bamboo) control on the levee crown and slopes in accordance with County, State, and federal requirements. Controlling vegetation on the levee slopes shall include applying permitted herbicides, and cutting or trimming vegetative growth such as weeds, brush, berry vines, and trees to the extent necessary to inspect and maintain the levee.
  - 9. Repairing or Restoring Waterside Slope Protection – Repair/restoration of existing waterside slope protection is an ongoing project along levee slopes that are subjected to considerable boat activity, wind and wave wash, and degradation by rodents. Repairs are determined by routine levee inspections and detailed engineering investigations. The repair/restoration may require slope rebuilding with clean embankment materials, compacted in place and covered with clean quarry stone riprap or other suitable revetment materials to maintain levee stability.
  - 10. Flood Emergency Planning and Preparation – Activities shall be performed as needed.
  - 11. Removing or Modifying Encroachments – Encroachments, which do not meet State standards, endanger levee safety, or interfere with levee maintenance and road access, will be removed or modified. Existing encroachments (e.g., discharge pipes, siphons, slide/flap/tide gates, weirs, drop structures, or other existing water control devices) are scheduled to be cleaned, repaired, raised, modified, and/or replaced as needed for operation and levee safety.
  - 12. Levee Profiles, Cross Sections, and Other Surveys – Engineering and surveying services will be performed as needed.
  - 13. Other levee and underwater surveys (scour investigations).

- 14. Engineering Services and Bradford Island Subventions Program Management. Provide engineering services and management as needed including DWR mandated labor compliance program.
- 15. Miscellaneous items – gates, guard rails and traffic control.

#### LEVEE REHABILITATION PLANS

A. Though no levee rehabilitation work has not been formally presented, the District has several locations that could be rehabilitated if funding were available. The District has two low spots on the north side of the island that needs to be raised on average three feet. Due to high water in the San Joaquin River, additional rock slope protection is needed along the western side of the island.

B. Site Specific engineering plans and work will be coordinated with the appropriate agencies, including the Bradford Island Subventions Program Staff, following authorization for the work by the District and prior to commencement of the work.

C. All engineering plans will be prepared and signed by a Civil Engineer licensed by the California Board for Professional Engineers, Land Surveyors, and Geologists.

D. The District will comply with the Department of Industrial Relations (DIR) for public works projects. All contractors awarded public works contracts from the District shall be registered with DIR.”

## COST AND BUDGET ESTIMATE

Reclamation District 2059 has developed a spending plan which concluded that the appropriate level of flood protection system requires approximately \$395,000 per year in operations and maintenance.

**TABLE 1 – FISCAL YEAR 2020-21 PROPOSED BUDGET**

Item	Total Amount						
Beginning Unrestricted Net Assets, July	\$0.00						
Annual District Operations	\$ 262,422.71						
Delta Ferry Operations	\$134,750.00						
<b>Total Annual Costs</b>	<b>\$397,172.71</b>						
<b>Assessment Calculator</b>							
<b>Total Annual Costs</b>	\$397,172.71						
Less Contribution from existing assessment (towards General Benefit contribution)	(\$158,257.00)						
Less Contribution from tolls and other sources (towards General Benefit contribution)	(\$25,209.82)						
<b>Balance to Assessment</b>	<b>\$213,705.89</b>						
	<table border="0"> <tr> <td style="text-align: center;"><u>Benefit Units</u></td> <td style="text-align: center;"><u>SFE Rate</u></td> <td></td> </tr> <tr> <td style="text-align: center;">1,381.60</td> <td style="text-align: center;">\$154.68</td> <td style="text-align: right;">\$213,705.89</td> </tr> </table>	<u>Benefit Units</u>	<u>SFE Rate</u>		1,381.60	\$154.68	\$213,705.89
<u>Benefit Units</u>	<u>SFE Rate</u>						
1,381.60	\$154.68	\$213,705.89					
<b>Total Assessment Amount =</b>	<b>\$213,705.89</b>						

Note: Benefit Units are based upon Single Family Equivalents as explained in the following section.

## METHOD OF APPORTIONMENT

---

This section includes an explanation of the special benefits to be derived from the maintenance, operations and repair activities, the criteria for the expenditure of assessment funds and the methodology used to apportion the total assessments to properties within the proposed Assessment District. The proposed Assessment District area consists of all Assessor Parcels included within the RD 2059 boundary.

Pursuant to Proposition 218, the method used for apportioning the assessment is based upon the proportional special benefits conferred to the properties over and above the general benefits conferred to real property in the proposed Assessment District, or to the public at large. Special benefit is calculated for each parcel in the District using the following process:

- 1.) Identification of all benefit factors derived from the Improvements
- 2.) Calculation of the proportion of these benefits that are general
- 3.) Determination of the relative special benefit within different areas of the Assessment District
- 4.) Determination of the relative special benefit per property type
- 5.) Calculation of the specific assessment for each individual parcel based upon special vs. general benefit, zones, property type and other supporting attributes

### DISCUSSION OF BENEFIT

Maintenance, operational, and improvement activities relating to flood control fall within the scope of Services that may be funded by assessments under the Code. (See Gov. Code, § 54710.5 (permitting any local agency with flood control capabilities to impose an assessment to finance those activities); Gov. Code, § 53750 (defining “flood control” as “any system of public improvements that is intended to protect property from overflow by water.”))

However, Proposition 218 expressly prohibits any assessment “imposed on any parcel which exceeds the reasonable cost of the proportional special benefit conferred on that parcel.” (Cal. Const., art. XIIC.) The assessments can be levied based only on the special benefit to property. This benefit is received by property over and above any general benefits. Moreover, such benefit is not based on any one property owner’s specific use of the maintenance, operations and improvements activities or a property owner’s specific demographic status.

The benefit factors below, when applied to property in the proposed Assessment District, confer special benefits to property and ultimately protect property in the proposed Assessment District and improve the safety, utility and functionality of such property.

A special benefit is a particular and distinct benefit over and above the general benefits conferred on real property located in the district or to the public at large. The total cost of the Services must be apportioned among the properties being assessed, based on the proportionate special benefit the properties will receive. Proposition 218 requires any local

agency proposing a new special assessment to “separate the general benefits from the special benefits conferred on a parcel.” (Cal. Const. art. XIID §4.) The basis for separating special and general benefits is to ensure that certain property owners are not charged for Services provided to the general public or to property outside the assessment district. (See *Silicon Valley Taxpayers’ Assn., Inc. v. Santa Clara County Open Space Authority* (2008) 44 Cal. 4th 431, 450.)

### **FLOOD CONTROL IS A SPECIAL BENEFIT**

Flood control operations, such as the District’s, provide only special benefits. Special benefits are benefits that are “peculiar and distinct over and above general benefits located in the district or to the public at large.” (Cal. Const. art. XIID § 2(i).) Because flood control infrastructure protects particular identifiable parcels (including residents of the parcel and any appurtenant facilities or improvements) from damage due to inundation or force by rising floodwaters, the benefits are provided directly to those parcels, and to none other.

By contrast, general benefits provided to the public at large are discussed in terms of general enhanced property values, provision of general public Services such as police and fire protection, and recreational opportunities that are available to people regardless of their location. (*Silicon Valley*, 44 Cal 4<sup>th</sup> at 450-456)

The issue of general benefits merits further discussion to the extent that flood control Services and improvements also have an obvious indirect relationship to the provision of general benefits. For example, the Services may protect restaurant and/or recreation facilities in the Assessment District that may be used by people regardless of whether they own property in the District. But this indirect relationship does not mean that the Services and Improvements themselves will provide any general benefits. Rather, the Services will provide direct special benefits to parcels that may themselves be used in the provision of general benefits.

More to the point, the public at large will be paying for the general benefits provided to benefiting “public use” property, and specially-benefited property owners’ assessments will not be used to subsidize general benefits provided to the public at large or to property outside the Assessment District. All property that is specially benefited by the Services and Improvements will be assessed, including the parcels used in the provision of general benefits. Thus, the general public will pay for a portion of the provision of the flood control Services and Improvements because the assessed public agencies will use general taxes and other public revenue to pay their Assessments, and privately-owned parcels (such as restaurants) will collect revenue from customers to pay for any “general benefits”.

The Assessment Engineer finds that the Services and Improvements are of distinct and direct special benefit to the property within the Assessment District.

The Assessment Engineer conducted a parcel-by-parcel analysis and has developed an approach, described below is the industry standard. In any case, following is a description of the separation of general benefit from special benefit, and the quantification of the general

benefit, in the District. In each step of this analysis, conservative assumptions and determinations have been used in order to ensure that the total calculated general benefit is maximized which reduces the special benefit assessed on any one parcel.

This Report concludes that enhanced flood control is a special benefit directly to the property that is being protected from flooding. The proposed Maintenance and Operations Services and Improvements, which would be over and above the baseline level, will result in the levees being maintained to a much higher standard, and accordingly will reduce the risk of flooding and the associated damage to property.

The following Benefit Factors section describes how and why the Services and Improvements specially benefit properties. This benefit is particular and distinct from its effect on property in general or to the public at large.

## **BENEFIT FACTORS**

The primary special benefit from the Services and Improvements is the significantly reduced risk of damage to property from flooding. In addition, this section describes other special benefits conferred to residential, commercial, industrial, institutional and other lots and parcels resulting from the Services and Improvements that will be provided. These types of special benefit are summarized as follows:

### **REDUCED RISK OF DAMAGE TO REAL PROPERTY ASSETS FOR ALL PROPERTY OWNERS WITHIN THE ASSESSMENT DISTRICT**

Properties in the proposed Assessment District are currently at higher risk for flood. The proposed Assessments will fund an increase in maintenance, operations and improvement activities to reduce the likelihood of levee failure and reduce the threat from flooding. The reduced risk of direct and indirect contact with flood water will increase public safety and will provide positive health benefits in the Assessment District. The proposed Assessments will fund an increase in maintenance, operations and improvement activities to reduce the likelihood of levee failure and reduce the threat from flooding, thereby significantly reducing the risk of property damage potential and loss of life associated with floods. Clearly, levee and flood control maintenance helps to protect and specifically benefits all properties in the Assessment District. These are special benefits to property in the Assessment District because property is ultimately more desirable and valuable in areas that are safer and have less risk of harmful flooding.

### **REDUCED RISK OF LOSS OF LIFE OR HARM TO PROPERTY FROM FLOODING**

The proposed Assessments will fund maintenance, operations and improvement activities to reduce the likelihood of levee failure and reduce the threat from flooding. These services will reduce the loss of life, injuries, and other public health issues associated with flooding. The reduced risk of direct and indirect contact with flood water will increase public safety and will provide positive health benefits in the Assessment District. These are special benefits to property in the Assessment District because property is ultimately more desirable and valuable in areas that are safer and have less risk of harmful flooding.

#### **INCREASED SAFETY OF DRINKING WATER SUPPLY TO PROPERTY**

Even a minor flood has the potential to contaminate the drinking water supply if flood water enters the distribution system through wells or appurtenances such as air release valves. Such contamination would render the public water supply unfit for drinking. Property owners and residents in the Assessment District would need to use bottled water for drinking and cooking while the distribution systems are flushed, decontaminated, and tested. In addition, privately-owned wells could be damaged or contaminated by flooding. This is ultimately another special benefit to property because property is more desirable and valuable in areas with safe drinking water supplies.

#### **PROTECTION OF JOBS, ECONOMIC BASE AND TRANSPORTATION SYSTEMS AFFECTING PROPERTY**

The proposed Assessment District will provide funding for maintenance, operational and improvement activities that will reduce the risk of significant disruption and harm to jobs and the economic base in the Assessment District. The maintenance, operations and improvement activities will also better protect the roads and transportation systems in the Assessment District that are crucial for maintaining the local economic base. Without accessible roads and access to jobs, the value of property in the Assessment District would be diminished. Therefore, another special benefit to property is the protection of jobs, the local economic base and local transportation systems.

#### **GENERAL VERSUS SPECIAL BENEFIT**

The assessment revenue will be used to provide maintenance, operations and improvement activities to reduce the risk of property damage and harm from flooding. This is a special benefit to property in the proposed Assessment District because the reduction in likelihood of flooding confers the special benefit factors described above and these benefits ultimately flow to property in the Assessment District. Moreover, in absence of the proposed Assessments, the annual ongoing revenues available to RD 2059 are not sufficient to effectively maintain the levees and flood control facilities and will not be sufficient to cover the approximately 20% local share of the funds to make the upgrades to the sections of levee system that have been identified as being in need of “critical” upgrade and/or repair. Therefore, in the absence of the proposed assessment, the potential for flooding in the proposed Assessment District could substantially increase.

Proposition 218 requires any local agency proposing to increase or impose a special assessment to “separate the general benefits conferred on a parcel.” (Cal. Const. art. XIII D, § 4.) The rationale for separating special and general benefits is to ensure that property owners are not charged a benefit assessment in order to pay for general benefits. Thus, a local agency carrying out a project that provides both special and general benefits may levy an assessment to pay for the special benefits, but must acquire separate funding to pay for the general benefits. (*Silicon Valley*, 44 Cal 4<sup>th</sup> at 431, 450.)

In other words:

<b>Total Benefit</b>	<b>=</b>	<b>Special Benefit</b>	<b>+</b>	<b>General Benefit</b>
--------------------------	----------	----------------------------	----------	----------------------------

A formula to estimate the general benefit is listed below:

<b>General Benefit</b>	<b>=</b>	<b>Benefit to Real Property Outside of Assessment District</b>	<b>+</b>	<b>Benefit to Real Property Inside of Assessment District</b>	<b>+</b>	<b>Benefit to Public at Large</b>
----------------------------	----------	--	----------	---	----------	---

#### **BENEFIT TO PROPERTY OUTSIDE, BUT PROXIMATE, TO THE DISTRICT**

There are no parcels that receive special benefit from the levee and flood protection services provided by RD 2059 that are not within the legal boundaries of the District. The general benefit to property outside of the District is calculated as follows with the parcel and data analysis performed by SCI Consulting Group.

##### **Assumptions:**

0 parcels outside and adjacent to the District  
75 parcels in the Assessment District

##### **Calculation**

General Benefit to Property outside the Improvement District=  
(0/(75)) = 0%

**TOTAL GENERAL BENEFIT TO PROPERTIES OUTSIDE, BUT PROXIMATE, TO THE DISTRICT = 0%**

#### **BENEFIT TO PROPERTY WITHIN THE ASSESSMENT DISTRICT**

The “indirect and derivative” benefit to property within the District is particularly difficult to calculate. A solid argument can be presented that all benefit within the Assessment District is special, because the Improvements are clearly “over and above” and “particular and distinct” when compared with the baseline level of service and the unique proximity and access of the Services and Improvements enjoyed by benefiting properties in the Districts.

Nevertheless, the *Silicon Valley Taxpayers Association* decision indicates there may be general benefit “conferred on real property located in the district.” A measure of the general benefits to property within the District is the percentage of land area within the District that is publicly owned, open to the public, and used for regional purposes such as major roads,

rail lines, hospitals, and other regional facilities because such properties, while physically within the District, are used for regional purposes and could provide indirect benefits to the public at large. Nonetheless, the Engineer has liberally assigned an allowance of a 1% general benefit factor.

**TOTAL GENERAL BENEFIT TO PROPERTIES WITHIN THE ASSESSMENT DISTRICT = 1%**

**BENEFIT TO THE PUBLIC AT LARGE**

In *Beutz v. County of Riverside* (2010) 184 Cal.App.4th 1516, the Court opined that general benefits from parks and recreation facilities could be quantified by measuring the use of parks and recreation facilities by people who do not live within the assessment boundaries. This Report uses this general benefit measure as the third component of the overall general benefit quantification. Therefore, the general benefit to the public at large can be estimated by the proportionate amount of time that the District's facilities are used and enjoyed by individuals who are not residents, employees, customers or property owners in the District. Here, the public at large within the District is primarily made up of non-resident boaters and fisherman.

However, the need for access by those who do not contribute to the assessment in any way (e.g. visitors who are not residents, employees, customers or property owners) in the District is extremely limited and difficult to measure. Nonetheless, the Engineer has liberally assigned an allowance of a 1% general benefit factor.

**TOTAL GENERAL BENEFIT TO PUBLIC AT LARGE = 1%**

**SPECIAL NOTE ON GENERAL BENEFITS**

In *Dahms v. Downtown Pomona Property* (2009) 174 Cal.App.4th 708, the court upheld an assessment that was 100% special benefit on the rationale that the Services funded by the assessments were directly provided to property in the assessment district. Similar to the assessments in Pomona that were validated by *Dahms*, the Assessments described in this Engineer's Report fund Flood Control Services that are directly provided to property in the assessment area. Moreover, as noted in this Report, the Services directly reduce flood risk on all property in the assessment area. Therefore, *Dahms* establishes a basis for minimal or zero general benefits from the Assessments. However, in this report, the general benefit is more conservatively estimated and described, and then budgeted so that it is funded by sources other than the assessment.

**TOTAL GENERAL BENEFITS**

Using a sum of these three measures of general benefit, we find that approximately 10% of the benefits conferred by the Improvements may be general in nature and should be funded by sources other than the assessment.

**General Benefit =**

$$\begin{aligned}
 & \mathbf{0\% \text{ (Outside the District)}} \\
 + & \mathbf{1\% \text{ (Property within the District)}} \\
 + & \mathbf{1\% \text{ (Public at Large)}} \\
 \\ 
 = & \mathbf{2\% \text{ (Total General Benefit)}}
 \end{aligned}$$

RD 2059's budget for fiscal year 2020-21 for this proposed Assessment would be \$213,705. Of this total assessment budget amount, RD 2059 will contribute at least \$4,274 or at least 2% of the total budget from sources other than this assessment. The contribution from the initial assessment (greater than \$190,000) more than satisfies this requirement.

### **SPECIAL NOTE ON GENERAL BENEFIT TO THE NEARBY LOCAL, STATE AND FEDERAL WATER PROJECTS**

Any additional general benefit from the proposed improvements to the nearby local, State and Federal water projects, is addressed through above-described 2% general benefit allowance, and by the DWR's programs which financially support a significant portion of RD 2059's operations and maintenance, and capital repairs.

### **ASSESSMENT APPORTIONMENT**

In the process of determining the appropriate method of assessment, various alternatives were considered. For example, an assessment only for all residential improved property was considered but was determined to be inappropriate because vacant, commercial, industrial and other properties also receive special benefits from the Assessments. Moreover, a fixed or flat assessment for all properties of similar type was deemed to be inappropriate because properties less likely to be affected by flooding would be assessed the same as properties more likely to be affected. Hence, the appropriate method of assessment should be based on the type and use of the property, the relative size of the property, and the level of potential damage to property. This method is further described below.

### **METHOD OF ASSESSMENT**

The next step in apportioning assessments is to determine the relative special benefit for each property. This process involves determining the relative benefit received by each property in relation to a "benchmark" property, a single family detached dwelling on one parcel of five acres or less. (one "Single Family Equivalent Benefit Unit" or "SFE"). This SFE methodology is commonly used to distribute assessments in proportion to estimated special benefits. In this Engineer's Report, all properties are assigned an SFE value, which is each property's relative benefit in relation to a single-family home on one parcel.

The relative benefit to properties from maintenance, operational and improvement activities that reduce the potential for levee failure and flooding is described by the following equations:

TABLE 2 – EQUATIONS

Equations	
1	$\sum \text{Special Benefit}_{\text{parcel}} = \sum \text{Assessment}_{\text{parcel}}$
2	$\text{Assessment}_{\text{parcel}} = \text{Rate}_{\text{zone}} \times f(\text{Replacement Factors, Parcel Specific Factors})$
3	$\text{Rate}_{\text{zone}} = \text{Base Rate} * \text{Relative Zone Factor}$
4	$\text{Base Rate} = \frac{\sum \text{Costs}}{\sum \text{SFEs}}$

TABLE 3 – FACTORS

Factor	Reference
$\sum \text{Cost}$	Table 2
$\sum \text{SFE}$	Table 2
Parcel Specific Factors:	
I. Flood Risk Factors	Table 4
II. Flood Damage Factors (Groups)	Table 5
III. Shared Facilities Factors	Table 6
Weighted Parcel Factor Summary	Table 7
Replacement Factors	Table 8
Summary of Proposed Rates	Table 10

That is, the special benefit conferred to property is a function of flood risk factors, flood damage factors, shared facilities factors and land use factors. The derivation of these factors is described in the sections below.

### ZONES OF BENEFIT

Most assessment districts, including assessment districts to fund flood protection, confer different types and amounts of special benefit on parcels in different areas of the assessment district. Therefore, the creation of zones of benefit, corresponding to these various areas, are routinely considered in the development of an assessment district.

However, the geography and topography of RD 2059 is relative consistent throughout its boundaries, and it is essentially a single basin with uniform levee crown and toe elevations. Therefore different zones of benefit are not appropriate.

Nonetheless, to in order to rigorously evaluate the different areas of RD 2059, the analysis has been divided into the

- **Northern** (including Sta 65+00 to 250+00 and the area contained therein)
- **Southern** (including Sta 0+00 to 65+00 & 250+00 to 393+01 and the area contained therein)

areas, as shown in Tables 4, 5, 6 and 7. (In this case, because of the uniformity of the District, the values are the same in all 4 tables)

### FLOOD RISK FACTORS (PARCEL SPECIFIC FACTOR I)

Flood risk factors are typically derived from an analysis of the relative risks corresponding to specific sections of flood protection system, and then assigned to specific corresponding geographic zones. An analysis was conducted comparing the flood risk in the North, Central and south ends of the District and the flood risk is uniform and all properties are protected by the same sections of levees, with the same relative risk of failure. A breach or failure anywhere on the levees will affect all interior properties uniformly. Therefore, the relative risk factors are the same.

**TABLE 4 – FLOOD RISK FACTORS**

Area	Flood Risk Factors (%)
<b>Northern</b> (Sta 65+00 to 250+00)	100.0
<b>Southern</b> (Sta 0+00 to 65+00 & 250+00 to 393+01)	100.0

### FLOOD DAMAGE FACTORS (PARCEL SPECIFIC FACTOR II)

Flood damage is generally a function of the depth of flooding, with higher water levels causing greater damage to structures. The proposed Assessment District area was evaluated, with properties subject to uniform flood depth throughout.

Based upon the relevant Flood Damage Percent curves (Corp of Engineer's Economic Guidance Memorandum (EGM) 01-03, Generic Depth-Damage Relationships, Table 2 Two-story with no Basement), relative Damage Factors were determined, and normalized, as shown in Table 6, below:

**TABLE 5 – FLOOD DAMAGE FACTORS**

	Approx Area Levee Crown Elevation (a)	Approx Levee Toe Elevation (b)	Effective Flood Depth (ft.) (a-b)	Mean of Damage	Normalized Flood Damage (%)
<b>Northern</b> (Sta 65+00 to 250+00)	9.0	-6.0	15.00	67.70	100.0
<b>Southern</b> (Sta 0+00 to 65+00 & 250+00 to 393+01)	9.0	-6.0	15.00	67.70	100.0

### SHARED FACILITY FACTORS (PARCEL SPECIFIC FACTOR III)

Shared facilities factors affect the calculated special benefit to parcels by evaluating the relative benefit to essential facilities and services. (For example, in the extreme hypothetical case of comparing benefit to a house at the lowest grade versus a house on stilts, the flood risk and flood damage to the properties may be very different, but both may receive very similar benefit in accessibility and access to water, power, sewer and drainage) A weighted system is used based upon an equal distribution for each of the five critical shared facilities to model the effect of the degradation of these facilities in different zones during a flood event. This component of this special benefit apportionment is the same in both zones as summarized in Table 7, below.

**TABLE 6 – SHARED FACILITY FACTORS**

Area	Water	Power	Sewer	Drainage	Road Access	Total (%)
<b>Northern</b> (Sta 65+00 to 250+00)	20	20	20	20	20	100
<b>Southern</b> (Sta 0+00 to 65+00 & 250+00 to 393+01)	20	20	20	20	20	100

### WEIGHTED PARCEL FACTOR SUBTOTALS

Within the proposed Assessment District boundaries, Flood Risk Factors, Flood Damage Factors and Shared Facility Factors describe the relative benefit to each parcel within the north, central and south areas, and are adjusted by their relative importance (weighting). Table 8 below shows the total weighted and normalized flood, Risk, Flood Damage and Shared Facilities factors. (Note: This analysis concludes that the special benefit conferred on north, central, and south areas are equal, as shown in Table 8)

TABLE 7 – TOTAL RELATIVE PARCEL FACTORS

Area	Flood Risk Factor	Flood Damage Factor	Shared Facilities Factor	Total Weighted Parcel Factors
Relative Weight (%)	33.33	33.33	33.33	
<b>Northern</b> (Sta 65+00 to 250+00)	100.00	100.00	100.00	100.00
<b>Southern</b> (Sta 0+00 to 65+00 & 250+00 to 393+01)	100.00	100.00	100.00	100.00

The relative weights were determined with the greatest emphasis on potential flood damage and the conclusion that the potential loss of shared facilities is critical to the use of all property in the District. They have been given a relative weight of 33.33% each, based upon engineering judgment.

#### LAND USE FACTORS TO DETERMINE REPLACEMENT FACTORS

The final step in determining the apportionment is to factor in the land use, or replacement value for each type of use within a Group.

Using the Contra Costa County Assessor's data for land and total value, appraisal results, and other regional characteristics and sources, relative land use factors were determined for various property types.

These property types and land use factors are described below and summarized in Table 9.

TABLE 8 – LAND USE FACTORS FOR PROPERTY TYPES

Land Use	Normalized Replacement/Ag Loss Value(%)	Unit
Single Family Residential	100.0	each + <= 0.25 acres
Commercial/Industrial	127.4	acre
Agricultural	44.2	acre
Vacant	18.1	each + <= 0.25 acres
Non Assessable	0.0	acre

#### LAND USE TYPES ON BRADFORD ISLAND

The parcels on Bradford Island include large, rectangular (> 15 acres) agricultural parcels primarily used for grazing; smaller, long and narrow residential and vacant residential parcels (<=15 acres); mineral right parcels that are not shown on County parcel maps and several utilitarian parcels including 4 owned by the District.

### RESIDENTIAL PROPERTIES

All improved residential properties with a single residential dwelling unit, are assigned a land use factor of 1.0 SFE per single family residence. These residential properties are assessed on a per acre basis, with 0.25 acres dedicated to the residence and the remainder assessed at the agricultural rate.

### COMMERCIAL/INDUSTRIAL & OFFICE PROPERTIES

Commercial and industrial properties are assigned a land use factor on a per acre basis, since there is a relationship between parcel size, structure size and relative benefits. The land use factor for commercial and industrial properties was determined to be 1.271 SFEs per acre, with the actual acreage rounded up to the next full acre.

### MINERAL RIGHTS PROPERTIES

There are a number of active natural gas wells on Bradford Island, and the associated gas well infrastructure receives significant special benefit from the proposed services and improvements. Mineral rights parcels do not necessarily receive special benefit commensurate directly with acreage. Hence, long-standing distribution of special benefit, as calculated in the 2015 Engineer's Report, to various parcel is maintained as shown in table 9 below:

**TABLE 9 –MINERAL RIGHTS PARCELS AND ASSOCIATED RELATIVE SPECIAL BENEFIT**

Current Owner	Parcel Number	Special Benefit Portion	Effective Acreages
Vintage Petroleum LLC	026-050-800-7	40.05%	148.18
Vintage Petroleum LLC	026-050-801-5	4.08%	15.11
Vintage Petroleum LLC	026-100-802-3	4.08%	15.11
Vintage Petroleum LLC	026-100-803-1	4.08%	15.11
Vintage Petroleum LLC	026-100-804-9	11.43%	42.31
Vintage Petroleum LLC	026-100-805-6	12.77%	47.26
Vintage Petroleum LLC	026-100-806-4	23.49%	86.92

Mineral Rights parcels are assessed at the Commercial/Industrial rates at the effective acreages listed in the table above. These assigned effective acreage model the relative special benefit conferred to each parcel.

**AGRICULTURAL PROPERTIES**

Based upon an in-depth analysis of revenue production value over time for agricultural properties, the land use factor for vacant properties was determined to be 0.463 SFEs per parcel, based upon the actual acreage.

**VACANT/UNDEVELOPED PROPERTIES**

The land use factor for vacant properties was determined to be 0.190 SFEs per parcel. . . . These vacant residential properties are assessed on a per acre basis, with 0.25 acres dedicated to the vacant residence and the remainder assessed at the agricultural rate.

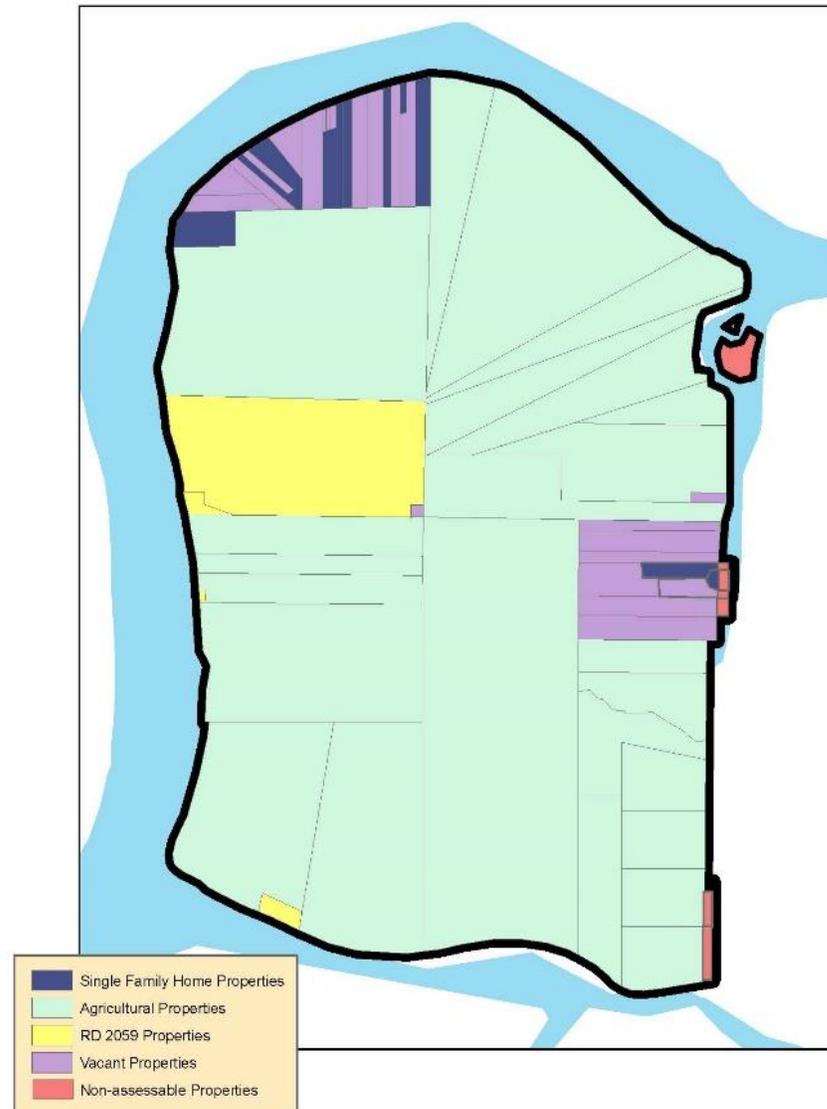
**PUBLICLY OWNED PARCELS**

Publicly owned parcels were individually reviewed and assigned the most appropriate property type.

Article XIID, Section 4 of the California Constitution states that publicly owned properties shall not be exempt from assessment unless there is clear and convincing evidence that those properties receive no special benefit. All public properties that are specially benefited are assessed.

A map of Bradford Island with various land use types is shown in Figure 2 below:

FIGURE 2 – VARIOUS LAND USE TYPES ON RD 2059



**SUMMARY OF SFES AND RATES FOR VARIOUS LAND USES**

The SFE column in this table is determined multiplying “Total Weighted Parcel Factors” values in Table 7 by the “Normalized Replaces/Crop Loss Value” values in Table 8, for each area. (In this case the values for each area are the same.)

The Rate column of this table is determined by dividing the total benefit by the number of Single Family Equivalent (SFEs) in order to determine an assessment rate per SFE. The base rate for a single family home is set at \$154.68. This calculation is shown in Table 1.

Rates for other types of parcels, as based upon relative replacement costs are shown in Table 10, below.

**TABLE 10 – SUMMARY OF SFEs AND RATES FOR VARIOUS LAND USES**

Land Use	SFE	Rate	Unit
Single Family Residential	1.000	\$154.68 each + <= 0.25 acres	
Commercial/Industrial	1.274	\$197.06 acre	
Agricultural	0.442	\$68.38 acre	
Vacant	0.181	\$28.02 each + <= 0.25 acres	
Non Assessable	0.000	\$0.00 acre	

## CRITERIA AND POLICIES

### PARCEL CHANGES

The signatory Assessment Engineer is responsible for a parcel by parcel analysis, to determine the special benefit and assessment amount for each parcel in the proposed Assessment District. Each year, the Assessment Engineer will re-analyze and re-calculate individual benefits and corresponding assessments for each parcel, incorporating parcel splits and combinations, land use changes, specific flood risks, etc. The Assessment Engineer shall use the lien date roll obtained from the County of Contra Costa, or a third-party distributor of this data as the basis for the levy roll. Review of aerial photos and other data including real estate data, and site visits are anticipated.

### APPEALS OF ASSESSMENTS LEVIED TO PROPERTY

Any property owner who feels that the assessment levied on their property is in error as a result of incorrect information being used to apply the foregoing method of assessment may file a written appeal. Any such appeal is limited to correction of an assessment during the then current fiscal year. Upon the filing of any such appeal, District will promptly review the appeal and any information provided by the property owner. If the District finds that the assessment should be modified, the appropriate changes shall be made to the assessment roll. If any such changes are approved after the assessment roll has been filed with the County for collection, the District is authorized to refund to the property owner the amount of any approved reduction.

### DURATION OF THE ASSESSMENT

If approved by property owners in an assessment ballot proceeding conducted pursuant to the Article and Government Code Section 53750 et seq., the assessments can be levied annually commencing with fiscal year 2020-21, and continuing each year at the discretion of the RD 2059 Board.

**COST OF LIVING ADJUSTMENTS TO ASSESSMENT RATE**

The assessment cannot be increased in future years without approval from property owners in another assessment ballot proceeding, except for an annual adjustment tied to the change in the U.S. Department of Labor, Bureau of Labor Statistics Consumer Price Index ("CPI") for the San Francisco Bay Area, not to exceed 4% per year. The December to December CPI will be used to calculate the CPI. In the case of a negative December to December CPI, a 0.0% CPI will be used.

This sub-section describes the criteria that shall govern the expenditure of assessment funds and ensures equal levels of benefit for properties of similar type. The criteria established in this Report, as finally confirmed, cannot be substantially modified; however, the Board may adopt additional criteria to further clarify certain criteria or policies established in this Report or to establish additional criteria or policies that do not conflict with this Report.

**ASSESSMENT FUNDS MUST BE EXPENDED WITHIN THE PROPOSED ASSESSMENT DISTRICT**

The net available assessment funds, after incidental, administrative and other costs, shall be expended exclusively for the maintenance, operations and improvements provided to levees that protect property within the boundaries of the proposed Assessment District.

**SENIOR, LOW-INCOME AND OTHER EXEMPTIONS**

The Government Code does not provide for exemptions to assessments for senior citizen or low-income property owners. If such a program were desired, RD 2059 or another agency could pay this assessment on behalf of the exempted property owners with funds collected from one or more non-assessment sources.

## ASSESSMENT

---

**WHEREAS**, the Board of Reclamation District 2059 is proceeding with the proposed formation of the Levee and Flood Control Facilities Improvement Assessment District under the California Codes Government Code sections 54703 et seq. and Article XIIIID of the California Constitution (the "Article"), to proceed with the proposed levy of assessments;

**WHEREAS**, the undersigned Engineer of Work has prepared and filed a report presenting an estimate of costs, a diagram for the Assessment District and an assessment of the estimated costs of the Improvements upon all assessable parcels within the Assessment District;

**NOW, THEREFORE**, the undersigned, by virtue of the power vested in me under Government Code Section 54703 and Article and the order of said Board, hereby make the following assessment to cover the portion of the estimated cost of said Improvements, and the costs and expenses incidental thereto to be paid by the Assessment District.

The amount to be paid for said Improvements and the expense incidental thereto, to be paid by the Assessment District for the fiscal year 2020-21 is generally as follows:

Costs	
Beginning Unrestricted Net Assets, July	\$0.00
Total Annual Costs	\$397,172.71
Less Contribution from other Sources	(\$183,466.82)
Net Amount to Assessment	\$213,705.89

An Assessment Diagram is hereto attached and made a part hereof showing the exterior boundaries of said Assessment District. The distinctive number of each parcel or lot of land in said Assessment district is its Assessor Parcel Number appearing on the Assessment Roll.

I do hereby assess and apportion said net amount of the cost and expenses of said Improvements, including the costs and expenses incident thereto, upon the parcels and lots of land within said Assessment District, in accordance with the special benefits to be received by each parcel or lot, from the Improvements, and more particularly set forth in the Cost Estimate and Method of Assessment hereto attached and by reference made a part hereof.

The assessment is subject to an annual adjustment tied to the annual change in the Consumer Price Index for the San Francisco Bay Area as of December of each succeeding year, with the maximum annual adjustment not to exceed 4%.

In the event that the actual assessment rate for any given year is not increased by an amount equal to the maximum of 4% or the yearly CPI change plus any CPI change in previous years that was in excess of 4%, the maximum authorized assessment shall increase by this amount. In such event, the maximum authorized assessment shall be equal to the base year assessment as adjusted by the increase to the CPI, plus any and all CPI adjustments deferred in any and all prior years. The CPI change above 4% can be used in a future year when the CPI adjustment is below 4%.

If property owners, in an assessment ballot proceeding, approve the initial fiscal year benefit assessment for the special benefits to their property including the CPI adjustment schedule, the assessment may be levied annually and may be adjusted by up to the maximum annual CPI adjustment without any additional assessment ballot proceeding. In the event that in future years the assessments are levied at a rate less than the maximum authorized assessment rate, the assessment rate in a subsequent year may be increased up to the maximum authorized assessment rate without any additional assessment ballot proceeding.

If property owners, in an assessment ballot proceeding, approve the initial fiscal year benefit assessment for the special benefits to their property, the proposed assessment shall continue for a period not more than two (2) years (i.e. this measure would have a 2 year sunset).

Each parcel or lot of land is described in the Assessment Roll by reference to its parcel number as shown on the Assessor's Maps of the County of Contra Costa for the fiscal year 2020-21. For a more particular description of said property, reference is hereby made to the deeds and maps on file and of record in the office of the County Recorder of Contra Costa County.

I hereby place opposite the Assessor Parcel Number for each parcel or lot within the Assessment Roll, the amount of the assessment for the fiscal year 2020-21 for each parcel or lot of land within the said Assessment District.<sup>1</sup>

Dated: July 28, 2020



Engineer of Work

\_\_\_\_\_

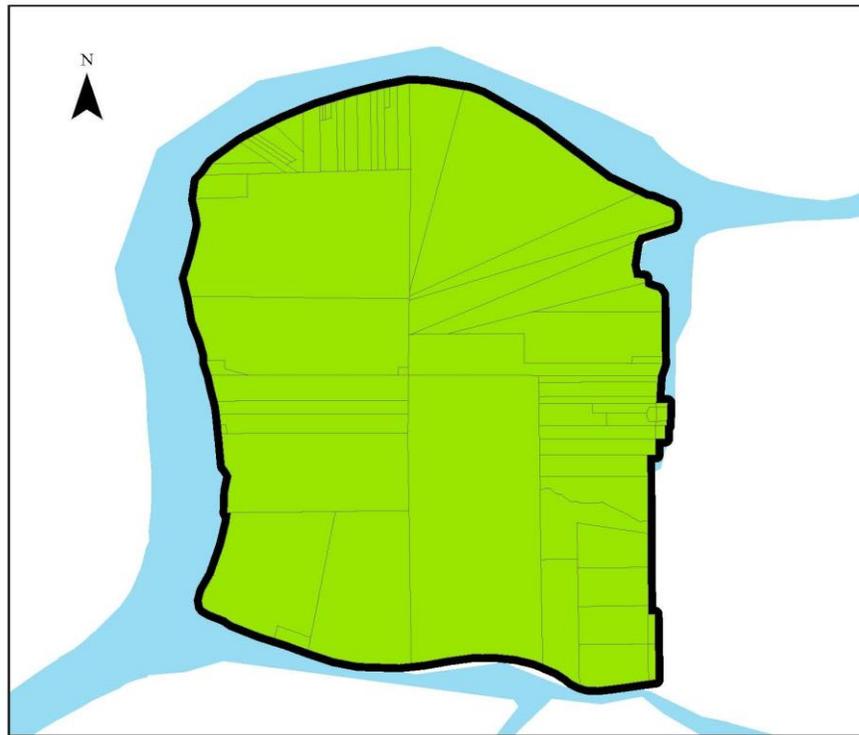
<sup>1</sup> Each parcel has a calculated assessment based on the estimated level of special benefit to the property.

By \_\_\_\_\_  
John Bliss, License No. C052019

**ASSESSMENT DIAGRAM**

The Assessment District includes all properties within the proposed boundaries of the Levee and Flood Control Facilities Improvement Assessment. The boundaries of the Assessment District are displayed on the following Assessment Diagram. The lines and dimensions of each lot or parcel within the Assessment District are those lines and dimensions as shown on the maps of the Assessor of the County of Contra Costa, for fiscal year 2020-21, and are incorporated herein by reference, and made a part of this Diagram and this Report.

**FIGURE 3 – RECLAMATION DISTRICT 2059 ASSESSMENT DIAGRAM FY 2020-21**



FILED IN THE OFFICE OF THE CLERK OF RECLAMATION DISTRICT 2059, COUNTY OF CONTRA COSTA, CALIFORNIA, THIS \_\_\_\_ DAY OF \_\_\_\_\_, 2020.

CLERK \_\_\_\_\_

RECORDED IN THE OFFICE OF THE CLERK OF THE RECLAMATION DISTRICT 2059, COUNTY OF CONTRA COSTA, CALIFORNIA, THIS \_\_\_\_ DAY OF \_\_\_\_\_, 2020.

CLERK \_\_\_\_\_

AN ASSESSMENT WAS CONFIRMED AND LEVIED BY THE BOARD OF RECLAMATION DISTRICT 2059, COUNTY OF CONTRA COSTA, ON THE LOTS, PIECES AND PARCELS OF LAND ON THIS ASSESSMENT DIAGRAM ON THE \_\_\_\_ DAY OF \_\_\_\_\_, 2020 FOR THE FISCAL YEAR 2020-21 AND SAID ASSESSMENT DIAGRAM AND THE ASSESSMENT ROLL FOR SAID FISCAL YEAR WERE FILED IN THE OFFICE OF THE COUNTY AUDITOR OF THE COUNTY OF CONTRA COSTA ON THE \_\_\_\_ DAY OF \_\_\_\_\_, 2020. REFERENCE IS HEREBY MADE TO SAID RECORDED ASSESSMENT ROLL FOR THE EXACT AMOUNT OF EACH ASSESSMENT LEVIED AGAINST EACH PARCEL OF LAND.

CLERK \_\_\_\_\_

FILED THIS \_\_\_\_ DAY OF \_\_\_\_\_, 2020 AT THE HOUR OF \_\_\_\_ O'CLOCK \_\_\_\_ M. IN THE OFFICE OF THE COUNTY AUDITOR OF THE COUNTY OF CONTRA COSTA, STATE OF CALIFORNIA, AT THE REQUEST OF THE BOARD OF RECLAMATION DISTRICT 2059.

COUNTY AUDITOR, COUNTY OF CONTRA COSTA

RD 2059

Note: REFERENCE IS HEREBY MADE TO THE MAPS AND DEEDS OF RECORD IN THE OFFICE OF THE ASSESSOR OF THE COUNTY OF YOLO IN CALIFORNIA FOR A DETAILED DESCRIPTION OF THE LINES AND DIMENSIONS OF ANY PARCEL SHOWN HEREIN. THOSE MAPS SHALL GOVERN FOR ALL DETAILS CONCERNING THE LINES AND DIMENSIONS OF SUCH PARCELS. EACH PARCEL IS IDENTIFIED IN SAID MAPS BY ITS DISTINCTIVE ASSESSOR'S PARCEL NUMBER.

PREPARED BY SCI CONSULTING GROUP  
4745 Mangelle Boulevard  
Fairfield, CA 94534  
707-430-4300

**ASSESSMENT DIAGRAM**  
**Levee and Flood Control Facilities Improvement Assessment**  
**Reclamation District 2059**

## APPENDICES

---

### APPENDIX A – ASSESSMENT ROLL, FY 2020-21

The Assessment Roll is made part of this report and is available for public inspection during normal office hours. Each lot or parcel listed on the Assessment Roll is shown and illustrated on the latest County Assessor records and these records are, by reference, made part of this report. These records shall govern for all details concerning the description of the lots or parcels.

026-020-002-7	\$0.00
026-020-003-5	\$79.35
026-020-004-3	\$0.00
026-020-005-0	\$821.35
026-020-006-8	\$16,709.93
026-030-001-7	\$3,418.43
026-030-002-5	\$13,673.71
026-030-003-3	\$3,418.43
026-030-004-1	\$3,418.43
026-030-005-8	\$3,418.43
026-030-008-2	\$79.35
026-030-009-0	\$3,418.43
026-030-011-6	\$0.00
026-030-012-4	\$0.00
026-030-013-2	\$1,093.90
026-030-014-0	\$4,717.43
026-040-002-3	\$9,268.73
026-040-003-1	\$8,428.51
026-040-004-9	\$8,204.23
026-040-005-6	\$0.00
026-040-007-2	\$0.00
026-040-008-0	\$2,043.48
026-040-010-6	\$3,213.32
026-040-011-4	\$1,594.29
026-050-004-6	\$1,367.37
026-050-006-1	\$22,896.66
026-050-009-5	\$523.75
026-050-011-1	\$1,036.51
026-050-012-9	\$1,036.51
026-050-013-7	\$1,036.51
026-050-014-5	\$523.75
026-050-015-2	\$1,843.17
026-050-016-0	\$1,709.21
026-050-017-8	\$1,709.21
026-050-018-6	\$1,709.21
026-050-019-4	\$831.41

026-050-024-4	\$2,734.74
026-050-028-5	\$0.00
026-050-029-3	\$0.00
026-050-030-1	\$0.00
026-050-031-9	\$1,914.32
026-050-032-7	\$2,336.91
026-050-800-7	\$29,200.65
026-050-801-5	\$2,977.59
026-100-802-3	\$2,977.59
026-100-803-1	\$2,977.59
026-100-804-9	\$8,337.72
026-100-805-6	\$9,313.13
026-100-806-4	\$17,128.64
026-100-807-2	\$0.00
026-100-808-0	\$0.00
026-111-001-9	\$480.59
026-111-002-7	\$391.03
026-111-003-5	\$263.88
026-111-004-3	\$273.63
026-111-005-0	\$146.95
026-111-006-8	\$616.25
026-111-007-6	\$363.03
026-120-001-8	\$672.70
026-120-002-6	\$36.20
026-120-003-4	\$36.20
026-120-004-2	\$64.19
026-120-005-9	\$750.20
026-120-006-7	\$479.51
026-120-007-5	\$616.71
026-120-008-3	\$641.92
026-120-009-1	\$472.55
026-120-010-9	\$345.25
026-120-011-7	\$206.65
026-120-012-5	\$605.73
026-120-013-3	\$1,891.74
026-130-001-6	\$480.75
026-130-002-4	\$357.47
026-130-004-0	\$370.92
026-130-006-5	\$0.00