

Appendix B

Comment Letters and Responses

This section contains the comment letters that were received on the Initial Study with Intent to Adopt a Mitigated Negative Declaration (IS/MND) for the Walnut and Grayson Creeks Desilting Project. Following each comment letter is a response by Contra Costa County intended to supplement, clarify, or amend information provided in the IS/MND.

Comment Letter #1

From: [Sandra Karaica](#)
To: [Alex Nattkemper](#)
Subject: Dredging of Side Creek need Hwy 4 & Grayson Creek
Date: Tuesday, November 9, 2021 1:50:38 PM

Hi Alex, Hope all is well.

I have the Oct 19, 2021 CCC Department of Conservation & Dev letter in front of me regarding the dredging of Grayson Creek, etc.

I live next to the "side" creek along Hwy 4 between Marsh Drive & Grayson Creek. THIS HAS NOT BEEN DREDGED FOR MANY YEARS.

I am VERY CONCERNED as we in this mobile home park - Rancho Diablo- flood 3 times (1998, 1998, 2005), the last in which 35 of us lost our cars due to the water coming into the floor boards & ruining the electric.

I tried to call directly to the Antioch State Yard Foreman (was Dave, now Roland) 4 times in October (757-4327) Each time Roland said he was busy & would call back, but never did. Still NOTHING HAS BEEN TO CLEAN UP THIS AREA.

In the side creek, the State did a BEAUTIFUL JOB finishing off their side of the creek, including installing a separate drain & netting on the hillsides to help with the water/dirt flow,

BUT NOTHING HAS BEEN DONE ON THE STATE SIDE - THE SIDE NEAR OUR WALL.

IN FACT; BECAUSE IT HASN'T BEEN DREDGED SINCE 2005, THERE IS SO MUCH DIRT BUILDUP, THERE IS NOW A DIRT ROAD MAKING IT EASIER STILL FOR THE WATER TO COME INTO OUR PARK.

I'm not sure what to do & WHY NOTHING HAS BEEN DONE TO CLEAN UP THIS SIDE. IT'S A MESS. FENCES HAVE BEEN PUT UP ON EACH END, BUT TAKEN DOWN BY THE HOMELESS EVENTUALLY, WHICH CREATES MORE OF A MESS.

I hope you can either let me know the status of cleaning up this area or direct me to who can help. THIS IS A 100 YEAR FLOOD ZONE, SO I'M NOT SURE WHY THIS AREA HAS NOT BEEN ADDRESSED BEFORE NOW.

Hope all is going well on your end. APPRECIATE THAT THESE CREEKS ARE GOING TO BE DREDGED & CLEANED OUT - JUST SORRY IT TOOK 20 YEARS TO DO & 2 YEARS TO EVEN GET STARTED.

NEED TO KNOW HOW THIS SIDE CREEK IS GOING TO BE CLEANED UP!

Thanks for your help!

Very Sincerely,
Sandra Karaica
330 Vista Del Rio
Pacheco, CA 94553
925-689-9694

From: [Sandra Karaica](#)
To: [Alex Nattkemper](#)
Subject: Re: Dredging of Side Creek near Hwy 4 & Grayson Creek
Date: Tuesday, November 16, 2021 10:19:10 AM
Attachments: [image001.png](#)

Alex, Thank You SO MUCH for responding, but I still need to know who to contact in the State who is responsible for cleaning this out.
Hope you can help! Thank You! Sandra Karaica

2

On Tuesday, November 16, 2021, 09:33:44 AM PST, Alex Nattkemper
<alex.nattkemper@pw.cccounty.us> wrote:

Hello Sandra,

Thank you for your comments on the Walnut & Grayson Creeks Desilting Project. You will be receiving a formal response from the County at the close of the CEQA comment period. However, I want to let you know that the side creek north of the mobile home park that is referenced in your email (and shown in the attached photo) is not owned or maintained by the County. Please let me know if you have any further questions or comments.

Regards,

Alex Nattkemper

Environmental Analyst

Office: (925) 313-2364

Cell: (925) 890-0659

Schedule: Tuesday - Friday



ENVIRONMENTAL SERVICES DIVISION

255 Glacier Drive

Martinez, CA 94553



Contra Costa County
Public Works
Department

Brian M. Balbas, Director

Deputy Directors

Stephen Kowalewski, Chief

Allison Knapp

Warren Lai

Carrie Ricci

Joe Yee

April 22, 2022

Sandra Karaica
330 Vista Del Rio Drive
Pacheco, CA 94553

RE: Walnut and Grayson Creeks Desilting Project
County Project No.: WO#8334

Dear Ms. Karaica:

Thank you for providing comments on the proposed Mitigated Negative Declaration for the Walnut and Grayson Creeks Desilting Project (Project). This letter is intended to address your comments submitted on November 9, 2021 and November 16, 2021. Our responses to your comments are presented below and follow the order of your comments (numbered in the margin of your emails and attached for reference).

Response #1: The side creek north of the mobile home park that is referenced in your emails is not owned or maintained by the County.

Response #2: Based on County records, the parcel where the creek in question is located appears to be owned by Caltrans. For further assistance, you can reach out to the Caltrans District 4 office in Oakland. Their contact information is available on the website here: <https://dot.ca.gov/contact-us>

These comments are incorporated into the MND document via inclusion of Appendix B Comment Letters and Responses. Please contact me if you have any further questions on our responses to your comments at alex.nattkemper@pw.cccounty.us or (925) 313-2364.

Sincerely,

Alex Nattkemper

Alex Nattkemper
Environmental Analyst
Environmental Services Division

AN:xx

\\PW-DATA\grpdata\engsvc\ENVIRO\Flood Control\Walnut and Grayson Creeks Desilting\CEQA\Public Noticing\3-Comments\Mobile Home Park Resident\3-Response\1. Response to Resident (final).docx

Sandra Karaica

April 22, 2022

Page 2 of 2

Enclosures

c: Paul Detjens, Flood Control
Gus Amirzehni, Flood Control
Anthony DiSilvestre, Flood Control
Ave Brown, Environmental Services

Comment Letter #2
WALNUT CREEK
WATERSHED
COUNCIL

November 18, 2021

Alex Nattkemper, Environmental Analyst
Contra Costa County Public Works Dept.
255 Glacier Drive, Martinez, CA 94553

Via Email: Alex.Nattkemper@pw.cccounty.us

RE: Walnut and Grayson Creeks Desilting Project
Comments on Proposed Mitigated Negative Declaration (County File No. 21-29)

Dear Mr. Nattkemper:

The Walnut Creek Watershed Council, The Friends of the Creeks, The Friends of Pleasant Hill Creeks, the Lafayette Creeks Committee, and the Friends of San Ramon Creek are organizations dedicated to restoring the Walnut Creek Watershed, improving the fish and wildlife habitat in Walnut Creek and its tributaries, and improving community understanding and awareness of the creeks in our watershed.

The comments and recommendations presented below and in the attachments to this letter represent the collaborative contributions of these organizations. We also support the comments submitted by the Friends of Pleasant Hill Creeks regarding Grayson Creek. For the reasons stated in both letters, the Council cannot support the proposed project as designed.

We request that this comment letter and all the attachments be included as part of the PMND public review process.

Summary of Our Review:

The analysis in the Proposed Mitigated Negative Declaration (PMND) of the project to remove 129,800 cubic yards from Walnut Creek and 42,500 cubic yards from Grayson Creek has flaws and proposes mitigation measures that are inadequate.

The flaws include:

- 1 • Inadequate analysis to justify the project's need in Walnut Creek.
- 2 • Inadequate evaluation in the biological assessment, especially related to fish.
- 3 • Failure to acknowledge and address, the human occupation of the channel in the project area and its effects on the biological resources and project implementation.
- 4 • Inadequate proposed mitigation measures
- 5 • Missed an opportunity to improve habitat values in conformance with the Flood Control and Water Conservation District's (District) own goals.

The modifications the Council requests include:

- 6 • Conducting a new and more comprehensive analysis in Walnut Creek of the need for the desilting, and of the amount of silt that needs to be removed, particularly after the October 24, 2021, storm.

- 7 • Modifying this project to focus on using the proposed sediment removal to maximize the benefits to fish and wildlife resources.
- 8 • Excavating enough sediment in a several locations to create deep pools and adding gravels suitable for spawning.
- 9 • Removing the patches of *Arundo donax* downstream from Willow Pass Road.

When visiting Drop Structure #1 recently, we heard, multiple times, the slap of the body of salmon against the concrete vertical wall of the drop structure as the salmon tried to complete their migration journey into the Walnut Creek Watershed to reproduce. It is hard to listen to these sounds without becoming angry at what we have done to this magnificent fish species and without becoming passionate about the need for change.

For the future of fish and wildlife in Walnut Creek, the Flood Control and Water Conservation District (District) needs to evaluate how to enable fish to swim higher in the creeks in the watershed and how to best protect the fish coming upstream from Suisun Bay. The Council requests that the evaluation include replacing or by-passing Drop Structure #1 (which the District has said is feasible) with a more natural structure that permits fish passage and reduces the opportunities for poaching.

We are very appreciative of the cooperative relationship we have with you. We hope the District will recognize this is an important opportunity for the District to enhance habitat values in a manner similar to the much-lauded Lower Walnut Creek Project and as discussed in the District's 50-year plan. We look forward to working with you to create a better future for fish and wildlife in the Walnut Creek Watershed.

Sincerely



Bob Simmons

President

Walnut Creek Watershed Council

2866 Bowling Green Drive

Walnut Creek, CA 94598

Contra Costa County Flood Control and Water Conservation District
Contra Costa County Board of Supervisors
Contra Costa Resource Conservation District
California Department of Fish and Wildlife
Regional Water Quality Control Board
City of Concord

Attachment 1

More Detailed Discussion on Walnut Creek

Sediment Discussion: The stated purpose of the proposal for Walnut Creek is to remove enough sediment where the project is located to re-establish the as-built flood channel design. There was no other evidence of need. Typically, the design basis of sediment removal projects from flood control channels includes the use of hydrologic simulation models, calibrated to actual channel conditions, to assess the changes in flood capacity and the volumes of sediment needed to be removed from the channel. This analytical approach also offers the opportunity for objective analysis of design alternatives and quantification of mitigation measures. The results of the analysis should be included in the PMND.

12

13

The atmospheric river on October 24, 2021, dumped 7-8" of rain at rain gauges in Pleasant Hill, Lafayette and Danville. Grayson Creek over topped its banks in several locations, but we have neither seen, nor heard of, evidence that Walnut Creek over topped its banks. This recent storm may have scoured sediment from the existing channel or may have contributed to additional sediment deposition. The new analysis should be based on a current evaluation of the amount of sediment remaining in the entire Walnut Creek project area remaining after the October 24 storm.

14

15

Finally, a report recently issued by the San Francisco Estuary Institute (SFEI) predicts that there will be a shortfall of sediment delivered to the Bay in the future.

https://www.sfei.org/sites/default/files/biblio_files/Coarse%20Sediment%20Strategy%20SFEI%20highres.pdf. The report also suggests Flood Control Districts and others should use different goals when removing sediment from a channel. The PMND should discuss how the proposed removal meets the Coarse Sediment Removal Strategy, and what future modifications in the watershed can be made to meet the targets for sediment delivery recommended by SFEI for a healthy watershed.

16

Fish and Wildlife Discussion. The most disappointing part of the PMND is its treatment of fish and wildlife. The PMND acknowledges that the project area is mapped as federally-designated Essential Fish Habitat for Chinook salmon, and that steelhead, a federally-designated threatened species under the Endangered Species Act, are also present. However, the PMND dismisses the importance of these facts and legal protections by stating that (1) there is too much fine silt (without saying it mostly falls in the lower part of the watershed), (2) there are not enough gravels suitable for spawning, (3) there is not enough rearing habitat, (4) water temperatures are too high, and (5) there is only an occasional stray fish.

17

While there clearly is silt in Walnut Creek, fine silt particles tend to drop in those portions of the creek with slower flows and lower gradients, which is also where the project area is located. Pictures taken recently show gravels immediately below Drop Structure #1 (Attachment 2). These gravels may be suitable for spawning. An expert fly fisherman, Jamie Burman has visited the site many times over the last 30 years. He has seen salmonid redds and fry in the area below Drop Structure #1, as he states in his personal account (Attachment 3). He was fly fishing there this year on at least two of the occasions some of us visited.

18

When several of us visited Drop Structure #1 on November 6, 2021, we were impressed by how many Chinook salmon were present in the pool below the drop structure (Attachment 4) and by watching the salmon seek to continue their migration journey (Attachment 5). Experienced fly fishers recently

observed that the pool contained over twenty Chinook salmon, and that is after substantial predation occurred. That there are a lot of salmon is also supported by the presence of so many poachers and fly fishers. In addition, Jamie Burman, owner of a fly shop and a professional fly-fishing guide, has observed that many Chinook salmon and steelhead swim up to Drop Structure #1 (which means they swam through the project area). Fly fishers, who were doing catch and release, were successful. Common sense says that fly fishers don't come to an area seeking an occasional 'stray' fish.

19

A significant factor impacting fish survival in lower Walnut Creek is the extensive poaching that has occurred, and that is occurring, even as we write this. Fish need to survive long enough to procreate, and the poaching means that there is no future salmon stock for the area. During our visits to Drop Structure #1 after the two storms, we saw people who drove to the end of Franquette Avenue in Concord and proceeded to Drop Structure #1 where they caught and removed multiple Chinook salmon. The PMND fails to acknowledge the extensive human predation, particularly at Drop Structure #1, and how it affects successful spawning. Common sense states that poachers do not come to an area in the numbers that they do in pursuit of the occasional 'stray' fish.

20

There is little evidence of any efforts to create suitable spawning and rearing habitat, or to use the need to remove sediment to create suitable habitat. Yet, Chinook salmon are clearly present. Simply because the habitat isn't perfect is an insufficient reason not to take actions that will improve existing habitat.

21

The creation of wetlands described in the PMND is important, particularly if done with the intent to create wetland and not just to remove sediment. However, fish habitat can be better improved through the following actions: (1) excavate 1-2 large holes to create rearing habitat in the upper reaches of the portions of Grayson and Pine Creeks that are accessible to anadromous fish, and in Walnut Creek above and below Drop Structure #1, and (2) deposit and stabilize appropriate amounts of gravels suitable for spawning beds.

22

Human Occupation of Walnut Creek. The PMND does not mention the presence of human occupation in and near the project area, nor does it mention the substantial amount of trash there, including a wooden bridge (Attachment 6). The mere presence of humans in the channel displaces fish and wildlife from those areas. Trash in this area inevitably winds up in Suisun Bay. The PMND should acknowledge this and include a mitigation measure that requires the removal of all trash in the entire project area prior to any project operations.

23

Arundo Donax. The PMND does not mention the presence of *Arundo donax* in and near the project area. Our mapping indicates that there are at least 14 stands of *Arundo donax* downstream from Willow Pass Road. *Arundo donax* is a highly invasive species that, unless prompt action is taken, **will** spread to the rest of the area, including downstream towards the Lower Walnut Creek project area.

24

Planting efforts. The PMND proposes seeding of disturbed areas with native seed. Our experience in restoration work, and consultation with experts in riparian restoration, results in a conclusion that simply placing seed will be ineffective, and that any plants that grow will ultimately be replaced by non-native species. The best way to achieve success is with the handplanting of plugs, with temporary irrigation until the native plants are well established. This is exactly what the District is doing with 31,000 plants in its Lower Walnut Creek project where habitat restoration is an important objective. Also, the PMND should include a description of the specific vegetation to be planted, monitoring and

25

reporting of the success of whatever planting method is utilized, and performance standards that require the re-vegetated areas to be covered by a significant percentage of native plants after three years, or replanted if that percentage is not achieved. The Council also requests that vegetation that can provide shading of Walnut Creek be considered.

26

Trail Closure: The proposed closure of Pacheco Creek Trails and the Iron Horse Trail should be limited to only those hours where there is heavy equipment actively operating on the side of the creek on which the trail is located. If the heavy equipment is working on the east side of Walnut Creek, or if the heavy equipment is idle, there is absolutely no need for a trail closure. While the document says that access to nearby public roads is an easy alternative, that is not true around Concord Avenue, on which traffic flows almost like a freeway.

27

28

Grayson Creek and Walnut Creek. On page 56 and on page 60, the PMND incorrectly states that Grayson Creek merges with Walnut Creek to form Pacheco Creek, and then says it is Pacheco Creek that flows into Suisun Bay, suggesting that Walnut Creek does not. Grayson Creek and Walnut Creek do not merge to form Pacheco Creek, and Walnut Creek flows directly into Suisun Bay. This needs to be corrected.

29

Attachment to November 18, 2021 Letter to Alex Nettkemper

Gravel Beds Below Drop Structure # 1



Walnut Creek Watershed

In 1975 I moved to Alamo, Ca from Back east (New Jersey)

I quickly discovered a creek near my home which full of Warmouth. (a Sunfish species) Back then this creek was full of Wildlife, deer, rabbits, fox, and reptiles. This was my playground.

I fished it almost daily well into my teen years. As development Progressed in Danville and San Ramon, I noticed after a storm The creek would stay cloudy much longer than previous years.

In 1988 I went down to one of my favorite spots on a warm Spring day and caught nothing, I went back several times in the month of June, and once again caught zero fish. This was a result of Siltation from construction up stream 5 miles away. I finally gave up on fishing on this section of Walnut creek. In 1995-a friend of mine said he was fishing Walnut creek lower downstream in Concord , and caught a Steelhead Trout on a fly rod, at first I did not believe any fish could live in this polluted stream and had to go see for myself. I made my way down to the area he mentioned (Willows shopping center in Concord) as I walked down to the water, a large king salmon rolled right in front of me, I was surprised to see such a magnificent fish, I eventually hooked a few salmon that day. I found in the next few years that Steelhead Trout would show up in this watershed as well, in 1997 after several storms had come through that October, in January of the same year I noticed a few schools of salmon fry in the slower sections of this creek. After confirming the species with a fish mesh net, I was elated to see the cycle of life for these fish coming full circle in a creek I once thought was doomed.

Jamie Burman Owner of Creative Sports Fly Shop
1712 Linda Dr, Pleasant Hill, ca (925)- 979-8040

Attachment 4 to November 18, 2021 Letter to Alex Nettkemper

Chinook Salmon in Pool Below Drop Structure #1



Below: Chinook Salmon at Drop Structure #1



Attachment to November 18, 2021 Letter to Alex Nettkemper

Chinook Salmon Jumping at Drop Structure #1



Below: Chinook Salmon at Falls at Drop Structure #1. Picture by Patrick Graney







Contra Costa County
Public Works
Department

Brian M. Balbas, Director

Deputy Directors
Stephen Kowalewski, Chief
Allison Knapp
Warren Lai
Carrie Ricci
Joe Yee

March 17, 2022

Bob Simmons, President
Walnut Creek Watershed Council
2866 Bowling Green Drive
Walnut Creek, CA 94598

RE: Walnut and Grayson Creeks Desilting Project
County Project No.: WO#8334

Dear Mr. Simmons:

Thank you for providing comments on the proposed Mitigated Negative Declaration (MND) for the Walnut and Grayson Creeks Desilting Project (Project) on behalf of the Walnut Creek Watershed Council. This letter is intended to address your comments submitted on November 18, 2021. Our responses to your comments are presented below and follow the order of your comments (numbered in the margin of your letter and attached for reference). Your submission included a letter dated November 18, 2021 and an Attachment 1. The documents were combined for the purposes of this response letter. Responses are numbered continuously beginning with the November 18, 2021 letter and continuing to Attachment 1. Because the first nine comments are summaries of subsequent comments that are expanded upon further in your letter, responses #1 – #9 provide a brief response and full responses are provided later in the document.

Response #1: The Project is a maintenance project that is necessary to restore flood capacity. CEQA does not require an exhaustive justification for Project objectives or need. Please see response #12 below for additional information.

Response #2: The biological assessment's focus is on potential Project impacts for the purpose of CEQA analysis. Since no work will be conducted in the flowing channel there is little potential for impacts to fish. Please see response #17 below for additional information.

Response #3: Human occupation and trash are not an impact of the Project, but the MND does describe the degraded habitat. Please see response #23 below for additional information.

Response #4: The comment does not identify any particular mitigation measure and therefore is difficult to respond to, however it is the opinion of the District that the proposed Best Management Practices and Mitigation Measures are adequate to reduce

Project impacts to less than significant. Please see response #11 below for additional information.

Response #5: The goal of the Project is to remove accumulated sediment to restore hydraulic capacity and reduce flood risk, which is the primary goal of the Flood Control and Water Conservation District. Though the project will increase valuable wetland habitat, it is not scoped as a restoration project. Please see response #11 below for additional information.

Response #6: Based on post-storm field observations, the conditions of the sediment benches where desilting is proposed remain unchanged. Please see responses #12, #13, #14, and #15 below for additional information.

Response #7: The goal of the Project is to remove accumulated sediment to restore hydraulic capacity for flood protection. Though the Project will increase valuable wetland habitat, it is not scoped as a restoration project. Please see response #11 below for additional information.

Response #8: The Project is limited to sediment removal on the floodplain benches and was specifically designed to avoid the low flow channel. It will not remove any materials from the low flow channel nor will it otherwise affect fish passage or spawning potential. Please see response #11 below for additional information.

Response #9: The removal of *Arundo donax* is not a goal of the Project. Please see response #24 below for additional information.

Response #10: The Project is limited to sediment removal on the floodplain benches. It does not include work on known fish migration barriers or other features that could affect the ability for fish to swim farther upstream. The drop structures are an existing condition and not part of the Project impacts. Therefore, regardless of the value of the modifying the drop structure, such work is outside the Project scope.

Response #11: The goals of the Lower Walnut Creek Restoration Project are very different than the goals of this Project, which is to remove accumulated sediment to restore hydraulic capacity to reduce flood risk. It is not a restoration project. However, the Project will not impact the flowing channel and was designed to minimize impacts to habitat where possible. In addition, the Project will result in higher value habitats by replacing sediment on the floodplain benches dominated by ruderal (weedy) vegetation with wetland habitats. There is a cyclical component to this benefit as the floodplain benches will silt in again over time and eventually be desilted again in a subsequent project, recreating the habitat.

The Flood Control District's *50 Year Plan* focuses on replacement of structures with more natural solutions where possible, the importance of community awareness, constraints, and other long-term planning considerations for bringing more natural processes back to our creeks. The Project at hand is needed for maintenance of flood capacity associated with the current design of the creek channels. It does not reconfigure the creeks, replace any structures, or do anything more than remove accumulated sediment. No work will be conducted in the flowing channel. The Project incorporates many elements to reduce impacts including avoiding wetland habitats as much as possible, not working in the flowing channel, working on only one side of the creek per season to allow use of the other side by wildlife, as well as a number of mitigation measures. As such, the Project is not inconsistent with the Flood Control District's *50 Year Plan* and mitigation measures are adequate.

In addition, the District's Lower Walnut Creek Restoration project is in a location that provides significantly fewer constraints and many more restoration opportunities than the urban area that is covered by the Project. There is no direct comparison possible between the two projects that have different purposes, constraints, and objectives.

Response #12: CEQA does not require an exhaustive justification for Project objectives or need. As stated in the MND under the Introduction and Description of Project, this work is part of periodic maintenance of these channels according to U.S. Army Corps of Engineers (USACE) requirements. The MND also states that the hydraulic capacity of these creeks has been reduced due to accumulation of sediment and growth of vegetation and that the Project is necessary to restore the hydraulic capacity of the creeks.

Extensive modeling was conducted to determine the extent of sediment removal needed to adequately restore capacity and to avoid the most sensitive habitats. In their current state, the hydraulic capacity of both creeks is reduced due to siltation as the creeks may overtop their banks during the 1% annual chance storm. Project work on Walnut Creek will reduce flood risk for commercial properties between Concord Avenue and Diamond Boulevard. Project work on Grayson Creek will reduce flood risk for commercial and residential properties between the confluence with Walnut Creek and Taylor Boulevard. Maintaining flood carrying capacity of these creeks is critical to protect existing land uses adjacent to both creeks.

Response #13: An alternatives analysis is not required for mitigated negative declarations per CEQA § 15071. Nevertheless, alternatives were considered as discussed under the Project description on page 2 of the MND. The proposed Project was deemed to provide the most flood protection while minimizing impacts to habitat and biological resources.

Response #14: The Contra Costa County Flood Control and Water Conservation District (FCD) is responsible for maintaining its facilities according to the original design capacity, which takes into consideration a number of factors depending on location and the facility, with the intention of not letting a creek overtop its banks. The fact that Grayson Creek overtopped its banks in some locations and that at Marsh Drive, the water level in Walnut Creek was approximately 6-inches below the soffit of the bridge, were visible examples of the necessity of this Project.

Response #15: The October 24, 2021 storm event was centered mostly over the Grayson Creek watershed. Based on post-storm field observations, the conditions of the sediment benches where desilting is proposed remain unchanged; therefore, the modeling that was used for the proposed Project is still valid and no additional modeling is needed. Changes to the low flow channels caused by the storm, if any, are insignificant to the overall hydraulic performance of the creeks.

Response #16: The Project was added to SFEI's SediMatch website in December 2018. The FCD has not received requests for sediment for beneficial reuse to date. Further, the Coarse Sediment Removal Strategy from SFEI specifies the need for coarse sediment. However, this Project is anticipated to remove finer grains of sediment such as silty sands or sandy silts. In addition, the FCD continues to coordinate with SFEI to support their efforts to prepare a sediment budget for the region by providing them with the Project's estimated volume of sediment to be removed so that this can be incorporated into their data and regional modelling.

Response #17: the MND analysis is focused on potential impacts resulting from Project activities. The analysis was based on surveys by a qualified biologist that included review of the Fish Passage Assessment – Lower Walnut Creek and Lower Grayson Creek, Contra Costa County, prepared by Charles H. Hanson, Ph.D. in 2014. As such, the site characterization is adequate to determine potential impacts of the Project. Moreover, the Project is limited to sediment removal on the floodplain benches (which are at an elevation too high for fish spawning and or passage) and was specifically designed to avoid the low flow channel. It will not remove any materials from the low flow channel nor will it otherwise affect fish passage or spawning potential. With regard to other wildlife, BIO-1, BIO-2, BIO-3, BIO-4, and BIO-5 were recommended by qualified biologists and are standard practices that are common to the industry to protect wildlife.

Response #18: Drop Structure #1 is outside the Project area. The gravels mentioned immediately below Drop Structure #1 are in the low flow channel, which is not affected by the Project. Please see response #17 for additional information.

Response #19: Please see response #18.

Response #20: Illegal poaching is not under the purview of the FCD, who is not responsible for law enforcement, nor is it an impact of the Project.

Response #21: Please see response #11.

Response #22: The Project is limited to sediment removal and was specifically designed to avoid the low flow channel. It will not remove any materials from the low flow channel nor will it otherwise affect fish passage or spawning potential. Please see response #11 for additional information.

Response #23: Human occupation and trash are not an impact of the Project, but the MND does describe the degraded habitat. On page 4, the MND states the following: "In the Project area, Grayson Creek is bordered by development on all sides, and is highly altered and disturbed." The Contra Costa County Public Works Maintenance Division regularly removes trash from the creeks and, prior to the ongoing COVID-19 pandemic, sponsored a number of creek clean up and education programs. Services for unsheltered people are available through other County departments.

Response #24: On page 4, the MND states the following: "In the Project area, Grayson Creek is bordered by development on all sides, and is highly altered and disturbed." The MND also states on page 22: "Both Grayson Creek and Walnut Creek are highly degraded within the Project area." The spread of *Arundo donax* in general is not an impact of the Project. However, spreading of *Arundo donax* could be exacerbated if stands are impacted by Project activities and are not handled properly. An invasive plant study was recently completed to identify invasive plants in the Project site and *Arundo donax* was identified. An additional measure will be added to require proper handling of *Arundo donax* in the Plans and Specifications developed for the Project.

Response #25: Planting plugs throughout the Project area individually by hand is not feasible due to the large area of disturbed soil that will need to be stabilized and does not provide the temporary stabilization that hydroseeding does. Further, hydroseeding with wetland species was very successful after the last desilt in 2006. Hydroseeding will stabilize the exposed sediment in the channel until vegetation is naturally established. Vegetation in the channel is expected to establish quickly, as it did in the past desilting operation.

Response #26: The MND indicates in a number of areas that native seed mix appropriate for the site will be used to revegetate the area and stabilize disturbed soils. As described in BEST MANAGEMENT PRACTICE BIO-2 on page 23 of the MND, a Storm Water Pollution Prevention Plan (SWPPP) will be prepared and implemented in accordance with the National Pollution Discharge Elimination System (NPDES) Construction General Permit as required under Section 402 of the Clean Water Act. Establishment of vegetation

cover is required under that program. Further, the FCD intends to monitor the establishment of vegetation and other recovery and success criteria related to the Project objectives. Regarding plants that can provide shade to the creek, the channel was designed by the Corps of Engineers with a specific roughness value that equates to grasses that can lie down under heavy flood flows and not block floodwaters. Woody vegetation, trees, or other vegetation increase roughness, decrease channel capacity and flood conveyance. To incorporate a higher roughness value would require either additional channel corridor width or an approved reduction in the level of flood protection.

Response #27: The proposed closures of Pacheco Creek Trail and the Iron Horse Trail will be coordinated with East Bay Regional Park District per the terms of their license agreement with FCD, and specified in the Project Specifications.

Response #28: Nearby crosswalks are available at Stanwell Drive (to the east) and New Drive (to the west).

Response #29: The portion of the creek where Walnut Creek drains into Suisun Bay has historically been known by many names, all of which are somewhat correct. The FCD uses the Corps of Engineer's nomenclature of Walnut Creek extending to Suisun Bay with Pacheco Creek as its most downstream tributary. Records from Contra Costa County and the United States Geological Survey (USGS) call this most downstream area Pacheco Creek or Pacheco Slough. Whatever the name, this description does not affect the analysis of impacts in the MND. However, your comment is noted.

These comments are incorporated into the MND document via inclusion of Appendix B Comment Letters and Responses. Please contact me if you have any further questions on our responses to your comments at alex.nattkemper@pw.cccounty.us or (925) 313-2364.

Sincerely,



Alex Nattkemper
Environmental Analyst
Environmental Services Division

c: Paul Detjens, Flood Control
Gus Amirzehni, Flood Control
Anthony DiSilvestre, Flood Control
Ave Brown, Environmental Services
Emma Burckert, Environmental Services

California Department of Transportation

DISTRICT 4
OFFICE OF TRANSIT AND COMMUNITY PLANNING
P.O. BOX 23660, MS-10D | OAKLAND, CA 94623-0660
www.dot.ca.gov



November 18, 2021

SCH #: 2021100347
GTS #: 04-CC-2021-00510
GTS ID: 24599
Co/Rt/Pm: CC/4/12.9

Alex Nattkemper, Environmental Analyst
Contra Costa County
Public Works Department
255 Glacier Drive
Martinez, CA 94553

Re: Walnut & Grayson Creeks Desilting Project Mitigated Negative Declaration (MND)

Dear Alex Nattkemper:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the Walnut & Grayson Creeks Desilting Project. We are committed to ensuring that impacts to the State's multimodal transportation system and to our natural environment are identified and mitigated to support a safe, sustainable, integrated and efficient transportation system. The following comments are based on our review of the October 2021 IS/MND.

Project Understanding

The project proposes to remove sediment from Walnut and Grayson Creeks that has accumulated since the last desilt operation in 2006. The project is located below segments of Interstate (I)-680 and State Route (SR)-4 in Contra Costa County.

Utilities

Any utilities that are proposed, moved or modified within Caltrans' Right-of-Way (ROW) shall be discussed. If utilities are impacted by the project, provide site plans that show the location of existing and/or proposed utilities. These modifications require a Caltrans-issued encroachment permit.

1

Encroachment Permit

Please be advised that any permanent work or temporary traffic control that encroaches onto Caltrans' ROW requires a Caltrans-issued encroachment permit. As part of the encroachment permit submittal process, you may be asked by the Office of Encroachment Permits to submit a completed encroachment permit application

2

Alex Nattkemper, Environmental Analyst
November 18, 2021
Page 2

package, digital set of plans clearly delineating the State ROW, digital copy of signed, dated and stamped (include stamp expiration date) traffic control plans, this comment letter, your response to the comment letter, and where applicable, the following items: new or amended Maintenance Agreement (MA), approved Design Standard Decision Document (DSDD), approved encroachment exception request, and/or airspace lease agreement. Your application package may be emailed to D4Permits@dot.ca.gov.

To download the permit application and to obtain more information on all required documentation, visit <https://dot.ca.gov/programs/traffic-operations/ep/applications>.

Thank you again for including Caltrans in the environmental review process. Should you have any questions regarding this letter, please contact Nick Hernandez at nick.hernandez@dot.ca.gov. Additionally, for future notifications and requests for review of new projects, please email LDR-D4@dot.ca.gov.

Sincerely,

A handwritten signature in black ink that reads "Mark Leong". The signature is fluid and cursive, with a long horizontal stroke extending from the end of the name.

MARK LEONG
District Branch Chief
Local Development Review

c: State Clearinghouse



Contra Costa County
Public Works
Department

Brian M. Balbas, Director

Deputy Directors

Stephen Kowalewski, Chief

Allison Knapp

Warren Lai

Carrie Ricci

Joe Yee

April 22, 2022

Mark Leong
District Branch Chief, Local Development Review
Caltrans District 4 Office of Transit and Community Planning
P.O. Box 23660, MS-10D
Oakland, CA 94623-0660

RE: Walnut and Grayson Creeks Desilting Project
County Project No.: WO#8334

Dear Mr. Leong:

Thank you for providing comments on the proposed Mitigated Negative Declaration (MND) for the Walnut and Grayson Creeks Desilting Project (Project). This letter is intended to address your comments submitted on November 18, 2021. Our responses to your comments are presented below and follow the order of your comments (numbered in the margin of your letter and attached for reference).

Response #1: As stated on page 48 of the MND, the maximum excavation depth for sediment removal will not go below the surfaces that were established when the channels were originally built, so all utilities should be beneath that level and not be disturbed by desilting activities. Further, Project construction documents will require the contractor to identify all utility crossings within the desilt areas so that their locations can be clearly marked in the field, and avoided by construction activities. Therefore, no utility relocation or Caltrans-issued encroachment permit for utilities are necessary.

Response #2: On page 2, the MND states that the sediment removal activities will take place within the Flood Control District's right-of-way (ROW). No permanent work or temporary traffic control that encroaches onto Caltrans' ROW is anticipated. Use of a recently completed maintenance road under State Route 4 will be needed to access a portion of Grayson Creek. However, this road was built for the Flood Control District's use. Therefore, no encroachment permit from Caltrans is needed.

These comments are incorporated into the MND document via inclusion of Appendix B Comment Letters and Responses. Please contact me if you have any further questions on our responses to your comments at alex.nattkemper@pw.cccounty.us or (925) 313-2364.

Sincerely,

Alex Nattkemper

Alex Nattkemper
Environmental Analyst
Environmental Services Division

AN:xx

\\PW-DATA\grpdata\engsvc\ENVIRO\Flood Control\Walnut and Grayson Creeks Desilting\CEQA\Public Noticing\3-Comments\Caltrans\2-Response\1. Response to Caltrans (final).docx

Enclosures

c: Paul Detjens, Flood Control
Gus Amirzehni, Flood Control
Anthony DiSilvestre, Flood Control
Ave Brown, Environmental Services



Friends of Pleasant Hill Creeks

November 19, 2021

Alex Nattkemper, Environmental Analyst
Contra Costa County Public Works Dept.
255 Glacier Drive, Martinez, CA 94553

Via Email: Alex.Nattkemper@pw.cccounty.us

**RE: Walnut and Grayson Creeks Desilting Project (Project) –
Comments on Proposed Mitigated Negative Declaration (County File No. 21-29)**

Dear Mr. Nattkemper:

Friends of Pleasant Hill Creeks (FPHC) respectfully submits the following comments on the Proposed Mitigated Negative Declaration (PMND) for the above referenced Project, which includes sections of Grayson Creek, an important environmental resource and riparian habitat corridor in our community.

About Friends of Pleasant Hill Creeks

FPHC is a nonprofit community organization of Pleasant Hill residents who care about our creeks. Since 2017, more than 100 community volunteers have participated in creek cleanups, wildlife surveys, water quality monitoring, and educational outreach focused on Grayson Creek. FPHC has had many positive experiences working with local agencies, including the Contra Costa County Flood Control and Water Conservation District (FCD), to clean up and restore our creeks. FPHC supports the Lower Walnut Creek Restoration Project and FCD's *50-Year Plan* ("From Channels to Creeks"). FPHC is also a member of the Walnut Creek Watershed Council and supports the Council's comment letter.

Concerns

In our view, the PMND is inadequate in its current form and should undergo further review and revision because: (i) it does not adequately describe the sensitive biological resources observed at and/or near the Grayson Creek sections of the Project site, including anadromous fish, migratory birds, and river otters; and (ii) it does not include adequate measures to mitigate the Project's environmental impacts on these resources. With this letter FPHC submits biological resource information that should be considered as part of the Lead Agency's review and suggests additional mitigation measures (see **Attachment A**).

Opportunity to Restore Grayson Creek While Providing Flood Protection

In addition to providing flood protection, this Project should be designed to advance the long-term restoration of the creeks system. The FCD's *50-Year Plan* (**Attachment B**) states that "the District's mission must be expanded to include habitat preservation and water quality in the course of providing flood protection" (p. 3). The *50-Year Plan* envisions restoring the rich ecosystems within our creeks and riparian corridors to provide wildlife linkages between urban ecosystems and open-space areas. This Project provides an excellent opportunity to implement this vision by including restoration measures that enhance water quality and wildlife habitat in the Project areas consistent with improving flood control. Actions taken in the Project area can support the success of the Lower Walnut Creek Restoration Project as well as future restoration activities. With this letter FPHC suggests restoration measures that we believe will help implement the vision set forth in the *50-Year Plan* (see **Attachments A & B**).

Actions Requested

FPHC respectfully requests that the Lead Agency:

- 3 1. Revise the PMND to include the biological resource information submitted with this letter;
- 4 2. Review and revise the PMND's impact analysis in consideration of this additional information;
- 5 3. Consider whether an Environmental Impact Report may be required for this Project;
- 6 4. Strengthen the mitigation measures to protect the biological resources of Grayson Creek;
- 7 5. Incorporate additional restoration measures into the Project to enhance Grayson Creek's riparian habitat and the creeks system consistent with the FCD's *50-Year Plan*; and
- 8 6. Identify beneficial reuse of the excavated silt in accordance with recommendations by the San Francisco Bay Estuary Institute (SFEI) rather than disposal in a landfill.

All attachments submitted and information provided or cited in footnotes to this letter are incorporated herein by reference.

We request that this comment letter and all the attachments be included as part of the PMND public review process.

Thank you for your consideration of our comments. We look forward to working with you, the Lead Agency, and other stakeholders to enhance the value of this Project for our community, Grayson Creek, and wildlife.

Sincerely,



Alan Bade
Co-Founder, Friends of Pleasant Hill Creeks
25A Crescent Drive #245
Pleasant Hill, CA 94523
pleasanthillcreeks@gmail.com

cc:

Walnut Creek Watershed Council
City Council of Pleasant Hill
Contra Costa County Flood Control and Water Conservation District
Contra Costa Resource and Conservation District
Contra Costa County Board of Supervisors
California Regional Water Quality Control Board
California Department of Fish and Wildlife

LIST OF ATTACHMENTS

- A Grayson Creek Specific Comments
- A-1 Photographs of Chinook Salmon Observed in Grayson Creek (October 2021)
- A-2 Bird Species Data Recorded in Grayson Creek Riparian Corridor Near Project Area
- A-3 River Otter and Muskrat Sightings in Grayson Creek
- A-4 Photograph of Western Pond Turtle Observed Near Grayson Creek / Chilpancingo Bridge
- A-5 Grayson Creek Water Quality Data Published by The Watershed Project
- A-6 Photographs of Fish Visible from Chilpancingo Bridge
- B Contra Costa County Flood Control and Water Conservation District's *The 50-Year Plan*

Attachment A

GRAYSON CREEK SPECIFIC COMMENTS

The following information and recommendations are based on field observations by FPHC members, data collection by FPHC and/or other community organizations, and publicly available information.

A. BIOLOGICAL RESOURCES

1. **Anadromous Fish.** In October 2021, FPHC members observed and photographed multiple large (18" to 40") anadromous fish in Grayson Creek upstream of the Project site. (Attachment A-1)¹ These fish have been identified from the photographs as Chinook salmon. The behavior of the fish we observed (swimming in a circular pattern and side by side) is consistent with spawning behavior. Our recent observations indicate that anadromous fish are passing through the Project site and attempting to spawn during the proposed timeframe of the Project (April 1 to October 31). Our observations are consistent with historical observations and assessments of Chinook salmon² in Grayson Creek and indicate that salmonids are migrating through the Project area and, potentially, spawning upstream. 9
2. **Migratory Birds:** FPHC and Mt Diablo Audubon Society have conducted monthly bird surveys on sections of Grayson Creek since 2017. The surveys have documented 104 species in two survey areas on Grayson Creek.³ The survey area nearest to the Project area, which has very similar habitat, has documented **78 native and migratory** species of birds. (Attachment A-2) We have also observed nesting birds near the Project area including nesting raptors. 10
3. **River Otters and Muskrat.** FPHC members have observed river otters swimming, foraging, and utilizing the banks of Grayson Creek near the Project site. (River otters were not mentioned in the Biological Resources Assessment.) The River Otter Ecology Project's "Bay Area River Otters Sightings Map" has documented multiple sightings of river otters at or near the Project area.⁴ FPHC members have also observed muskrat swimming near the Project site. (Attachment A-3) 11
4. **Western Pond Turtles:** FPHC members have observed Western Pond turtles just upstream of the project site, which confirms the need for mitigation measures to protect the turtles. (Attachment A-4) 12

B. HYDROLOGY AND WATER QUALITY

1. FPHC members observed Grayson Creek overtopping its banks in several places during the October 2021 storms, including in the Project area, which supports the need for work to improve the conveyance capacity of the creek. However, we believe the Project should be designed to maximize its restoration potential consistent with the FCD's *50-Year Plan*. A return to "pre-existing" conditions would not be considered a success. 13

¹ Due to concerns about poaching, we have not publicly disclosed the exact location where we observed the fish. If the exact location is relevant to your analysis, please contact us to discuss.

² See, e.g., Hanson, Charles H., *Fish Passage Assessment – Lower Walnut Creek and Lower Grayson Creek, Contra Costa County* (Walnut Creek: Hanson Environmental, Inc., September 2014).

³ Grayson Creek Bird Survey data can be accessed at the following eBird hotspots: eBird, Grayson Creek Hotspot, <https://ebird.org/hotspot/L7453556>; eBird, Grayson Creek (Oak Park Blvd.) Hotspot, <https://ebird.org/hotspot/L9110333>.

⁴ River Otter Ecology Project, "Bay Area River Otter Sightings Map," <https://roep.maps.arcgis.com/apps/webappviewer/index.html?id=95129308301f465faa56f200c0c133ac>.

2. Pollution of Grayson Creek from homeless encampments, dumping, and trash overflow from adjacent commercial establishments has occurred, and continues to be a concern, in and near the Project area. FPHC and other community organizations as well as the City of Pleasant Hill have observed, documented, and removed thousands of pieces of trash from Grayson Creek. 14
3. The Watershed Project has produced water quality reports relevant to the Project area (Grayson Creek at Chilpancingo Bridge) that should be included in the water quality analysis and monitoring processes.⁵ This water quality data, together with our direct observations of fish and other wildlife, indicates that the water in Grayson Creek is relatively healthy and supportive of fish and other wildlife (**Attachments A-1, A-2, A-5, and A-6**). 15
4. Homeless encampments also present a significant safety issue. We have seen discarded needles, human feces and other safety concerns that could create risks for Project personnel. In addition, individuals camping/sleeping in the creek channel could be at risk during flooding events and during Project construction. Cooperative arrangements with law enforcement, adjacent city governments, the County, CORE, and California Department of Fish and Wildlife should be developed to address these issues, and others, such as poaching.⁶ Homeless individuals camping in or near the Project area should be contacted before construction activities begin. The County's CORE program could be very helpful in this regard. 16
5. Dredged sediment should not be moved to landfills but reused beneficially to help restore the Bay's wetlands and mudflats in accordance with SFEI recommendations (see specific resources below in comments to HYD-1). 17

C. **RECOMMENDATIONS**

We recommend that Mitigation Monitoring and Reporting Plan (MMRP) be strengthened and that additional restoration elements be incorporated into the Project design to enhance habitat preservation and water quality in the course of providing flood protection, consistent with the FCD's *50-Year Plan*. 18

1. **BIO-1**

- The education program should include the above-referenced species information. 19

2. **BIO-2**

- The PMND and MMRP do not adequately address the presence and/or passage of anadromous fish in Grayson Creek. The Biological Resources Assessment lists these fish only as "possible," while our observations have confirmed their presence as recently as October 2021. A qualified fish biologist should determine the size and configuration of the protected flow channel to enable the passage of anadromous fish upstream and downstream and review the other mitigation measures for adequacy. Movement of successful anadromous fish fry downstream could be especially impacted by the Project's excavations in late winter and spring while migrating back to Suisun Bay. 20

⁵ The Watershed Project, *Water Quality in Contra Costa County*, <https://app.thewatershedproject.org/creek/WAL> and *Grayson Creek at Chilpancingo Pkwy.* (CEO16), <https://app.thewatershedproject.org/site/CEO160>.

⁶ In addition to pollution, poaching threatens species of special concern in the watershed, including Chinook salmon, which are targets of poaching in Walnut Creek.

- The timing of the work season (currently planned for April 1 – October 31) should be reviewed in light of the additional species information provided above, particularly the presence of Chinook salmon that were observed in October of this year. 21
- Pre-construction surveys for special status and common wildlife species should include areas upstream and downstream of the Project area and in the adjacent riparian corridor on either side of the Project area. Many of the special status species are migratory, will be utilizing the corridor, and could be affected by construction activities. 22
- Any dewatering or water diversion activities should be designed to protect the anadromous fish, river otters, and other wildlife documented above. 23
- In addition to seeding of disturbed areas with a native seed mix suitable for riparian and wetland habitats, we also recommend planting native shrubs. 24
- The SWPPP should include surveying and removal of all trash and hazardous substances (e.g., needles and human waste from homeless encampments) from the Project area prior to and during construction activities in order to protect water quality and Project personnel. 25
- The SWPPP should consider The Watershed Project's data. (**Note 5 and Attachment A-5**) 26

3. BIO 3

- Western pond turtles, a species of special concern, are seen fairly often on our monthly bird surveys near Chilpancingo bridge. (**Attachment A-4**)
- When implementing BIO-3, special attention should be made to look for nesting turtles as they may wander far from the creek in search of good nesting locations. Multiple visits may be required to adequately protect the turtles during their nesting season, which coincides with the Project's active dates.
- The Project should implement the best management practices (BMPs) identified by the Western Pond Turtle Range-wide Conservation Coalition, which includes the USFWS and CDFW. These recommend adding basking sites as habitat improvements. Below are links to two of the coalition's BMP publications: 27
 - Western Pond Turtle Range-wide Management Strategy 2020, https://ecos.fws.gov/docs/recovery_plan/WPT%20RCC%20Strategy%202020.pdf, and
 - Recommended Best Management Practices for the Western Pond Turtle on Department of Defense Installations, https://www.denix.osd.mil/dodparc/parc-resources/materials-for-installation-personnel/bmp-western-pond-turtle/Pond%20Turtles%20BMP_Final_508_v2.pdf.

4. BIO 4

- Pre-construction surveys for nesting birds should be conducted by a qualified ornithologist. Non-disturbance buffer zones should be established and regularly monitored by the ornithologist. 28
- The “non-nesting” season described in the MMRP as September 1-January 31 is not accurate. For example, Anna's Hummingbirds (a species often observed in Grayson Creek) nest during December and January. Therefore, nesting bird surveys should be conducted before any construction activities in this timeframe as well. 29
- Special attention should be made to look for nesting blackbird species, raptors and other species in the Project areas. FPHC members have observed nesting blackbirds near Center St bridge. Red-shouldered hawks traditionally nest in the sycamores near Grayson Creek (Chilpancingo Parkway and Shadowood Park). Cooper's Hawks are commonly seen on our surveys. We have often observed swallows nesting under bridges crossing Grayson Creek. 30

5. BIO 6

- The restoration seed and plant palate should include native vegetation only. Please also see comments below regarding planting methods (Section 7(d)).

31

6. HYD-1

- Given the documented presence of salmonids in Grayson Creek and the potential existence of fry, this mitigation measure should be re-evaluated to ensure that salmonids and fry can safely traverse the Project areas during construction.
- Appropriate beneficial reuse of excavated silt should be determined in accordance with recommendations by the San Francisco Bay Estuary Institute (SFEI) rather than disposal in a landfill. SFEI resources with additional information regarding beneficial reuse of dredged sediment are provided below.
 - Sediment for Survival Factsheet, [https://www.sfei.org/sites/default/files/biblio_files/Sediment for Survival factsheet.pdf](https://www.sfei.org/sites/default/files/biblio_files/Sediment%20for%20Survival%20factsheet.pdf)
 - Towards a Course Sediment Strategy for the Bay Area, https://www.sfei.org/sites/default/files/biblio_files/Coarse%20Sediment%20Strategy%20SFEI%20highres.pdf
 - Expert review of the sediment screening guidelines for the beneficial reuse of dredged material in San Francisco Bay, <https://www.sfei.org/documents/expert-review-sediment-screening-guidelines-beneficial-reuse-dredged-material-san>

32

33

7. RESTORATION MEASURES

(a) Fish passage:

- Grayson creek has year-round water from Suisun Bay to its upper reaches with only minor impediments to fish passage. With a few modifications, this Project represents a significant opportunity to improve fish habitat in Grayson Creek and help restore the population of anadromous fish to the Walnut Creek Watershed.
- A low concrete dam in the project area at 37.991508, -122.067425 should be removed because during low flows it is a barrier to fish and may completely stop successful anadromous fish fry from reaching Suisun Bay.
- A second low barrier exists within the project area about 175 feet downstream of Highway 4 and should also be removed. This is described as a concrete encased pipeline that spans across the entire channel. Whether it is an active pipeline is unknown. During low flows it likely blocks successful anadromous fish fry from reaching the Bay.
- Both of these should be removed while large equipment is in the area, especially if they are relics and no longer in use.
- Gradients for good fish passage within the project area should be evaluated. "Humps" may exist where water is too shallow for fish to safely pass in lower flow conditions. Occasional pools may be needed to connect these shallow reaches.
- Areas should be identified where native trees can be safely added to help cool water temperatures. Other shading mechanisms could also be employed such as native riparian shrubs or plants.

34

35

36

37

38

39

(b) Fish habitat:

- This Project should support long-term restoration of the creeks system, including fish habitat. Actions taken in the Project area can enhance the success of the Lower Walnut Creek Watershed Project as well as future restoration activities. 40
- Gravel bars or beds are needed and should be added as part of this Project. Once again, pools could be excavated, and gravels added. Areas for gravel additions should be identified by a qualified biologist. During high water events, silt that may accumulate gets scoured away, exposing beds appropriate for spawning. High water events are also when anadromous fish are most likely to return to Grayson Creek. The beds are likely to remain free from silt after a high-water event long enough for eggs to be successful. Indeed, members of the Walnut Creek Watershed Council and FPHC observed these scoured gravel beds in both Grayson Creek and Walnut Creek after the Oct 24, 2021 storm. 41
- Gravel beds could also be added upstream where shady conditions already exist if these are considered more effective. We encourage the FCD to look at upstream sites like the one on FCD property near Beatrice Road. Water is year-round here on the East Fork of Grayson all the way to the concrete box channel and it is a well shaded site. Gravel beds could be added in a widened stream channel on FCD land. Another site is near Viking Dr. bridge. We believe this site would not need much modification. Water comes out of the box channel at high velocity during storm events and we expect it would adequately scour silt from added gravel beds. 42
- These and all potential fish habitat mitigations should be evaluated in the biological resources section of the Project document. 43
- We believe the assessment in the PMND as to whether there's enough water in Grayson Creek for fish was flawed. The evaluation was done in the Spring and Summer in the third year of a drought. The report should include depth data from multiple years to adequately assess whether enough continuous and deep enough water is available for fish. 44
- Depth gauges should be added at multiple points on Grayson Creek and monitored. 45

(c) Wetland enhancement:

- The PMND mitigations make only a cursory attempt to encourage wetlands. Rather than accepting the return of pre-project conditions as being a "successful" project, active efforts should be made to enhance existing and perhaps establish new wetlands. These will help with filtration (affecting water quality), provide cover for small fish, and encourage California native flora and fauna. 46

(d) Grasslands and upslope:

- We agree with Nomad's assessment of creeping ryegrass as desirable to encourage. We are actively planting it in riparian restorations on Grayson Creek. They state, "Creeping ryegrass stands (*Leymus triticoides* Herbaceous Alliance) is considered of high inventory priority as it has a Subnational Conservation Status Rank of S3 (CDFW 2020)" (Biological Resources Assessment, p. 31). However, the Project plans to reseed with California natives including the creeping ryegrass (*Leymus triticoides*) using a "hydro-seed" method. In our experience this California native needs to be planted as "plugs". It has a low germination rate as seeds. 47
- The replanting efforts need to be a multi-year project. Some of our most successful restorations have come from weed abatement the first year, planting in the second year, and following again with weed abatement in the third year. 48
- At a minimum, the Project areas need to be monitored after planting and not abandoned to return to their ruderal state. Reseeding or replanting alone is too passive. We need to ensure survival of

this revegetation investment. In our experience with native plant restorations, it is often second- or third-year efforts that ensure the long-term viability of the restoration. Creeping ryegrass is good at excluding non-natives when the non-native seed bank is removed but it will need some help past the first year.

- Efforts need to be made to remove completely all stands of nearby invasive *Arundo donax* including the rhizomes while heavy equipment is available. Special education needs to happen to make sure excavation crews do not inadvertently spread it. Arundo stands will need to be revisited after project completion for at least two seasons to ensure complete eradication, maybe more.
- Arundo removal in the watershed directly affects the Lower Walnut Creek Restoration Project! The last thing we want is for Arundo to infect this wonderful restoration.

49

(e) Birds:

- Birds would benefit from all of the mitigation and restoration measures recommended above. Native plants would provide better forage, and enhanced wetlands would be used by marsh birds such as Song Sparrow, Marsh Wren, Common Yellowthroat and others.
- Adding California native trees and shrubs would greatly improve bird habitat. California native species besides the graminoids should be considered, especially in the top areas of the creek's banks where they do not impede flows and may decrease erosion during higher flows.

50

51

**Attachment A-1 Photographs of Chinook Salmon Observed in Grayson Creek
(October 2021)**



**Attachment A-1 Photographs of Chinook Salmon Observed in Grayson Creek
(October 2021) Cont'd**



**Attachment A-1 Photographs of Chinook Salmon Observed in Grayson Creek
(October 2021) Cont'd
(with 4' surveyor's stake)**



**Attachment A-2 Bird Species Data Recorded in
Grayson Creek Riparian Corridor Near Project Area**

[See Following Pages]



Friends of Pleasant Hill Creeks



Mount Diablo Audubon Society

Grayson Creek Bird Survey Species List

Grayson Creek Riparian Corridor sections between Viking Dr. Bridge and Chilpancingo Parkway, Pleasant Hill, CA
November 2017—October 2021

- | | |
|---|---|
| 1. Greater White-fronted Goose (<i>Anser albifrons</i>) | 47. Violet-green Swallow (<i>Tachycineta thalassina</i>) |
| 2. Cackling Goose (<i>Branta hutchinsii</i>) | 48. Barn Swallow (<i>Hirundo rustica</i>) |
| 3. Canada Goose (<i>Branta canadensis</i>) | 49. Cliff Swallow (<i>Petrochelidon pyrrhonota</i>) |
| 4. Wood Duck (<i>Aix sponsa</i>) | 50. Bushtit (<i>Psaltirparus minimus</i>) |
| 5. American Wigeon (<i>Mareca americana</i>) | 51. Ruby-crowned Kinglet (<i>Regulus calendula</i>) |
| 6. Mallard (<i>Anas platyrhynchos</i>) | 52. Red-breasted Nuthatch (<i>Sitta canadensis</i>) |
| 7. Bufflehead (<i>Bucephala albeola</i>) | 53. White-breasted Nuthatch (<i>Sitta carolinensis</i>) |
| 8. Hooded Merganser (<i>Lophodytes cucullatus</i>) | 54. Marsh Wren (<i>Cistothorus palustris</i>) |
| 9. Common Merganser (<i>Mergus merganser</i>) | 55. Bewick's Wren (<i>Thryomanes bewickii</i>) |
| 10. Wild Turkey (<i>Meleagris gallopavo</i>) | 56. European Starling (<i>Sturnus vulgaris</i>) |
| 11. Rock Pigeon (<i>Columba livia</i>) | 57. Northern Mockingbird (<i>Mimus polyglottos</i>) |
| 12. Eurasian Collared Dove (<i>Streptopelia decaocto</i>) | 58. Western Bluebird (<i>Sialia mexicana</i>) |
| 13. Mourning Dove (<i>Zenaidura macroura</i>) | 59. American Robin (<i>Turdus migratorius</i>) |
| 14. White-throated Swift (<i>Aeronautes saxatalis</i>) | 60. Cedar Waxwing (<i>Bombicilla cedrorum</i>) |
| 15. Anna's Hummingbird (<i>Calypte anna</i>) | 61. House Sparrow (<i>Passer domesticus</i>) |
| 16. American Coot (<i>Fulica americana</i>) | 62. House Finch (<i>Haemorhous mexicanus</i>) |
| 17. Wilson's Snipe (<i>Gallinago delicata</i>) | 63. Purple Finch (<i>Haemorhous purpureus</i>) |
| 18. Double-crested Cormorant (<i>Phalacrocorax auratus</i>) | 64. Pine Siskin (<i>Spinus pinus</i>) |
| 19. Great Blue Heron (<i>Ardea herodias</i>) | 65. Lesser Goldfinch (<i>Spinus psaltria</i>) |
| 20. Great Egret (<i>Ardea alba</i>) | 66. American Goldfinch (<i>Spinus tristis</i>) |
| 21. Snowy Egret (<i>Egretta thula</i>) | 67. Fox Sparrow (<i>Passerella iliaca</i>) |
| 22. Green Heron (<i>Butorides virescens</i>) | 68. Dark-eyed Junco (<i>Junco hyemalis</i>) |
| 23. Black-crowned Night-Heron (<i>Nycticorax nycticorax</i>) | 69. White-crowned Sparrow (<i>Zonotrichia leucophrys</i>) |
| 24. Turkey Vulture (<i>Cathartes aura</i>) | 70. Golden-crowned Sparrow (<i>Zonotrichia atricapilla</i>) |
| 25. Cooper's Hawk (<i>Accipiter cooperii</i>) | 71. Song Sparrow (<i>Melospiza melodia</i>) |
| 26. Red Shouldered Hawk (<i>Buteo lineatus</i>) | 72. Lincoln's Sparrow (<i>Melospiza lincolni</i>) |
| 27. Red-tailed Hawk (<i>Buteo jamaicensis</i>) | 73. California Towhee (<i>Melospiza crissalis</i>) |
| 28. Belted Kingfisher (<i>Megasceryle alcyon</i>) | 74. Red-winged Blackbird (<i>Agelaius phoeniceus</i>) |
| 29. Red-breasted Sapsucker (<i>Sphyrapicus ruber</i>) | 75. Brown-headed Cowbird (<i>Molothrus ater</i>) |
| 30. Downy Woodpecker (<i>Dryobates pubescens</i>) | 76. Brewer's Blackbird (<i>Euphagus cyanocephalus</i>) |
| 31. Nuttall's Woodpecker (<i>Dryobates nuttallii</i>) | 77. Orange-crowned warbler (<i>Leiosthlypis celata</i>) |
| 32. Northern Flicker (<i>Colaptes auratus</i>) | 78. Common Yellowthroat (<i>Geothlypis trichas</i>) |
| 33. American Kestrel (<i>Falco sparverius</i>) | 79. Yellow Warbler (<i>Setophaga petechia</i>) |
| 34. Merlin (<i>Falco columbarius</i>) | 80. Yellow-rumped Warbler (<i>Setophaga coronata</i>) |
| 35. Pacific-slope Flycatcher (<i>Empidonax difficilis</i>) | 81. Western Tanager (<i>Piranga ludoviciana</i>) |
| 36. Black Phoebe (<i>Sayornis nigricans</i>) | |
| 37. Say's Phoebe (<i>Sayornis saya</i>) | |
| 38. Hutton's Vireo (<i>Vireo huttoni</i>) | |
| 39. Warbling Vireo (<i>Vireo gilvus</i>) | |
| 40. Steller's Jay (<i>Cyanocitta stelleri</i>) | |
| 41. California Scrub-Jay (<i>Aphelocoma californica</i>) | |
| 42. American Crow (<i>Corvus brachyrhynchos</i>) | |
| 43. Common Raven (<i>Corvus corax</i>) | |
| 44. Chestnut-backed Chickadee (<i>Poecile rufescens</i>) | |
| 45. Oak Titmouse (<i>Baeolophus inornatus</i>) | |
| 46. Northern Rough-winged Swallow (<i>Stelgidopteryx serripennis</i>) | |

Total Species: 81

Total Native and Migratory Species: 78

Total Raptor Species: 6

Data Source: Grayson Creek Bird Survey, a joint community science project of Friends of Pleasant Hill Creeks (a project of SEE) and Mt. Diablo Audubon Society. Updated: 11/16/21.

Contact: pleasanthillcreeks@gmail.com

**Attachment A-2 Bird Species Data Recorded in
Grayson Creek Riparian Corridor Near Project Area Cont'd**



Red-shouldered hawk nest near Chilpancingo Bridge, Grayson Creek



Red-shouldered hawk hunting crayfish in Grayson Creek

**Attachment A-2 Bird Species Data Recorded in
Grayson Creek Riparian Corridor Near Project Area Cont'd**



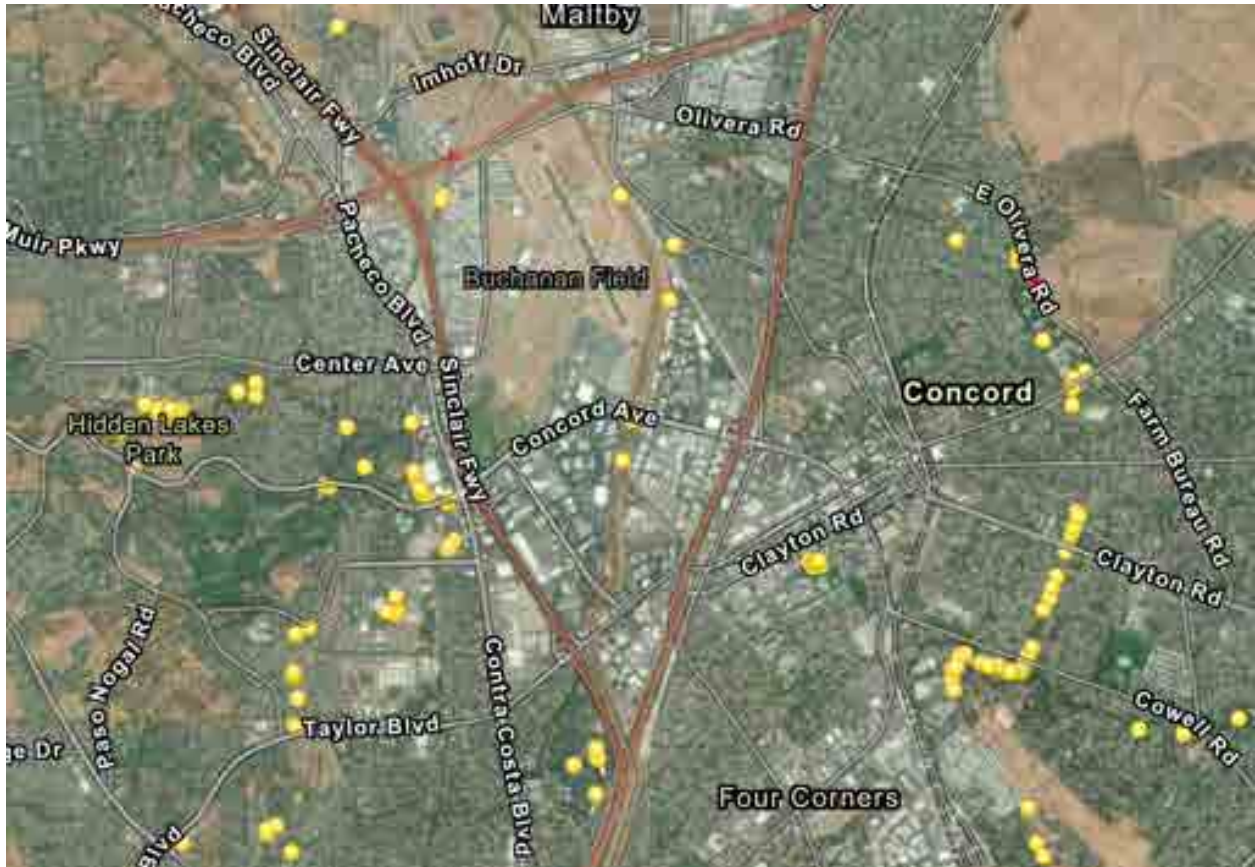
Green Heron foraging in Grayson Creek



Great Egret foraging in Grayson Creek

Attachment A-3 River Otter and Muskrat Sightings in Grayson Creek

River Otter Sightings at or Near Project Area (For More Details, Please See Interactive Map (Link in Map Caption))



Data Source: River Otter Ecology Project, "Bay Area River Otter Sightings Map,"
<https://roep.maps.arcgis.com/apps/webappviewer/index.html?id=95129308301f465faa56f200c0c133ac>.

Attachment A-3 River Otters and Muskrat in Grayson Creek Cont'd



River Otter near Chilpancingo Bridge, Grayson Creek



Muskrat near Chilpancingo Bridge Grayson Creek

**Attachment A-4 Photograph of Western Pond Turtle Observed Near
Grayson Creek / Chilpancingo Bridge**



Western Pond turtle (*Actinemys marmorata*) near Chilpancingo bridge

Attachment A-5 Grayson Creek Water Quality Data
Published by The Watershed Project

[See Following Pages]



Water Quality in Contra Costa County

[Home](#)
[About](#)
[Dow](#)

Walnut Creek



Creek Description

Walnut Creek runs from Mount Diablo and the East Bay Hills through the Cities of Walnut Creek, Pleasant Hill, Lafayette, and Danville before reaching the Carquinez Strait. 70% of its 29 miles are natural, with no obvious reinforcements or concrete channel. 45% of its watershed (the land that drains to the creek) is residential, while 30% is covered by impervious surfaces such as roads and houses. This large watershed encompasses over 90,000 acres and contains many smaller creeks that enter the main stem of Walnut Creek, including Grayson Creek.



Creek Report Card

Dissolved Oxygen	● Good
pH	● Good
Specific Conductivity	● Bad
Temperature	● Good
Turbidity	● Marginal

Explore Sampling Sites

Explore Other Creeks



Water Quality in Contra Costa County

[Home](#)[About](#)[Dow](#)

Grayson Creek at Chilpancingo Pkwy. (CEO160)

Grayson Creek flows north continuing along a wide, open channel before flowing under Chilpancingo Parkway. The areas has some tall grass right next to the creek and animals such as fish, waterfowl and even turtles can be found here. This site is monitored once a month for temperature, dissolved oxygen, conductivity, pH, and turbidity. We always take volunteers on our monitoring expeditions, where you'll learn about the equipment we use and do observational assessments. Please contact [Satoko Mills](#) if you'd like to join us!

[Go back to Walnut Creek overview](#)

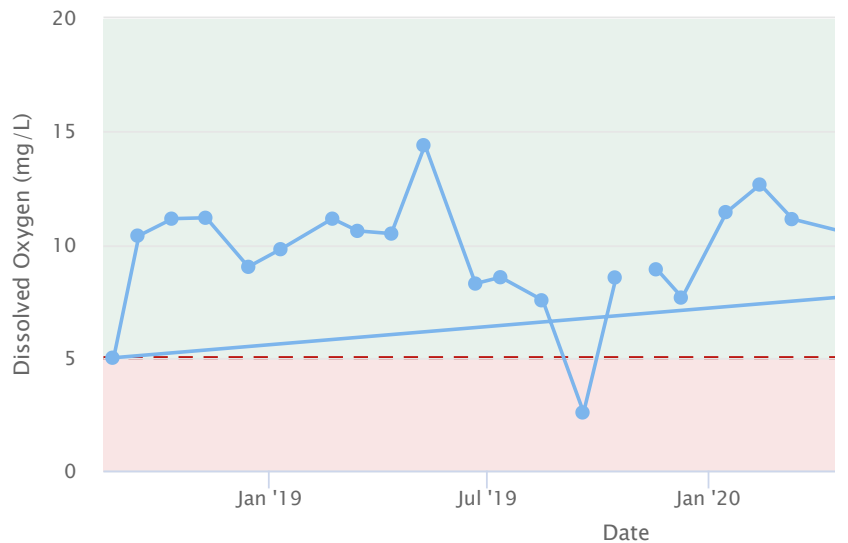
Sites on Walnut Creek

Grayson Creek at Chilpancingo Pkwy. ▼

[Plots](#)[Images](#)

Select Water Quality Feature

Dissolved Oxygen ▼



Chilpancingo Pkwy.

Six Flags Hurricane Harbor

Civic Park

Golf Club Rd.

Six Flags Hurricane Harbor

Diablo Valley College

Ple

Six Flags Hurricane Harbor

Hiç

Click and drag on the chart to zoom in

▼ more details

Vitals: Dissolved Oxygen

Aquatic organisms depend on oxygen for respiration. Oxygen is dissolved in water through aeration, via moving over rocks or waterfalls, and photosynthesis by plants living in the creek. Cold water can hold more dissolved oxygen than warm water, because the molecules in the water move slower and thereby retain more oxygen.

Dissolved Oxygen should be above 5 mg/L

(Source: [USEPA Dissolved Oxygen Threshold](#))



Water Quality in Contra Costa County

[Home](#)[About](#)[Dow](#)

Grayson Creek at Chilpancingo Pkwy. (CEO160)

Grayson Creek flows north continuing along a wide, open channel before flowing under Chilpancingo Parkway. The areas has some tall grass right next to the creek and animals such as fish, waterfowl and even turtles can be found here. This site is monitored once a month for temperature, dissolved oxygen, conductivity, pH, and turbidity. We always take volunteers on our monitoring expeditions, where you'll learn about the equipment we use and do observational assessments. Please contact [Satoko Mills](#) if you'd like to join us!

[Go back to Walnut Creek overview](#)

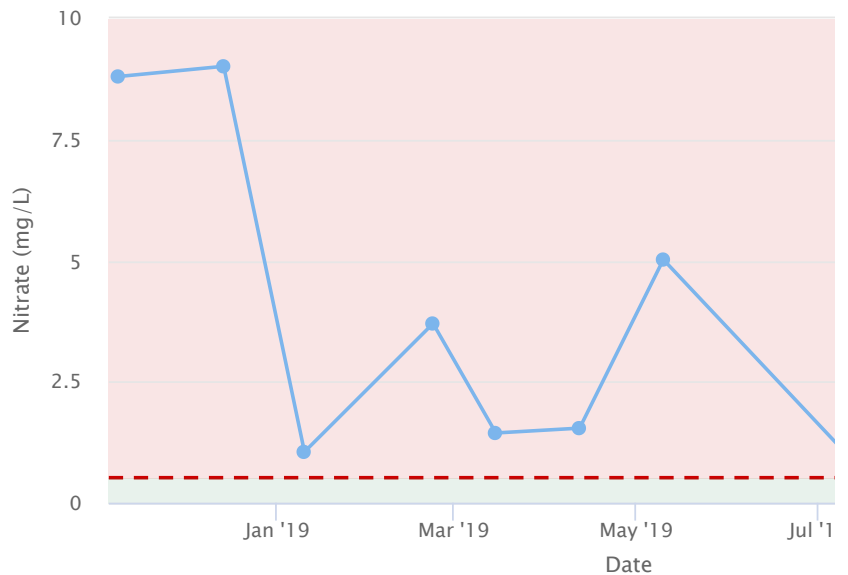
Sites on Walnut Creek

Grayson Creek at Chilpancingo Pkwy. ▼

Plots Images

Select Water Quality Feature

Nitrate ▼



Chilpancingo Pkwy.

Highway-242

Golf Club Rd.

Civic Park

Ple

Click and drag on the chart to zoom in

▼ more details

Nutrients: Nitrate

Nitrates are nitrogen in the form NO_3^- . Sources of nitrates include fertilizer, animal waste, human waste (typically from leaking septic systems), and industrial pollution. Nitrates are a critical nutrient for aquatic plants and algae, which utilize nitrates as a food source. However, high levels of nitrates can lead to overgrowth of algae and eutrophication, which is correlated with decreases in dissolved oxygen levels. The presence of nitrates by itself does not generally greatly affect aquatic species such as insects or fish until excessive nitrates are present, in which case it will create a harsh living environment for these organisms.

Nitrate should be below 0.5 mg/L

This threshold is based on the potential for eutrophication, rather than direct nitrate toxicity. (Source: [Revital Katznelson \(formerly SWAMP\)](#))



Water Quality in Contra Costa County

[Home](#)[About](#)[Dow](#)

Grayson Creek at Chilpancingo Pkwy. (CEO160)

Grayson Creek flows north continuing along a wide, open channel before flowing under Chilpancingo Parkway. The areas has some tall grass right next to the creek and animals such as fish, waterfowl and even turtles can be found here. This site is monitored once a month for temperature, dissolved oxygen, conductivity, pH, and turbidity. We always take volunteers on our monitoring expeditions, where you'll learn about the equipment we use and do observational assessments. Please contact [Satoko Mills](#) if you'd like to join us!

[Go back to Walnut Creek overview](#)

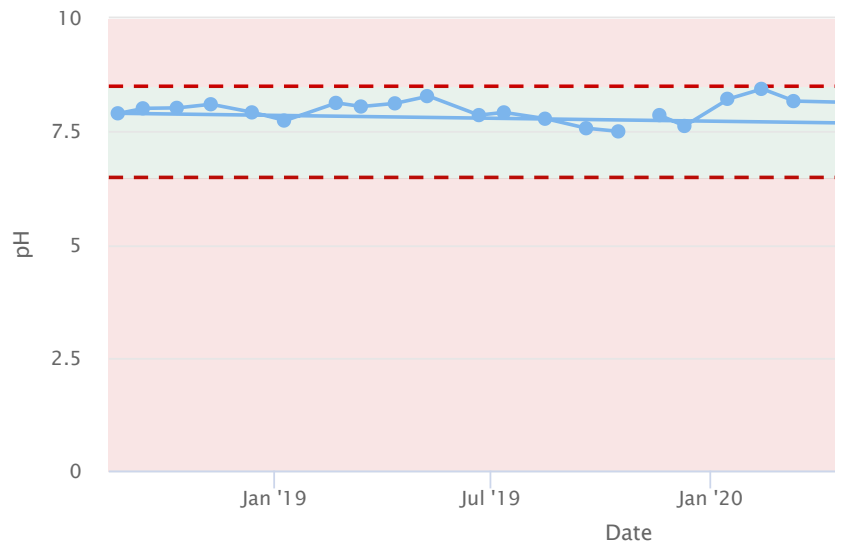
Sites on Walnut Creek

Grayson Creek at Chilpancingo Pkwy. ▼

Plots Images

Select Water Quality Feature

pH ▼



Chilpancingo Pkwy.

Six Flags Hurricane Harbor

Civic Park

Golf Club Rd.

Six Flags Hurricane Harbor

Diablo Valley College

Ple

Hiç

Click and drag on the chart to zoom in

▼ more details

Vitals: pH

pH is a measure of how acidic or basic the water is. pH in streams can be affected by many things, including urban runoff, mining activities, and even pine needles. Typically, the presence of organic matter and decomposition lower pH and urban runoff tends to increase pH. A pH range of 6.5 to 8.5 is optimal for the health of freshwater fish and bottom-dwelling macroinvertebrates.

pH should be between 6.5 and 8.5

(Source: [USEPA pH Threshold](#))



Water Quality in Contra Costa County

[Home](#)[About](#)[Down](#)

Grayson Creek at Chilpancingo Pkwy. (CEO160)

Grayson Creek flows north continuing along a wide, open channel before flowing under Chilpancingo Parkway. The area has some tall grass right next to the creek and animals such as fish, waterfowl and even turtles can be found here. This site is monitored once a month for temperature, dissolved oxygen, conductivity, pH, and turbidity. We always take volunteers on our monitoring expeditions, where you'll learn about the equipment we use and do observational assessments. Please contact [Satoko Mills](#) if you'd like to join us!

[Go back to Walnut Creek overview](#)

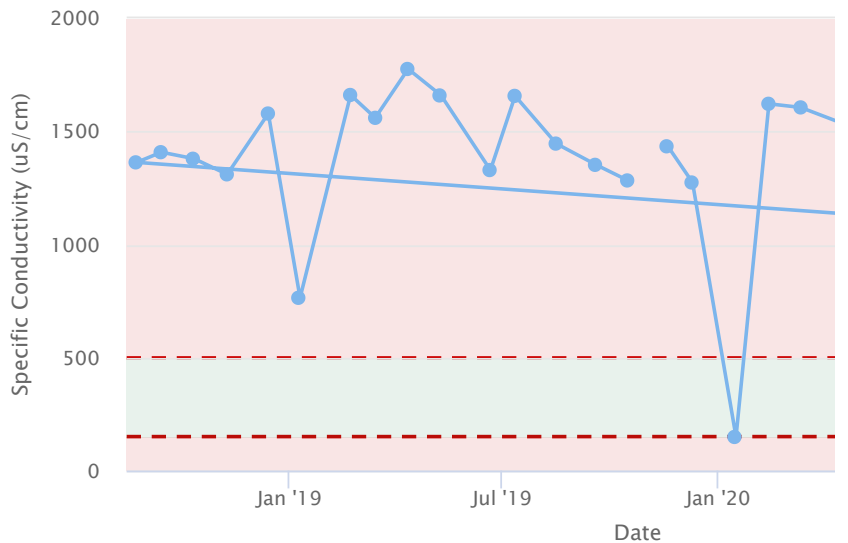
Sites on Walnut Creek

Grayson Creek at Chilpancingo Pkwy. ▾

Plots Images

Select Water Quality Feature

Specific Conductivity ▾





Water Quality in Contra Costa County

[Home](#)[About](#)[Dow](#)

Grayson Creek at Chilpancingo Pkwy. (CEO160)

Grayson Creek flows north continuing along a wide, open channel before flowing under Chilpancingo Parkway. The areas has some tall grass right next to the creek and animals such as fish, waterfowl and even turtles can be found here. This site is monitored once a month for temperature, dissolved oxygen, conductivity, pH, and turbidity. We always take volunteers on our monitoring expeditions, where you'll learn about the equipment we use and do observational assessments. Please contact [Satoko Mills](#) if you'd like to join us!

[Go back to Walnut Creek overview](#)

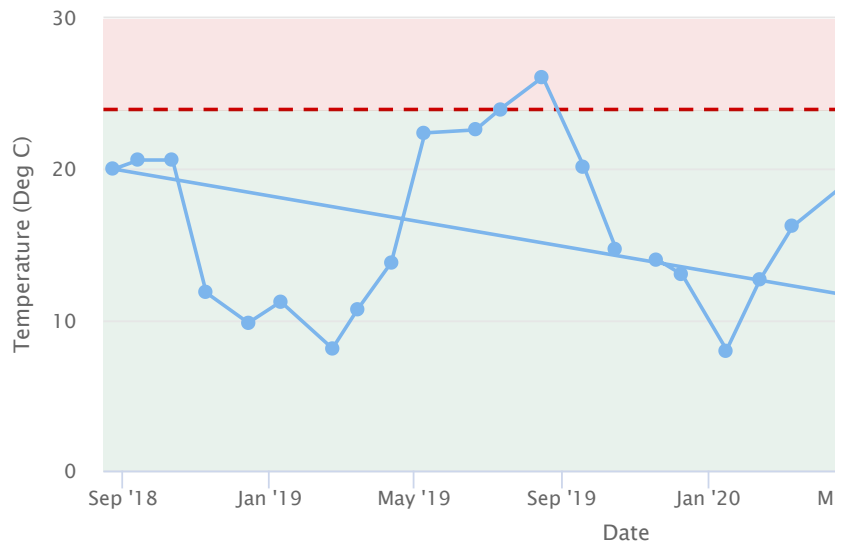
Sites on Walnut Creek

Grayson Creek at Chilpancingo Pkwy. ▼

Plots Images

Select Water Quality Feature

Temperature ▼



Chilpancingo Pkwy.

Six Flags Hurricane Harbor

Civic Park

Golf Club Rd.

Six Flags Hurricane Harbor

Diablo Valley College

Ple

Six Flags Hurricane Harbor

Hiç

Click and drag on the chart to zoom in

▼ more details

Vitals: Temperature

Water temperature affects all creatures living in the stream, as well as directly influencing water chemistry (including conductivity and dissolved oxygen). Different animals have different preferred temperature ranges; cold water fish such as rainbow trout like water to be less than 16°C, although they can tolerate higher temperatures. Deep, fast-moving, and shaded streams tend to be colder than shallow, slow-moving, and exposed streams.

Temperature should be below 24 Deg C

This is the maximum temperature tolerated by salmonids, although they tend to avoid waters that are over 20 degrees C. (Source: [California Water Boards Temperature Threshold](#))



Water Quality in Contra Costa County

[Home](#)[About](#)[Dow](#)

Grayson Creek at Chilpancingo Pkwy. (CEO160)

Grayson Creek flows north continuing along a wide, open channel before flowing under Chilpancingo Parkway. The areas has some tall grass right next to the creek and animals such as fish, waterfowl and even turtles can be found here. This site is monitored once a month for temperature, dissolved oxygen, conductivity, pH, and turbidity. We always take volunteers on our monitoring expeditions, where you'll learn about the equipment we use and do observational assessments. Please contact [Satoko Mills](#) if you'd like to join us!

[Go back to Walnut Creek overview](#)

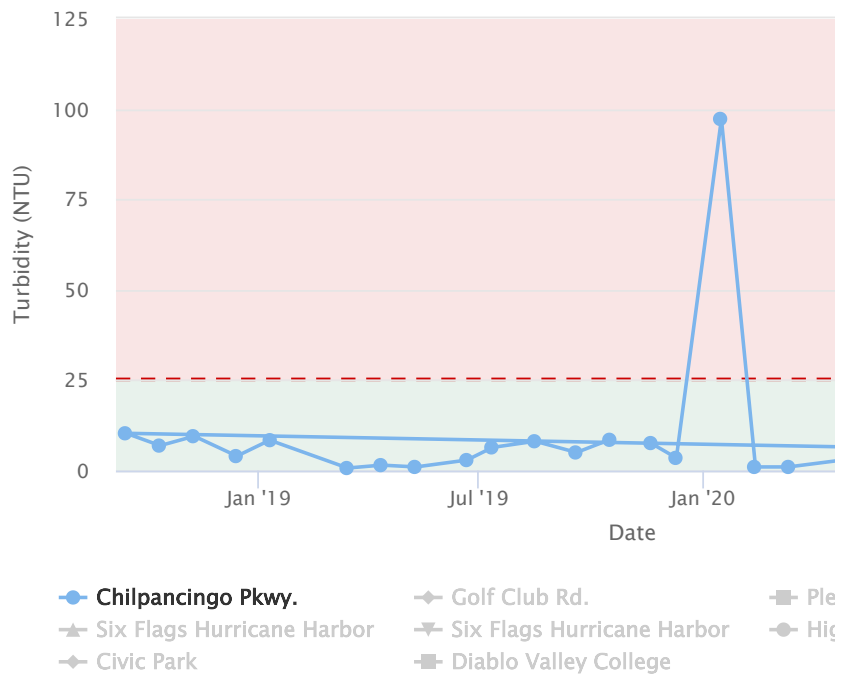
Sites on Walnut Creek

Grayson Creek at Chilpancingo Pkwy. ▼

Plots Images

Select Water Quality Feature

Turbidity ▼



Click and drag on the chart to zoom in

▼ more details

Vitals: Turbidity

Turbidity measures how clear the water is. Sediment or dissolved solids in the water can stick in the gills of fish, settle on top of spawning grounds, and even impair their ability to find food. Filter-feeding invertebrates such as clams and water fleas can become clogged with sediments, leading to starvation. It can even increase the temperature of the water, leading to lower oxygen levels. Rainfall often increases turbidity in creeks, as stormwater runoff contributes to higher flows and can cause creek-bed erosion. Other sources of increased turbidity include algal blooms, waste discharge, and even animals or children playing in the water.

Turbidity should be below 25 NTU

Turbidity Threshold derived from this publication: Sigler, J. W., T.C. Bjornn, and F.H. Everest. 1984. Effects of chronic turbidity on density and growth of steelhead and coho salmon. Transactions of the American Fisheries Society 113:142-150. (Source: [Turbidity Threshold](#))

Attachment A-6 Fish Visible from Chilpancingo Bridge



Attachment A-6 Fish Visible from Chilpancingo Bridge Cont'd



Attachment B

CONTRA COSTA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

**THE 50-YEAR PLAN
“From Channels to Creeks”**

The 50 Year Plan

"From Channels to Creeks"

**Adopted by the
Contra Costa County Flood Control and Water Conservation District
Board of Supervisors
March 31, 2009**

For information contact:

Mitch Avalon

Deputy Chief Engineer

Contra Costa County Flood Control and Water Conservation District

255 Glacier Drive, Martinez CA, 94553

maval@pw.cccounty.us

(925) 313-2203

On April 9, 1999, Contra Costa County held its first Watershed Symposium. At that Symposium, we outlined a vision to convert our concrete and rip-rap lined channels into natural systems that safely convey the same flood waters. Over the years, this vision has been reviewed and refined. The purpose of this paper is to identify the benefits for the Flood Control District to convert its first generation infrastructure, consisting of concrete and rip-rap lined channels, to second generation facilities, consisting of natural creek systems, and the methods to achieve this. The vehicle to achieve this is long range planning for creek enhancement.

As with most Flood Control Districts, the Contra Costa County Flood Control and Water Conservation District was formed to provide flood protection infrastructure and improvements for a rapidly developing County. Our mandate at that time was defined as simply providing flood protection in the most economical manner. The County paid all right-of-way costs, which often resulted in relatively narrow concrete and rip-rap-lined channels. Today, however, communities desire a broader range of services. The citizens of our county still want flood protection, but they also want a healthy and natural looking eco-system in their drainage channels and creeks (while minimizing the amount on their tax bill for maintenance and new infrastructure costs). They want good water quality and a sustainable and rich plant and animal habitat in their creeks and watersheds. At the same time, our infrastructure is aging and will need to be replaced over the next several decades. Compounding our problem is a severe lack of funding. After passage of Proposition 13 in 1978, our tax revenue was reduced by 58%. We have been scrambling to perform our mission and maintain our existing infrastructure ever since. Planning for the capital replacement of an estimated \$500 million in infrastructure is daunting to say the least. To do this we need to take a long view and we need public support to plan and fund our infrastructure replacement.

Our existing major infrastructure has a remaining service life of 30 to 50 years. We need to embark now upon a planning process for long-range replacement of this essential infrastructure. The question for our communities is this; what type of infrastructure should it be replaced with? Should we simply rebuild our concrete or rip-rap channels, or should they be replaced with more natural systems of vegetation and riparian habitat in a manner that allows natural processes to maintain essential flood protection and water quality improvement functions, recreational and aesthetic values, as well as allowing flexibility to respond to climate change? Our experience indicates there will be much more support for replacing the existing infrastructure with natural systems. If we pose this question openly, then the answer becomes a community design issue, resulting in community involvement, and ultimately community buy-in and support. This long-range process to develop a creek enhancement plan was termed the "50 year plan" simply to illustrate the long-range aspect of the process.

Historical Background

The Contra Costa County Flood Control and Water Conservation District (Flood Control District) was established in July of 1951. This was during the Age of Infrastructure. Americans had just returned from overseas where they had won World War II, in great part due to America's resources, technology, and "Yankee know-how". Americans were filled with optimism, a "can do" attitude, and the sense that any problem could be solved with technology and infrastructure. Contra Costa County, along with the rest of California, was growing and expanding. As the county developed, public policy required the construction of extensive infrastructure. The population in the Walnut Creek watershed increased from 53,000 to 250,000 between 1950 and 1966. The floods of 1955 and 1958 galvanized public support for flood control infrastructure throughout the county. The Flood Control District, in partnership with the the U.S. Army Corps of Engineers and the Department of Agriculture Soil Conservation Service, constructed improvements in the Walnut Creek, Marsh Creek, Pinole Creek, Rodeo Creek and other watersheds. Due to subsidies provided by the federal and state governments, the Flood Control District was able to construct these major regional flood control facilities at a local cost of approximately ten percent of the total project cost. The cities and the county supported the construction of infrastructure to meet the needs of the citizenry. At the time, however, we did not understand the environmental consequences of our infrastructure construction.

In the 1970's we began to understand the effects of unbridled construction activities. We began to understand that many things are interrelated, and saw the need to analyze things from a system-wide perspective and not on an individual basis. Public sentiment began to shift towards being more sensitive to the environment. The National Environmental Policy Act, Clean Water Act, and the Endangered Species Act were all passed in the late 1960's and 1970's. Since then, these and other

environmental policies and laws have been strengthened, and regulations established to enforce and monitor infrastructure construction and maintenance activities. Citizen action groups were formed in communities throughout the county to oppose the traditional approach to solving our infrastructure problems. These groups and evolving statutory requirements forced government agencies in the county to analyze the impact of construction activities on the environment. Over the last twenty-five years, these actions have defined the current public policy of providing infrastructure with environmental protection and preservation.

The New Mission and Our Challenge

The original mission of the Flood Control District was to provide flood control infrastructure. This mission was aligned with the public policy at the time, and the District was very successful in providing flood protection improvements for the residents of the county. To be aligned with today's public policy, however, the District's mission must be expanded to include habitat preservation and water quality in the course of providing flood protection.

Other critical issues will also have to be addressed including the significant reduction in financial assistance offered by the state and federal government for flood protection projects, and the means to accumulate and protect reserve funds to implement an infrastructure replacement plan. Flood risk is defined by topography and is not evenly distributed. Hurricane Katrina focused a national debate on the equity of subsidizing disaster recovery costs for property located in hazard prone areas. In California's current "pay as you go" public policy environment, it will be very challenging to enlist the financial support of property owners outside flood hazard areas to implement an overhaul of existing flood channels that seemingly benefit a minority of property owners.

Our customers, the cities, the county, the public, and other agencies, are operating within the same public policy framework that the District is. All public infrastructure has a limited service life, a period of time the infrastructure will perform its designed service with routine maintenance before it needs to be replaced. The question is how do we plan for the replacement of this critical infrastructure within today's public policy framework?

The Approach to Flood Control Issues

The Flood Control District's mission defines its approach to resolving flood control issues. The District's mission is consistent with current public policy and the mandate from the regulatory agencies to provide flood protection while preserving riparian

habitat and maintaining water quality. The “flood control” issues of today are different from the flood control issues of the past. The issues of today are, for lack of a better term, “creek issues”. Creek issues combine the concerns for flood protection, ecosystem preservation, and water quality. To resolve the issues we face today, we must approach them from a **multi-objective** perspective. We must identify the stakeholders involved in the issue, determine their interests and needs, and then provide alternatives that meet those needs and interests. The alternatives must be based on sound science to ensure that the creek system will provide all the functions necessary for the watershed.

Planning for creek issues requires **community-based planning**. This type of community planning will often transcend jurisdictional boundaries. Resolution of today’s issues must go beyond the traditional focus of the “plumbing” of the watershed (i.e., the creeks), and extend to the watershed as a whole. The solutions of tomorrow must be **watershed-based and multi-objective**, or more accurately, the solutions of tomorrow must evolve from **community-based watershed planning**.

Creek Enhancement Planning

The Flood Control District has many miles of engineered, or historically termed “improved”, channels that no longer have the natural features of the original creek. Funding will likely become available to restore some natural features to these channels. Some channels were designed for specific land uses that have changed over time and, if this trend continues, may become inadequate in the future. If some of these facilities become inadequate, should they be replaced with the same type of facility or replaced with a facility having the features of a natural creek? Should concrete lined channels be replaced with engineered creeks? Can flood control earthen channels be converted to “flood control creeks”? As our community’s age and land uses change, we will have the opportunity through redevelopment to implement more natural flood protection facilities integrated in the new urban landscape.

The Flood Control District can develop Creek Enhancement Plans to, for example, plant trees in an earthen channel and still maintain flood protection, IF the drainage system is looked at from a watershed perspective, to offset the loss in capacity due to the trees planted in the channel. If the goal is to convert a flood control channel to a natural creek, then some Creek Enhancement Plans will need extremely long planning horizons of 50 years or more to achieve all of their objectives. Some plans may be as simple as providing a bypass pipe or an upstream detention basin or increased upstream infiltration to allow a creek section to be natural, while other plans may call for purchasing a row of houses in order to replace a concrete channel with a natural looking creek. These kinds of objectives are achievable and can be implemented without unreasonable disruption to a community if a long-range “50-year” creek enhancement plan is adopted. The Flood Control District will develop these plans if the

citizens of our cities and the county are interested in a more natural environment in our flood protection facilities.

Flood Control District Benefits

There are several benefits for the Flood Control District to develop long-range plans to convert its drainage facilities into a natural system.

- Broad public support - Initially it may seem easier to simply replace the existing infrastructure. However, regulatory agencies and public sentiment support conveying flood waters in natural systems rather than artificial concrete systems. Planning future facilities that meet modern expectations will guarantee a broad level of support.
- Grant Funds - There will be opportunities for grant funds to construct elements of a more natural system and probably fewer (or maybe zero) opportunities for grant funds to replace concrete structures.
- Increase Awareness - Going through a long-term planning process provides an opportunity to discuss issues related to flood protection, floodplain management, natural creek system function and form, etc. Increased public awareness of stormwater issues leads to increased understanding and support for funding.
- Community Design - Including the public and community leaders in a long-range plan allows the project to become part of the community design element of a neighborhood or town. These can then be part of the general plan or specific plan for a community and can lead to partial funding through development fees or redevelopment revenue. These kinds of projects can also contribute to making communities more sustainable, including meeting new targets for carbon emission reduction, enhancing greater reliance on local water supplies, and responding to the anticipated effects of climate change.
- Life Cycle Costs - These vary by facility and channel reach. Concrete channels tend to have high initial construction costs, very low ongoing maintenance costs and high replacement costs. Natural channels require increased right-of-way width and generally higher ongoing maintenance but low or zero replacement costs. Taking the long view, the costs for natural channels will be much less compared to the costs of multiple life cycles for concrete channels.
- Water Quality and Conservation – Water flowing in natural creeks flows over and through biological media and is filtered through creek banks and beds, cleansing the water and retaining it longer in the watershed helping to meet stormwater (NPDES) permit requirements and enhancing aquatic habitat features.

- Aesthetics – Natural channels are much more appealing than concrete channels for recreational uses or simply as a visual amenity for a community.
- Recruitment and Retention – Staff working for the Flood Control District will be more likely to be motivated, have a high morale and make a career at the District if the District is progressive, visionary, and places importance on environmental protection.

Opportunities

There are many opportunities for long-range planning for replacement of vital flood protection infrastructure within existing community planning and implementation activities that include the following:

- Redevelopment Plan – area-wide master plan that can include watershed infrastructure.
- Redevelopment Plan Projects – projects outlined in a community's Redevelopment Plan.
- Development Projects – requiring (or negotiating) implementation of short pieces of channel/creek enhancement with land use entitlements.
- General Plan Updates – watershed and system-wide infrastructure planning.
- General Plan Amendments – identify improvements to segments of a regional or watershed infrastructure plan.
- Specific Plans – neighborhood level improvements of watershed infrastructure.
- Watershed Management Plan – regional, watershed level assessment of infrastructure needs.
- Mitigation – opportunity to develop and possibly implement portions of a plan as alternative mitigation.
- Regulation Offsets/Alternative Compliance – opportunities to develop watershed or creek enhancement plans and/or implement portions of improvements as an offset or in-lieu of stormwater (NPDES) or regulatory permit requirements.
- FEMA Mapping – opportunity to review watershed or creek infrastructure needs within floodplains.

- Integrated Regional Water Management Planning – collaboration with water supply agencies that could provide funding or cost-share contributions to alternative stormwater management approaches that retain and “harvest” rainfall, thereby enhancing local water supplies for landscape irrigation and reduction of flood peaks.
- Community Based Organizations – collaborative or independent projects by non-profit organizations with private funding sources.
- Climate Change and Sea Level Rise – may be a trigger for long-range creek planning, especially with expansion of the floodplain incorporating more properties.
- Bay Area Stream Goals – opportunity for watershed and regional infrastructure planning.
- Emergency Planning – predisaster mitigation planning with grants from FEMA and other organizations.

Benefits for the Community

The community gains many tangible benefits in addition to continuing flood risk reduction. These benefits are similar to those of the Flood Control District, but are from a different perspective.

- Quality of Life – having a natural creek system drain through a neighborhood rather than a concrete channel looks and feels better to the surrounding residents resulting in increased property values.
- Community Amenity – the community can plan and design its public spaces and retail/commercial areas to take advantage of the attraction of a natural system. The community can have a recreational and aesthetic focus along the creek as a natural system, rather than a concrete lined flood control utility.
- Habitat – a natural creek will provide the plant and animal habitat necessary for a rich eco-system within the creek and its riparian corridor and can provide wildlife linkages between urban ecosystems and open-space areas.
- Water Quality – a natural system will provide opportunities for cleansing and filtering storm run-off, particularly during low flow events, to reduce pollutants in the stormwater.
- Connection with Nature/Community Health – Nature Deficit Disorder (a term introduced by Richard Louv in his book “Last Child in the Woods”) embodies a

theory that children who lose the connection with nature exhibit a variety of behavioral problems more so than children who get out into nature. As our landscape becomes more urbanized and we have more technological diversions, our children have less opportunity and spend less time interacting in a natural environment. Reestablishing natural creeks in an urban setting will increase opportunities for children to interact with nature in an otherwise paved or manicured/structured environment.

- Community Involvement – The community has an opportunity for citizens to get involved in creek related activities, such as clean-ups, water quality monitoring and fish surveys, or for youth groups to help actively manage portions of the creek by, for example, removing invasive species, or by developing watershed plans. These activities increase citizen involvement and increase their sense of community.
- Development of “Green Jobs” – The community can develop and retain a skilled workforce restoring and maintaining public and private natural creeks. This could include re-vegetation and soil bioengineering project work, water quality monitoring, and coordination of erosion prevention/stabilization on private property and stream stewardship training for private property owners. These would be new jobs for the community that can’t be outsourced overseas, which helps the community’s economic sustainability.

Outreach

Successful long-range planning and implementation will require active support from and partnerships with many agencies, groups and individuals. The Flood Control District will need to outreach to many different groups to increase awareness, enlist support and develop partners to initiate and sustain a long-range plan. For Contra Costa County this would include the following groups:

- Public Managers Association
- City/County Engineering Advisory Committee
- City Councils
- Watershed Forum
- Non-profit organizations
- Regulatory agencies

Developing a brochure (“The 50 year plan-A future for our Children”) or short, concise informational piece would be very helpful to communicate the concept and opportunity of this approach to infrastructure replacement.

Roles and Responsibilities

If we are to embrace this approach to infrastructure replacement, what should the role of the Flood Control District be? And what of our partners, the cities, the non-profit groups (NGO's), the regulatory agencies, what role should they play?

- Flood Control District – The Flood Control District must be a cheerleader for the 50-year plan. We need to provide outreach information on the benefits and value added by this approach. By long practice and political prudence we do not conduct activities within a jurisdiction without that jurisdiction's approval. We must work hard to enlist the support of the public and the communities within which these projects and activities would occur. The root issue for the Flood Control District is funding. How can we obtain community support for funding capital replacement of flood protection infrastructure and then fund its ongoing maintenance? The average household spends maybe \$700 per year on potable water and over \$300 per year on wastewater treatment. In contrast, the average Contra Costa household spends about \$30 per year on water quality (NPDES) and less than \$70 per year on flood protection maintenance and improvements, depending on the specific watershed (see footnote 1). As a society, do we spend enough resources on stormwater management, does the general public understand the benefits and value of stormwater management and the flood protection system? Everyone uses the water supply system every day; everyone uses the waste water system every day. If a flood protection system is viewed as providing solely flood protection, then it is used only during heavy storm events. Even though a flood protection system saves a community from disastrous economic losses from rare storm events, it is never foremost in people's minds. If a flood protection system embodies a natural creek that has habitat value, recreational elements and opportunities for children to interact with nature, then it will be used on a more frequent basis and be viewed with more importance in relation to other necessary societal expenditures.
- Cities – Cities must take a leadership role in establishing the vision for their community for flood protection infrastructure. Cities must define the goals for a Creek Enhancement Plan. Cities must support the objectives of a 50-year plan if it is to be successful, and these objectives must be incorporated into the city's General Plan to ensure long-term commitment and provide the opportunities for eventual implementation through future land use decisions.
- Community Based Organizations/Non-Governmental Organizations/Non-Profit Groups – These community groups can play a key role in adding benefit and value to a community's Creek Enhancement Plan. For example, community organizations may harness the energy of volunteer citizens to monitor the health of the natural creek after it's converted from a concrete channel. Another group may partner with the Flood Control District to help maintain some of the features

of a natural channel using youth labor, which benefits the community by providing work for a segment of the community and provides activities for them after school. Community groups will be natural and necessary partners to communicate and outreach to the public about the overall benefits of a Creek Enhancement Plan and watershed based community planning processes. The Resources Conservation District has a long history in assisting community groups in these efforts.

- Regulatory Agencies – Regulatory agencies must invest time up front in the planning process to make sure the Creek Enhancement Plan includes the proper balance of habitat for the natural creek system. The regulatory agencies must also be flexible when the only way to implement a more natural system is by “shoehorning” it into an urban environment and compromises on everyone’s part are required to meet the sometimes daunting constraints involved. Balancing community use of the creek as a public open space with habitat needs for species will be especially tricky.

Challenges

There are challenges to every endeavor in life, and addressing creek issues is no different.

- Jurisdictional Boundaries – It will be a challenge to develop watershed management plans in watersheds that span several jurisdictions.
- Form and Function – Unfortunately a concrete channel is much more efficient at moving flood waters than a natural creek. As a result, a natural creek needs to have more room (perhaps several times the width!) than a flood control channel. There are solutions to this, but coming to a consensus or collective agreement will be difficult.
- Conflicting Interests – Finding solutions that meet the concerns of the environmental and regulatory community for habitat preservation, the concerns of the neighborhood for aesthetics, the concerns of property owners on the floodplain for flood protection and the concerns of those property owners who front on the creek will be difficult.
- Political Leadership – It will also be difficult to develop 50 year plans for creek enhancement in a political environment that cycles on a four year period.
- Unified Vision – It will be a challenge for some communities to establish a collective vision for their creek, and to determine how to make their creek a resource and amenity for the community.

- Funding – A list of challenges would not be complete without funding. Funding, of course, seems to be an issue wherever we turn, and creek issues are no different. Along with any long-range plan for creek enhancements must be a plan to fund the improvements and the ongoing maintenance.
- Climate Change – This will result in increased storm runoff and flooding, and increased water surface elevation at a creek's mouth, which will result in more property in the floodplain. However, this may be a trigger for comprehensive watershed based planning around creeks.

The Flood Control District will continue to provide the best service to the cities, the county, and their residents, for the needs of today and of the future. To be successful, we feel this will require a long-term, multi-objective approach on a watershed basis with community-based planning. Some effort to better define the potential costs and constraints to implementing more natural flood protection needs to be done. Creek issues can be resolved and challenges can be overcome, if there is a desire on everyone's part to focus on common goals and work together.

Footnote 1

Revenue for constructing flood protection projects and maintaining existing flood protection facilities comes from a portion of the 1% ad-valorem property tax on parcels within a flood control zone. A flood control zone is a major watershed area within the county; for example, flood control zone 1 is the Marsh Creek watershed and flood control zone 9 is the Pinole Creek watershed. Prior to Proposition 13 in 1978, each year flood control zones established their budget needs for the upcoming year and recommended a tax rate to fund the budget. The budget and recommended tax rate was developed through a community-based advisory committee within the watershed. After Proposition 13 was passed in 1978, the tax rate was locked in and the total property tax collected was reduced to 1% of assessed value. In 1978 some flood control zones had a reasonable tax rate based upon projects that were underway. Other flood control zones had reduced tax rates because the zone had a surplus or there were no pending projects. As a result, today the revenue within flood control zones throughout the county vary significantly, with as low as a zero tax rate in Zone 9 (Pinole Creek watershed). This results in a zero annual investment per residential parcel in the Pinole Creek watershed for flood protection, \$35 annual investment per residential parcel in the Walnut Creek watershed and a \$70 annual investment per residential parcel in the Marsh Creek watershed.



Contra Costa County
Public Works
Department

Brian M. Balbas, Director
Deputy Directors
Stephen Kowalewski, Chief
Allison Knapp
Warren Lai
Carrie Ricci
Joe Yee

April 22, 2022

Alan Bade, Co-Founder
Friends of Pleasant Hill Creeks
25A Crescent Drive #245
Pleasant Hill, CA 94523

RE: Walnut and Grayson Creeks Desilting Project
County Project No.: WO#8334

Dear Mr. Bade:

Thank you for providing comments on the proposed Mitigated Negative Declaration (MND) for the Walnut and Grayson Creeks Desilting Project (Project) on behalf of the Friends of Pleasant Hill Creeks. This letter is intended to address your comments submitted on November 19, 2021. Our responses to your comments are presented below and follow the order of your comments (numbered in the margin of your letter and attached for reference).

Response #1: The MND acknowledges on pages 22 and 23 that “both Central California Coast steelhead and Central Valley Fall/Late Fall-run Chinook salmon have potential to occur in the portions of Grayson Creek and Walnut Creek that are within the Project area.” However, the flowing channels are excluded from the Project and as such would not impact or result in the loss or disturbance of spawning or rearing habitat for anadromous fish.

To prevent any sediment mobilization from the desilting activities into the flowing channel, a Storm Water Pollution Prevention Plan (SWPPP) will be prepared and implemented, as explained in BEST MANAGEMENT PRACTICE BIO-2. In addition, MITIGATION MEASURE HYD-1 states that a two-foot berm/barrier will be left between the low flow channel and work areas to prevent sediment from entering the channel during construction, and affecting water quality.

Short-term impacts on migratory and other bird species nesting within the Project area are listed on page 26 of the MND. Therefore, MITIGATION MEASURE BIO-4 will be implemented, which includes preconstruction surveys for nesting bird species and burrowing owls.

As stated on page 32 of the MND, “the Project is not expected to affect the area’s utility

as a movement corridor for wildlife in the long term. During the desilting work, the temporary disturbance may discourage some movement during the day when work is taking place. This will be minimized by working on one side of the creek one year, then the other side the next year, leaving one side available for movement."

Although river otters are not mentioned in the original MND, their inclusion would not change the Project or proposed mitigation measures since all work will occur outside the flowing channel. They would not be impacted by the Project due to their ability to avoid the work zone and find other temporary habitat outside the Project area, similar to other common species listed on page 33 of the MND. Preconstruction surveys will help minimize impacts to these types of species, as described in BEST MANAGEMENT PRACTICE BIO-1. The worker education program in BIO-1 will cover common species that could occur in the Project area, such as river otters and muskrat, in addition to special status species.

Response #2: As noted on pages 10 and 11 of the Flood Control District's *50 Year Plan*, some of the biggest challenges to replacing flood control channels – such as Grayson and Walnut Creek with facilities having the features of a natural creek – are lack of funding as well as physical constraints. A natural creek requires a much wider floodplain than a flood control channel. Since all or nearly all the parcels adjacent to both creeks are already developed, it would require an enormous amount of funding to purchase and relocate existing commercial and residential buildings and their associated infrastructure to other locations in order to make room for a wider creek.

The Project is a maintenance project with a goal to remove accumulated sediment to restore hydraulic capacity for flood protection; it is not a restoration project. However, the Project was carefully designed to minimize impacts to habitat where possible, and the Project will result in higher value habitats by replacing sediment on the floodplain benches dominated by ruderal (weedy) vegetation with wetland habitats. There is a cyclical component to this benefit, as the floodplain benches will silt in again over time and eventually be desilted again in a subsequent project, recreating the habitat.

The Flood Control District's *50 Year Plan* focuses on replacement of structures with more natural solutions where possible, the importance of community awareness, constraints, and other long-term planning considerations for bringing more natural processes back to our creeks. The Project at hand is needed for maintenance of flood capacity associated with the current design of the creek channels. It does not reconfigure the creeks, replace any structures, or do anything more than remove accumulated sediment. The Project incorporates many elements to reduce impacts including avoiding wetland habitats as much as possible, not working in the flowing channel, working on only one side of the creek per season to allow use of the other side by wildlife, as well as a number of mitigation measures. As such, the Project is consistent with the Flood Control District's *50 Year Plan*.

Response #3: Your comment letter will be included as an attachment to the MND and will be provided to the Project biologists prior to conducting the preconstruction surveys and biological monitoring.

Response #4: Please see response #3.

Response #5: An EIR is not required for the Project because all impacts will be mitigated to less than significant by the proposed measures.

Response #6: Please see responses #1 and #3.

Response #7: Please see response #2.

Response #8: The Project was added to SFEI's SediMatch website in December 2018. The Flood Control District (FCD) has not received requests for sediment for beneficial reuse to date. Further, the Coarse Sediment Removal Strategy from SFEI specifies the need for coarse sediment. However, this Project is anticipated to remove finer grains of sediment such as silty sands or sandy silts. In addition, the FCD continues to coordinate with SFEI to support their efforts to prepare a sediment budget for the region by providing them with the Project's estimated volume of sediment to be removed so that this can be incorporated into their data and regional modelling.

Response #9: The MND analysis is focused on potential impacts resulting from Project activities. The analysis was based on surveys by a qualified biologist that included review of *Fish Passage Assessment – Lower Walnut Creek and Lower Grayson Creek, Contra Costa County*, prepared by Charles H. Hanson, Ph.D. in 2014. As such, the site characterization is adequate to determine potential impacts of the Project. Moreover, the Project is limited to sediment removal on the floodplain benches (which are at an elevation too high for fish spawning and or passage) and was specifically designed to avoid the low flow channel. It will not remove any materials from the low flow channel nor will it otherwise affect fish passage or spawning potential. Also, please see response #1 above.

Response #10: Preconstruction surveys for nesting birds and the implementation of no-work buffers around any active nests that are found will avoid impacts to these species, as described in MITIGATION MEASURE BIO-4 on page 26 of the MND.

Response #11: Although rivers otters and muskrat are not mentioned in the MND, their inclusion would not change the Project or proposed mitigation measures. All work will occur outside the flowing channel and BEST MANAGEMENT PRACTICE BIO-1 and BIO-2 will reduce all impacts to all species that may be using or present in the creek channels. Also, please see response #1.

Response #12: As stated on page 25 of the MND, MITIGATION MEASURES BIO-1, BIO-2, and BIO-3 will reduce potential impacts to western pond turtle during Project implementation. If necessary, any western pond turtles observed within the work zone will be relocated out of harm's way by a qualified biologist.

Response #13: Please see response #2.

Response #14: Human occupation and trash are not an impact of the Project, though the MND does describe the degraded habitat. On page 4, the MND states the following: "In the Project area, Grayson Creek is bordered by development on all sides, and is highly altered and disturbed." The Public Works Maintenance Division regularly removes trash from the creeks and, prior to the pandemic, sponsored a number of creek clean up and education programs. Services for unsheltered people are available through other County departments.

Response #15: Water quality analysis and monitoring is not part of the Project, with the exception of avoiding impacts associated with construction. The Project is not expected to have adverse impacts to water quality in Grayson Creek. The Project was designed to avoid the flowing channel and implementation of Best Management Practices and Mitigation Measures will reduce, if not eliminate, the potential for unintended impacts to water quality during construction.

Response #16: Homeless individuals camping in or near the Project area will be contacted before construction activities begin. Any remaining encampments will be removed and abated prior to construction.

Response #17: Please see response #8.

Response #18: The proposed Best Management Practices and Mitigation Measures reduce impacts to less than significant and no additional measures are necessary to reduce Project impacts to less than significant. Also, please see response #2.

Response #19: The worker education program as described in BEST MANAGEMENT PRACTICE BIO-1 will be expanded to cover common species that could occur in the Project area, in addition to special status species.

Response #20: The Project will not affect the existing low flow channel. Also, please see response #9.

Response #21: The Project will not affect the existing low flow channel. Also, please see response #9.

Response #22: Preconstruction surveys for potential wildlife species will be conducted within buffers consistent with industry standards. As stated on page 32 of the MND, "the Project is not expected to affect the area's utility as a movement corridor for wildlife in the long term. During the desilting work, the temporary disturbance may discourage some movement during the day when work is taking place. This will be minimized by working on one side of the creek one year, then the other side the next year, leaving one side available for movement."

Response #23: The flowing channels are excluded from this Project and as stated on page 55 of the MND, "channel flows will be maintained during the Project, so a dewatering system will not be needed."

Response #24: As stated on page 24 of the MND, "Disturbed areas will be seeded with a native seed mix suitable for riparian and wetland habitats."

Response #25: The SWPPP will be prepared by a Qualified SWPPP Developer (QSD) or Qualified SWPPP Practitioner (QSP) and will focus on reduction of sediment mobilization and accidental release of hazardous substances associated with construction in accordance with the National Pollution Discharge Elimination System (NPDES) Construction General Permit as required under Section 402 of the Clean Water Act. Also, please see response #16.

Response #26: As described on page 54 of the MND, a SWPPP will be required by the contract plans and specifications and is required by BEST MANAGEMENT PRACTICE BIO-2: "The SWPPP will specify the Best Management Practices (BMPs) that will be used during Project construction to ensure water quality impacts are minimized. The SWPPP will address erosion control, sediment control, non-storm water management, accidental spills, and other sources of potential contamination that could occur from construction vehicles or materials." For additional information, please see responses #15 and #25.

Response #27: Please see response #12.

Response #28: Please see response #10.

Response #29: No desilting activities will occur in December or January.

Response #30: Please see response #10.

Response #31: On page 24 of the MND, it states "Disturbed areas will be seeded with a native seed mix suitable for riparian and wetland habitats."

Response #32: The Project is limited to sediment removal on the floodplain benches

and was specifically designed to exclude the low flow channel. It will not remove any materials from the low flow channel nor will it otherwise affect fish passage or spawning potential. All fish will be able to travel safely through the Project area during desilting.

Response #33: Please see response #8.

Response #34: The Project is a maintenance project with a goal to remove accumulated sediment to restore hydraulic capacity for flood protection; it is not a restoration project. However, the Project will not impact the flowing channel and was designed to minimize impacts to habitat where possible and the Project will result in higher value habitats by replacing sediment on the floodplain benches dominated by ruderal (weedy) vegetation with wetland habitats. There is a cyclical component to this benefit as the floodplain benches will silt in again over time and eventually be desilted again in a subsequent project, recreating the habitat. For more information, please see response #9.

Response #35: The Project is a maintenance project with a goal to remove accumulated sediment. As such, removal of existing structures is out of the Project scope.

Response #36: The Project is a maintenance project with a goal to remove accumulated sediment. As such, removal of existing structures is out of the Project scope.

Response #37: The Project is a maintenance project with a goal to remove accumulated sediment. As such, removal of existing structures is out of the Project scope.

Response #38: Please see responses #9 and #34.

Response #39: The Project is a maintenance project with a goal to remove accumulated sediment. As such, planting of trees is out of the Project scope. In addition, planting trees or other woody types of vegetation within the flood control facility would adversely affect flood protection and increase flood risk. The channel was designed by the Corps of Engineers with a specific roughness value that equates to grasses that can lie down under heavy flood flows and not block floodwaters. Woody vegetation, trees, or other vegetation increase roughness, decrease channel capacity and flood conveyance. To incorporate a higher roughness value would require either additional channel corridor width or an approved reduction in the level of flood protection. As stated on page 24 of the MND, "Disturbed areas will be seeded with a native seed mix suitable for riparian and wetland habitats."

Response #40: Please see responses #9 and #34.

Response #41: Please see responses #9 and #34.

Response #42: Please see responses #9 and #34.

Response #43: Please see responses #9 and #34.

Response #44: Please see responses #9 and #34.

Response #45: The Project is a maintenance project with a goal to remove accumulated sediment. As such, installing depth gauges is not part of the Project.

Response #46: Please see response #34.

Response #47: Planting creeping ryegrass (*Leymus triticoides*) plugs throughout the Project area individually by hand is not feasible due to the large area of disturbed soil that will need to be stabilized and does not provide the temporary stabilization that hydroseeding does. Further, hydroseeding with wetland species was very successful after the last desilt in 2006. Hydroseeding will stabilize the exposed sediment in the channel until vegetation is naturally established. Vegetation in the channel is expected to establish quickly, as it did in the past desilting operation.

Response #48: As described in BEST MANAGEMENT PRACTICE BIO-2 on page 23 of the MND, a SWPPP will be prepared and implemented in accordance with the NPDES Construction General Permit, as required under Section 402 of the Clean Water Act. Establishment of vegetative cover is a best management practice required under that program. Further, the FCD intends to monitor the establishment of vegetation and other recovery and success criteria related to the Project objectives.

Response #49: The removal of *Arundo donax* is not a goal of the Project. The worker education program as described in BEST MANAGEMENT PRACTICE BIO-1 will include methods to prevent the spread of invasive species, including *Arundo donax*, that occur in the Project area.

Response #50: The Project will result in higher value habitats by replacing sediment on the floodplain benches dominated by ruderal (weedy) vegetation with wetland habitats, which would benefit marsh birds and other wetland species. There is a cyclical component to this benefit as the floodplain benches will silt in again over time and eventually be desilted again in a subsequent project, recreating the habitat.

Response #51: Please see response #34 above.

These comments are incorporated into the MND document via inclusion of Appendix B Comment Letters and Responses. Please contact me if you have any further questions on our responses to your comments at alex.nattkemper@pw.cccounty.us or (925) 313-2364.

Sincerely,

Alex Nattkemper

Alex Nattkemper
Environmental Analyst
Environmental Services Division

AN:xx

\\PW-DATA\grpdata\engsvc\ENVIRO\Flood Control\Walnut and Grayson Creeks Desilting\CEQA\Public Noticing\3-Comments\Friends of Pleasant Hill Creeks\3-Responses\1. Response to FPHC (final).docx

Enclosures

c: Paul Detjens, Flood Control
Gus Amirzehni, Flood Control
Anthony DiSilvestre, Flood Control
Ave' Brown, Environmental Services