

MARIN COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
GALLINAS LEVEE UPGRADE PROJECT INITIAL STUDY
COMMENTS ON THE INITIAL STUDY AND RESPONSES

1. Comments on the Initial Study and Responses.....2

Letter A. Dennis Bortoli3

Letter B. Josh Dieterich5

Letter C. Robert Dobrin7

Letter D. Tom Graham21

Letter E. Rochelle Karter23

Letter F. Stanley Karter31

Letter G. Gerald MacDonald35

Letter H. Sean McClelland.....37

Letter I. Michael McCrea40

Letter J. Frances Nunez42

Letter K. Alan Scotch46

Letter L. Gina M. Solomon49

Letter M. Ellen Stein56

Letter N. Gallinas Watershed Council.....60

Letter O. Marin Audubon63

Letter P. Phil Bennett67

Letter Q. California Department of Fish and Wildlife69

2. Changes to the Initial Study75

1. Comments on the Initial Study and Responses

This document contains copies of the comment letters on the Gallinas Levee Upgrade Initial Study (Initial Study) received during the public review period, and the individual responses to those comments. In addition, two letters were received after the close of the public review period, but are nevertheless responded to here. Each written comment letter is designated with a letter (A through N) in the upper right-hand corner of the letter. Within each written comment letter, individual comments are labeled with a number in the margin. Immediately following each comment letter is an individual response to each numbered comment. Only comments on the scope of the Project and on the Initial Study analysis and conclusions are responded to: comments expressing the commenter's support for or opposition to the Project, and comments addressing other issues not within the scope of the Project are not responded to.

Changes to the text of the initial study are indicated by ~~strike-throughs~~ for deletions and underline for additions.

Comments were received from the following individuals and organizations:

| Letter Designation | Commenter's Name and Affiliation (if any) |
|--------------------|--|
| A | Dennis Bortoli |
| B | Josh Dieterich |
| C | Robert Dobrin |
| D | Tom Graham |
| E | Rochelle Karter |
| F | Stanley Karter |
| G | Gerald MacDonald |
| H | Sean McClelland |
| I | Michael McCrea |
| J | Frances Nunez |
| K | Alan Scotch |
| L | Gina M. Solomon |
| M | Ellen Stein |
| N | Judy Schriebman, Gallinas Watershed Council |
| O | Barbara Salzman and Phil Peterson, Marin Audubon Society |
| P | Phil Bennet (letter received after close of comment period) |
| Q | Gregg Erickson, California Department of Fish and Wildlife (letter received after close of comment period) |

Williams, Laurie

From: Epke, Gerhard
Sent: Wednesday, July 31, 2019 4:32 PM
To: Williams, Laurie
Subject: Fwd:

FYI
Looks like I can answer these when I return Friday and they are not comments for the IS...

Sent from my phone.
Pardon the smistakes.

Begin forwarded message:

From: Dennis Bortoli <densv@aol.com>
Date: July 31, 2019 at 1:05:41 PM PDT
To: gepke@marincounty.org

Gallinas Levee Upgrade Project

I live at 9 Vendola Dr and have no problem confirming a maintenance levee easement on my property.

I have a couple of questions.

- 1 | 1) Will the posts extend above the top of the finished TRB to expedite and facilitate any future need to add elevation if tidal increase happens faster than expected?
- 2 | 2) To assure timely levee inspection, maintenance & repair it is important that a small vehicle (golf cart sized) have useable access. Being confined within an easement the levee is a long walk and tools or materials may be needed. Will said vehicle access be within the 10 foot easment? If not the TRB should be wide enough for said vehicle.

Dennis Bortoli

Letter A. Dennis Bortoli

- A-1 There is no plan to extend the posts above the top of the TRB boards to accommodate future height increases. The feasibility of a higher TRB has not been studied. The Project is intended to provide an increased level of protection from flooding for a 30-year period. Longer-term solutions are likely to be orders of magnitude more expensive and the District does not consider a higher levee to be feasible at this time.
- A-2 Vehicle access along the levee is not required for maintenance and is not proposed as part of the Project. Providing vehicle access would substantially increase the cost of the Project and would be more disruptive for property owners. The more robust design of the TRB is expected to reduce the frequency of inspections and repairs. The easement (possibly with small gates along the TRB in-between properties) would facilitate access.

Williams, Laurie

From: joshua.dieterich <joshua.dieterich@gmail.com>
Sent: Tuesday, July 16, 2019 1:37 PM
To: Williams, Laurie
Subject: Zone 7 Gallinas Levee Upgrade

Hello Laurie,

My name is Josh Dieterich, homeowner at 623 Galerita Way, San Rafael, 94903, in the Santa Venetia neighborhood.

I'm writing to express my great sense of urgency to update the earthen levee that protects my neighborhood. In public meetings I have attended, I have encountered a troubling reluctance to access the property of certain owners who have not been responsive to outreach to date.

1

The levee system is dependent on collective maintenance and access. I applaud the decision to move forward with an additional timber reinforced berm atop the length of the levee, and assume that in installing this berm and the pipe system updates mentioned in your notice of availability that you will access and address any problems found on every parcel along the full length of the levee. All of us in the neighborhood depend on the levee to protect the health and safety of our families and the value of our real estate.

Thank you for being proactive in this work.

Sincerely,

Josh Dieterich

Letter B. Josh Dieterich

- B-1 The District acknowledges and appreciates the commenter's support for the Project. As described in the Project Description of the Initial Study, the Project includes upgrading the entire length of the levee along Vendola Drive to achieve the design elevation and to replace deteriorating sections of the existing TRB.

Robert Dobrin robertd@vendola.org 15 Vendola Drive San Rafael California 94903 415.786.1273

Via email to:
lwilliams@marincounty.org
and US Mail

August 5, 2019

Laurie Williams
Senior Watershed Planner
Suite 304
3501 Civic Center Drive
San Rafael, CA 94903

Dear Ms. Williams;

1 [As a resident homeowner in the Marin County Flood Control and Water Conservation District Zone 7,
I have a keen interest in the correct, efficient and environmentally sensitive execution of all proposed
projects in my community.
In the pages that follow are my comments on the Initial Study for the Gallinas Levee Upgrade Project.
Please include this letter, my comments and the attachments in the Administrative Record for the Galli-
nas Levee Upgrade Initial Study.

Thank you.

Robert Dobrin

Inadequate Product Description

The California Environmental Quality Act and subsequent case law clearly requires a stable and finite project description. The Gallinas Levee Upgrade Project Initial Study (Initial Study) describes two methods for constructing the Timber Reinforced Berm (TRB): Posts and a Soil Buttress with “deadman” anchors¹.

2 Immediately following the construction alternatives is this declaration:

In addition to the two basic TRB designs described above, other variations on these designs may also be used.

This description fails to meet the threshold required for informed decision making as it reserves for “other variations.” This allows the lead agency to “design on the fly” which could yield a project with environmental impacts vastly different from those analyzed.

For example, if more than 30 homes opt for, or because of soil conditions must have, deadman/ buttress construction, more fill will be required. Thus the 125 truck loads of fill² enumerated and analyzed for impact would be inadequate.

3 These “unspecified design variations” will have a ripple effect on many of the projects impacts including Air Quality, Biological Resources, Geology and Soils, Greenhouse Gas Emissions, Hydrology, Noise, Utilities and Service Systems.

Without a precise description of the design for the entire project, the analysis of environmental impacts fails. The Marin County Flood Control and Water Conservation District, Zone 7 (Lead Agency) must clearly define and analyze the project for meaningful analysis of environmental impacts

Impacts of Access, Maintenance and Easements Not Studied

4 There is virtually no analysis or discussion of the impacts of the access required for the TRB project. A ten foot wide strip of land along the length of the TRB will need to be acquired and kept clear permanently. Twenty feet will be required for construction. Aside from cursory mentions of the need to remove fences and other domestic appurtenances, there is no significant discussion of access, construction or maintenance along the access for construction and maintenance.

5 The need for an analysis of the entirety of the project including the easements is acknowledged by the Lead Agency³:

All answers to the topical questions must take into account the whole of the action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as

¹ Initial Study p16

² Initial Study, p20, Table 4

³ Initial Study, p28

5
(cont.)

well as operational impacts. Significant unavoidable cumulative impacts shall be identified in Section V of this Initial Study (Mandatory Findings of Significance).

6

Existing habitat will be disturbed for construction. An unspecified number of native and non-native trees, bushes and other landscaping will be removed for construction and permanent maintenance purposes. Essentially, a ten foot, unpaved permanent road will be required along the length of the levee and 20 feet for construction. Surely there will be operational impacts from this new ten foot road that do not now exist. Will weed control be necessary? How will that be done? How many trees and of what types will be removed?

7

Feasibility, Soils, Hydrology and Engineering have not been studied.
There is scant evidence in the Initial Study that construction of the proposed project is feasible or that it will perform as intended. Conclusions of no significant Geologic Impacts are not supported by evidence in the record. Indeed, there is a clarion call from the Lead Agency’s own experts for more study of the underlying geological conditions before proceeding. Without further study of the soils, the lead agency risks exacerbating existing perils including subsidence, sliding and seismic events.

8

The project objectives are (emphasis added):⁴

1. *Reduce the risk of tidal flooding in the Santa Venetia neighborhood due to a 100-year tidal elevation until the year 2050.*
2. ***Increase the stability and reliability of the levee and TRB with new construction and facilitate future maintenance.***
3. *Protect and promote healthy native habitat where the Project borders the marsh.*

9

The Initial Study and Negative Declaration relies heavily on the expertise of the engineering firm of Kleinfelder to conclude the project would “have a less than significant impact” by its location “on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.”⁵

The Negative Declaration attempts to explain this conclusion by insisting the project “*would not alter the geologic conditions of the site*”⁶. The Initial Study goes on to say⁷:

The Project, however, would not change this underlying condition. The redesigned and reconstructed TRB would be more stable than the current aging and deteriorating structure, and would therefore be

⁴ Initial Study, p9
⁵ Initial Study, p67
⁶ Initial Study, p68
⁷ Ibid

less susceptible to collapse due to subsidence, liquefaction, or lateral spreading. Therefore, the impact would be less than significant.

9
(cont.)

This conclusion is not supported by any evidence in the record and is erroneously based on a 2013 Kleinfelder report which did not analyze the proposed project⁸.

In fact in a February 2016 letter⁹ to the Lead Agency, Kleinfelder stresses the proposed project's impacts on the geological conditions have not been analyzed. In that letter Kleinfelder provided the following assessment of the proposed project's performance (emphasis added):

The timber reinforced berm could potentially be improved by using more durable materials (such as composite decking material), increasing embedment of the boards into the underlying earthen levee, adding buttressing fill or deadman anchors to improve sliding and overturning resistance, or other alternatives. To pursue such an improvement plan, additional geotechnical and structural analyses should be performed to determine the overturning or sliding factors of safety of the existing and/or proposed future raised flood protection elements. Note that Kleinfelder has not performed structural analysis at this time; such an analysis should be performed once detailed construction plans for improved/raised berms are developed.

10

Kleinfelder reiterated its uncertainty about the soils ability to support the project in a letter to the Lead Agency in May of 2018¹⁰ (emphasis added):

(A)dditional geotechnical and structural analysis will be performed to determine the overturning or sliding factors of safety of the proposed future raised flood protection elements. More detailed construction plans must be prepared before this analysis can be conducted.

These geotechnical studies, if they exist, are not cited in the Initial Study. It is impermissible under CEQA to make a finding of no significant impact based on the results of a future study or conjecture.

It is inexplicable why the Lead Agency has failed to fully study the project's potential geologic impacts as they are well aware of the potential perils a taller, larger and heavier TRB might pose when they state (emphasis added)¹¹:

Where additional backfill material is needed between the timber panels, controlled density fill (CDF) would likely be used. CDF is a self-compacting, self-leveling concrete product that can be delivered in a cement mixer truck and pumped via a boom truck staged on the street-side of the homes. CDF is a relatively light-weight material, making it especially suitable for this use, since more weight would result in more settlement of the levee.

⁸ Initial Study, p69

⁹ Kleinfelder letter to Hannah Lee, Marin County Flood Control District. February 16, 2016 (attached)

¹⁰ Kleinfelder letter to Hannah Lee, Marin County Flood Control District, May 24, 2018 (attached)

¹¹ Initial Study p16

10 (cont.) The February 16, 2016 and May 24, 2018 Kleinfelder letters constitute an expert warning that the project might indeed pose a significant impact to the environment and create additional hazards for the community.

11 Finally, the Initial Study is entirely silent on any increased hydraulic forces a taller structure may need to withstand in the face of rising sea levels. There is no such analysis in the Initial Study.

12 Since the Lead Agency has not studied these potential impacts, it can not, by any stretch of the imagination, reasonably conclude they do not exist. Moreover, proceeding without studies of the soil and hydrology may jeopardize the safety of the community the project is supposed to protect.

Public Vistas from South Fork of Gallinas Creek not Studied.

The Lead Agency has concluded that the Project will have no significant impact on public views.

This conclusion does not take into account the views experienced on or from the South Fork of Gallinas Creek.

13 The Lead Agency has reached this conclusion by studying several land-side locations including trails, the bridge to Santa Margarita Island and trails on the Island while completely ignoring the 7,000 plus linear feet of public vistas visible from the creek.

The South Fork of Gallinas Creek is a navigable waterway popular with kayakers, boaters, paddle-boarders and the occasional swimmer. The whole of the creek is accessible to the public from public launches and marinas including a Marin County maintained Kayak launch at McInis Park. Notable aesthetic resources including Mt. Tamalpais and the Marin Civic Center are visible while navigating many sections of the Gallinas Creek.

As the proposed TRB will be extended where it does not exist today, and raised in other portions, public vistas along the entire length of the TRB will be altered. In particular Kayakers, seated in or on craft that is low to the water, will have decreased views of the surrounding hills and elements of the built environment. This is particularly true at low-tide.

A more robust study of the raised TRB's impact to public vistas from the Gallinas Creek is required before any conclusions of the project's impact on public vistas can be drawn.



February 16, 2016
Kleinfelder Project No.: 96670.001A

Ms. Hannah Lee
Marin County Flood Control & Water Conservation District
Department of Public Works
3501 Civic Center Drive, Suite 304
San Rafael, CA 94903

**SUBJECT: Assessment of Redwood Box Floodwall / Timber Reinforced Berm
Las Gallinas Levee System
San Rafael, California**

Dear Ms. Lee:

This letter summarizes our conclusions regarding the existing redwood box floodwalls (also referred to as "timber reinforced berms") and the District's request to increase the height of the timber reinforced berms approximately 1 foot at the Las Gallinas Levee System (LGLS) project site in San Rafael, California. Our findings regarding the LGLS have been previously detailed in our Geotechnical Data Report (Kleinfelder, 2013) and our Geotechnical Alternatives Analysis (Kleinfelder, 2014).

BACKGROUND INFORMATION

The LGLS, as defined herein, includes levees along the southern and eastern bank of the south fork of Las Gallinas Creek. LGLS partially surrounds the community of Santa Venetia located north and east of the city of San Rafael in eastern Marin County, California. Stationing begins with Station 0+00 at the eastern end of the levee system near E. Vendola Drive near Pump Station #4 and increases westward to Station 32+00 near Pump Station #5 at the northeastern end of Vendola Drive. The levee then extends to the southwest along Las Gallinas Creek to Station 108+00 at the southwestern end of Vendola Drive.

LGLS is divided into two reaches for purposes of the geotechnical evaluations described in our 2013 geotechnical investigation report (Kleinfelder, 2013) and our 2014 alternatives analysis report (Kleinfelder, 2014). Reach 1 extends from station 0+00 to Station 32+00, and Reach 2 extends from Station 32+00 to Station 108+00.

The Santa Venetia Marsh Preserve pathway traverses the levee crown over the length of the levee in Reach 1. In Reach 2, the levee extends along the outside edge of existing residences' backyards along Vendola Drive.

TIMBER REINFORCED BERM CONSTRUCTION

In 1983, to increase the level of flood protection, a timber reinforced berm was constructed along the top of the majority of the existing levee within Reach 2 (about 5,550 lineal feet). The timber reinforced berms are about 2.5 to 3.2 feet wide, measured perpendicular to levee crest,

96670.001A/OAK16L35192 Page 1 of 2 February 16, 2016
© 2016 Kleinfelder

1330 Broadway, Suite 1200, Oakland, CA 94612 p | 510.628.9000 f | 510.628.9009

14

14
(cont.)

and rise about 1 to 2½ feet above the earthen levee crown. The redwood boards used to construct these berms are minimally embedded in the underlying earthen levee by about 6 to 12 inches.

These timber reinforced berm were intended to raise the level of protection for the areas landside of the Reach 2 levees, and have provided some protection during high water events since their installation. These previously-constructed temporary levee improvements have been in place for almost 30 years and show signs of distress. It is our understanding that the District inspects, repairs, and replaces these timber reinforced berms on an ongoing basis, with an average of about two to three properties maintained each year.

TIMBER REINFORCED BERM PERFORMANCE

The redwood boxes/timber reinforced berms were constructed to increase freeboard along the levee and provide additional protection where the freeboard deficiency is small (i.e., less than two feet). In their current configuration they may not be considered robust enough to meet USACE or FEMA criteria for accreditation for height, stability, seepage protection or flood fighting / maintenance access. Regarding the District's request to increase the existing timber reinforced berm one foot, any additional increases in berm height using the current construction methods will likely diminish their overturning and sliding capacities. However, further assessment of these timber reinforced berms should be evaluated in addition to assessing modifications of the existing timber reinforced berm to create a viable flood protection element.

The timber reinforced berm could potentially be improved by using more durable materials (such as composite decking material), increasing embedment of the boards into the underlying earthen levee, adding buttressing fill or deadman anchors to improve sliding and overturning resistance, or other alternatives. To pursue such an improvement plan, additional geotechnical and structural analyses should be performed to determine the overturning or sliding factors of safety of the existing and/or proposed future raised flood protection elements. Note that Kleinfelder has not performed structural analyses at this time; such an analysis should be performed once detailed construction plans for improved/raised berms are developed.

CLOSURE

We appreciate the opportunity to be of continued assistance to the Marin County Flood Control & Water Conservation District on this project. If you have any questions or require additional information, please feel free to contact us at your convenience.

Sincerely,

KLEINFELDER

Craig A. Hall
Craig A. Hall, PE, GE
Geotechnical Engineer



E. Morley Beckman
E. Morley Beckman, PE
Civil Engineer

cc: Mr. Jon Liang, EIT, Marin County

96670.001A/OAK16L35192
© 2016 Kleinfelder

Page 2 of 2

February 16, 2016

KLEINFELDER 1330 Broadway, Suite 1200, Oakland, CA 94612 p | 510.628.9000 f | 510.628.9009



May 24, 2018
Kleinfelder Project No.: 20170610.002A

Ms. Hannah Lee
Marin County Flood Control & Water Conservation District
Department of Public Works
3501 Civic Center Drive, Suite 304
San Rafael, CA 94903

**SUBJECT: Timber-Reinforced Berm Improvement Project
Basis for Conceptual Design Memo
Las Gallinas Levee System
Santa Venetia, California**

Dear Ms. Lee:

This letter summarizes Kleinfelder's assessments and findings regarding the proposed timber-reinforced berm improvements, which are part of the Las Gallinas Levee System (LGLS), relative to expected levee settlement and existing geotechnical reports. Timber-reinforced berms (TRBs) are also referred to as "redwood boxes" in previous reports and communications, and these terms may be used interchangeably in this memorandum.

Our findings regarding the LGLS evaluation have been previously detailed in Kleinfelder's Geotechnical Data Report¹ and Geotechnical Alternatives Analysis report². These reports can be found at the Marin County Department of Public Works Marin Watershed Program website:

<http://www.marinwatersheds.org/resources/publications-reports/las-gallinas-creek-levee-evaluation-reports-and-documents>

BACKGROUND INFORMATION

The LGLS includes levees located along the southern and eastern banks of the south fork of Las Gallinas Creek. LGLS partially surrounds the community of Santa Venetia, located north and east of the city of San Rafael, in eastern Marin County, California. Stationing begins with Station 0+00 at the eastern end of the levee system near E. Vendola Drive at Pump Station #4 and increases westward to Station 32+00 near Pump Station #5 at the northeastern end of Vendola Drive. From there the levee extends to the southwest along Las Gallinas Creek to Station 108+00 at the southwestern end of Vendola Drive.

The LGLS is divided into two reaches for purposes of the geotechnical evaluations described in our 2013 Geotechnical Data Report (Kleinfelder 2013) and our 2014 Geotechnical Alternatives Analysis report (Kleinfelder 2014). Reach 1 extends from Station 0+00 to Station 32+00 and Reach 2 extends from Station 32+00 to Station 108+00. The Santa Venetia Marsh Preserve pathway traverses the levee crown over the length of the levee in Reach 1. In Reach 2, which is

¹ "Geotechnical Data Report, Las Gallinas Levee System, San Rafael, California," July 3, 2013

² "Geotechnical Alternatives Analysis, Las Gallinas Levee System, San Rafael, California," January 15, 2014

14
(cont.)

14
(cont.)

the subject of this letter, the levee extends along the outside edge of the backyards of the existing residences along Vendola Drive.

EXISTING TIMBER REINFORCED BERM CONDITION

In 1983, to increase the level of flood protection along Las Gallinas Creek, a TRB was constructed along the majority of the top of the existing levee within Reach 2. The TRBs are about 2½ to 3¼ feet wide, measured perpendicular to levee crest, and about 1 to 2½ feet above the earthen levee crown. The wooden boards used to construct these berms are currently minimally embedded in the underlying earthen levee.

The TRBs were intended to raise the level of protection for the areas landside of the Reach 2 levees. The TRBs have provided some protection during high water events since their installation. However, these previously-constructed levee improvements have been in place for nearly 35 years and now show signs of distress. It is our understanding that the District inspects, repairs, and replaces these TRBs on an ongoing basis, with an average of about five properties (about 200 linear feet) repaired or rebuilt each year. In the last 15 years, approximately half of the facility length has been rehabilitated as funding has allowed.

LGLS EVALUATION AND PROPOSED TIMBER-REINFORCED BERM IMPROVEMENTS

Our findings regarding the LGLS evaluation outlined in our Geotechnical Data Report (Kleinfelder 2013) and Geotechnical Alternatives Analysis (Kleinfelder 2014) form the basis for conceptual design of the Timber-Reinforced Berm Improvement Project. Pages 38-40 of our Geotechnical Alternatives Analysis (Kleinfelder 2014) describe an alternative for replacement/improvement of the TRBs. This alternative considered the use of composite timber materials; however, it did not specifically describe increasing the height of the TRB above 2½ feet of exposed height. Doing so requires significantly increasing the depth of embedment for TRB support posts to maintain structural stability. As part of the final analysis and design for the project, which is included in the scope of the forthcoming Timber-Reinforced Berm Improvement Project, additional geotechnical and structural analyses will be performed to determine the overturning or sliding factors of safety of the proposed future raised flood protection elements. More detailed construction plans must be prepared before this analysis can be conducted.

PROJECTED SETTLEMENT

The Reach 2 levees overlie about 45 to 50 feet of compressible Bay Mud which is still undergoing consolidation settlement, and they are expected to continue to settle as the Bay Mud continues to consolidate. If the elevation of the TRBs is raised (which we now understand will be up to a maximum of about 2.8 feet), the incremental load will contribute to additional settlement, although the magnitude should be small (Kleinfelder 2014, Page 40). As stated in our Geotechnical Data Report (Kleinfelder 2013, Page 4): "We anticipate that future settlement will continue to be about 3 to 4 inches every 10 years for the next several decades."

The Marin County Flood Control & Water Conservation District (the County) has been monitoring settlement markers in this community since 1962. The most recent survey, conducted in 2016, indicated that settlement in the vicinity of the existing TRBs has slowed to about 6/10th of an inch in about four years. Due to anticipated impacts of construction of the improved TRBs, notably the placement of additional fill within the TRBs which would generate a small magnitude of additional settlement, we recommend conservatively using the settlement projection of 3 to 4 inches every 10 years as was described in the Geotechnical Alternatives Analysis report (Kleinfelder 2014).

14
(cont.)

Kleinfelder understands that in 2017 the County completed a new sea level rise vulnerability assessment, referred to as BayWAVE, for San Pablo Bayside communities, including Santa Venetia. Based on a conservative estimate of 3 to 4 inches of settlement every 10 years, we estimate settlement of up to 12 inches by 2050. We understand that BayWAVE predicts 20 inches of sea level rise in that time period. The lowest TRB has a current crest elevation of approximately 9.7 ft NAVD88, which we understand will be raised to 12.5 ft NAVD88. The FEMA 100-year stillwater elevation is 9.8 ft NAVD88. By 2050, the stillwater elevation may be 11.5 ft NAVD88 and the levee may have settled up to about 12 inches, corresponding to a crest elevation of 11.5 feet NAVD88. Shortly after 2050 the flood protection would begin to drop below the design level of 100-year protection as settlement further progressed. If this scenario occurs, additional maintenance or flood control improvements, or other actions, will be required to continue to provide flood protection to the Santa Venetia community.

LIMITATIONS

This work is subject to the Limitations stated in our previous reports and was performed in a manner consistent with that level of care and skill ordinarily exercised by other members of Kleinfelder's profession practicing in the same locality, under similar conditions and at the date the services are provided. Our conclusions, opinions, and recommendations are based on a limited number of observations and data. It is possible that conditions could vary between or beyond the data evaluated. Kleinfelder makes no other representation, guarantee, or warranty, express or implied, regarding the services, communication (oral or written), report, opinion, or instrument of service provided.

CLOSURE

We appreciate the opportunity to continue to work with Marin County Flood Control & Water Conservation District on this project. If you have questions regarding this letter or if we may be of further assistance, please contact the undersigned at (510) 628-9000.

Sincerely,

KLEINFELDER, INC.


E. Morley Beckman, PE,
Senior Engineer


Christopher R. Nardi, PE, GE
Principal Geotechnical Engineer



Letter C. Robert Dobrin

- C-1 This comment introduces the commenter's letter, and does not require a response.
- C-2 The commenter is incorrect in stating that the Project Description presented in the Initial Study is inadequate under CEQA. The Project Description fully and accurately describes the proposed Project, as required by State CEQA Guidelines section 15063, and generally following the suggested content contained in Guidelines appendices G and H. Minor variations of the design of the TRB, for example, spacing and depth of posts, and the depth of embeddedness of the bottom board, would be within the scope of the designs described in the Project Description. Such variations would not result in new or more severe impacts than those disclosed in the Initial Study. Please see also the response to comment C-7.
- C-3 The figure of 30 properties for which the single wall/soil buttress design would be used is an estimate by District staff based on their knowledge of site conditions and communications with property owners: limiting site conditions, and the additional expense of the single wall/soil buttress design are expected to limit the number of properties where this alternative would or could be employed. Therefore, the Initial Study uses a reasonable assumption of 30 properties.

If several more properties were to use this design, no additional or more severe significant impacts are anticipated. Modelled construction-related air quality emissions are far below significance thresholds, as shown in Table 3-1 in Initial Study Section 3. Even if incrementally more fill is required to complete the Project, air quality impacts would not be substantially greater, and would still be well below significance thresholds. The same holds true for greenhouse gas emissions, which are estimated for the Project construction period in Initial Study Section 8, Greenhouse Gas Emissions, topic a). The construction footprint is about the same for the single wall/soil buttress design, and in both instances, no construction would occur on the creek side of the levee below the high tide line. Therefore, biological resources impacts would be the same for either design. Noise impacts would be about the same, as well, as construction hours would not change, and only small equipment would be used on the levee, and, as noted above. Both geologic and hydrologic impacts would be about the same for the two designs, and would be less than significant for either, as described in Section 7, Geology and Soils, and Section 10, Hydrology and Water Quality, in the Initial Study. Likewise, impacts on Utilities and Service Systems would be the same, and would be less than significant, for either design, as described in Initial Study Section 19, Utilities and Service Systems.

In sum, and as stated in the response to comment C-2, the Project Description presented in the Initial Study is complete and accurate, and the Initial Study fully analyzes the impacts of the Project.

- C-4 Access requirements for construction and maintenance are described in the Project Description of the Initial Study, on page 14. Impacts of construction and maintenance are discussed throughout the Initial Study, including impacts to biological resources, hydrology and water quality, noise, aesthetics, etc.
- C-5 Each impact discussion in the Initial Study considers the whole of the action, as described in the Initial Study. Where potentially significant impacts are identified, mitigation measures are included to reduce the impact to less than significant. If the Project is approved, the District will incorporate all mitigation measures into the Project.
- C-6 Impacts of construction and maintenance on biological resources are discussed in Initial Study Section 4, Biological Resources. Several mitigation measures are specified to avoid and minimize impacts to biological resources, and to restore and improve sensitive marsh habitat. No permanent road would be constructed along the levee. If necessary, remedial actions including weed control would be taken, as discussed in Mitigation Measure MM BIO-4. As discussed under topic e) in the Biological Resources section, the Project has not yet identified which trees would be removed during construction. If any trees fall under the County's Native Tree Protection ordinance, removal could require obtaining a permit from Marin County and complying with permit terms, potentially including re-planting.
- C-7 The preliminary design basis for the reconstructed and new sections of the TRB are included in two studies by Kleinfelder engineers, a 2013 geotechnical study that describes soil conditions of the existing levee, and a 2014 alternatives study that explores options for increasing flood protection. Both studies are referenced in the list of citations at the end of the Project Description. The 2014 alternatives study is based on the 2013 geotechnical study. As is typical, final plans were not completed prior to preparation of the Initial Study. Instead, the Initial Study relies on preliminary plans and the engineering and design studies underlying them. If the Project is approved, the District will proceed to final design, including additional engineering to support the final design. Minor changes to the conceptual designs presented in the Initial Study Project Description may be necessary, for example, with regard to the depth and spacing of posts for the TRB. This is not expected to substantially change the Project as described in the Project Description in the Initial Study, nor to result in new or more severe significant impacts than those described in the Initial Study. If the final design differs substantially from that described in the Initial Study, then the District will determine whether Project changes have the potential for new or more severe significant impacts, and therefore require additional CEQA review. If the final design does not meet safety criteria, then the District will not proceed with the Project, and will consider other alternatives.
- C-8 The Project objectives are described in the Project Description, on page 9 of the Initial Study.

- C-9 The TRB is an existing structure that has been in place for over 30 years, without significant failure. The Project would upgrade the existing structure. The Project would not alter subsurface conditions. The improved design, and replacement of deteriorated sections of the existing TRB, would result in increased stability, given the same underlying soil conditions. In their 2013 report, Kleinfelder describes and analyzes current soil conditions of the Project site. This geotechnical study provides a basis for Kleinfelder's subsequent recommendations for increasing flood protection. Pages 51 and 58, and plates 13 and 14 of the study detail how the deteriorated and variable condition of the existing TRB contributes to its potential to fail during a flood event, and suggests that an engineered and rebuilt structure would decrease the "fragility" of the existing levee system. Please see also the response to comment C-7.
- C-10 Please see the response to comments C-7 and C-9. The District is aware of the caveats in Kleinfelder's 2016 and 2018 letters regarding the need for additional engineering of the TRB. As noted in the response to comment C-7, it is typical to conduct environmental review prior to final design and engineering. It is preferable to conduct environmental review at this stage, so that mitigation measures developed through the environmental review process can be incorporated into the final design. Per Kleinfelder's recommendations contained in the cited memos, and per the District's own standard operating procedures, the final design will be subjected to engineering analysis to ensure its safety and stability. If the final design differs substantially from the Project as described and analyzed in the Initial Study, the District will consider whether additional environmental review is required.
- C-11 The 2013 Kleinfelder geotechnical report includes a seepage analysis, one aspect of a hydraulic analysis. Additional hydraulic, hydrologic, and coastal analysis of the existing levee system was performed by the Army Corps of Engineers (Army Corps of Engineers, 2013. Las Gallinas Creek Hydrologic, Hydraulic and Coastal. U.S. Army Corps of Engineers, San Francisco District, Water Resources Section. December 2013). The Army Corps of Engineers also completed a flood risk analysis in 2014, which uses hydraulic and hydrologic modeling as an input (Las Gallinas Creek, CA, Preliminary Flood Damage Analysis. US Army Corps of Engineers, San Francisco District. January 7, 2014). Please see also the response to comment C-10.
- C-12. As noted in the previous responses, it is customary and preferable to conduct environmental review prior to finalizing the design of a project. Should the final design phase result in a substantial change to the design of the TRB, the District would determine at that time whether additional environmental review is required.
- C-13 While raising the elevation of the TRB may partially block views for boaters and swimmers in the creek, the impact would be insubstantial, and less than significant, for the following reasons. First, the Project would result in a relatively small

increase in the height of the TRB (up to 3 feet higher than the current TRB, or, where there currently is no TRB, above the existing levee crest), and so views from the creek would be only minimally blocked. Second, the deeper portions of the creek, which are used by boaters and swimmers, are separated from the levee by about 50-150 feet by the fringing marsh and residents' boat docks (see Figure 2 in the Project Description). From this distance and perspective, the levee, and the TRB, fill only a small portion of the lower part of the view; as shown in the Figure C-1, the TRB currently blocks a small portion of the view of houses and backyards from the creek, not of scenic elements such as San Pedro Ridge, which is behind and higher than the houses; raising the TRB by up to 3 feet would only block more of the views of the houses and yards, and would not block views of scenic elements. Third, if any blocking of scenic elements were to occur, for example, where the ridge is visible between houses, the effect would be partial and fleeting, as boaters or swimmers would tend to pass by or away from locations where scenic elements are partially blocked. Fourth, living shoreline features, including planting of native vegetation along the marsh face of the TRB, would soften the appearance of the TRB itself. In sum, the higher TRB would not be expected to block scenic elements in the view from the creek, and any blocking of scenic elements that may occur would be partial and fleeting. Any such impacts would be insubstantial, and therefore less than significant. Figure C-1 shows a view from the creek toward San Pedro Mountain, and demonstrates how a small increase in levee height would not substantially alter the existing view.

- C-14 This comment contains letters from Kleinfelder engineers to the District referenced in previous comments. Please see responses to comments C-7, C-9, and C-10.



Figure C-1: View of Levee, houses along Vendola Drive, and San Pedro Ridge from South Fork Gallinas Creek. Source: Google Maps.

Williams, Laurie

From: Tom Graham <tom@arrgh.com>
Sent: Saturday, August 03, 2019 9:13 PM
To: Williams, Laurie
Subject: "Notice of Availability"

Hello Laurie;

1 I know it is futile, but I am registering my opinion anyway. You are forging ahead with your Levee Upgrade Project for Zone 7. Do you even understand the problem? I live in Santa Venetia and I am a retired engineer. The argument can be made that these homes should never been built here; however, what made the project feasible was the dredging of Las Gallinas Creek and perpetual funding to keep it from silting up. Shortsighted politics have been allowed to take over and now the fill on which these homes have been built has been allowed to become saturated with ground water and has become unstable. Upgrading the levee, though laudable, is merely a "bandaid". The long term solution is to dredge the channel and straighten it out past Buck's Landing all the way to the Pump House channel. Over time, this will dewater and stabilize the land.

A collective shame on Marin County politics.

Tom Graham
125 Vendola Drive

Letter D. Tom Graham

D-1 Please see Project Objectives on page 9 of the Initial Study. Dredging, as suggested by the commenter, would increase flow capacity in Gallinas Creek, and may decrease the potential for riverine flooding. Flood risk in the Santa Venetia neighborhood, however, is from high tides, with incremental increases from high riverine flows, as discussed in the 2013 Army Corps of Engineers study referenced in the response to comment C-11. The problem of flooding of the Santa Venetia neighborhood has been studied extensively (see citations in responses to comments C-7 and C-11), and the District now has a good understanding of several factors contributing to it, as well as potential solutions. The Project is not intended to address all of the underlying problems, but rather to increase flood protection for a limited period of time, for a cost that is within the District's means. Dredging would not alter the downstream boundary condition of high tides, which are the primary contribution to flood risk.

As funding allows, the Marin County Department of Public Works dredges South Fork Gallinas Creek for recreation, as part of its management of County Service Area #6 (CSA #6) for the Gallinas Creek community. CSA #6 is governed by the Marin County Board of Supervisors, which appoints the five-member CSA #6 Advisory Board. The Advisory Board advises the Board of Supervisors on all matters relating to projects, programs, and budgets of CSA #6.

The CSA #6 boundary includes properties along South Fork Gallinas Creek extending downstream to Bucks Landing off North San Pedro Road, including Santa Venetia neighborhood properties. A portion of the basic property tax (ad valorem tax) is secured for CSA #6 from the properties in the CSA #6 boundary to raise funds for dredging of the main creek channel for recreational boating purposes, including a smaller channel around Santa Margarita Island. Prior dredging episodes occurred in 1966, 1973, 1981, and 1992-1994. The next dredging has not yet been scheduled but could occur as early as 2021, depending on the availability of sites for placement of dredged sediments. Please see also the response to comment F-4. For more information on dredging, see Marin County Department of Public Works, 2015, Lower Las Gallinas Creek Dredge Channel Conceptual Design Study Final Draft, March 18, 2015, available here: <http://www.marinwatersheds.org/resources/publications-reports/gallinas-creek-final-geomorphic-dredge-technical-memo>

August 5, 2019

County of Marin
Laurie Williams,
Senior Watershed Planner
3501 Civic Center Drive, Suite 304, San Rafael, CA 94903.

RE: cover letter for comments on CEQA Initial Study for Santa Venetia TRB

1 [The possibility that storms, sea rise and subsidence will most likely cause severe problems to Santa Venetia is not a question. I question the current plan as to feasibility, best solution, unintended consequences, and lack of coordination with the Bay Area and the state of California. We are not an island, although we may become one.

2 [A glaring inconsistency in this report is the response by the county to the question under "Geology and Soils", which asks if the project will result in lateral spreading or subsidence, which was answered as "Insignificant Impact".
A major potential negative environmental impact is the added weight (yet unknown) of the proposed TRB that is certain to cause significant additional subsidence and lateral spreading.

3 [Among the most important means of flood control is our pump stations. The County seems to be trying to minimize their importance, due to funding. Statements about the 1980's floods fails to emphasize that it was the lack of and breakdown of the pumps that allowed the water to flood the neighborhood. But it is also stated that the pumps need to be maintained, some fixed, some raised higher, and possibly additional pumps. The County deems this to be too expensive. When contemplating the millions of dollar cost of flooding, it seems that money for the current and possible additional pumps must be a priority. Many websites and comments on the internet state that pumps are the first and most efficient responders.

Thank you,
Rochelle Karter
55 Vendola Drive

Response to CEQA initial report

County of Marin
Laurie Williams,
Senior Watershed Planner
3501 Civic Center Drive, Suite 304, San Rafael, CA 94903.

NOTE: **Excerpts from study are in black italics. My responses are in red.**

As stated on the CEQA site: *P. 23 of initial study instructions:*

1. *All answers to the topical questions must take into account the whole of the action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts. Significant unavoidable cumulative impacts shall be identified in Section V of this Initial Study (Mandatory Findings of Significance).*
- 4 The TRB plan seems to be a quick solution, consisting currently of an un-engineered plan without an actual cost analysis or a materials list providing an accurate description of the weight/subsidence issue, or consideration of the wider environmental impact zone. As stated above, this initial CEQA report is supposed to reflect effects on the environment, yet this study only provides limited views on a minor sphere of the effected environment. For instance, the report does not address possible effects on the areas across the creek, nor how flood prevention actions that have occurred across the creek may affect the subject neighborhood.
<https://projects.propublica.org/graphics/levees>.
- 5 “*As the Bay mud consolidates and dries out, it compresses, resulting in subsidence of the land surface. Now, most of the Santa Venetia neighborhood lies below sea level.*”
I did not know that most of Santa Venetia neighborhood lies below sea level. Please provide data. My property and those around me are definitely not below sea level.
- 6 ... *the County and the District have monitored levee settlement... Subsidence is expected to continue, resulting in a lowering of the elevation of the levee structure by a predicted 12 inches by 2050 (Kleinfelder, 2014.... From Kleinfelder, 2013 p. 30: “If new loads are placed on the levee, significantly greater settlement will occur. “*
Kleinfelder, 2018 **“More detailed construction plans must be prepared before this analysis can be conducted.”**
Since there are no verified or final engineering reports or plans that project the weight of the proposed TRB including it’s fill and backfill, how can this calculation be made? The extremely heavy potential weight of the proposed materials could cause more sinkage of the neighborhood and provide a worse condition.
- 7 Typically, only 2-5 individual properties have their distressed portion of the TRB replaced by the District each year, due to funding limitations.

7 (cont.) How many properties have had repairs and replacement so far? Have they begun to use alternative materials to better withstand deterioration? Is this maintenance program continuing this year? Would funding for this project by the County and the special fee on property taxes (to be voted on) be better used for required maintenance, including for keeping the pumps in good repair?

8 After implementing this Project, these homes would be protected from a 100-year tidal water surface elevation.

How does this project also address the other factors of flooding such as the storm drains backing up, the underground sanitary sewer inundation, ingress and egress roads, etc?

9 Article from: [The Sea Beneath Us, Bay Nature Magazine, Grace Mitchell Tada](#)

It's not just rising sea levels that will inundate the San Francisco Bay and other coastal areas of the U.S. as a consequence of climate change; groundwater levels will also rise. **Landscape architecture and environmental planning and urban design professor Kristina Hill** is a pioneering researcher on...<https://baynature.org/article/the-sea-beneath-us/>

10 *There is a section of TRB ...claimed to be owned by the San Rafael Airport. The airport and County entered into a Memorandum of Understanding (MOU) on September 18, 2018, which provided, among other things, that the Airport would waive certain rights related to public and private activities on this parcel. Therefore, it is anticipated that the Airport will not prohibit Project activities.*

Is there an agreement with the Airport that their levee will coincide with ours? Studies (attached) have proven that a higher elevation levee on one side will direct the flood flow to the other side. How will our neighbors at Marin Lagoon and Comtempo Marin be effected and how will their levees effect the Santa Venetia neighborhood? Those neighborhoods are within San Rafael city limits, which points to the need to cooperate and plan with other entities.

<https://projects.propublica.org/graphics/levees> is a video and article titled: "To See How Levees Increase Flooding"

11 *The panels, also consisting of composite lumber, would be attached to the insides of the posts with galvanized steel fasteners.*

Since the preliminary "plans" include deeper posts but only same level cross members, how will this address seepage, animal burrows, etc?

Geology and Soils

- 12 1. c) [Will the project] be located on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? Answer in the report: insignificant impact

13 "Insignificant impact" seems very incorrect: The mud is unstable, sinking, and would likely become more so from this project. It will with no doubt contribute to lateral spreading and subsidence. Is the "no impact" answer a mistake in your report? It is a major factor in the environmental consequence due to adding substantially more weight. You ask for mitigation proposals: Use sheetpiling. Some sheets are now made of new lightweight materials, provide depth across entire length which controls seepage and animal burrows, can be raised as needed plus requires no maintenance.

Included are some studies/information found on the web which are included as part of my response to the CEQA initial study.

1. https://www.marincounty.org/-/media/files/departments/cd/planning/slr/baywave/vulnerability-assessment-final/005_unincorporatecommunity_profiles_baywave_va_17_06_23.pdf?la=en

“Community Profile: unincorporated Marin (BayWAVE) Vulnerability Evaluation”

...In the low lying exposed areas in nearly every community, except Kentfield, subsidence is an ongoing issue that sea level rise could only exacerbate. This impacts buildings, roads, and utility infrastructure...

14 2. <https://projects.propublica.org/graphics/levees> is a video and article titled: “To See How Levees Increase Flooding, We Built Our Own”

3. <https://baynature.org/article/the-sea-beneath-us/>

It's not just rising sea levels that will inundate the San Francisco ...

4. <http://cmisheetpiling.com/applications/flood-protection/> Cost Saving levee designs

5. Pump Station Improvements

https://cdn.ymaws.com/www.ncsafewater.org/resource/collection/3FC9FF88-FAFC-4374-9756-5E20FB0BC0C2/CD_Tues_PM_03.20_Hilderhoff_PAPER.pdf

6. FEMA and flood walls

https://www.fema.gov/media-library-data/20130726-1608-20490-6445/fema551_ch_05.pdf

Letter E. Rochelle Karter

- E-1 Please see the Project Objectives on page 9 of the Initial Study. Please see also the responses to specific comments, below.
- E-2 Please see the response to comments C-7, C-9, and C-12.
- E-3 The Project includes work at two pump stations. As discussed in Initial Study Section 21, topic b), the District has additional intentions to upgrade Pump Station 4, and Marin County Public Works is coordinating with the District to upgrade the Santa Venetia neighborhood's storm drain system where feasible as part of future road maintenance efforts. Improvements plans for the stormwater and pumping system will leverage the 2015 Venetia Storm Drain Hydraulic Study (<http://www.marinwatersheds.org/resources/publications-reports/santa-venetia-storm-drain-hydraulic-study-final-report>). The study's executive summary describes that modeling indicates 27 homes are at risk due to a 100-year *stormwater flood* (based on estimated finished floor elevations). Several hundred homes have finished floors below the 100-year and 10-year *tidal flood* elevations. Because many more homes are at risk due to levee failure and tidal flooding than due to interior stormwater flooding, the current Project is prioritized above the pump station projects. The pump stations are designed to pump stormwater from inside the levee out to the creek and are not designed to handle tidewater. Pumping tidewater not only means inefficiently "pumping in circles" but also exposes the pump parts to excessive wear, sediment, and corrosive salts. Pumps are necessary and critical for managing stormwater, but levees and berms are the first and most efficient way of protecting against tidal flooding.
- E-4 With regard to hydraulic and hydrologic analysis, please see the response to comment C-11. The District is aware that levees sometime constrain floodplains and drive up water surface elevations. FEMA has made it clear to the District that they will not fund a project that measurably increases flood risk elsewhere, even if the District has separate plans to mitigate for those impacts. For this Project, the water surface elevations that put Santa Venetia at risk are primarily driven by the tide elevations in San Francisco Bay. Raising the TRB will not measurably impact the Bay tidal heights. Therefore, the District does not anticipate an impact to the levees or land across the creek from Santa Venetia as a result of raising the TRB height.
- E-5 In response to the comment, the text on page 2 of the Initial Study is revised as follows:

Now, most of the Santa Venetia neighborhood lies below ~~sea level~~ high tide.

This change does not affect the environmental analysis or significance conclusions in the Initial Study, and only serves to clarify information provided in the Initial

Study. No recirculation is required for this minor modification, per State CEQA Guidelines section 15073.5(c)(4).E-6 Please see the response to comments C-7, C-9, and C-12. As noted in the Project Description on page 16 of the Initial Study, where additional backfill material is needed between the timber panels, controlled density fill (CDF) would likely be used. CDF is a relatively light-weight material, making it especially suitable for this use, since more weight would result in more settlement of the levee.

- E-7 Approximately half of all properties have had repairs and/or replacements completed by the District over the last 15 years. Over the years the new materials used have changed from redwood to pressure treated wood with environmentally sensitive copper preservative to help protect against termites and fungus. The pressure treated wood is expected to last 10-20 years. The composite material identified as part of this Project is about four times as expensive but is anticipated to endure at least the 30-year Project design life. The existing maintenance program is continuing this year with the goal of addressing the most vulnerable areas of the system within the limited maintenance budget. If the Project does not get constructed, for whatever reason, but the special tax is approved, the funds would go towards an expanded TRB/levee maintenance program in Zone 7. The Zone in such a scenario could consider using the additional funding to replace more sections of TRB per year and/or to upgrade to the composite material. By having a special tax for TRB/levee maintenance, more funding would be available to maintain the pump stations and upgrade Pump Station No. 4.

The Santa Venetia Storm Drain Hydraulic Study (Marin County Department of Public Works, 2015, Santa Venetia Storm Drain Hydraulic Study Final Report. Prepared by GHD, January 2015. http://www.marinwatersheds.org/sites/default/files/2017-11/20150127_GWPSWMMFinalReport.pdf) showed that with the exception of Pump Station No. 4, the pumps have the capacity to pump 100-year stormwater flows. The District considers that the greatest risk to flooding in Santa Venetia is from levee overtopping, because it does not have a 100-year protection. That is why the District has proposed this Project.

- E-8 This Project, as described in the Project Description in the Initial Study, includes only proposed upgrades to the Gallinas Levee. As described briefly in Initial Study Section 21, Mandatory Findings of Significance, in the discussion of potential cumulative impacts, the District is planning to upgrade Pump Station 4, but currently there is no implementation schedule. Also as stated in the cumulative impacts discussion, the Marin County Department of Public Works has plans, though currently no implementation schedule, for repairing, maintaining, and upgrading Santa Venetia's stormwater infrastructure.

The Project would not affect storm drains or sanitary sewer infiltration and inflows, which the District understands are ongoing issues.

- E-9 Rising sea level is expected to raise groundwater levels, as suggested in the comment. This would occur with or without the Project, and would not be a consequence of, nor exacerbated by, the Project. As stated on page 9 of the Initial Study, the objective of this Project is to provide increased flood protection for a 30-year period, to address predicted sea level rise and continued subsidence of the land. This would allow time for the community to make long-term adaptation plans.
- E-10 The MOU, as well as a recorded Grant of Permission Agreement and Tidelands Lease Agreement, are all available for review at the Marin County Department of Public Works website: <https://www.marincounty.org/depts/pw/divisions/projects/land-use/srairport>

Because the lower reaches of Gallinas Creek are tidal, flooding in the adjacent marshes and floodplains is a consequence of both the height of the tide and river flow. Tidal hydrology is different from fluvial (i.e., riverine) hydrology. The Project would not be expected to have a substantial effect on flooding of the opposite bank, as the height of the water in the Gallinas Creek channels is mostly a function of the downstream boundary condition, that is, the tide level and other coastal processes, as described in the Army Corps of Engineers' 2013 report (see full reference in response to comment C-11). The video referenced in the comment depicts river flooding, not tidal flooding, and so has minimal relevance to the Project. The airport and other Las Gallinas neighborhoods are protected by levees with similar elevation to the proposed elevation of the TRB.

The Gallinas Watershed Program facilitates cooperation and planning between the partner entities within the watershed. These entities include the District, the County, the Open Space District, the City of San Rafael, and Las Gallinas Valley Sanitary District. The District is aware of and strives to coordinate the current Project with other projects in the area, including the CSA #6 Geomorphic Dredge (see response to comment D-1) and McInnis Marsh Restoration.

- E-11 Kleinfelder's 2013 geotechnical report (see references following the Project Description in the Initial Study) includes a seepage analysis and also considers risk to the levee from animal burrows. Seepage through the TRB is minimized by backfilling the TRB box with relatively impermeable soil or other material, and by embedding the bottom board in the earthen levee. The rebuilt TRB would not reduce seepage through the underlying earthen levee itself, as described in Kleinfelder, 2013. Animal burrows can also be expected, and are addressed through the District's ongoing maintenance program. Kleinfelder did not, however, consider seepage or animal burrows a major risk for levee failure. See Kleinfelder, 2013, plates 13 and 14.

The alternative single wall/soil buttress design may be appropriate for areas that are known to have seepage. While timbers do not prevent seepage, the increased soil levee width associated with this design variation may help reduce seepage.

- E-12 Please see the response to comments C-7, C-9, and C-12. The underlying soil has undergone consolidation over the decades since the community was developed, but the subsidence is slowing down significantly from what originally occurred. The Project would not substantially alter that situation.
- E-13 Sheetpiling as an alternative design for decreasing flood risk was studied by Kleinfelder in their 2014 alternatives analysis (see full citation in references following the Project Description in the Initial Study). Sheetpiling was previously determined by the District to be prohibitively expensive. See cost comparison of alternatives in Kleinfelder, 2014, Table 9-2. Since that study was completed, however, costs for certain materials and technologies have gone down, and the cost may further be reduced from Kleinfelder's estimates by not including installation of the access road that was required to meet USACE criteria (a road is not required for the FEMA grant). Because of the interest expressed by several commenters in a sheetpile wall as an alternative to the Project, the District intends to refresh the cost analysis for a sheetpile wall and make this information available to the public. Were the District to pursue use of a sheetpile wall instead of the proposed TRB reconstruction, additional environmental review would be required.
- E-14 The references cited in this comment do not directly address the Project or the environmental analysis in the Initial Study. The BayWAVE sea level rise vulnerability assessment is used as a reference in the Initial Study (see references following the Project Description; cited as Marin County, 2017). The Project design takes into account predicted future sea level rise.

To: Laurie Williams, Senior Watershed Planner
3501 Civic Center Drive, Suite 304
San Rafael, CA 94903

Comments on GALLINAS LEVEE UPGRADE PROJECT INITIAL STUDY

- 1 This study dated July 3, 2019 has many aspects. Although some community meetings were held by the County, the plan has been formulated without any honest effort to consult with the property owners most affected and incorporate our legitimate concerns and rights.
Instead, County personnel have persuaded numerous Santa Venetia residents who do not live adjacent to Gallinas Creek that the flood protection of their properties is dependent upon creekside residents being willing to accept changes to our properties that considerably devalue them, and change the way we live. This is already causing discord in the community that never existed before.
- 2 CEQA requires that alternate solutions be seriously considered, and that has not been done for this project, as far as affected property owners are aware.
- 3 The initial study speaks of numerous variations from the primary proposal. For example, the idea of a single composite wall in some places, rather than a double walled "planter box" everywhere. Since flood protection depends on a continuous water barrier all around the neighborhood, we must assume that the single wall will provide that protection; and if a single wall will work dependably, why has it not been considered to propose a single composite wall EVERYWHERE? This is just one example of ideas that might have arisen if the residents had been consulted as part of the planning process.
- 4 I chose to purchase my house at 119 Vendola in 1999 because it is adjacent to the creekside environment and has a boat dock. There were many boats and docks on the creek, and periodic dredging had been conducted to preserve navigation. Since that time, the County has collected funds from our taxes toward dredging, but it has all been spent on "consulting" with no dredging done at all.
- 5 I still enjoy limited boating on the creek, and over the years it has been a most important source of recreation, including to my wheelchair-bound daughter. The gangway between my yard and boatdock are wheelchair accessible. The

5
(cont.)

proposed raising of the floodwall far higher than current sea level issues require would destroy that wheelchair accessibility. I need to know how that accessibility will be addressed by the project.

6

The idea of an easement to our properties which has been so casually mentioned needs to have far more discussion before we are asked to agree with it. Many of us have trees, sheds and other features within the 10-20 foot wide band surrounding the proposed TRB. We need to know what changes the County is proposing within the easement zone. Also, we have always enjoyed total privacy between our parcels, and we wish to know how the plan affects access or gates between our properties, including who pays for them. Will we be allowed to fill in our lots so that we would be once again able to have a view, or will we be trapped behind a high wall?

7

One of the alternative solutions to flood prevention would be a sheet pile wall placed near the creelside end of our property. It too could be made of composite materials, and could be designed to be high enough to counteract flood threats anticipated for the near future, with the capability of height being added every decade by bolting on additional panels. This far more sensible, as we could adapt to the slowly changing conditions without walling out our views and darkening our yards.

8

This would allow a future dredging of the creek right up to the sheet piling which would keep the mud from slumping back in, as it has done after previous dredging.

9

This plan is very much like the original intention for the creekside, similar to the concrete walls which were originally built near where the bridge to the island now exists. This was the vision that the first creekside residents were promised.

10

I believe that much of the motivation for this current project has been driven by the fact of long deferred maintenance of the deteriorating pipes that empty into the creek, and the hopes of funding that maintenance with the FEMA grant which has been applied for.

Sincerely,

Stanley Karter

Letter F. Stanley Karter

- F-1 During the final design phase of the Project, staff will work with individual property owners and the community to balance individual preferences with site and cost constraints. Following final design, specific permission from each levee property owner will be sought during easement negotiation.
- F-2 A CEQA initial study does not require consideration of alternatives. Kleinfelder, 2014 (see full citation in references following the Project Description in the Initial Study) includes a consideration of alternative designs for decreasing flood risk in Santa Venetia. The study was presented at a community meeting on January 29, 2014. None of the other alternatives were considered feasible due to high cost. The components of this study can be found here: <http://www.marinwatersheds.org/resources/publications-reports/las-gallinas-creek-levee-evaluation-reports-and-documents>. Please see also the response to comment E-13.
- F-3 Please see the response to comment C-2. The single wall/soil buttress design (see Project Description, Figure 6) may be preferable for some property owners who wish to raise the elevation of their backyard, or for other reasons. Both designs would provide equal flood protection. The soil provides the flood protection (not the wood itself) and the purpose of the wood walls/bulkheads is to allow for the soil berm to have a narrower footprint. A single-walled berm has a narrower footprint than a berm that has no wall. A double-walled berm has an even narrower footprint than a single-walled berm. District staff understand that many property owners do not feel that they have room for a single-walled berm in their backyards, since these require additional fill. The additional fill is more costly and, because of the additional weight, may result in differential settlement, which could affect residences and other structures if they are too close.
- The outer wall of the double-walled berm and the one wall of the single-walled berm form one continuous, effective barrier, regardless of whether there is a narrow soil berm with a second wall, or a wider soil berm behind it.
- F-4 Please see the response to comment D-1. The cost for dredging has risen precipitously in recent decades and CSA #6 no longer collects enough funds to complete a traditional dredge on a regular basis. CSA #6 is considering a “geomorphic” dredge instead. A geomorphic dredge is generally narrower and shallower than the traditional dredge, and is therefore less expensive. Its shape is intended to encourage natural processes for sediment transport, which should reduce future maintenance costs.
- F-5 The District will work with individual property owners during easement negotiation to ensure that issues such as accessibility are adequately addressed. Though not

a CEQA issue, accessibility is an important consideration in determining the final design of the Project.

- F-6 Requirements for site preparation are described in the Project Description, pages 14-16, and Table 1. The District will work with individual property owners on the details of easements after the election and once there are design plans to look at. Specific changes within the easement zone will be discussed on a property-by-property basis at that time. The District and property owners will consider whether it is feasible to install small locked access gates between properties on top of the TRB itself as part of the Project. This Project is not in conflict with private property owners filling in their yard but the potential for land settlement should be considered.
- F-7 Please see the response to comment E-13.
- F-8 Because of the damage it would cause to sensitive habitat and infrastructure, including residents' boat docks, dredging is confined to only the deep part of the South Fork Gallinas Creek channel. Please see the response to comment D-1, and the study referenced at the end of that comment.
- F-9 The District does not consider concrete walls a viable alternative for flood protection, and is not responsible for fulfilling long-ago promises made by the developers of the neighborhood.
- F-10 The commenter is incorrect: FEMA does not fund deferred maintenance and the pipes are not part of the scope of the FEMA grant.

Williams, Laurie

From: Gerald MacDonald <gerger@pacbell.net>
Sent: Monday, August 05, 2019 3:21 PM
To: Williams, Laurie
Subject: The CEQA Report

Re: The CEQA Report Aug, 2019

1 | The proposed new berm is an un-engineered disaster, spending resources on a project that destroys private property values and ultimately reduces the safety of the neighborhood. A cheap, quick fix to an ongoing problem is a seriously flawed and short sighted approach.

2 | In Europe, the Low Countries (Netherlands) are mostly below sea level but enjoy 1st world life styles w/o compromise. What have they done how do they secure their communities?
There is an elegant solution to our potential future problems. Where there's an essential need to secure an area from sea-water flooding, sheet piling is installed. SF Airport, created on fill, is surrounded by sheet piling which retains the fill (land) within and keeps sea water out.

In the past, Sheet piling was made of metal which could deteriorate over time. Now, it is also made from composites making it corrosion proof and a truly long lasting barrier. An engineered sheet pile barrier would properly address the danger of sea level rise in our community with almost no maintenance issues.

3 | Doctors take a Hippocratic oath which swears to do no harm in providing care. I'm hoping the people that proposed this cheap-fix solution would rethink their approach. A new and improved TRB will do harm to the properties bordering the inlet w/o creating an effective barrier. An effective barrier holds the landfill in, the water out and does not increase subsidence.

4 | There is also the unaddressed subject of neighborhood flooding from rain and runoff. Drainage in many areas of the community is slow to non existent.

Yours sincerely,
Gerald MacDonald - 53 Vendola Dr.

Letter G. Gerald MacDonald

- G-1 The District disagrees with the premise of this comment. Regarding the engineering basis for the Project, please see the response to comment C-7. CEQA does not require the consideration of economic effects or cost. For a consideration of alternatives to address flood risk, see the 2014 Kleinfelder alternatives study referenced in the Project Description of the Initial Study. Please see also the response to comment E-13.
- G-2 Please see response to comment E-13.
- G-3 Please see response to comment G-1.
- G-4 Please see response to comment E-8.

Williams, Laurie

From: Williams, Laurie
Sent: Wednesday, July 31, 2019 12:42 PM
To: Sean Gabriel McClelland
Cc: Laura Joanna Moore; Epke, Gerhard
Subject: FW: Gallinas levee project support
Attachments: NOA_Gallinas_Levee_Upgrade.pdf

Mr. McClelland,

Thank you for your inquiry. Gerhard is out at training until Friday but he will try to contact you then to provide additional information. We currently have a CEQA Initial Study out for public comment. These comments should be addressed to me; you can email or write a letter, but the **comment period closes Monday, August 5 at 4 pm.**

Please see attached Notice of Availability for more information.

Cost is an issue. Flood Control Zone 7, part of the Marin County Flood Control and Water Conservation District, maintains levees and pump stations in Santa Venetia. The Zone funds its work through a portion of ad valorem (property) taxes. That amount is small, so the Zone’s advisory board is considering putting a parcel tax measure on an upcoming ballot in order to pay for the Gallinas Levee Upgrade Project.

I hope this answers your immediate questions.

Laurie L Williams, GISP
SENIOR WATERSHED PLANNER
415 473 4301
lwilliams@marincounty.org

From: Sean Gabriel McClelland <seanmcclelland@gmail.com>
Date: July 30, 2019 at 11:13:46 AM PDT
To: gepke@marincounty.org
Cc: Laura Joanna Moore <editor.moore@gmail.com>
Subject: Gallinas levee project support

Hello,

I'm a new home owner in Santa Venetia, and believe this is, by far, the most important issue for our neighborhood to deal with. How can I best stay informed, and support this project?

<http://www.marinwatersheds.org/resources/projects/gallinas-levee-upgrade-project>

1

I learned about this report on Nextdoor.com, but don't see a place to "comment" as the post mentioned.

Are some home owners along the creek still attempting to deny workers access to the levee? Is cost an issue? Is something preventing this levee reinforcement project from happening?

Thank you.

Sean McClelland
632 Vendola Dr, San Rafael, CA 94903
248-506-3724

Letter H. Sean McClelland

- H-1 This comment does not address the environmental analysis contained in the Initial Study. Please see the response to the email provided by County staff at the beginning of the comment letter.

Williams, Laurie

From: Michael McCrea <farmboyflyer@att.net>
Sent: Monday, August 05, 2019 3:03 PM
To: Williams, Laurie
Subject: Draft Initial Study Gallinas Levee Upgrade Project

- 1 I would like to reiterate and endorse the comments made by Francis Nunez concerning this project, while adding my serious concerns over the lack of detail on the impacts on the **Quality of life** to residents directly impacted by the proposed plan; especially considering the statement within the plan of quality of life factors would be "**less than significant**" on these residents.
How was this determination made? I and other residents were not polled on how significant the impacts would be on them. Should not a detailed plan be available to residents before the individual would be able to respond to such factors?
- 2 I believe there are other methods of addressing the flooding problems here, and implore the board to research all options before proceeding with this massive expensive project.

Thank you for your consideration,

Michael McCrea

Letter I. Michael McCrea

- I-1 Frances Nunez's comments are contained in Letter J, below. "Quality of life" is not defined and is not an environmental topic required to be analyzed by CEQA, and no such analysis is contained in the Initial Study.

- I-2 Please see the alternatives study performed by Kleinfelder (Kleinfelder, 2014; full citation in the reference list at the end of the Project Description), including the cost comparison in Table 9-2 of that study. Please see also the response to comment E-13.

Williams, Laurie

From: Fran Nunez <franceslnunez@gmail.com>
Sent: Monday, August 05, 2019 1:49 PM
To: Williams, Laurie
Subject: Comments re Initial Study - Flood Zone 7 Levee

Laurie Williams,
Senior Watershed Planner
3501 Civic Center Drive, Suite 304,
San Rafael, CA 94903

Please consider the following comments on the DRAFT INITIAL STUDY GALLINAS LEVEE UPGRADE PROJECT

Definition of Initial Study and Project - Section 15378 states:

" All phases of planning, implementation, and operation must be considered in the Initial Study of the project . . "Project" means the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and that is any of the following: . . (1) An activity directly undertaken by any public agency including but not limited to public works construction and related activities clearing or grading of land."

Initial Study (IS) should therefore include planning, implementation and operation of the entire Easement Area but fails to do so.

1

The proposed easement area is 10 feet wide (3-4 ft of TRB and an additional 6-7 feet inboard of the TRB.) This is an average of 600 square feet per residence, or about 1.6 acres for 118 parcels. The IS should consider the **entire** 1.6 acre project area including the **inboard 6-7 feet of easement**, which, in many cases, currently contains trees, landscaping and structures such as decks and boat houses.

The IS should disclose if a physical change will be required to the existing landscaping and structures within the project easement area outside of the TRB. Any plans to require removal of homeowners' existing trees, landscaping, and structures should be disclosed along with compensating mitigation measures for the negative aesthetic and property value impacts created.

Page 15 of the IS states, 'Clearing and Grubbing: Contractor would remove trees, shrubs and grass/topsoil as necessary, within construction footprint.' However, "Construction Footprint" is not defined and would seem to indicate Footprint of the TRB. This need clarification.

Ground Cover over Entire Easement area to Prevent Weeds and Maintenance

2

The IS should clarify the plans for ground cover on the top of the TRB and the rest of the easement area: Ground cover such as rocks or bark is needed to prevent unsightly and hazardous weed growth within the 600 square feet easement on our property. Long term maintenance should include not only repair / rehabilitation of the TRB but also rodent control and maintenance of ground cover to prevent weeds on the entire 1.6 acre project area.

Aesthetic Impacts

3

The IS states: " Views from backyards and rear windows may include scenic elements including Gallinas Creek, the marsh, and the hills beyond. Homes in the southern part of the Project site have views of Santa Margarita Island. . . views would be only partially obstructed, and because residents would still have unobstructed views from the levee itself and from their docks, the impact on private views would not be considered substantial, and is therefore less than significant. "

I strongly disagree. The obstructed views will be a significant permanent negative impact for hundreds of residents every day. People choose to pay more for their homes because they highly value the views and water access / riparian rights of the creek side location.

3
(cont.)

This project is being implemented on private property and, with the exception of the SM Island Trail, all impacted views of the scenic vista are from the windows and backyards of 118 private homes. The approximately 300 people who live in those residences will be impacted by the additional 3 feet of levee height and will no longer be able to enjoy the same views from their homes or backyards.

Under CEQA, obstruction of a view from a **few** private properties is **generally** not considered a significant impact when the general public views are not impacted. However, this is an unusual project as 99 percent of all negatively impacted views will be experienced by residents who willingly gave 180 sq feet of their property for a community levee for decades and are now being asked to agree to a 3 foot higher levee and to turn over 600 sq feet of their property adjacent to the creek . . possibly giving up landscaping and structures such as decks and boathouses as well.

The lead agency has added insult to injury by using their **discretionary** power to claim that hundreds of creekside owners / residents will not experience a significant negative aesthetic impact. The IS states that residents could still enjoy the views from their docks, but fails to mention that the 3 foot increase in levee height will make it much more difficult to access their docks, especially for those that are older or disabled and fails to offer any mitigation for that negative impact.

TRB - IS contains No Engineered Structure Proven able to withstand Hydraulic Forces of Sea Level Rise

Kleinfelder 2-16-2016:

"The timber reinforced berm could **potentially** be improved by using more durable materials (such as composite decking material), increasing embedment of the boards into the underlying earthen levee, adding buttressing fill or deadman anchors to improve sliding and overturning resistance, or other alternatives. To pursue such an improvement plan, **additional geotechnical and structural analyses should be performed to determine the overturning or sliding factors** of safety of the existing and/or proposed future raised flood protection elements. Note that Kleinfelder has not performed structural analyses at this time; such an analysis should be performed once detailed construction plans for improved/raised berms are developed."

4

Kleinfelder 5-2018

"Our findings regarding the LGLS evaluation outlined in our Geotechnical Data Report (Kleinfelder 2013) and Geotechnical Alternatives Analysis (Kleinfelder 2014) form the basis for conceptual design of the Timber-Reinforced Berm Improvement Project. Pages 38-40 of our Geotechnical Alternatives Analysis (Kleinfelder 2014) describe an alternative for replacement/improvement of the TRBs. This alternative considered the use of composite timber materials; however, **it DID NOT specifically describe increasing the height of the TRB above 2½ feet of exposed height. Doing so requires significantly increasing the depth of embedment for TRB support posts to maintain structural stability.** As part of the final analysis and design for the project, which is included in the scope of the forthcoming Timber-Reinforced Berm Improvement Project, **additional geotechnical and structural analyses will be performed to determine the overturning or sliding factors of safety of the proposed future raised flood protection elements. More detailed construction plans must be prepared before this analysis can be conducted"**

The IS states:

"the Project site is underlain by that with the potential for liquefaction and resulting subsidence during a seismic event. The geotechnical study also notes that the levee is susceptible to lateral spreading into Gallinas Creek. The Project, however, would not change this underlying condition. The redesigned and reconstructed TRB would be more

Y
stable than the current aging and deteriorating structure, and would therefore be less susceptible to collapse due to subsidence, liquefaction, or lateral spreading. Therefore, the impact would be less than significant."

This is untrue because the redesigned and reconstructed TRB would be built 3 feet higher and would be heavier than the current structure.

4
(cont.) ***In addition, No verifiable engineering has been done to ensure that the TRB could be raised within a 3-4 foot wide footprint to the design height of 12.5 without incurring overturning or sliding or collapse due to subsidence, liquefaction, or lateral spreading .***

Therefore the impact would be Significant.

(In addition Kleinfelder 2016 Figure 8 of a Non-engineered, "conceptual" design included in the IS shows in the chart that the MAX height of the redesigned and reconstructed TRB is 4 feet. The current levee on my property has an elevation of 9.7 (per Gerhard Epke) and a height of 3 feet. The Kleinfelder max conceptual TRB design elevation would seem to be 11 feet or 1.5 less than the goal height.)

Thank you for considering these comments.

Frances Nunez
209 Vendola Drive

Letter J. Frances Nunez

J-1 The Project Description in the Initial Study fully meets the requirements of State CEQA Guidelines section 15063, and generally follows the Project Description contents suggested in Guidelines appendices G and H. The extent of the Project site, including the area of land that would be disturbed or traversed, is described on pages 12 and 14. The Initial Study analyzes all potential impacts that may occur within the footprint of the Project, as well as adjacent areas that could potentially be affected.

J-2 Weed barriers of fabric, wood and/or rock are currently employed to keep vegetation from establishing on the top of the TRB as sections are reconstructed through the existing maintenance program. A similar approach would be employed as part of the Project, as described in the Initial Study, Section 4, Biological Resources, Mitigation Measures BIO-3 and BIO-4. Vegetation on either side of the TRB would also be attended to as part of the Project. Maintained landscaping within the proposed easement area on the inboard side of the levee would be evaluated on a case by case basis during the easement acquisition process. The property owner would be able to replace non-invasive landscaping after construction as long as it does not interfere with the proposed improvements. On the outboard, marsh side of the TRB, patches of certain invasive plants (including ice plant and acacia) would be removed and replanted with native marsh vegetation.

The District already performs rodent control on levees (where permission is granted). Easements will facilitate these efforts in the future.

J-3 The District acknowledges the commenter's disagreement with the Initial Study's conclusion of less-than-significant for aesthetic impacts. This conclusion, however, is well-considered and supported, and is consistent with the CEQA statute, State CEQA Guidelines, and case law: under CEQA, impacts on private views are generally not considered significant. See, for example, the State CEQA Guidelines, Appendix G, section 1, Aesthetics, question c. Impacts on public views are fully considered in Initial Study Section 1, Aesthetics. Please see also the response to comment C-12. Any design that increases flood protection, other than raising the elevation of homes, would have the effect of blocking some views from residences and backyards.

J-4 Please see the responses to comments C-7 and C-9.

Williams, Laurie

From: Epke, Gerhard
Sent: Thursday, July 25, 2019 4:19 PM
To: Alan
Cc: Williams, Laurie
Subject: RE: COMMENT & QUESTION: Gallinas Levee Upgrade Project CEQA Document

Thanks for your input Alan,
 I am copying Laurie, who is collecting comments for this document.

-Gerhard

SENIOR PROGRAM COORDINATOR - (415) 473-6562 - [OFFICE]
 MARIN COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
WWW.MARINWATERSHEDS.ORG

From: Alan <AlanScotch@comcast.net>
Sent: Thursday, July 25, 2019 12:07 PM
To: Epke, Gerhard <GEpke@marincounty.org>
Subject: COMMENT & QUESTION: Gallinas Levee Upgrade Project CEQA Document

I read: "*Additionally, up to two weeks of construction would be required in each backyard and during that time a temporary 20-foot wide easement would be necessary.*".

This TEMPORARY EASEMENT extends 15 feet from the center of the levee. Just within that 15 feet is the original chain-link fence (surrounded by honey-suckle and ivy).

Also creek-side of that fence (but outside of the 10 feet PERMANENT EASEMENT):

1. is an Agave cactus. I need to know in writing, before I agree with this TEMPORARY Easement, that the agave, fence, honeysuckle & ivy will not be damaged.
2. is a lot of dead plants, leaves and grass that over the years I have composted (and still composting) into soil. I need to know in writing that it will not be removed. (if anything it reinforces the levee).

Also I need to know what is affected by the PERMANENT EASEMENT.

If my levee has a lot of [ice-plant](#) will it stay?

There's a small cactus growing in the PERMANENT EASEMENT. If you require its removal – I need to know – and be given good notice -- so that I can relocate it.

Thanks,
 Alan

From: Epke, Gerhard [<mailto:GEpke@marincounty.org>]
Sent: Friday, July 05, 2019 2:32 PM
To: Epke, Gerhard
Subject: Gallinas Levee Upgrade Project CEQA Document

Dear Santa Venetia Residents and Homeowners,

We have probably spoken about the County Flood District's plans to potentially reconstruct the timber-reinforced portion of the levee behind homes on Vendola Drive. I am writing to inform you that the comment period for the draft CEQA Gallinas Levee Upgrade Project is now open for 30 days. Please follow the links here for the study and notice of availability:

2 http://www.marinwatersheds.org/sites/default/files/2019-07/Z7_NOA.pdf

<http://www.marinwatersheds.org/sites/default/files/2019-07/Gallinas%20Levee%20Upgrade%20IS%20Signed%20Accessible.pdf>

Some tips for providing productive comments have been included on the project webpage here:

<http://www.marinwatersheds.org/resources/projects/gallinas-levee-upgrade-project>

Additionally, I have been assembling an email list as I speak with people about this potential project, which might be a useful communication tool if the project moves forward. If your landlord, neighbor, roommate, etc would be an additional good point of contact for communications about the levee, please forward this email and have them respond to me with their address.

Thank you,
Gerhard Epke

SENIOR PROGRAM COORDINATOR - (415) 473-6562 - [OFFICE]
MARIN COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
WWW.MARINWATERSHEDS.ORG

Email Disclaimer: <https://www.marincounty.org/main/disclaimers>

Letter K. Alan Scotch

- K-1 Impacts on rare plants and sensitive habitat are examined in Section 4, Biological Resources, of the Initial Study. Impacts on ornamental landscaping are not considered significant impacts of the proposed Project. Details of access agreements for the Project such as those mentioned will be worked out between the District and individual property owners at the beginning of the real estate negotiations. The specific details suggested here are the type of considerations that will be negotiated with each property owner and documented in writing.
- K-2 This comment contains a notice of the comment period for the Initial Study.

**Huddle Solomon Trust
623 Vendola Drive
San Rafael, CA 94903**

Laurie Williams
Via email: lwilliams@marincounty.org

July 30, 2019

RE: Zone 7 Gallinas Levee Upgrade Project Initial Study Comments

Dear Ms. Williams,

1 [Thank you for the opportunity to comment on the Gallinas Levee Upgrade Project CEQA Initial Study. As residents of Santa Venetia and owners of a home with a levee and timber-reinforced berm (TRB) on Vendola Drive, we are directly affected by this project in multiple ways. We support the intention of the proposed project to mitigate flood risk in Santa Venetia, and we generally agree with the findings of the CEQA Initial Study. However, we have several concerns and comments as itemized below.

1) The proposed TRB is unjustifiably high

The Federal Emergency Management Agency (FEMA) 2016 San Francisco Bay Coastal Study, set the base flood elevation (BFE) for the community at 9.8 feet. A 20 inch sea level rise projection predicts a potential 100-year flood level of 11.5 feet by 2050. Although the latter is a stillwater elevation, the prevailing wind directions and shelter of the creek from the open areas of San Francisco Bay would reduce the likelihood of significant waves and storm surge on the creek.

2 [The height of the inner levee at the Santa Venetia Marsh Preserve is approximately 11 feet. The CEQA Initial Study document, on page 9, states: "...the inner levee has considerably less potential for failure due to its height and construction, and therefore there are no plans to improve it at this time" (emphasis added). This statement indicates that the Marin County Flood Control District considers a height of 11 feet to be adequate protection for the Santa Venetia community.

There is no reason to increase the height of the TRB to anything greater than 11 feet, to equal the height of the inner levee at the Santa Venetia Marsh Preserve. At most, 11.5 feet could be justified to account for the sea level rise projections, although at that point the inner levee would also need to be raised to avoid flooding of the community.

The costs and impacts of the project will increase significantly with any additional increment of height over 11 feet without any justification or commensurate benefit. Resistance from property owners will significantly increase with every additional increment of height, as people will justifiably object to losing their enjoyment of their views, and to the loss of property value due to the view of a wall rather than of trees and hills (see below).

We note that the principal objective of the project is to "[r]educe the risk of tidal flooding in the Santa Venetia neighborhood due to a 100-year tidal elevation until the year 2050." According to the County's



2
(cont.)

own analysis, a 100-year tidal elevation in the year 2050, even with 20 inches of sea level rise, would only reach 11.5 feet, not 12.5 feet. There is no justification provided in the document for the additional foot of elevation proposed. 12.5 feet therefore is not required to meet the objective of the project.

A project height of 12.5 feet would necessitate a revised project scope to also include a plan and budget for raising the inner levee at the Santa Venetia Marsh Preserve by an additional 1.5 feet. Otherwise the flood control benefits to the community are non-existent at any flood elevation over 11 feet. If there are no flood control benefits to the project as described, then the environmental impacts, although relatively minor, would be unmitigable because they are unnecessary. We therefore request that the County lower the proposed height of the project to align with the 11 foot levee elevation at the Marsh Preserve.

2) Property values will be negatively affected

3

We strongly disagree with Section 14(e) of the CEQA Initial Study. This section, on “Population and Housing” asks whether the project will: “Result in any physical changes which can be traced through a chain of cause and effect to social or economic impacts?” The current conclusion is: “By reducing the likelihood of flooding, the Project may be expected to help maintain property values. These changes would tend to have positive economic impacts, that could result in residential property owners investing in maintaining and remodeling their homes.” This text is speculative and does not cite to any references. At a minimum, the statements need to be referenced to indicate that they are more than pure fantasy. We certainly do not expect to make any greater investment in maintaining or remodeling our home if the project is completed.

4

This section fails on a more serious level, however. It does not consider the economic cost of the loss of views. According to an article in MarketWatch on the value of a view, “For a home on flat ground with an unobstructed view of an open space or a park, a seller could add 5 to 10%.”¹ This estimate is generally consistent with others that have been reported, although cost premiums due to views have been reported to be as high as 80% for homes with an unobstructed water view.²

Figure 1 shows the current view from our living room, showing the TRB and the currently unobstructed view of the trees and hills beyond. The area across the creek appears from our vantage point to be parkland. We purchased the home at a significant premium due to this unobstructed view. The height of the current TRB at our property is 2 feet, and the top of the berm is at approximately 10 feet.³ Thus, under the proposal, the County could raise the TRB by up to 2.5 feet at our property. Figure 2 shows what the view would look like from our home with an additional 2.5 foot berm. That degree of increased height almost eliminates the view from our home. Thus, based on the Lewis 2018 estimate above, and our current home value estimate of \$924,500⁴, our home value would be reduced by between \$46,000-92,000. This does not consider the additional loss of real property due to the County easement.

¹ Lewis M. This is how much a home’s view is worth. MarketWatch, May 9, 2018.

<https://www.marketwatch.com/story/this-is-how-much-a-homes-view-is-worth-2018-05-09> (visited July 27, 2019).

² Blavin SM. Facts & Figures: How Much is a View Worth? Apartment Therapy. September 21, 2011.

<https://www.apartmenttherapy.com/how-much-is-a-v-156527> (visited July 27, 2019).

³ Personal communication, Gerhard Epke, Senior Program Coordinator, Marin County Flood Control District, July 26, 2019.

⁴ Realtor.com (visited July 27, 2019)

4
(cont.)

For these reasons, Section 14 of the CEQA initial study requires revision to describe the economic impacts, to the residents along Vendola Drive, of the loss of views. The only way to mitigate these impacts is to construct a TRB that is no higher than necessary. For this reason, construction of a TRB that exceeds 11 feet would impose a significant social and economic impact on local residents without any mitigation or corresponding benefit (since Santa Venetia would flood anyway if the water exceeds 11 feet). For this reason, we request that the County (1) Correct the omission in the CEQA analysis, and (2) Limit the height of the berm to no higher than 11 feet.

3) Minimizing impact of the project on local residents and wildlife

5

We commend the County for the many mitigation measures in the Initial Study to address the impacts of the project on local residents and wildlife. We have personally had multiple sightings of Ridgeway's rails in the marsh along Gallinas Creek, and we strongly agree that construction activities must not occur during nesting season or at high tides when rails and other marsh inhabitants are forced into areas that are within the footprint of the project. We also commend the efforts to re-landscape the affected areas with native vegetation and to create horizontal and vertical corridors for wildlife.



Figure 1: Current View, 623 Vendola Drive

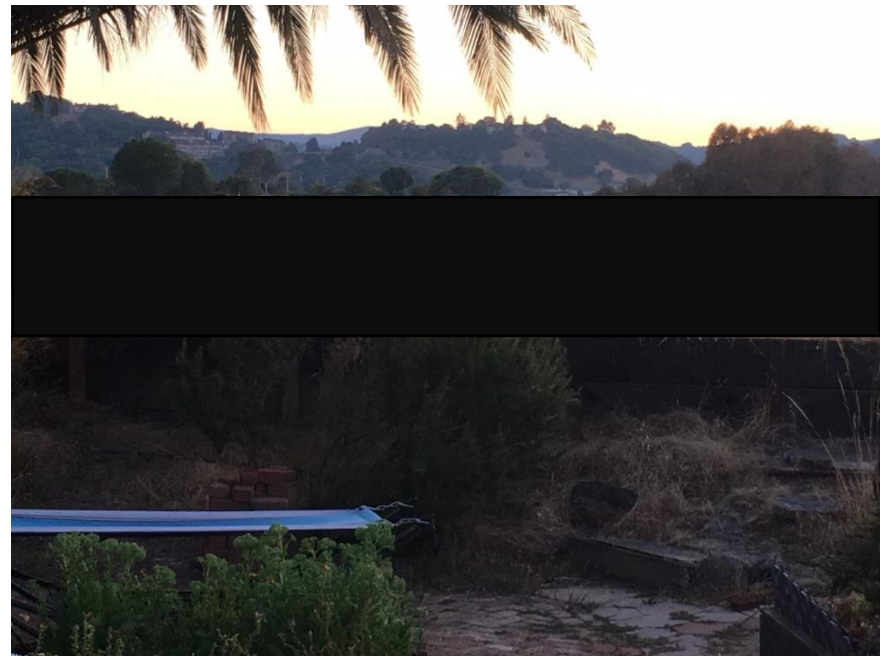


Figure 2: Simulated view with 12.5 foot TRB, 623 Vendola Drive

6 | In addition to non-native grasses and iceplant, several areas along the levee are infested with highly-invasive pepperweed (*Lepidium latifolium*) and wild radish (*Raphanus sativus*), which should be removed to protect the marsh. It is not clearly stated in the document whether these invasive plants will be removed by the contractors. This should be clarified, and would significantly increase the benefit of the project to the marsh habitat.

7 | We also commend the County for recognizing the degree of damage that heavy equipment would create, and the commitment to use hand tools or small equipment. Our yard, for example, has small curved brick paths leading to the levee. These could be easily negotiated with a motorized wheelbarrow, but not with a skid steer (Bobcat). We therefore request clarification that skid steers will not be used in yards where doing so would be destructive to the landscaping and existing constructions (such as raised garden beds). Currently the initial study is unclear as to when the skid steers would be used, and does not clearly state that they will not be used if the resident objects or if their use would damage vegetation or structures outside the 15-20 foot construction easement.

4) Permanent easement may not be needed

8 | The focus of the current document is on the construction of the new TRB. However, the project will include a permanent easement along the levee for ongoing inspection and maintenance. We question whether a permanent easement is necessary.

We are asking that the County consider the alternative of performing future levee inspections using drones. A drone survey was used recently to measure the height of the levee, and it was apparently highly successful and quick. This would potentially result in considerable cost savings since the County would not need to purchase easements from property owners and would not need to maintain a system of fences and gates; it would also save considerable personnel time.

8 | We understand that current drone technology does not allow close inspection of the wood for evidence of rot or damage, or close inspection of the levee for rodent burrows.³ Drone technology, however, is rapidly improving and such detail may be available in the relatively near future. We request that the County consult with drone experts to evaluate whether technological advances are expected to allow sufficiently detailed inspections within the next ten years, such that a permanent easement could be reconsidered. We assume that there would be no need for inspections in the first few years after project completion. Therefore, if sufficiently advanced drones are available by approximately 2030, all inspections of the levee could reasonably be performed by drone. This would allow continuation of the current practice of temporary easements for purposes of repairs. We understand that temporary easements for repairs have been challenging in a few cases, however there may be other ways to address that problem. For example, the County could require temporary easements for levee repairs as a term and condition of property sale along Vendola Drive. We would expect that quite a few properties will be sold over the next decade, and ultimately there should be access to all properties. The County would not need to compensate property owners for a “taking” if this course were pursued.

9 | If the County decides to proceed with the permanent easement, we request clarification as to how the easement will be maintained in a secure fashion so as not to allow passage between back yards. We understand, through a personal communication³, that the plan is to install locked gates on the top of the TRB, and to provide keys only to the inspectors. This plan could work, although it would involve a potentially significant expenditure of public funds. Regardless, we are seeking assurance that there will

9
(cont.)

continue to be fences or locked gates on both sides of our property so that our neighbors' dogs, or other intruders, cannot simply walk along the top of the TRB and access our yard at any time of the day or night.

Conclusion

10

We appreciate the intent of this project, and the County's desire to protect the Santa Venetia neighborhood from flooding. We greatly enjoy living in Santa Venetia, and we chose the neighborhood in significant part because of the access to Gallinas Creek, and the ability to canoe, kayak, or stand-up paddle from our dock. We also enjoy the Santa Venetia Marsh Preserve on a daily basis. We would like to continue to enjoy the neighborhood. Such enjoyment hinges on finding a reasonable balance between raising and strengthening the berm enough to reduce the risk of flooding without unnecessarily disrupting people's views and yards on Vendola Drive. Thank you for considering our perspective.

Sincerely,



Gina M. Solomon, Trustee
Huddle Solomon Trust

Letter L. Gina Solomon

- L-1 The District acknowledges and appreciates the commenter's support for the Project.
- L-2 As described in the Project Description, the proposed design height of 12.5 feet is based on the current FEMA base flood elevation, anticipated sea level rise based on figures used by BayWAVE, and an initial estimate of levee subsidence. This design height is intended to provide flood protection through about 2050. The commenter is correct that the inner levee around the marsh is slightly lower than this elevation. Therefore, in order to maintain flood protection through 2050 at 12.5 feet, the inner levee would need to be raised slightly at some point in the future. As part of the final design of the Project, the District will reexamine the design height, considering updated settlement and sea level rise projections, more site-specific determination of 100-year flood elevation, and the potential effects of muting of tidal water surface elevations within the Santa Venetia Marsh Open Space preserve, so that the two segments provide a consistent level of protection. The District anticipates that, should the design elevation be revised downward, no additional environmental review would be required, as this would tend to reduce, rather than increase, environmental impacts identified in the Initial Study.
- L-3 The statement regarding the potential for the Project to help maintain property values is based on a basic understanding that residential properties within a FEMA-mapped 100-year flood zone lose their value due to the propensity to flood, and/or because of higher flood insurance rates. While the statement that the Project could result in more investment by property owners is indeed speculative, there is no basis for concluding the opposite: that by decreasing flood risk, the Project may result in decreased maintenance and investment in properties, leading to physical deterioration of the neighborhood. CEQA does not require examination of positive impacts of a project, only adverse impacts. The conclusion in the Initial Study, that the Project would not result in economic or social impacts that through a chain of cause and effect could result in adverse physical impacts, is well-reasoned.
- L-4 As noted in the response to comment J-3, Any design for levee height increase would have the effect of blocking some views from residences and backyards. As noted in that response, impacts on private views are generally not considered significant under CEQA. A slight decrease in property value that could result would not be expected to result, through a chain of cause and effect, in adverse physical changes. Furthermore, the value of all homes, not just those along the creek, that receive increased flood protection in the neighborhood would be expected to rise, as noted in the response to the previous comment. Economic impacts themselves are not considered in a CEQA review. The alternative means of reducing flood risk would be to raise the elevation of houses. This may also have the effect of

- improving views. Doing nothing to reduce flood risk would certainly result in a decrease in the value of homes in the neighborhood. With regard to the proposed design height of the TRB, please see the response to comment L-2.
- L-5 The District acknowledges and appreciates the commenter's support of Project features that would protect sensitive habitat and species.
- L-6 Vegetation on the levee would be removed to facilitate reconstruction of the TRB, but this would not include all the invasive plants currently occurring in the Project area. As detailed in Mitigation Measure BIO-4, following revegetation, the area would be monitored for 5 years to assure success of native vegetation. If more than 20 percent of vegetation is invasive plants, remedial actions including weed control would be taken.
- L-7 The terms of access agreements will be negotiated with individual property owners. If better access points exist in adjacent yards, the TRB would be constructed on several parcels with one temporary access path between the levee and Vendola Drive.
- L-8 The District appreciates the commenter's suggestion for an alternative means of inspecting the levee system. While drone technology is evolving quickly, its use is limited to certain conditions and cannot replace physical inspections with the level of confidence needed here. The District will continue to seek ways to maintain the levee system while minimizing intrusiveness. At this point, the District assumes that physical access by construction crews will be required for periodic maintenance, and believes that permanent easements are the best way of ensuring this.
- L-9 The District is working to clarify the real estate negotiation process for residents along the water. This will be considered at a Zone 7 Advisory Board meeting in the near future. Through the real estate negotiation process, the District intends to identify where fences currently separate properties and make allowances for those fences to be reconstructed with gates after the TRB work is completed.
- L-10 Please see responses to the previous comments in this comment letter.

Williams, Laurie

From: ellen stein <sfeval1@yahoo.com>
Sent: Tuesday, July 30, 2019 1:59 PM
To: Williams, Laurie
Subject: Flood Zone 7

Public Works staff:

I have several questions, concerns and objections regarding the proposed Levee reconstruction and easement request that I don't believe were adequately addressed in the CEQA process.

1. The residents along the water allowed the County to build a levee system on their property in the 1980's. This system has provided many years of protection for the neighborhood. Instead of gratitude, the county now wants to take control of that property along with an additional 10 feet of private land? Where are other solutions acknowledged in this process? The residents along the water should not have to shoulder the burden of lost property, views, riparian rights that will be constrained along with decreased property values. Has the County explored the possibility of a tide gate for instance?

Have other communities plagued with flooding issues been studied to find alternate solutions? This is not a new problem yet the County has settled on trying to build upon an existing structure that hasn't even been certified to perform as needed by an engineer? How can this process be completed without a defined engineered design?

2. The cost of purchasing an easement on private property along with tree removal, structure removal, litigation and the tons of dirt being brought in for reinforcement would exhaust the Zone 7 funds leaving little if any for the other necessary flood control measures needed. Most property owners have allowed access for maintenance through the years. The County dropped the

4
(cont.) ball by not continually informing residents and new owners' of the need to keep the levees clear of structures and trees. Now residents have a situation where they will be required to remove structures and plants that they have spent a great deal of time and money on for their enjoyment. The County would be better off to work with the few homeowner's that deny access rather than the enormous expense of acquiring creek side property along the 2 miles.

5 3. I am insulted and disgusted with the notion that the 100 plus creek side residents' loss of view is inconsequential. The "public" view is the only consideration? This has a huge impact on waterfront households and one that has not been addressed. Many owners purchased their homes for the view and loosing it will only diminish property values.

6 4. Many residents have spent a great deal of time landscaping and pulling weeds over the years to keep the levees from becoming an eyesore. With the new reconstruction, who will be responsible for the new fencing between yards, steps to access the water, landscaping to make the levees more appealing and regular maintenance so the homeowners' will not have to continually pull unsightly weeds? Will homeowners loose all control of the levees along with the extra 10 feet of land? The CEQA report doesn't address any of these issues or what will happen to current landscaping and structures.

7 I urge the County Staff to come up with a better solution that will keep our community united. The intimidation and calling out creek side residents that do not want to voluntarily give up a portion of their property is divisive.

Sincerely,

Ellen Stein

Letter M. Ellen Stein

M-1 As described in the Project Description, the levee was originally constructed by the developer at the time that the Santa Venetia neighborhood was developed, in the early 20th century. The TRB was added after water overtopped the earthen levee in 1982 and 1983, causing extensive damage in the neighborhood. All property owners along the creek purchased their properties knowing that a portion of their land was used for the levee that protects their property, and the entire neighborhood, from flooding. Zone 7 of the Marin County Water Conservation and Flood Control District was formed to address continued flooding along Las Gallinas Creek. The property owners along the Creek, and throughout the neighborhood, are within the District Boundaries. The District is a duly created governmental agency that represents the interests of those within the District.

Please see the 2014 Kleinfelder alternatives study (full citation is in the list of references at the end of the Project Description) for alternatives considered to reduce flood risk in this location. A tide gate was not one of the alternatives selected for study in the Kleinfelder report because there is not a feasible location for one across Gallinas Creek that would protect Zone 7. Some alternatives, like this, can be screened out before spending funds on formal study.

M-2 Please see the responses to comments C-1 and C-7.

The District is always on the lookout for new solutions to flooding problems, and District staff keep current with new technologies, resources, and innovation through subscriptions to technical and professional publications and attending conferences. An example study by District staff that considered tidal flooding solutions is the Richardson Bay Shoreline Study available here: https://www.marinwatersheds.org/sites/default/files/2017-07/2015.10.12_RichardsonBayShorelineStudy_000.pdf. The study includes an evaluation of tidal flood reduction tools, including appropriate locations for tide gates, such as where there is existing infrastructure or barriers. The District looked at communities in Europe and the United States for examples of tidal barriers.

The high cost and need for additional land for other alternatives is the reason why, after years of study, the District has concluded that the only feasible option to protect the Santa Venetia neighborhood is rebuilding and improving the existing levee / TRB system.

M-3 With regard to other planned flood control and drainage improvements for Santa Venetia, please see the response to comment E-18. Outside sources of funds would be needed to complete the Project. The District is pursuing several sources of funds.

- M-4 Without easements, the District has not had the authority to enforce its recommendations for maintaining the levee, including limiting tree growth. However, when real estate negotiations commence, the District will work with property owners in good faith to allow structures and trees that do not interfere with the Project to remain. The District has no plans to acquire creekside property fee title. Easements would give the District the right to access, inspect, and maintain (if needed) the entire levee. This would be necessary to meet the FEMA grant requirements for maintenance commitment.
- M-5 Please see the responses to comments J-3 and L-4.
- M-6 Please see the responses to comments C-6, J-2, and K-1.
- M-7 The District acknowledges the commenter's opposition to the Project as proposed.



GALLINAS WATERSHED COUNCIL

PO Box 4284, San Rafael, CA 94913

Aug. 5, 2019

Laurie Williams, Senior Watershed Planner
3501 Civic Center Drive, Suite 304
San Rafael, CA 94903
lwilliams@marincounty.org

RE: Comments on GALLINAS LEVEE UPGRADE PROJECT INITIAL STUDY

Dear Ms. Williams:

1 | Gallinas Watershed Council compliments the thorough history and report work done by you and County on this Negative Declaration for the Santa Venetia Levee Upgrade Project. We are pleased to see the County moving ahead with protecting the Santa Venetia neighborhood from rising seas while also protecting the marsh and the unique wildlife that inhabits this area.

We have the following comments we would like to see considered. None of these should impact the Negative Declaration, but they may help clarify certain parts of the report.

2 | One consideration we have is regardless of it being a Negative Declaration, a qualified biologist should be available to drop by the project to observe and see that the work is being carried out in the manner specified, that no species are being endangered, that no work is impacting the marsh, etc. Rigorous project management is often needed to make sure that the important specifications of the project are being adhered to by all contractors and subcontractors to produce the results desired and required. The endangered California Ridgway's Rail, the Salt Marsh Harvest Mouse are two species of special concerns as noise and construction work are known to impact their breeding, feeding and general health. Monitoring Measure BIO-1 (page 55) does not specify a monitoring schedule. While pre-construction observation is included and monitoring during the project is mentioned, it is not clear when actual monitoring will occur. Will the biologist be on-site daily, or drop by occasionally, scheduled or unannounced, to observe conditions during the project? We would appreciate clarification on this point.

*Gallinas Watershed Council is a fiscal project of MarinLink, a 501(c)(3) nonprofit.
MarinLink's federal tax ID number is 20-0879422.*

www.gallinaswatershed.org gwc@gallinaswatershed.org (415) 578-2580

3 | Page 9: We suggest adding the number of homes where the TRB work will be happening; this number of homes needing easements for the TRB is never mentioned. The second paragraph here would be a good place.

4 | Page 9-10: Very pleased to see SLR adaptation features for habitat on the marsh face of the TRB are included, to provide refugia protection during high tides for the ES. These are shown in Figure 7 and spelled out in Mitigation Measure BIO-4.

5 | Figure 6, page 11: Are these two options at the choice of the landowner whose property they will impact? Is one choice preferable or are both equal? Text mentions that the maximum elevation not to exceed height of inner SV Marsh levee—can the reasoning for this please be explained? Also, is this height the same or greater than the airport levees' height? Given past history, if Santa Venetia were to have a slightly higher levee than the airport's, it might go far in increasing neighborhood acceptance.

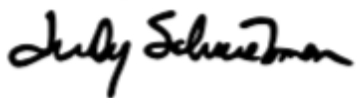
6 | Page 12: "...may be on property claimed to be owned by the SR Airport." Didn't the MOU also specify clearing title on these lands? When is that expected to be started/completed?

7 | Page 15: Redwood members can be recycled, if not salvaged, at Marin Resource Recovery Center. This is a higher, better use than landfill and it's closer to the site.

8 | Page 65, Energy and Page 72, Greenhouse Gas Emissions: As proponents of DrawDown Marin, we want to draw County's attention to the Los Gatos facility that creates aggregate from atmospheric CO2 capture. Should this material be needed and useful for fill of the new TRB or any other part of the project, carbon credits could perhaps be leveraged against GHG production due to the project, possibly resulting in Air Quality mitigation, since carbon dioxide should now be considered a dangerous air pollutant as well as a GHG. It could be a good thing to do regardless. <http://www.blueplanet-ltd.com> This material has been successfully used at the SF Airport. We encourage the county to pursue this with CARB prior to project start.

9 | The Gallinas Watershed Council commends Senior Watershed Planner Laurie Williams and the county for their work in developing the project such that sensitive natural features, homeowners, and Gallinas Creek wildlife will be protected during this process and for five years of monitoring afterward.

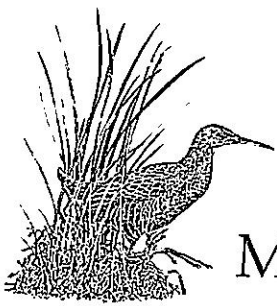
Sincerely,



Judy Schriebman
Secretary, Gallinas Watershed Council

Letter N. Judy Schriebman, Gallinas Watershed Council

- N-1 The District acknowledges and appreciates the commenter's support for the Project.
- N-2 As identified in Mitigation Measure BIO-1, a qualified biological monitor would review all areas prior to vegetation removal. At the beginning of each workday within marsh habitat, a biological monitor would visually inspect and sweep both sides of each exclusion fence to ensure that the fence is in good repair and that sensitive species have not entered the work area.
- N-3 The levee goes along a total of 111 properties. Six of these are owned by public agencies, such as pump station sites. The levee / TRB is located on at least a portion of about 94 private parcels. The levee / TRB is on County-controlled State tidelands off the back of approximately 11 parcels.
- N-4 Please see the response to comment N-1.
- N-5 Both designs would provide equal flood risk reduction. The alternative design with imported fill and a single panel would reduce or eliminate the nuisance ponding that occurs in many of the low-lying yards. Property owners will be able to specify their preferred design, though site-specific constraints will affect the final selection.
- N-6 The text of the Initial Study does not state that the maximum elevation of the TRB would not exceed the height of the Santa Venetia Marsh inner levee. The inner levee has an elevation of approximately 11 feet. The proposed design height for the reconstructed TRB is not to exceed 12.5 feet. Please see the response to comment L-2. Please see the response to comment E-4 regarding other levees in the area.
- N-7 The MOU, as well as a recorded Grant of Permission Agreement and Tidelands Lease Agreement, are all available for review at the Marin County Department of Public Works website: <https://www.marincounty.org/depts/pw/divisions/projects/land-use/srairport>. Pursuant to the MOU, on August 20, 2019 the Airport and Board of Supervisors executed a Grant of Permission waiving the Airport's rights, if any, to prohibit public or private activities taking place south of the mean lower low water line.
- N-8 Please see the discussion of handling of waste materials in Initial Study Section 19, Utilities and Service Systems, topic e).
- N-9 The District appreciates the information provided.
- N-10 Please see the response to comment N-1.



Marin Audubon Society

P.O. Box 599 | MILL VALLEY, CA 94942-0599 | MARINAUDUBON.ORG

August 5, 2019

Laurie Williams, Senior Watershed Planner
Marin County Dept. of Public Works
3501 Civic Center Drive
San Rafael, CA 94903

Att: Gerhard Epke

RE: SANTA VENETIA: GALLINAS CREEK LEVEE UPGRADE PROJECT

Dear Ms. Williams:

1 Thank you for the opportunity to submit comments on the Santa Venetia Project will upgrade and repair 7,000 feet of the timber reinforces levee (TRB) along Gallinas Creek and upgrade several pump stations to improve flood protection. The design will raise the currently uneven-height of the levee by 1-3 feet above NAVD88 to 12.5 feet NAVD88 in order to protect the community from predicted sea level rise by 2050. The project purpose also includes increasing the stability of the levee and the TRB, as well as promoting healthy native habitat. The work would be done in increments starting at the stretches where the elevations are lower. The area of our concern is along the creek adjacent to the TRB, and around the outfalls and pumps, where the primary adverse impact, the loss of wetlands and transition zone habitat, would occur.

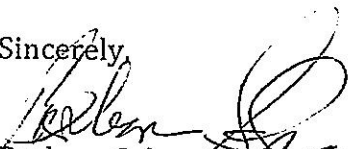
3 Surveys have found that Gallinas Creek has the largest population of endangered Ridgway's Rails in the county and perhaps the North Bay. Although narrow, the tidal marsh and transition zone adjacent to the TRB is part of Ridgway Rail habitat. The amount of salt marsh vegetation varies along the TRB, as native vegetation is intermixed with non-natives. Some sections have more wetland plants than others, but even the sections where wetland vegetation is minimal, provide high tide refugia for Ridgway Rail and Salt Marsh Harvest Mouse. Impacts would occur from trampling and other activities related to the construction.

4 The most environmentally sensitive approach to increasing flood protection would be to use sheet piles because the footprint would be narrow and more area along the creek could be undisturbed. We understand this option was considered and found to be too expensive. The cost difference should be discussed.

- 5 | - Scheduling work outside of Rail breeding season and not during high tides when the rails would need the transition zone for refugia should be required. Also phasing the work, by doing sections that are lower first, will allow sections of undisturbed habitat to remain and would also be a benefit to rails needing refugia.
- 6 | - Directing crews to work on the land side of the TRB, e.g. to avoid walking or standing on the vegetation wherever possible and to not pile or store materials on the Creekside.
- 7 | - Improving the transition habitat wherever possible. It seems unlikely that all of the work will be able to be accomplished without impacting the transitional habitat adjacent to the TRB. BMP's should be prepared that will assure this habitat is left improved and not degraded. Of particular concern is adding fill that may be needed to support a taller structure.
- 8 | - Vegetating the area adjacent to the new berm with native salt marsh vegetation, and upland plants at higher elevations, with species suitable to provide protective cover for the rails. *Grindelia* is a particularly good refugia cover species. *Baccharis pilularis* and *Elymus triticoides* are good species that will coalesce into high tide refugia habitat.
- 9 | - Follow up maintenance measures should include weeding, which will most certainly be needed, and possibly watering of high marsh plants, particularly of upland species at least for the first year or two.
- 10 | Obtaining access agreements from the adjacent property owners will be difficult. If history tells us anything, some people may not want to have their views impacted by higher TRB and may even object to the taller vegetation.

Thank you for considering our comments.

Sincerely,


Barbara Salzman, Co-chair
Conservation Committee


Phil Peterson, Co-chair
Conservation Committee

Letter O. Barbara Salzman and Phil Peterson, Marin Audubon Society

- O-1 This comment summarizes the Project.
- O-2 Impacts to sensitive habitats, including wetlands, and special status species are discussed in Initial Study Section 4, Biological Resources. Please see also the responses to the following comments in this comment letter.
- O-3 Section 4, Biological Resources, in the Initial Study uses the most recent scientific information available to characterize the presence of Ridgway's rail near the Project site. The salt marsh harvest mouse is presumed present in all suitable habitat. Use of the upper marsh by sensitive species during high tide, as mentioned by the commenter, is described in the analysis. For this reason, Mitigation Measure BIO-2 states that barrier fencing would be installed and no work would be conducted during extreme high tide events.
- O-4 With regard to sheetpiling as an alternative to the proposed reconstruction of the TRB, please see the response to comment E-13.
- O-5 Pipe upgrading and abandonment at the pump stations would occur within the allowable work window for Ridgeway's rail. The District has determined that restricting work on TRB reconstruction to the work window would render the project infeasible, given the 3-year performance period of the FEMA grant. Consistent with federal and State guidance, the Project would instead rely upon nesting bird surveys to avoid all impacts to Ridgeway's rail and other nesting bird species. The commenter's suggestion to phase the work is already part of the Project plan. Both federal and State resource agencies regulate potential impacts to active rail nest sites, but not impacts to potential refugia areas. Work during high tides would be avoided, as per Mitigation Measure BIO-2.
- O-6 As described in the Project Description, all access to the TRB would be from the land side of the levee between houses, pursuant to access agreements with property owners, or through publicly-owned parcels such as the pump stations. To protect sensitive biological resources and water quality, work would stay out of the marsh and above the high tide line.
- O-7 As identified in Mitigation Measure BIO-5, the District would restore sensitive vegetation disturbed during construction, and monitor conditions to ensure that restoration has been successful.
- O-8 As suggested by the commenter, the District would restore sensitive vegetation disturbed during construction. As described in Mitigation Measure BIO-5, the revegetation strategy for the outside of the berm is to create a "living shoreline," using a palette of native species such as coyote brush, saltgrass, marsh gumplant,

rushes, and bulrushes, as shown in Figure 7 in the Project Description. The District appreciates the suggestion of vegetation species, which will be considered during restoration planning for the site.

- O-9 As identified in Mitigation Measure BIO-5, following revegetation, the Project site would be monitored for 5 years to assure success of native vegetation. If more than 20 percent are invasive plants, remedial actions including weed control would be taken. Site restoration would be designed by a qualified restoration biologist, who may or may not incorporate supplemental watering into the restoration program depending upon site-specific conditions.

- O-10 Visual impacts are discussed in Initial Study Section 1, Aesthetics, and found to be less than significant. Please see also responses to comments C-13 and J-3.

From: phil bennett <astrophil@att.net>
Sent: Friday, August 09, 2019 1:50 PM
To: Williams, Laurie <LWilliams@marincounty.org>
Subject: santa venetia

To Whom it may concern,

1 | I live at 57 vendola drive on las gallinas creek and would like to voice my opinion though I apologize that
this return email is late as my old computer
had to be replaced and now back online. As my father was an engineer and taught me various useful
information, I have been studying the effects
with water on our property and would like to add my experience living here as I have for 15 years.
Firstly, the water that sometimes floods our backyard, especially in January, is water that seeps
underground and never comes up anywhere
near the present levee. Also, since the mud is accumulating because of the postponing of dredging, the
water table is higher due to the
2 | lack of room for the water. I do believe that dredging would do the most in alleviating the flooding
problem that we have experienced with the
mud accumulation. It is very clear when one sees this every day.
3 | Also, if the levee is made of slats of wood as we have now, the water would find it's way between the
slats.
4 | Also, I have many plants in the wood structure and I do not want to lose these plants as they are mature
natives.

Thank you.

Sincerely,

Philis Bennett

astrophil@att.net

415 479 1100

Email Disclaimer: <https://www.marincounty.org/main/disclaimers>

Letter P. Phil Bennett (Letter received August 9, 2019)

- P-1 Regarding seepage through the levee, please see the response to comment E-11. The Project cannot stop groundwater from bubbling up and this is likely to increase with sea level rise. This is one reason for there being a 30-year Project design life.
- P-2 Regarding dredging, please see the response to comment D-1. The groundwater is high due to the tide elevations, which would not be reduced through dredging. Drainage ditches can be an effective way of reducing the water table in places where the tides are not so high relative to the ground elevation, but would not be effective here.
- P-3 Please see the response to comment E-11. The wooden panels do not provide flood protection. The purpose of the wooden panels is to reinforce a narrower earthen berm than would otherwise be possible without such reinforcement. The earthen material is what acts as the flood barrier and would be composed of soil and controlled density fill, as described in the Project Description, on page 16 of the Initial Study. Plants growing in the structure have a negative impact on the berm's ability to hold back water and are discouraged.
- P-4 Impacts on rare plants and sensitive habitat are examined in Section 4, Biological Resources, of the Initial Study. Impacts on ornamental landscaping are not considered significant impacts of the proposed Project. Details of access agreements for the Project will be worked out between the District and individual property owners.



State of California – Natural Resources Agency
 DEPARTMENT OF FISH AND WILDLIFE
 Bay Delta Region
 2825 Cordelia Road, Suite 100
 Fairfield, CA 94534
 (707) 428-2002
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
 CHARLTON H. BONHAM, Director



Q

August 20, 2019

Ms. Laurie Williams
 Senior Watershed Planner
 Marin County Flood Control and Water Conservation District, Zone 7
 3501 Civic Center Drive, Suite 304
 San Rafael, CA 94903

Dear Ms. Reid:

Subject: Gallinas Levee Upgrade Project, Initial Study, SCH #2019079013, City of San Rafael, Marin County

The California Department of Fish and Wildlife (CDFW) received a Gallinas Levee Upgrade Project, Initial Study/Mitigated Negative Declaration (MND) from Marin County Flood Control and Water Conservation District (District) for the Gallinas Levee Upgrade Project (Project) pursuant to the California Environmental Quality Act (CEQA).

CDFW is submitting comments on the IS to inform the Marin County Flood Control and Water Conservation District, of our concerns regarding potentially significant impacts to sensitive resources associated with the proposed Project.

Regulatory Requirements

1 CESA prohibits unauthorized take of candidate, threatened, and endangered species. Therefore, if “take” or adverse impacts to species listed under CESA cannot be avoided either during Project activities or over the life of the Project, a CESA Incidental Take Permit (ITP) must be obtained (pursuant to Fish and Game Code Section 2080 *et seq.*). Issuance of a CESA ITP is subject to CEQA documentation; therefore, the CEQA document should specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the proposed Project will impact any CESA-listed species, early consultation is encouraged, as significant modification to the Project and mitigation measures may be required to obtain a CESA ITP. More information on the CESA permitting process can be found on the CDFW website at <https://www.wildlife.ca.gov/Conservation/CESA>.

Fully Protected Species

Fully protected species such as salt-marsh harvest mouse, California clapper rail, and California black rail may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock (Fish and Game Code Section 3511). Therefore, appropriate mitigation measures to ensure avoidance of fully protected species which do not cause “take” should be disclosed in the MND.

1
(cont.)

Lake and Streambed Alteration Agreement

CDFW requires an entity to notify CDFW before commencing any activity that will divert or obstruct the natural flow, or change the bed, channel, or bank (which may include associated riparian resources) of a river, lake, or stream or use material from a streambed. Ephemeral and/or intermittent streams and drainages (that are dry for periods of time or only flow during periods of rainfall) are also subject to Fish and Game Code section 1602; and CDFW may require a Lake and Streambed Alteration (LSA) Agreement with the applicant, pursuant to Section 1600 et seq. of the Fish and Game Code. CDFW acknowledges that the MND includes language stating that the District will need an LSA Agreement under Required Approvals (page 21).

Issuance of an LSA Agreement is subject to CEQA. CDFW, as a Responsible Agency under CEQA, will consider the CEQA document for the Project. The CEQA document should identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for completion of the agreement. To obtain information about the LSA notification process, please access our website at <https://www.wildlife.ca.gov/conservation/lisa> or to request a notification package, contact CDFW's Bay Delta Regional Office at (707) 428-2002.

CDFW also has jurisdiction over actions that may result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code Sections protecting birds, their eggs, and nests include 3503 (regarding unlawful take, possession or needless destruction of the nests or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird). Migratory raptors are also protected under the federal Migratory Bird Treaty Act.

Project Description and Environmental Setting

The Project is located within the Santa Venetia neighborhood of an unincorporated community located near the City of San Rafael in Marin County, California. The community is comprised of approximately 900 homes, east of the Marin County Civic Center, bordered on the northern and northeastern edge by the South Fork Gallinas Creek. The Project is along approximately 7,000 linear feet of Las Gallinas Creek from #5 Vendola Drive to #825 Vendola Drive, Marin County.

In 2016, the Federal Emergency Management Agency (FEMA) completed a San Francisco Bay Coastal Study, which resulted in reassessing portions of the Santa Venetia residential neighborhood below the base flood elevation of 9.8 feet. The Project objectives of the Gallinas Levee Upgrade Project include:

- Reduce the risk of tidal flooding in the Santa Venetia neighborhood due to a 100-year tidal elevation until the year 2050.
- Increase the stability and reliability of the levee and the timber reinforced berm (TRB) with new construction and facilitate future maintenance.
- Project and promote healthy native habitat where the Project borders the marsh.

Approximately 35 years ago, a TRB was constructed around the Santa Venetia neighborhood. The Project as proposed would install a TRB in areas where there is none, and increase the height of the TRB to account for the new FEMA base flood elevation, subsidence and projected

2

2
(cont.)

20-inches of sea level rise until 2050 in other areas. The new TRB would be approximately 1-3 feet higher, with a maximum elevation of 12.5 feet; yet the final design has yet to be completed. Per Figure 6, some areas will have a landside soil buttress and the TRB will be tied back. Other areas will have no proposed landside soil buttress.

The Project also proposes to replace or remove existing tidal culverts.

Comments and Concerns

3

Salt Marsh Habitat

CDFW is concerned that the Project as proposed will result in a loss of salt marsh habitat. Page 15 states, "A new survey of the current height of the earthen levee, scheduled to be undertaken by the District in the spring of 2019, will determine the required height of the TRB." Figure 6 does not show the existing high tide line and the proposed high tide line in 2050. Currently, most of the creek-side area of the levee has salt marsh habitat. Also, most of the TRB is low enough or has adjacent vegetation that salt marsh harvest mouse and other marsh species have areas they can escape to during high tide.

CDFW appreciates that the Project Description (Figure 7) and Mitigation Measure BIO-4, include a living shoreline feature, which is a vertical corridor of salt marsh habitat with a lattice for species to potentially use as an escape mechanism during a high tide event.

CDFW is concerned that increasing the height of the TRB by 1 to 3.5 feet along the 7,000-foot levee will ultimately result in the loss of the entire marsh area creek side of the TRB. Therefore, CDFW recommends implementing the following concept included in Mitigation Measure BIO-4 to the greatest extent feasible, "Wherever feasible given space constraints, clean fill shall be placed and compacted on the outboard side of the TRB to increase marsh elevation, while maintaining an appropriate slope to allow development and migration of marsh vegetation in association with sea level rise."

4

CDFW also recommends that Mitigation Measure BIO-3 and BIO-4, state that once the spring survey is completed to determine the required height of the TRB, the District will map both the current high tide line and the projected high tide line for the entire length and life of the structure, which as proposed is until 2050. If there is a difference in salt marsh habitat between the two maps, to reduce potentially significant impacts, a Mitigation Plan should be written for review and acceptance by CDFW for the resulting loss of any salt marsh habitat.

For the areas of salt marsh habitat that are not projected to be impacted, CDFW recommends long-term monitoring of the salt marsh habitat for the life of the Project to ensure that the habitat is not lost. If the Project impacts exceed the projected marsh impacts in the Mitigation Plan, CDFW recommends developing a mechanism to mitigate for the on-going loss of that habitat.

5

Fully Protected Species

The MND should include species avoidance measures to be implemented wherever Project activities will directly impact salt marsh vegetation or occur adjacent to salt marsh vegetation. These measures could include barrier fencing, hand removal of salt marsh vegetation, seasonal work windows, and avoidance buffers.

Mitigation Measure BIO-1 should be revised to specifically add the following language:

Project activities within or adjacent to tidal marsh or suitable Ridgway's (California clapper) rail (CCR) or California black rail (CBR) habitat shall be avoided during rail breeding season (January 15 – August 31 for CCR, February 1 – August 31 for CBR) each year unless appropriately times, yearly protocol level surveys are conducted and survey methodology and results are submitted to and accepted by CDFW. Surveys shall focus on suitable habitat that may be disturbed by project activities during the breeding season to ensure that these species are not nesting in these locations.

If breeding rails are determined to be present, no activities, visual disturbance (direct line of sight) and/or an increase in the ambient noise level shall occur within 700 feet of areas where CCR and/or CBR have been detected during the breeding season. If surveys have not been conducted, all work shall be conducted 700 feet from CCR and/or CBR habitat during nesting season.

FILING FEES

The Project, as proposed, may have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish and Game Code, § 711.4; Pub. Resources Code, § 21089).

CONCLUSION

To ensure significant impacts are adequately mitigated to a level less-than-significant, CDFW recommends all impacts to be identified and appropriate mitigation measures be incorporated as enforceable conditions into the final CEQA document for the Project. CDFW appreciates the opportunity to comment on the IS to assist the District in identifying and mitigating Project impacts on biological resources.

CDFW appreciates the opportunity to provide comments on the IS/MND for the proposed Project and is available to meet with you to further discuss our concerns. If you have any questions, please contact Ms. Karen Weiss, Senior Environmental Scientist (Supervisory), at karen.weiss@wildlife.ca.gov.

Sincerely,



Gregg Erickson
Regional Manager
Bay Delta Region

cc: State Clearinghouse

Letter Q. Gregg Erickson, California Department of Fish and Wildlife (letter received August 20, 2019)

- Q-1 This comment introduces the letter and describes the regulatory role of the California Department of Fish and Wildlife. Required approvals for the Project are listed in the Project Description. A Section 1600 Streambed Alteration Agreement is anticipated. The District does not anticipate the need for an Incidental Take Permit, since the Project, as mitigated, is not expected to result in the take of listed species. Please see Initial Study Section 4, Biological Resources, topic a), and the response to comment Q-5, below.
- Q-2 The comment summarizes the Project Description, including the environmental setting.
- Q-3 The District appreciates CDFW's endorsement of the provision of Mitigation Measure BIO-4 to include clean fill on the outboard side of the TRB where space permits, in order to facilitate growth of marsh vegetation in this area. This provision may insulate the area against impacts of future sea level rise. However, the District notes that this Initial Study is restricted to examining the impacts of the Project, and that mitigation measures are intended to compensate only for the impacts of the Project, not to compensate for impacts of sea level rise.
- Q-4 As stated in the Project Description, "The level of protection targeted is the 100-year BFE plus up to about 2.5 feet to account for land settlement and sea level rise projections between now and 2050. This increased level of protection is to be accomplished through raising the existing TRB to meet an elevation of 12.5 feet above MLLW." The design elevation will be reexamined by the District, as discussed in the response to comment L-2, including consideration of current and projected high tide line, but the Project would not affect the height of the tide. The District notes that this Initial Study is restricted to examining the impacts of the Project, and that mitigation measures are intended to compensate only for the impacts of the Project, not to compensate for impacts of sea level rise. Thus, the District does not plan to develop a mitigation plan for the impacts of sea level rise.
- Q-5 The commenter suggests species avoidance measures in and directly adjacent to salt marsh vegetation. Mitigation Measure BIO-1 includes use of hand tools or hand-held motorized equipment, biological monitoring, and barrier fencing outside work areas. In response to the comment, the text of Mitigation Measure BIO-1 has been revised to add "and directly adjacent to" to the phrase "within potential habitat" (see below). The District intends to conduct protocol-level surveys for Ridgway's rail and black rail annually during Project implementation; this has been added to Mitigation Measure BIO-1, below. Site-specific avoidance buffers will be implemented around all presumed nesting sites where rails are detected.

The District understands that Ridgway's rail and California black rail are State-listed fully protected species, and will undertake all needed measures to avoid take of these species. The District also notes that construction of components of this Project, including living shoreline features, removal of invasive species, installation of fill, and reduced need for maintenance, will extend and improve the marsh habitat for rails as well as other species. Protocol-level surveys were conducted in 2019 by Point Blue, and will be conducted annually at the direction of the District. These surveys will identify calling locations of rails, which are presumed to be near their nesting sites. Active nest sites will be avoided with an avoidance barrier of 700 feet, though this buffer distance may be reduced depending on site conditions and the nature of the proposed work, in coordination with CDFW and other appropriate agencies. For potentially impacting work within 250 feet of nesting sites, activities will be conducted outside of rail nesting season (January 15 - August 31 for CCR, February 1 - August 31 for CBR).

Mitigation Measure BIO-1 is revised as follows. These changes only amplify and clarify this measure and do not alter the conclusion reached in the Initial Study that the mitigation measure would reduce the impact to less than significant. No recirculation is required for this minor modification, per State CEQA Guidelines section 15073.5(c)(4).

MM- BIO-1 For work within and directly adjacent to potential habitat for salt marsh harvest mouse, California black rail, and Ridgway's rail (i.e., within tidal marsh habitat), the following protection measures shall apply:

For work within and directly adjacent to marsh habitat, including work at the two pump stations with pipeline replacement activities, the biological monitor shall survey the area where ground disturbance or vegetation removal will take place each morning prior to the start of work.

Protocol-level surveys will be conducted annually in Las Gallinas marsh and Santa Venetia marsh in all suitable habitat for Ridgway's (California clapper) rail (CCR) or California black rail (CBR). Survey methodology and results will be submitted for CDFW approval. No work activities, visual disturbance (direct line of sight) and/or increase in the ambient noise level shall occur within 700 feet of areas where CCR and/or CBR have been detected and are likely to be nesting during the breeding season (January 15 - August 31 for CCR, February 1 - August 31 for CBR), though this buffer distance may be reduced depending on site conditions and the nature of the proposed work, in coordination with CDFW and other appropriate agencies. For work within 250 feet of nesting sites, activities will be conducted outside of rail nesting season.

Q-6 The District is aware of the filing fee requirement, and will pay it at the appropriate time.

Q-7 Please see the response to comment Q-5, above.

2. Changes to the Initial Study

Two changes are made to the Initial Study in response to the comments received. These changes only amplify, clarify, or correct the text and do not alter conclusions regarding impacts or mitigation measures. No recirculation is required for these minor modifications, per State CEQA Guidelines section 15073.5(c)(4).

Page 2 is revised as follows:

Now, most of the Santa Venetia neighborhood lies below ~~sea level~~ high tide.

Page 54, Mitigation Measure BIO-1 is revised as follows.

MM- BIO-1 For work within and directly adjacent to potential habitat for salt marsh harvest mouse, California black rail, and Ridgway's rail (i.e., within tidal marsh habitat), the following protection measures shall apply:

For work within and directly adjacent to marsh habitat, including work at the two pump stations with pipeline replacement activities, the biological monitor shall survey the area where ground disturbance or vegetation removal will take place each morning prior to the start of work.

Protocol-level surveys will be conducted annually in Las Gallinas marsh and Santa Venetia marsh in all suitable habitat for Ridgway's (California clapper) rail (CCR) or California black rail (CBR). Survey methodology and results will be submitted for CDFW approval. No work activities, visual disturbance (direct line of sight) and/or increase in the ambient noise level shall occur within 700 feet of areas where CCR and/or CBR have been detected and are likely to be nesting during the breeding season (January 15 - August 31 for CCR, February 1 - August 31 for CBR), though this buffer distance may be reduced depending on site conditions and the nature of the proposed work, in coordination with CDFW and other appropriate agencies. For work within 250 feet of nesting sites, activities will be conducted outside of rail nesting season.