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Estuary Blueprint

The public input period for the 2022 Estuary Blueprint ran from December 8th, 2021 to January 21st, 2022. Written input was received from digital surveys and emails, while verbal input was received from a public input session on January 11th, 2022. The following document contains a compilation of all written public input and their respective responses.

Action Number (if applicable)	Action Shorthand (if applicable)	Task Number / Summary (if applicable)	Commenter Name	Commenter Organization (if applicable)	Comments	Proposed Action or Response
1	Climate Resilience	Overall Action	David Ayers	UC Davis	I feel the following tasks should be incorporated into the final draft of the 2022 Estuary Blueprint: 1) Determine the effect of various sea level rise scenarios on habitat opportunity for imperiled fish species (using hydrospatial models). 2) Create digital elevation models for all restored tidal wetland and make this information publicly available to assist in hydrospatial modeling efforts.	Thank you for highlighting some critical science/data gaps. The intent of Task 1-5 is to create a climate science consortium to identify and address these types of gaps.
1	Climate Resilience	Overall Action	Tom Kendall	U.S. Army Corps of Engineers	The USACE must consider climate change during the planning process for all projects. We have examples of climate resilience in some of our projects even though it may not be a stated goal or objective. For example, the South San Francisco Bay Shoreline Phase I project includes horizontal levees (i.e., fairly wide expanses of sloping marsh with structural levees on the landward side) to allow for tidal habitat migration and refugia. We hope that USACE can be considered a collaborating partner (as described in the 2016 Estuary Blueprint) in these areas.	USACE added as collaborating partner to Tasks 1-1 and 1-2.
1	Climate Resilience	Overall Action	Susan Schwartz	Friends of Five Creeks	Skip the vision statement, new consortium (not enough people for all these meetings; need to get things done). Give the history of the Delta independent-science effort, is another one going to work? What will make it work? I have no idea whether 1-6 will work or slow things down. Re 1-7, are these plans something new (maybe poor idea) or do they build on something ongoing, like Bay Adapt(maybe good idea).	Thank you for your comments. Much of this action draws directly from the Bay Adapt Joint Platform and Delta Adapts and seeks to support and advance those efforts. Task 1-7 seeks to support completion of adaptation plan efforts where they have not yet been completed and is consistent with Bay Adapt, Plan Bay Area, and Delta Adapts.
1	Climate Resilience	Overall Action	Carin High, Gita Dev, William Hoppes, Sadie Wilson	Citizens Committee to Complete the Refuge, Ohlone Audubon Society, Sierra Club, and Greenbelt Alliance	We strongly support this action item and, based upon our experience, feel that it is imperative that Task 1-4 is implemented: “Explore establishment of new, or modification of existing, regulatory authority to protect shoreline habitats and open space while pursuing measures to protect communities and infrastructure from climate impacts.” So much of our efforts to protect and improve the Bay’s ecosystem resilience and biodiversity, as well as protecting our communities and existing and future residents, rely heavily on our ability implement the Tasks identified in the Draft Blueprint. It is evident that we cannot adequately protect our shorelines, open spaces and migration pathways for tidal wetland ecosystems through the existing federal and state regulations. Shoreline habitats may receive some regional regulatory oversight through agency coordination of review, as long as Section 404 Clean Water Act and Bay Conservation and Development Commission (BCDC) permits are required. However, many areas that could support transition zone/uplands habitats (Action 11) that support Bay ecosystem function and could act as future migration pathways as sea levels continue to rise have no such regional and regulatory oversight. We remain deeply concerned that governance gaps exist that allow continued local permitting of new development in undeveloped areas along the edges of the Bay that continue to put additional people in harm’s way as sea levels rise. In doing so, such developments place the burden of providing future flood protection or compensation for poorly-planned development, on future generations. As important, such development squanders increasingly limited opportunities to provide tidal wetland migration pathways, potential flood accommodation space to protect communities and to sustain crucial services provided by tidal wetlands such as carbon sequestration, wave attenuation, water quality functions, flood desynchronization, support of fisheries and biodiversity, etc. During the Bay Adapt process we commented that local permits continue to be issued for projects that will require future protection from sea level rise. These projects fall through existing federal and state regulatory gaps. A common refrain when we raise the issue of sea level rise is “this project is small and won’t increase the overall impacts of sea level rise on Bay Area communities” which may or may not be true at the individual project level depending on the project’s location, but is certainly not true from a cumulative perspective. Another response is that “future flood risk is something that needs to be addressed at a regional level” and yet another is “there is no regulation saying we cannot permit development (in an area that will be vulnerable to future inundation from sea level rise).” Comments such as these highlight the concern that despite the good intentions of the Bay Adapt Joint Platform, Bay Area communities collectively are not all rowing in the same direction, and that the actions of a few may be at cross purposes or inconsistent with “increased climate resiliency that incorporates natural resource protection” at the local and regional levels.	Thank you for your comments.
1	Climate Resilience	Task 1-1	Rachael Hartofelis	Association of Bay Area Governments	Does this language fully align with Bay Adapt's actions related to an adaptation vision? If not, it should be made as consistent as possible.	Yes, the language is pulled directly from Bay Adapt
1	Climate Resilience	Task 1-2	Laurel Larsen	Delta Science Program	The Delta Adapts adaptation strategy is anticipated to be complete in 2023-2024. Implementation of identified strategies is under the jurisdiction of multiple other agencies and groups. We agree that completion of the adaptation strategy is an appropriate milestone, but note that implementation will extend beyond the estuary blueprint timelines.	Thank you for your comment.
1	Climate Resilience	Task 1-4	Carin High, Gita Dev, William Hoppes, Sadie Wilson	Citizens Committee to Complete the Refuge, Ohlone Audubon Society, Sierra Club, and Greenbelt Alliance	Milestone for Task 1-4: We are extremely concerned that the draft language for the accompanying Milestone is too open ended and that there is no action proposed beyond development of an Impact and Needs Analysis: “Establish collaborative working group and develop an Impact and Needs Analysis.” A concrete timeline needs to be set, else we fear the process of establishing the working group and developing an Impacts and Needs Analysis may drag on, without the identification and implementation of actions that may actually close existing governance gaps. It is imperative that we find ways to implement changes to the existing regulations to ensure long-term protection of our communities, the resilience and health of the ecosystems of the Bay, and the biodiversity of Bay ecosystems. As you are so well aware, time is of the essence, the threats posed by climate change are already upon us, and the push to develop lands that could serve as transition zone/uplands habitats adjacent to tidal wetlands continues unabated. We do not have the luxury of waiting six years more years for the next Draft Blueprint to identify and implement actions that will close the existing governance gaps.	The milestone reflects the goal of the Blueprint to be both aspirational and feasible. This effort currently has no funding and no identified lead.
1	Climate Resilience	Task 1-5	Laurel Larsen	Delta Science Program	Also, consider further clarifying the scope/purpose of the consortium. Will it include social and natural scientists, policy makers, science managers?	Thank you for your comment. The consortium scope, purpose, and membership has yet to be defined by the larger community of partners/interested parties.
1	Climate Resilience	Task 1-8		Alameda County Water District	Groundwater in the San Francisco Bay Area is complex and managed by various programs, regulations, and agencies. As a result, the SFEP is encouraged to coordinate with and to provide draft findings with all agencies providing oversight (e.g., San Francisco Bay Regional Water Quality Control Board, California Department of Toxic Substances Control, Groundwater Sustainability Agencies, etc.) prior to publishing such information.	Thank you for your comment.
2	Equity	Overall Action	Laurel Larsen	Delta Science Program	DSC is developing an Environmental Justice white paper and could be listed as a collaborating partner. BARHI is another group that would be good to partner with here and on Task 2.	Delta Stewardship Council added as collaborating partner.
2	Equity	Overall Action	Susan Schwartz	Friends of Five Creeks	Offering small grants or training to young organizations sounds great. BMPS probably a bureaucratic waste; same for a "racial equity analysis," whatever that is. How about challenge relevant organizations to report realistically on what they have done that has succeeded in this area? (This does NOT mean they all should make grand statements about their good intentions.)	Thank you for your comments.
2	Equity	Overall Action	John Bourgeois, Kirsten Struve, Brian Mendenhall	Valley Water	Action 2 should be moved after Action 4 so all climate related topics can be grouped together.	Thank you for your comment.
2	Equity	Overall Action	Carin High, Gita Dev, William Hoppes, Sadie Wilson	Citizens Committee to Complete the Refuge, Ohlone Audubon Society, Sierra Club, and Greenbelt Alliance	We strongly support this action, but believe there should be a strategy for ensuring frontline and Indigenous communities have the necessary funding to participate in planning processes. Recommended Additional Milestone under Task 2-2: Create and identify designated, ongoing funding sources to support ongoing community participation and capacity-building, rather than one-time funding for capacitybuilding projects.	Please see related Task 1-3 that establishes a climate equity consortium that could be a vehicle for ongoing support.
2	Equity	Task 2-1	Laurel Larsen	Delta Science Program	The Delta Stewardship Council will continue working with CBOs and an Environmental Justice Expert Panel focused on the Delta and Suisun Marsh areas. Outputs and lessons learned – as well as network capacity – can be shared with similar activities in the Bay Area. The Council can also share work around identifying vulnerabilities and web mapping if useful to the Bay Area network (please see: https://deltascience.shinyapps.io/Delta_vulnerability_map/).	Thank you for your comment.
2	Equity	Task 2-2	Laurel Larsen	Delta Science Program	Suggest a slight reframing through an environmental justice lens to better align it with DSC’s EJ initiatives. In other words, consider mentioning the importance of also assessing the impacts of water quality and habitat on these disadvantaged communities. With the addition of a social science evaluation component for the pilot program, the task could be well aligned with action 4B in our draft 2022-2026 Science Action Agenda, “Measure and evaluate the effects of using coproduction or community science approaches (in management and planning processes) on communities' perceptions of governance and decision-making processes”. There is a great 501(c)(3) program: https://streetteam.org/about for downtown beautification through the Bay Area, Sacramento, and more. The focus is on the streets but could be expanded? Romie Nottage presented their program at the State of the Estuary Summit. Could also build capacity through education, job training or professional development? Opportunity to work with state agencies to increase job opportunities and recruitment form underrepresented communities.	Thank you for your comment. Please see Action 8 which includes integrating community-based science, Action 22 which includes addressing impacts of toxic water quality sites, and Action 24 which advances consideration of equity in parks and open space planning.
2	Equity	Task 2-2	Anne Bremer	The Watershed Project	Does task 2-2 include workforce development, particularly for youth (or adults) from marginalized communities? It would be great to include "training and mentorship" as a way to build capacity in addition to funding and grant-writing or technical assistance.	Workforce development is very much supported and was considered as part of this Task (or as a separate Task); however, the Working Group was not able to identify an existing or new means of advancing it regionally.
2	Equity	Task 2-3	Laurel Larsen	Delta Science Program	The Delta Science Program is holding a climate smart restoration and adaptation workshop on February 2-3, 2022, and plans to develop a set of climate-smart plant “palettes” that could be used in projects. While not specific to CBOs, this could be a helpful resource to share with the network and is aligned with the BMP milestone. Also, The Franks Tract Futures project provides a great example to look to in the Delta. Partners on that project are DSC, CDFW, DWR, and UC Davis (Brett Milligan). Also, regarding collaborating partners, CRNA and Dept of Conservation has expertise and training on community engagement and public participation based in principles of racial equity	Thank you for your comment.
2	Equity	Task 2-3	Rachael Hartofelis	Association of Bay Area Governments	It would be helpful to understand how this would build from other resources by organizations like Greenlining Institute's "Making Equity Real in Climate Adaptation and Community Resilience Policies and Programs: A Guidebook" and the "Resilience Playbook" by Greenbelt Alliance?	Thank you for your comment. Where this task may differ from those efforts is the more narrow focus on BMPs for project implementation though there certainly may be some overlap with those other resources and will be considered during the task implementation process.
2	Equity	Task 2-4	Rachael Hartofelis	Association of Bay Area Governments	Flag for LPA. Maybe a unified relationship with Tribes would be a win-win-win for SFEP, MTC, and Tribes?	Thank you for your comment.

3	Adaptation Planning	Overall Action	Susan Schwartz	Friends of Five Creeks	Is there any evidence that "supporting frontline communities and community-based organizations" is going to prioritize nature-based solutions? It's nice to support these groups, but my experience over a generation is that agencies like yours are interested in supporting such groups mainly in order to appear to have backing for their policies. I doubt your "help desk" would provide meaningful help -- might boost staff of centralized agencies. Re task 3-3 and 4, is there evidence that relevant policies etc. need to be restructured (emphasis on that term) to advance nature-based solutions? We are going to need all the solutions we can get. (I do think that the Priority Conservation Areas probably should be updated.) I wonder whether this should be mainly 3-6 and 3-7.	Thank you for your comments. This action tackles the significant hurdles that delay and constrain climate adaptation projects in the region in order to expedite implementation of solutions. Climate change and sea level rise are already disproportionately impacting frontline communities; therefore, they should be involved and their expertise utilized--and funded--in the projects that will impact them.
3	Adaptation Planning	Overall Action	Ted Barone	Tam Valley Sea Level Rise Task Force	Tasks 3-1 and 3-2 are most relevant to our community-based organization of volunteers. One of our biggest challenges is that we have had to spend a lot of time figuring out what the issues are, what resources might be out there, and how to access them. There is so much noise around sea level rise and it's related issues that it is daunting to even start the process. It's all well and good to support frontline communities but if we don't even know you exist as a resource, then you're not of much use. The point is that there needs to be a strong effort to reach out and find communities that are in need of organization and to help develop leadership in those areas. Thank you for the opportunity to comment.	Thank you for your comments.
3	Adaptation Planning	overall Action	Tom Kendall	U.S. Army Corps of Engineers	The USACE's Engineering with Nature (EWN) initiative strongly coincides with adaptation planning and implementation due to its focus on developing sustainable solutions through considering social, environmental, and economic benefits throughout a project's life. The San Francisco District views developing projects that can adapt to sea-level rise and remain effective while providing multiple benefits as one of its greatest opportunities to implement EWN. In 2021 the San Francisco District became a "proving ground" for the USACE-wide EWN initiative and looks forward to engaging with partners on this important new focus area. Furthermore, USACE is an active member of the Bay Restoration Regulatory Integration Team (BRRIT), which is working to increase the scale and pace of restoration projects so they can be more adaptable to climate change. The formation of the BRRIT was suggested, in part, by the USACE Regulatory Branch. We hope that USACE can be considered a collaborating partner in these areas.	US Army Corps of Engineers has been incorporated as collaborating partner.
3	Adaptation Planning	Task 3-3	Laurel Larsen	Delta Science Program	The Delta Stewardship Council is working on an amendment to Chapter 4 of the Delta Plan (focused on ecosystems). The Draft PEIR for this effort includes guidelines, a new regulatory policy, recommendations, and performance measures related to ecosystem function and adaptation. This effort is also being carried out in light of new science and understanding of climate change impacts on ecosystems. The Draft PEIR also includes a focus on improving coordination and funding. The background research informing the amendment and the analyses in the Draft PEIR could help inform Task 3-3 and related tasks and actions.	The task has been revised to highlight the ecosystem chapter revisions as an example.
3	Adaptation Planning	Task 3-3	Steve Goldbeck	BCDC	BCDC does not have sediment management policies, suggest changing sediment management to dredging policies, or deleting. BCDC's Bay Fill Policy Amendment adopted in 2019 did address this task (relating to green infrastructure and adaptation). Alternately, include "create" in the first sentence of the task, and instead of "such as BCDC..." State: "Create sediment management policies." Also, suggest adding a task that includes increasing funding and staff for regulatory agencies to reduce permitting backlog and accelerate permit processing for nature based adaptation projects.	Action revised to more broadly include creation or revision opportunities. Task for increased funding was discussed by working group with regard to Task 3-4, but the consensus was to focus on policy issue resolution.
3	Adaptation Planning	Task 3-3	Carin High, Gita Dev, William Hoppes, Sadie Wilson	Citizens Committee to Complete the Refuge, Ohlone Audubon Society, Sierra Club, and Greenbelt Alliance	Task 3-3: "Revise regulatory policies, guidelines, or regulations to accelerate natural and nature-based adaptation projects consistent with the overall protection of the health of the Estuary, such as BCDC's policies on sediment management and Suisun Marsh Protection Plan, RWQCBs' sediment reuse and climate change policies, and DSC's Delta Plan climate change policies." Milestone: "Revise three policies, guidelines, or regulations to facilitate natural or nature-based adaptation projects." We support revision of policies pertaining to sediment management and in particular, of beneficial reuse of suitable dredged sediment. However, we strongly urge that efforts to "streamline" or "cut the green tape" for natural and nature-based adaptation projects very narrowly define what actions qualify for consideration as natural and nature-based adaptation projects. Projects that include grey infrastructure or development should not be included in policy or regulation revisions that expedite permit processes and circumvent opportunities for full agency and public review.	Thank you for your comment.
3	Adaptation Planning	Task 3-5	Rachael Hartofelis	Association of Bay Area Governments	Recommend reframing as "Further integrate resilience and natural resource protection into Plan Bay Area..."	Suggested edit made.
3	Adaptation Planning	Task 3-6	Rachael Hartofelis	Association of Bay Area Governments	Is there willingness to broaden the goals to include people? Could this be altered to say "long-term protection of habitats and communities"?	Suggested edit made.
3	Adaptation Planning	Task 3-6	Carin High, Gita Dev, William Hoppes, Sadie Wilson	Citizens Committee to Complete the Refuge, Ohlone Audubon Society, Sierra Club, and Greenbelt Alliance	This is issue absolutely crucial if we are to encourage local communities to consider natural and nature-based solutions in place of traditional grey infrastructure (as appropriate given the location). In reality, sufficient funding will be the limiting factor for implementation of most of the Draft Blueprint identified Actions and Tasks, e.g. Task 2-2, Task 4-1, Task 4-2, Task 10-1, Task 10-2, Task 11-1, Task 11-2, etc. and we need to be working to identify funding mechanisms to support implementation of the Action item	Thank you for your comment.
4	Adaptation Projects	overall Action	Tom Kendall	U.S. Army Corps of Engineers	See comments under Action 3 (Adaptation Planning).	US Army Corps of Engineers has been incorporated as collaborating partner.
4	Adaptation Projects	Overall Action	Susan Schwartz	Friends of Five Creeks	All these sound great, since they focus on getting things done, and the collaborative meetings, done right, should be really valuable. See my general comments and comments on other actions.	Thank you for your comments.
4	Adaptation Implementation	Overall Action	John Bourgeois, Kirsten Struve, Brian Mendenhall	Valley Water	Completing design and implementation are good milestones but is funding associated with this or is it just a tracking mechanism?	This is a tracking task.
4	Adaptation Projects	Task 4-3	Rachael Hartofelis	Association of Bay Area Governments	Is it possible to have an early milestone of high level cost estimates for some of these green-grey approaches that we could integrate into the Funding and Investment Framework (Task 3-6)?	To the extent that cost estimates will necessarily precede implementation that information can inform the funding and investment framework. One direct source of costing info are the applications for grants such as through the Restoration Authority. Lots of great data to be mined from those applications.
4	Adaptation Projects	Task 4-4	Rachael Hartofelis	Association of Bay Area Governments	Suggested: "evaluate project design and costing"	Suggested edit made.
4	Adaptation Implementation	Task 4-4	John Bourgeois, Kirsten Struve, Brian Mendenhall	Valley Water	Add to description "recognize interactions between projects"	Suggested edit made.
4	Adaptation Implementation	Task 4-4	Steve Goldbeck	BCDC	Suggest amending the Milestone language to say "Launch the Shoreline Adaptation Project Mapping Program within EcoAtlas for San Francisco Bay."	Suggested edit made.
5	Watershed Connections	Overall Action	Susan Schwartz	Friends of Five Creeks	Tasks 5-3, 4, and 5 should have priority, I think. Over the years, I have become skeptical of broad, uncritical allegiance to trying to do things for entire watersheds -- the concept is important, of course, but let's get stuff done where we can.	Thank you for your comments.
5	Watershed Connections	Task 5-1	John Bourgeois, Kirsten Struve, Brian Mendenhall	Valley Water	Under milestone section, suggest adding the following at the end: "Also include in demonstration how watershed-based approach leads to ease of permitting and reduced compensatory mitigation." ☐ Valley Water's One Water Plan and may be valid pilot projects for SF Estuary Partnership to consider.	Permitting added to milestone.
5	Watershed Connections	Task 5-2	Laurel Larsen	Delta Science Program	Please see comment above on Task 3-3: The Delta Stewardship Council is working on an amendment to Chapter 4 of the Delta Plan (focused on ecosystems). The Draft PEIR for this effort includes guidelines, a new regulatory policy, recommendations, and performance measures related to ecosystem function and adaptation. This effort is also being carried out in light of new science and understanding of climate change impacts on ecosystems. The Draft PEIR also includes a focus on improving coordination and funding. The background research informing the amendment and the analyses in the Draft PEIR could help inform Task 3-3 and related tasks and actions.	Delta Stewardship Council added as collaborating partner.
5	Watershed Connections	Task 5-2	John Bourgeois, Kirsten Struve, Brian Mendenhall	Valley Water	Under milestone section, suggest adding following at the end: "Also during the workshops present sample multi-benefit projects from various watersheds to illustrate how the tools and documents could be utilized in individual project setting and specific benefits that can be gained."	Text added to milestone to address comment.
5	Watershed Connections	Task 5-4	John Bourgeois, Kirsten Struve, Brian Mendenhall	Valley Water	Under milestone section, suggest adding following at the end: "Also add detailed discussion of any potential hurdles associated with implementation of the management measures and provide strategies how to overcome such hurdles and choose one project to demonstrate success of such strategies	Thank you for your comment. The milestone identified in this task is the next step in advancing these opportunities. A demonstration project will certainly be useful, but not necessarily achievable in the next 5 years due to the research that needs to be done and subsequent relationship building and discussion that needs to happen with dam operators.
5	Watershed Connections	Task 5-4	Steve Goldbeck	BCDC	It is unclear what is meant by the latter half of this sentence, there appears to be a typo.	Edited to address typo.
5	Watershed Connections	Task 5-5	John Bourgeois, Kirsten Struve, Brian Mendenhall	Valley Water	Remove wording 'Coarse' ☐ Under milestone section, suggest adding the following: "Also apply the bay regional sediment strategy to a routine sediment removal program from representative flood protection agency to demonstrate how to optimize opportunities and ways to reduce barriers."	Thank you for your comment.
5	Watershed Connections	Task 5-5	Steve Goldbeck	BCDC	Task 5-5. The strategy for coarse grain sediments should also take into consideration the need for coarse grain sediment in the watershed for species such as salmon, as well as the need for coarse grain sediment in marshes. This concept should be incorporated into the task and milestone.	Language that references the need to consider the need for coarse sediment in the watershed in addition to the bay margin added.

6	Sediment	Overall Action	Laurel Larsen	Delta Science Program	Great idea! There is a big need for studies on whether the planned restoration in the Delta would be feasible over the long term without active management of sediment supply to the Delta. There has been a lot of focus on organic sediment accumulation (i.e., for carbon sequestration), but very little work done on how mineral sediment supply affects the long-term persistence of wetlands. Reading on, we see some actions dealing with the use of dredged sediment. Using dredged sediment to support wetland restoration hasn't been seriously considered in the Delta, so there are likely missed opportunities. I strongly encourage inclusion of the Delta in any regional coordination on the use of dredged sediment.	Thank you for your comment. Task 6-7 calls for the need to conduct a sediment analysis in the Delta similar to the Sediment for Survival report that was released in 2021. The dredged sediment tasks focus on Bay structures (LTMS) and opportunities to advance our understanding of impacts from dredging that are very contextual in nature. Since the Delta does not have a similar foundational understanding of the sediment supply and demand required to meet restoration goals and adapt to climate change, the working group through the synthesis paper was the next big step that needed to happen.
6	Sediment	Overall Action	Susan Schwartz	Friends of Five Creeks	I have heard folks babble on like 6-1 for 20+ years with very little happening. The rest of this may or may not move us forward. But this area should have priority, with emphasis on getting things done.	Thank you for your comment.
6	Sediment	Overall Action	Tom Kendall	U.S. Army Corps of Engineers	<p>The USACE’s new Regional Dredge Material Management Plan includes an information gap analysis concerning beneficial use. Additional information is needed on habitat restoration effectiveness, placement locations, economics, and strategies (including a regional plan). The USACE plans to prioritize and address these information gaps in the future. Furthermore, USACE will be piloting the use of dredge material at a strategic near shore location in FY 2023 to assess the ability of tides and waves to move material onshore to provide resilience (and elevation) to mudflats and marshes. Finally, the projects mentioned below under Subtidal Habitat and Tidal Marsh advance beneficial use of dredge material and involve strategic placement.</p> <p>We hope that USACE can be considered a collaborating partner in this area. Q11</p>	The Water Resources Development Act project and associated monitoring to inform benefits and impacts of the project are included in task 6-2. USACE is listed as lead or collaborating partner on 4 of the 7 tasks.
6	Sediment	Overall Action	Steve Goldbeck	BCDC	Action 6: Description. Suggest eliminating the word “mineral” sediments because most sediment (and soil for that matter) has a mix of mineral and organic matter. Also, this action appears to have inconsistent use of “beneficial reuse” and “beneficial use.” We suggest that the terms in the final document are consistently used where appropriate. Example, title use, and task 6-7 and milestone	Language has been standardized and "mineral" removed.
6	Sediment	Task 6-1	Steve Goldbeck	BCDC	Task 6-1. The milestone does not seem directly connected to the task. Perhaps make the milestone less specific so it tracks better, or create a new task that works better with the milestone. Suggested language change for this milestone: “Evaluate the net impacts/benefits of beneficially reusing sediment to support state and federal funding and selection of beneficial reuse of dredged sediment from federal and other projects. Use the SF Bay Regional Water Quality Control Board’s CEQA analysis for the USACE multi-year permit to incorporate findings supporting beneficial reuse, including, but not limited to hydraulically dredged sediment.”	Thank you for your comment.
6	Sediment	Task 6-2	Steve Goldbeck	BCDC	Task 6-2. Suggest revising the first sentence to read: “Pilot shallow water placement of sediment to determine efficacy in increasing sediment accretion in tidal marshes, and conduct....”	Thank you for your comment.
6	Sediment	Task 6-4	John Bourgeois, Kirsten Struve, Brian Mendenhall	Valley Water	To increase the use of Sedimatch consider making project information entry mandatory and provide added incentive to sediment suppliers by providing mitigation credits	Thank you for your comment. Making SediMatch mandatory may be an outcome of the coordination work under this Task.
6	Sediment	Task 6-4	Steve Goldbeck	BCDC	Task 6-4: It is unclear how the meetings will help develop a programmatic roadmap for beneficial reuse opportunities. Perhaps expand on the outcome or goals of the meetings to support this task?	Thank you for your comment. The task language provides more context to this effect.
6	Sediment	Task 6-4	Steve Goldbeck	BCDC	Task 6-4. Suggest removing the term “long term” before working group, and change the word “increasing” in the second to last line to “increase.” Milestone: suggest removing word: “interagency” from in front of “working group.” As noted in the action, this is more than an interagency working group.	Thank you for your comment. Typos have been addressed. Long-term was a key aspect of this task as it is intended to be a group of practitioners that are planning 5 - 10 years in advance to be able to anticipate and adapt to sediment needs and demands.
6	Sediment	Task 6-6	John Bourgeois, Kirsten Struve, Brian Mendenhall	Valley Water	Prioritize research efforts that lead to acceleration of implementation of individual projects to increase future sediment supplies	Valley Water added as a collaborating partner.
6	Sediment	Task 6-7	John Bourgeois, Kirsten Struve, Brian Mendenhall	Valley Water	Under milestone section, suggest adding following at the end: “As a part of the report, develop different sets of sediment management and monitoring strategies under various future climate scenarios for select OLU.”	Language added regarding mangament and monitoring strategies but does not specify OLU's as that is currently a SF Bay construct and the Delta stakeholders may want to use a different model.
7	Carbon Management	Overall Action	Susan Schwartz	Friends of Five Creeks	All this should have high priority. See general comments.	Thank you for your comments.
7	Carbon Management	Overall Action	Tom Kendall	U.S. Army Corps of Engineers	See comments under Action 1 (Climate Resilience).	US Army Corps of Engineers has been incorporated as a collaborating partner on climate resilience tasks throughout document.
7	Carbon Management	Overall Action	Beth Campbell	U.S. Army Corps of Engineers	<p>The USACE must consider climate change during the planning process for all projects. We have examples of climate resilience in some of our projects even though it may not be a stated goal or objective. For example, the South San Francisco Bay Shoreline Phase I project includes horizontal levees (i.e., fairly wide expanses of sloping marsh with structural levees on the landward side) to allow for tidal habitat migration and refugia.</p> <p>We hope that USACE can be considered a collaborating partner (as described in the 2016 Estuary Blueprint) in these areas.</p>	US Army Corps of Engineers has been incorporated as a collaborating partner on climate resilience tasks throughout the document.
7	Carbon Management	Overall Action	Steve Goldbeck	BCDC	Action 7: Carbon Management. The second sentence of the action description appears to be garbled. It currently reads: “Projects should focus on converting the more subsidized locations on conversion to managed wetlands and in less subsidized locations on conversion to tidal wetlands.” Suggest revising the Milestone in Task 7-4 to read: “Complete at least one scientific paper on the impacts of submerged aquatic vegetation (SAV) on carbon management and the potential of native SAVs to provide sustained carbon storage.”	Suggested edits made.
7	Carbon Management	Task 7-2	Laurel Larsen	Delta Science Program	This is highly relevant to work we are funding by Dennis Baldocchi at UC Berkeley. The project will synthesize long-term information on greenhouse gas budgets and soil carbon accumulation in tidal, nontidal, and restored wetlands.	Thank you for your comment. Delta Stewardship Council has been added as a Collaborating Partner.
7	Carbon Management	Task 7-2	Carin High, Gita Dev, William Hoppes, Sadie Wilson	Citizens Committee to Complete the Refuge, Ohlone Audubon Society, Sierra Club, and Greenbelt Alliance	<p>Task 7-2: Applied research to better understand the processes of carbon sequestration and greenhouse gas emissions generated from wetlands and open water systems in the Bay-Delta. Milestone: Complete 1-3 scientific papers on the carbon implications of land management and wetlands restoration activities in the Delta...” We are encouraged and strongly supportive of the January 18, 2022 SFEP Staff Memo that recommends that this and milestone be modified to include the Bay: “Support and promote carbon sequestration in the Bay as well as the Delta by revising Task 7-2 to support applied research in both the Delta and Bay regions.” We urge that this recommendation be incorporated into the 2022 Blueprint. Furthermore, given the governance gaps that we discussed earlier in this comment letter, we strongly urge SFEP to further modify the Carbon Management Action by introducing the potential for voluntary carbon credit funding for wetland restoration within the Bay. We also believe it is imperative that a pilot tidal wetland restoration project that “uses American Carbon Registry Standards to qualify for the voluntary carbon market” be established within the Bay and not just in the Delta as was mentioned during the public comment session. The process of closing governance gaps may take time, the implementation of a pilot project within the boundaries of the Bay may help to incentivize communities to consider tidal wetlands restoration projects in their Climate Adaptation Strategies and signals the importance of tidal wetlands in the draw down and sequestration of atmospheric carbon.</p>	The Bay has been added to task 7-2 and its milestone. Task 7-6 outlines the next step the region needs to take to show proof of concept for use of ACR standards to access the voluntary carbon market. This is to set the region up to be able to use such a demonstration project to access the compliance market, which is going to have far more funding flowing through it than the voluntary market. If we can get one demonstration project, this would set up both subregions (bay/delta) with the pilot they need to transition into the compliance market with more certainty.
7	Carbon Management	Task 7-4	Laurel Larsen	Delta Science Program	<p>It may be that we lack the context, but we question why this action is specific to SAV, as well as the basic premise that SAV can provide sustained carbon management services. Judy Drexler has done some definitive work on the extent to which nonnative SAV sequester carbon. She found that while Egeria densa may capture sediment and sequester carbon, it may inhibit long-term sequestration on marshes by capturing the sediment that would otherwise be routed to long-term storage on the marsh platform (and hence potentially endanger the persistence of the marsh in the face of SLR).</p> <p>①Drexler, J. Z., Khanna, S., & Lacy, J. R. (2021). Carbon storage and sediment trapping by Egeria densa Planch., a globally invasive, freshwater macrophyte. Science of the Total Environment, 755, 142602.</p> <p>②Lacy, J. R., Foster-Martinez, M. R., Allen, R. M., & Drexler, J. Z. (2021). Influence of invasive submerged aquatic vegetation (E. densa) on currents and sediment transport in a freshwater tidal system. Water Resources Research, 57(8), e2020WR028789.</p>	This task is focused on native SAVs. The Coastal Conservancy and Ocean Protection Council agree that more data is needed on native SAVs and their carbon sequestration potential.
7	Carbon Management	Task 7-5	Laurel Larsen	Delta Science Program	Highly relevant to work that DSC is funding, including Dennis Baldocchi at Berkeley (see above comment) and Peter Hernes at the USGS, who is working on detrital contributions to food webs in the Delta. Dennis Baldocchi is an excellent point person for new and existing flux towers in the Delta. A new one is being installed as part of the project DSC is funding.	Thank you for your comment. This is helpful context. This task, however, is specifically addressing the lack of data in the Bay and the need to collect that data to understand carbon fluxes in SF Bay wetlands.
7	Carbon Management	Task 7-6	Laurel Larsen	Delta Science Program	The Delta Conservancy has led a lot of work on this and should be listed as a task lead.	Delta Conservancy is listed as a lead.

8	Wetland Monitoring	Overall Action	David Ayers	UC Davis	<p>I am an active member of the tidal wetland research community in the Bay Delta yet I'm only now learning about many of the consortiums in this area, including the Estuary Blueprint. I am familiar with WRMP but find many restoration oriented scientists are not.</p> <p>Thus, I feel the following tasks should be incorporated into the final draft of the 2022 Estuary Blueprint.</p> <p>1) Develop an updated organizational chart to describe the myriad agencies and groups charged with wetland monitoring, research, restoration, compliance, etc.</p> <p>2) Increase exposure to these groups by presenting at the IEP, Tidal Wetland Project work team where many Bay Delta wetland scientists convene twice yearly.</p>	Thank you for your comments.
8	Wetland Monitoring	Overall Action	Susan Schwartz	Friends of Five Creeks	I'm all for the WRMP, but why does it need 3-5 new funding sources?	Thank you for your comments. These new funding sources have already been identified by the WRMP Steering Committee and could fund the program at a sustainable level as it is getting established.
8	Wetland Monitoring	Overall Action	Tom Kendall	U.S. Army Corps of Engineers	<p>Two USACE staff are active participants on the Wetland Regional Monitoring Program Technical Advisory Committee (TAC) and Fish & Fish Habitat (FFH) Workgroup, respectively. The FFH Workgroup has nearly completed the development of Standard Operation Procedures (SOP) for wetland monitoring, and the TAC has been updated regularly on the progress of the SOP document.</p> <p>The USACE collected monitoring data at Sonoma Baylands for 20 years ending in 2016 and is in year 7 of a 15-year monitoring and adaptive management program at the Hamilton Wetland Restoration Projects. Monitoring of the effects of dredging on eelgrass occurring near Richmond and Oakland federal channels has generated seasonal and annual eelgrass maps at these locations.</p> <p>We hope that USACE can be considered a collaborating partner in this area.</p>	US Army Corps of Engineers been incorporated as a Collaborating Partner for relevant tasks.
9	Subtidal Habitats	Overall Action	Susan Schwartz	Friends of Five Creeks	There are an estimated 2,880 acres of eelgrass in San Francisco Bay, and an estimated 8000 acres of suitable habitat. Increasing this by 75 acres in five years, after many years of research (and as far as know no check on what happened with all the eelgrass "restored" as Bay Bridge mitigation) sounds pretty paltry. Are the new projects in other areas going to get things done or provide employment for researchers, consultants, and postdocs (as we have seen before).	Thank you for your comments. Eelgrass restoration is can be very ephemeral and vary throughout the year and between years. A task to complete a habitat suitability model is included to better target restoration efforts. Just over 75 acres were restored in the last 5 years and the milestone reflects the hope to at least hit that same mark again, if not improve on it. The suitability model will also help target restoration to the areas that are likely to be more successful for eel grass beds to be sustained for a long period of time.
9	Subtidal Habitats	Overall Action	Tom Kendall	U.S. Army Corps of Engineers	<p>The Middle Harbor Enhancement Area is a subtidal restoration project intended to produce several acres of eelgrass beds and habitat as well as improved hydrology. Initial monitoring results from 2020 to 2021 show improved habitat function for shorebirds, California least tern, and brown pelican.</p> <p>We hope that USACE can be considered a collaborating partner in this area.</p>	US Army Corps of Engineers added as collaborating partner to Task 9-2
9	Intertidal/Sub tidal Habitats	Overall Action	Steve Goldbeck	BCDC	Action 9: Subtidal Habitat. The description and Task 9-5 states "... enhance non-tidal marsh intertidal, unvegetated tidal flat, and subtidal habitats...". This sentence is not clear, why is "non-tidal marsh" included in a Subtidal Habitat task? Does Task 9-2 take into consideration that some SAV, particularly eelgrass beds, expand and contract seasonally? Suggest revising Task 9-3 to read "Increase populations of native oysters (Ostrea lurida) by expanding the extent of existing beds or establishing new beds, including as use for living shorelines."	This action is not solely a subtidal habitat action, rather it includes intertidal habitat as well (but not tidal marsh). Task 9-2 does take into consideration the fluctuations of SAV seasonally and between years, but the working group still decided to go with acres covered rather than projects. For Task 9-3, nothing precludes the expansion or establishment of new beds as part of a "living shoreline" project.
9	Intertidal/Sub tidal Habitats	Task 9-4	Steve Goldbeck	BCDC	Action 9: Task 9-4. It may be that working directly with the regulatory agencies rather than through BRRIT would more quickly advance the milestone due to limited capacity of BRRIT staff, and issues that are broader than BRRIT. Also, if you change to work with regulatory agencies, it does not preclude working with the BRRIT. Suggest revising Task 9-4 to read "Work with the regulatory agencies, including the Bay Restoration Regulatory Integration Team (BRRIT) to raise awareness of the status of eelgrass, native oysters (Ostrea lurida), and other types of subtidal habitat restoration projects and benefits documented to date; and advance discussions on permitting issues with respect to native oyster (Ostrea lurida), gravel beach, and other restoration projects.	Suggested edit made.
9	Intertidal/Sub tidal Habitats	Task 9-5	Steve Goldbeck	BCDC	Task 9-5 milestone. Please correct spelling of "course" to coarse sediment beaches in.	Suggested edit made.
10	Tidal Marsh	Overall Action	David Ayers	UC Davis	<p>I feel the following tasks should be incorporated into the final draft of the 2022 Estuary Blueprint:</p> <p>1) Develop a regionally standardized approach (i.e., hydrosatial model) to measure tidal wetlands as habitat for imperiled fish species.</p> <p>2) Generate a priori comparisons across future wetland design alternatives (i.e., habitat opportunity per excavation cost, habitat opportunity per tidal energy cost) and sea level rise scenarios (i.e., habitat opportunity across time)</p> <p>3) Discern how various flow management actions would affect fish habitat opportunity in tidal wetlands, maximizing compatibility between flow and ecosystem restoration goals.</p> <p>Please contact me with any thoughts or questions at deayers@ucdavis.edu</p>	Thank you for your comments. These detailed research suggestions are more appropriate for consideration during action implementation.
10	Tidal Marsh	Overall Action	Susan Schwartz	Friends of Five Creeks	High priority for all these -- get things done.	Thank you for your comments.
10	Tidal Marsh	Overall Action	Tom Kendall	U.S. Army Corps of Engineers	<p>Sonoma Baylands and Hamilton Wetland Restoration Project sites are intertidal marshes constructed as part of our Habitat Restoration Mission; Bel Marin Keys will be the next intertidal marsh project constructed for the same purpose. The South San Francisco Bay Shoreline Phase I and II projects are multipurpose and intended to address both flood risk management and habitat restoration objectives in part through the creation of intertidal marsh.</p> <p>We hope that USACE can be considered a collaborating partner in this area.</p>	Collaborating partners for tidal marsh restoration are extensive. Language has been developed to broadly encompass all potential collaborating partners.
10	Tidal Marsh	Overall Action	Steve Goldbeck	BCDC	Action 10- Tidal Marsh. Task 10-2 States "Protect San Francisco Bay historical Baylands (tidal marsh and non-tidal wetlands and waters)..." to support migration and preservation of tidal habitats. Suggest clarifying the wording to include subsided historical baylands that are not currently wetlands. Do the acres of tidal marsh restored in Task 10-1 milestone include the number of tidal marsh acres enhanced in Task 10-3 milestone?	Task revised to more clearly focus on areas within historical bayland margins that are either currently still tidal marsh or are currently non-tidal wetlands and waters). The Blueprint is relying on the SF Bay Joint Venture tracking mechanisms to track restoration and enhancement acres separately.
10	Tidal Marsh	Task 10-4	Carin High, Gita Dev, William Hoppes, Sadie Wilson	Citizens Committee to Complete the Refuge, Ohlone Audubon Society, Sierra Club, and Greenbelt Alliance	Environmental impacts of proposed new ferry routes that utilize existing facilities are currently not being analyzed by the California Public Utilities Commission. The CPUC is the only agency overseeing common carrier movement on the bay and all its navigable tributaries, including rivers, creeks and delta waters. Moreover, MTC/ABAG at their last public meeting 2 (January 14, 2022) emphasized revising policy to include ferry services as new transit systems that will serve as hubs for new development. An "on-demand" ferry service (somewhat like Uber-style ferry boats) was authorized by the CPUC in 20213. The most recent privatized ferry proposal was to approve "on-demand" ferry service, utilizing existing facilities, for the entire bay including navigable tributaries. Existing studies by the USGS have demonstrated impacts to waterbirds from ferries when crossing the Bay. Wakes from ferries can erode tidal wetlands adjacent to ferry routes. Tidal wetland ecosystems and existing and potential wildlife habitat, along new proposed ferry routes, should be protected from the wakes of water-based transportation such as ferry boats, including hovercraft.	Thank you for your comment. This is an emerging issue that will be tracked and considered for inclusion in future Blueprint updates.
11	Transition Zones	Overall Action	Susan Schwartz	Friends of Five Creeks	Notable lack of acreage goals here. Yes on workgroup meetings if folks can be honest about what has failed and why.	Thank you for your comments.
11	Transition Zones	Overall Action	Tom Kendall	U.S. Army Corps of Engineers	<p>See comments under Action 1 (Climate Resilience)</p> <p>See comments under Action 1 (Climate Resilience)</p>	Language has been developed to broadly encompass all potential collaborating partners.
12	Managed Wetlands	Overall Action	Laurel Larsen	Delta Science Program	These topics are quite relevant to the Delta, but the "managed ponds" terminology in the main action is a bit restrictive. "Managed wetlands" or "managed ponds and wetlands" may be more appropriate to encompass the nontidal habitats in the upper SFE that are managed for food web subsidies, carbon sequestration, and wildlife. This also includes seasonally inundated, managed floodplains in places like the Yolo Bypass, where experiments have been underway to evaluate pulsed flow strategies to provide fish rearing habitats and food web subsidies to local and downstream habitats. This set of tasks is relevant to the science action 3E in the 2022-2026 draft SAA, "Test and monitor the ability of tidal, nontidal, and managed wetlands and inundated floodplains to achieve multiple benefits over a range of spatial scales, including potential management costs, tradeoffs, and unintended consequences". Additional collaborating science partners for these actions in the Delta include Ducks Unlimited, Suisun Resource Conservation District, California Waterfowl, UC Davis, the Yolo Basin Foundation, and CDFW.	Suggestions have been incorporated.
12	Managed Wetlands	Overall Action	Steve Goldbeck	BCDC	Action 12- Managed Wetlands. It appears that this action is intended to encompass any non-tidal wetlands that are under management. However, the next action addresses seasonal wetlands, so it is unclear whether they are part of this action as well if they are managed? it might be useful to clarify this section. There also appears to be overlap in what is being described in Action 9, Action 10, and 12. Given that habitat management in the region has evolved to consider complete landscapes, including both subtidal areas and transitional uplands, perhaps there might be ways to express that understanding across the actions. The Task 12-2 text is the same as Task 11-2 and appears to be language more suited for Action 11.	Action text has been modified to more clearly describe the difference between the managed wetlands habitats this action focuses on and the seasonal wetlands of Action 13. Splitting the habitat types up is not ideal for promoting restoration of complete landscapes, but splits/definitions are consistent with how success is being tracked by others (such as EcoRestore and SF Bay Joint Venture).

12	Managed Wetlands	Overall Action	Yiwei Wang	SF Bay Bird Observatory	appreciate inclusion of predation, but want to emphasize that native predators are also an issue and predators are likely the biggest impediment for species recovery for snowy plovers and California Least Terns. Suggest that Task 12 include recommendation for modeling waterbird responses to future restoration scenarios	Thank you for your comment. Action 12 includes various tasks focused on understanding and maximizing habitat benefits of managed ponds for various species under both current and future scenarios.
12	Managed Wetlands	Task 12-3	Yiwei Wang	SF Bay Bird Observatory	Document does not mention the need to manage some ponds as salt panne habitat Task 12-3 calls for comparing species use and density in non-tidal wetlands relative to tidal wetland habitats, which overlooks the importance of dry panne habitat for Snowy Plovers, avocets, and stilts. This habitat will inherently support lower species diversity but is vital for these species. Due to the unique habitat requirements for Snowy Plovers (and to a lesser degree avocets and stilts), there should be a separate task to assess the management of dry pond habitat on these species populations	Thank you for your comment. The overall intent of Action 12 is to maximize habitat benefits of various types of managed ponds, including those with salt panne habitat. Task 12-4 recognizes the need to assess current habitat benefits for multiple species when considering long-term costs and benefits of managed ponds.
12	Managed Wetlands	Task 12-4	Laurel Larsen	Delta Science Program	Expanding the terminology to include managed ponds, managed wetlands, and inundated floodplains is particularly important here. The methodology should also account for the costs/benefits of how the water is "sourced" from the upper Estuary and how the actions impact partners that must undertake particular reservoir operations and/or use of agricultural infrastructure to make flow actions happen.	Suggestions have been incorporated.
13	Seasonal Wetlands	Overall Action	Susan Schwartz	Friends of Five Creeks	Trivia: 13-1 and 2 overlap in confusing ways. Rephrase. Stock ponds are not exactly seasonal wetlands -- change the title, put them somewhere else?	Task 13-1 is focused on protecting existing seasonal wetlands while task 13-2 is focused on restoring seasonal wetlands. Task 13-3 has been reworded to distinguish between natural seasonal wetlands and constructed stock ponds.
13	Seasonal Wetlands	Overall Action	John Bourgeois, Kirsten Struve, Brian Mendenhall	Valley Water	This action should be either combined with Action 8 (Wetland Regional Monitoring Program) or placed next to it.	Thank you for your comment. Action 8 is focused on monitoring for tidal marsh while this action is focused on upland seasonal wetlands.
14	Creeks	Overall Action	Susan Schwartz	Friends of Five Creeks	BAWN has never functioned except as a paper group. Lists are not updated, meetings when they were held just were used to give apparent approval to SFEP ideas. All this sounds like pipedreams based on a "community" that hardly exists. Except for 14-4, most useful might be to just look at what has really happened, what has succeeded, failed, or been maintained for long periods (very important), and re-think. I note that 14-5 was never finished; this would be a great pilot but as someone who has tried, I wouldn't count on much.	Thank you for your comments
14	Creeks	Overall Action	Tom Kendall	U.S. Army Corps of Engineers	The Upper Guadalupe River Construction Project has flood risk management as the primary purpose. However, objectives will be achieved while restoring protected salmonid species habitat through barrier removal, construction of floodplain benches, riparian restoration, etc. The USACE has a restoration mission on other creeks outside of San Francisco Bay such as Dry Creek, tributary to the Russian River. This mission could be applied to key San Francisco Bay tributaries as well. We hope that USACE can be considered a collaborating partner in this area.	US Army Corps of Engineers has been added as collaborating partner where appropriate.
14	Creeks	Task 14-2	John Bourgeois, Kirsten Struve, Brian Mendenhall	Valley Water	Milestone: BAWN is not a well-funded or attended association. Suggest adding a milestone to fund BAWN to expand their influence.	Task and milestone have been revised to expand focus beyond just BAWN.
14	Creeks	Task 14-3	John Bourgeois, Kirsten Struve, Brian Mendenhall	Valley Water	Milestone: Rather than annual lists, put effort and funding into watershed plans that identify priority actions. This would also meet the intent of Regional Board watershed plans/profiles.	Funding and technical resources are needed to develop watershed plans. The task as written looks to compile funding needs lists for this purpose (among others).
15	Invasive Species	Overall Action	Susan Schwartz	Friends of Five Creeks	Pretty much common sense, but notably vague, making me think that little will happen.	Thank you for your comments.
15	Invasive Species	Overall Action	Laurel Larsen	Delta Science Program	There is frequent mentioning of "key invasive species" – consider clarifying what these are, how they are defined, and/or if they should be identified as part of a task.	Text in Action 15-5 revised to better define what species to prioritize with respect to eradication and control. The language is purposely somewhat vague to allow for flexibility and to work through the organizations and coordinating bodies that prioritize which species to work on.
15	Invasive Species	Overall Action	Andrew Cohen, Miyoko Sakashita, William Jennings, Marcie Keever, Gary Bobker, Rachel Zwillinger, Ron Stork, Marc Holmes, Ben Eichenberg, David Lewis, Ted Lempert, Marcia Brockbank, David Helvarg, Linda Hunter, Barbara Barrigan-Parilla, Linda Sheehan, Glenn Phillips, Katharine Noonan, Daniel Glusenkamp, Chance Cutrano, Will Travis	Center for Research on Aquatic Bioinvasions, Center for Biological Diversity, California Sportfishing Protection Alliance, Friends of the Earth, The Bay Institute, Defenders of Wildlife, Friends of the River, California Ballast Water Advisory Committee, San Francisco BayKeeper, Save the Bay, Former Assemblymember and author of California's ballast water law, San Francisco Estuary Project (retired), Blue Frontier, Wild Oyster Project, Restore the Delta, Environment Now, Golden Gate Audubon, Rotary Nature Center Friends and Lake Merritt Institute, California Institute for Biodiversity, Sierra Club San Francisco Bay Chapter, San Francisco Bay Conservation and Development Commission (former Director) and recipient of the San Francisco Estuary Partnership's Jean Auer Environmental Award	The San Francisco Bay/Delta ecosystem is generally recognized as the most invaded estuary in the world; ballast water is the dominant vector introducing non-native species into the estuary from other parts of the world; and preventing new invasions is the most important and effective action that can be taken to address the problem of aquatic invasive species. It is thus striking that the proposed San Francisco Estuary Blueprint says nothing whatsoever about ballast water and contains no action of any kind to reduce the introduction of non-native species in ballast discharges. This oversight should be corrected. Specific actions to promote the effective regulation of ballast water discharges to reduce the risk of introducing harmful invasive species should be included in the Blueprint as priority actions.	Thank you for your comments. Invasive species prevention has always been a high priority in the Blueprint and is the focus of Task 15.1 which aims to maintain, expand, and improve invasive species prevention programs. The task is meant to cover all key vectors including ballast water. The task has been revised to specifically mention key vectors, including ballast water.
15	Invasive Species	Overall Action	Andrew Cohen, Miyoko Sakashita, William Jennings, Marcie Keever, Gary Bobker, Rachel Zwillinger, Ron Stork, Marc Holmes, Ben Eichenberg, David Lewis, Ted Lempert, Marcia Brockbank, David Helvarg, Linda Hunter, Barbara Barrigan-Parilla, Linda Sheehan, Glenn Phillips, Katharine Noonan, Daniel Glusenkamp, Chance Cutrano, Will Travis	Center for Research on Aquatic Bioinvasions, Center for Biological Diversity, California Sportfishing Protection Alliance, Friends of the Earth, The Bay Institute, Defenders of Wildlife, Friends of the River, California Ballast Water Advisory Committee, San Francisco BayKeeper, Save the Bay, Former Assemblymember and author of California's ballast water law, San Francisco Estuary Project (retired), Blue Frontier, Wild Oyster Project, Restore the Delta, Environment Now, Golden Gate Audubon, Rotary Nature Center Friends and Lake Merritt Institute, California Institute for Biodiversity, Sierra Club San Francisco Bay Chapter, San Francisco Bay Conservation and Development Commission (former Director) and recipient of the San Francisco Estuary Partnership's Jean Auer Environmental Award	(continued) Two relevant points should be recognized. First, the failure to effectively regulate ballast water discharges is a public health threat as well as a critical environmental threat. Scores of human pathogens, including bacteria, viruses and protozoans, have been identified in ballast water. These include the causative agents of infectious and non-infectious diseases, nosocomial and wound infections, as well as microbes that produce air-borne toxins. Studies have also shown alarmingly high levels of antibiotic resistance in ballast water bacteria. Some of these pathogenic bacteria have been carried by ballast water into new parts of the world, including the United States, where they contaminated food or water supplies and made people ill. In the 1990s, ballast water introduced an emergent strain of infectious waterborne disease into South America that killed over 10,000 people. Note that ballast water from overseas is discharged into the Delta upstream of intakes that provide drinking water to over 25 million Californians. Also, the communities most at risk from the spread of introduced waterborne diseases are generally poorer communities and communities of color, due to generally weaker water treatment, wastewater treatment and public health infrastructure, so that the government's ongoing failure to implement the level of protection from the discharge of human pathogens in ballast water mandated by the Clean Water Act could be construed as an environmental injustice. Second, although in 2006 the California Legislature drafted and passed and the Governor signed into law the strongest ballast water discharge regulations in the world in order to protect the health and environmental safety of all Californians, the responsible state agency never implemented those regulations. Eventually, Congress took away California's authority to implement its own ballast water law, when it passed the Vessel Incidental Discharge Act (VIDA) in December 2018. Thus, the only remaining possible pathway to effective regulation of ballast discharges is to persuade the federal government to adopt and implement the necessary discharge limits.	Thank you for your comments. We agree that preventing invasive species introductions and pathogens from ballast water discharge is a challenge and a high priority for the San Francisco Estuary. Ballast water is a key vector that is addressed in Action 15 on invasive species. This vector in particular involves many agencies and organizations described in more detail in the next response, below.

		Overall Action	Andrew Cohen, Miyoko Sakashita, William Jennings, Marcie Keever, Gary Bobker, Rachel Zwillinger, Ron Stork, Marc Holmes, Ben Eichenberg, David Lewis, Ted Lempert, Marcia Brockbank, David Helvarg, Linda Hunter, Barbara Barrigan-Parilla, Linda Sheehan, Glenn Phillips, Katharine Noonan, Daniel Glusenkamp, Chance Cutrano, Will Travis	Center for Research on Aquatic Bioinvasions, Center for Biological Diversity, California Sportfishing Protection Alliance, Friends of the Earth, The Bay Institute, Defenders of Wildlife, Friends of the River, California Ballast Water Advisory Committee, San Francisco BayKeeper, Save the Bay, Former Assemblymember and author of California's ballast water law, San Francisco Estuary Project (retired), Blue Frontier, Wild Oyster Project, Restore the Delta, Environment Now, Golden Gate Audubon, Rotary Nature Center Friends and Lake Merritt Institute, California Institute for Biodiversity, Sierra Club San Francisco Bay Chapter, San Francisco Bay Conservation and Development Commission (former Director) and recipient of the San Francisco Estuary Partnership's Jean Auer Environmental Award	<p>(continued)</p> <p>The Blueprint should be amended to include the following actions:</p> <p>(1) The Estuary Partners, including the State of California, should use all available means to persuade the U.S. Environmental Protection Agency (US EPA) to adopt limits on harmful non-native organisms and human pathogens in ballast discharge that comply with the Clean Water Act. The Act requires US EPA to base these discharge limits on what can be achieved by use of the "Best Available Technology." Specifically, US EPA should (a) immediately withdraw its proposed discharge limits (published in late 2020 by the previous administration), which had already been rejected by the Second Circuit Court of Appeals for failing to comply with the minimum requirements of the Clean Water Act, and had earlier been found by US EPA and other federal agencies to be far too weak to protect the environment or public health; and (b) immediately develop and publish a new proposed rule based on the Best Available Technology as defined by the Clean Water Act.</p> <p>(2) The Estuary Partners should insist that US EPA base the ballast water discharge limits on the highest level of treatment that could be achieved using the best available water or wastewater treatment technology employed in purpose-built ballast water treatment plants constructed onshore at or near ports, consistent with long-established Clean Water Act case law holding that "available technology" includes treatment technology used by other industries; unless it is determined that onshore treatment is "economically infeasible" within the meaning of the Clean Water Act. In that case, US EPA should adopt discharge limits based on the highest level of treatment that can be achieved by shipboard treatment systems, as demonstrated by the publicly-available test performance of the most effective shipboard ballast water treatment system. The publicly-available test data have been reviewed twice: in a report released by Friends of the Earth, and in an article published in a peer-reviewed scientific journal by three former members of the US EPA's Science Advisory Board Panel on Ballast Water Treatment. Both reviews found that the best commercially-available ballast water treatment systems currently in use on some ships consistently demonstrated levels of treatment that are hundreds or thousands of times more effective than is required by US EPA's current proposed rule.</p> <p>(3) US EPA has argued that the best data for determining the Best Available Technology among shipboard ballast water treatment systems are test data submitted by shipboard ballast water treatment system manufacturers to obtain US Coast Guard approval for the use of their treatment systems in US waters. However, the Coast Guard has refused to release those data to the public and denied Freedom of Information Act requests submitted by the State of California and by scientists. The State of California should sue the Coast Guard to immediately release to the public all test data in its possession on the effectiveness of shipboard ballast water treatment systems.</p>	<p>Thank you for your comments. Invasive species prevention has always been a high priority in the Blueprint and is the focus of Task 15-1 which aims to maintain, expand, and improve invasive species prevention programs. The task is meant to cover all key vectors including ballast water (which is a high priority) and was developed with the input of many partners engaged in invasive species prevention. The Estuary Blueprint is a collaborative document and the tasks in the Blueprint are generated with the input of the entities responsible for implementing the tasks. Each task has one or more leads who have agreed to take a lead role in advancing the task as well as identified collaborating partners who, in addition to the lead, will be engaged in accomplishing the task. The Blueprint does not include tasks that direct the action of entities without the approval of those entities.</p> <p>Some of the work that is ongoing and will be the focus of 15-1 includes: The ongoing work of the Federal Aquatic Nuisance Species Task Force (ANSTF). One of the high priorities of this committee is to evaluate and implement the roles and responsibilities of the ANSTF agencies under the Vessel Incidental Discharge Act (VIDA) and to make sure there is meaningful and substantive consultation with the states. SFEP will continue work with the California State Lands Commission and other key state and federal agencies through the ANSTF, the Western Regional Panel on Aquatic Nuisance Species Coastal Committee, the Pacific Ballast Water Group, Western Governors Association, and other coordinating bodies and technical advisory groups to develop and expand ballast water management and other prevention programs as a milestone under the prevention task. The identified leads for Task 15-1 are: California Invasive Plant Council, California Department of Food & Agriculture, California Department of Fish & Wildlife, California State Lands Commission, San Francisco Estuary Partnership, and the US Fish & Wildlife Service. The identified collaborating partners for Task 15-1 are: California State Parks Division of Boating and Waterways, Delta Conservancy, Delta Stewardship Council, National Oceanic and Atmospheric Administration, PlantRight Partnership, San Francisco Bay Regional Water Quality Control Board, Central Valley Regional Water Quality Control Board, California State Coastal Conservancy's Invasive Spartina Project, San Francisco Bay National Estuarine Research Reserve, Suisun Resource Conservation District, US Army Corps of Engineers, US Coast Guard, US Department of Agriculture, and the US Environmental Protection Agency.</p>
15	Invasive Species	Overall Action	Andrew Cohen, Miyoko Sakashita, William Jennings, Marcie Keever, Gary Bobker, Rachel Zwillinger, Ron Stork, Marc Holmes, Ben Eichenberg, David Lewis, Ted Lempert, Marcia Brockbank, David Helvarg, Linda Hunter, Barbara Barrigan-Parilla, Linda Sheehan, Glenn Phillips, Katharine Noonan, Daniel Glusenkamp, Chance Cutrano, Will Travis	Center for Research on Aquatic Bioinvasions, Center for Biological Diversity, California Sportfishing Protection Alliance, Friends of the Earth, The Bay Institute, Defenders of Wildlife, Friends of the River, California Ballast Water Advisory Committee, San Francisco BayKeeper, Save the Bay, Former Assemblymember and author of California's ballast water law, San Francisco Estuary Project (retired), Blue Frontier, Wild Oyster Project, Restore the Delta, Environment Now, Golden Gate Audubon, Rotary Nature Center Friends and Lake Merritt Institute, California Institute for Biodiversity, Sierra Club San Francisco Bay Chapter, San Francisco Bay Conservation and Development Commission (former Director) and recipient of the San Francisco Estuary Partnership's Jean Auer Environmental Award	<p>(continued)</p> <p>(4) The Governor should submit to the US EPA Administrator (pursuant to the relevant section in VIDA) a formal objection to the proposed discharge limits and request their replacement with limits based on the Best Available Technology as required by the Clean Water Act, ordered by the Second Circuit Court of Appeals, and described above.</p> <p>(5) Because US EPA has failed to meet the legal deadlines in VIDA for adopting new ballast water discharge limits, and by its actions has demonstrated that it is in no hurry to adopt new limits but rather is willing to continue to leave in place, indefinitely, the limits rejected by the Second Circuit in 2015, and because VIDA allows states to enforce their own ballast water laws and regulations until US EPA promulgates new limits, California should immediately begin enforcing the discharge limits that the State enacted in 2006. Alternatively, California could expeditiously develop, adopt and enforce discharge limits based on the Best Available Technology, as described above.</p> <p>(6) If US EPA fails to adopt ballast water discharge limits based on the Best Available Technology as described above, Estuary Partners including the State of California should join with regional and national environmental organizations in suing the US EPA under the Clean Water Act. It should be noted that since the initial Comprehensive Conservation and Management Plan was published (forerunner to the Estuary Blueprint), environmental organizations have sued US EPA four times over its failure to implement ballast water discharge limits as required by the Clean Water Act, and won each time; that the Court held in the most recent lawsuit that the discharge limits that US EPA is now proposing fail to meet the minimum requirements of the Clean Water Act; that the Court ordered US EPA to revise those limits accordingly; and that by proposing to simply re-adopt the limits that the Court rejected US EPA is openly defying the Court order. Note that the states of New York, Wisconsin, Michigan, Minnesota, Illinois and Pennsylvania previously filed amici curiae briefs in support of the environmental position.</p> <p>(7) In addition, the California Department of Health, local public health authorities, and the offices of the Attorney General and District Attorneys should consider what other powers they may have pursuant to their responsibilities to protect the health and safety of Californians that could be used to prevent the release of potentially fatal human pathogens into the drinking water sources for 25 million Californians, or into marine or fresh waters where such pathogens could infect seafood consumed by Californians or could infect wounds of people working or bathing in such waters.</p>	
15	Invasive Species	Task 15-3	Laurel Larsen	Delta Science Program	The Delta Interagency Invasive Species Committee (or DIISC), after organizing a December 15, 2021, symposium on EDRR is in the process of developing a draft EDRR plan for the Delta. This work is being led by the Delta Conservancy and the Delta Science Program.	Thank you for your comments. Delta Conservancy and Delta Stewardship Council are listed as Task Leads for this task, along with USFWS. The EDRR plan for the Delta is included in the scope of this task.
16	Freshwater Flows	Overall Action	Susan Schwartz	Friends of Five Creeks	Seems like a priority where previous strategies haven't done so well. No idea what might work.	Thank you for your comments.
16	Freshwater Flows	Task 16-1	John Bourgeois, Kirsten Struve, Brian Mendenhall	Valley Water	How is this task different from the existing SWRCB public process for updating and implementing the Bay-Delta WQCP?	This task is referring to the State Water Resources Control Board process and has been reworded for clarity. State Water Resources Control Board is the Task Lead.
16	Freshwater Flows	Task 16-2	Laurel Larsen	Delta Science Program	The Sacramento River Science Partnership is working on this. NMFS has been taking the lead on life cycle modeling for winter-run Chinook salmon, which also seems relevant.	Sacramento River Science Partnership and NOAA have been listed as collaborating partners.
16	Freshwater Flows	Task 16-5	Laurel Larsen	Delta Science Program	<p>It is a little unclear about whether this action is seeking to promote institutional change or take action on specific science items (e.g., the synthesis component). Is there a way to clarify the intent of this task, perhaps via the milestone(s).</p> <p>--In 2014 the Delta Science Program chartered a synthesis effort for the SWRCB about instream flow methods for tributaries to the Bay-Delta: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/flow_objectives/docs/delta_science_rpt_022014.pdf</p> <p>--And SWRCB (and many others) are working on instream flow/unimpaired flow requirements for (cold water beneficial uses like Chinook salmon) Sacramento River and the entire Estuary.</p> <p>--A DSP independent review in 2019 "Biological Goals Advisory Panel" has also informed the process: https://deltacouncil.ca.gov/pdf/science-program/biological-goals/2019-09-18-April-2019-biological-goals-final-report.pdf</p> <p>--SWRCB has drafted goals for the lower San Joaquin, including a good synthesis of existing science: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/docs/biological_goals/draft_biological_goals.pdf</p>	Task has been reworded to clarify confusion; the intent is to synthesize recent studies to help inform updated flow management recommendations.
16	Freshwater Flows	Task 16-5	John Bourgeois, Kirsten Struve, Brian Mendenhall	Valley Water	In order to be actionable, development of instream flow recommendations needs to consider all beneficial uses of those flows and balance the environmental and human needs as well as the needs of salmon with those of other native species like delta and longfin smelt. Suggest that this task include a robust stakeholder engagement element.	This task has been reworded for clarity.
17	Water Conservation	Task 17-1	Laurel Larsen	Delta Science Program	In case of interest, we'd like to highlight a remote sensing-based effort to quantify water use. Although focused on agricultural fields, it can help augment or replace water meter data in some areas: https://openetdata.org/ .	Thank you for your comments
17	Water Conservation	Task 17-1		Alameda County Water District	<p>ACWD supports the inclusion of Task 17-1 and the advancement of "smart" water meters and monitors, but suggests modifying Task 17-1 and its milestone language as follows to further encourage agencies throughout the Estuary to pursue smart water meter and monitor installation:</p> <p>Task 17-1: Advance the installation of 'smart' water meters and monitors, including Advanced Metering Infrastructure or AMI, as industry best practice throughout the Estuary and provide support for obtaining funding for agencies working towards this goal.</p> <p>Milestone: All major water agencies to be substantially advanced in early phase conversion to 'smart' water meters, such as pilot testing or proof of concept.</p>	Suggested edit made.
17	Water Conservation	Task 17-2		Alameda County Water District	<p>ACWD supports making improvements in indoor and outdoor water use efficiency through programs like BayREN, but the milestone of enrollment of 18 municipal water utilities specifically in the BayREN water upgrades \$ave Program may pose some logistical challenges for some agencies, such as billing system configurations and other potential issues with implementation. SFEP is encouraged to update this task to reflect an approach that would provide flexibility for agencies and achieve the same goal with the addition of the following language in [capitalization]: "TASK 17-2: Expand BayREN OR SIMILAR WATER EFFICIENCY PROGRAMS to expedite customer participation and utility investment in indoor and outdoor water efficiency projects for single-family, multifamily, commercial, and institutional customers to reduce water waste from inefficient fixtures and leaks." "Milestone: (By 2027) Enrollment of 18 municipal water utilities in the Water Upgrades \$ave Program OR SIMILAR PROGRAM"</p>	Suggested edit made.

17	Water Conservation	Task 17-3	John Bourgeois, Kirsten Struve, Brian Mendenhall	Valley Water	Milestone “Offer 20 regenerative landscape and MWELo trainings throughout the Estuary.”	Suggested edit made.
17	Water Conservation	Task 17-4	John Bourgeois, Kirsten Struve, Brian Mendenhall	Valley Water	Description: “Develop a model ordinance for water efficient retrofit on resale or retrofit on listing, based on such examples as existing City of Davis, Santa Cruz County, and/or City and County of San Francisco ordinances, taking into account contingencies that do not delay close of escrow. Develop a model ordinance to encourage water efficient new development based on examples developed by Santa Clara Valley Water District.” ☐ Milestone, “Develop model retrofit and new development ordinances for use by Estuary cities and counties. Adoption by X% of Estuary cities and counties in Y years.”	Thank you for your comment. The existing task is intended to be consistent with the Plan Bay Area strategy to retrofit existing housing stock; however, a model ordinance for new development may be considered as part of the next Blueprint update.
17	Water Conservation	Task 17-5	John Bourgeois, Kirsten Struve, Brian Mendenhall	Valley Water	Milestone “Hold one workshop with Estuary stakeholders and produce report.”	Suggested edit made.
17	Water Conservation	Task 17-6	John Bourgeois, Kirsten Struve, Brian Mendenhall	Valley Water	Description: “Address knowledge gaps on the use of water by the Commercial, Industrial, and Institutional (CII) sector within the Estuary by completing...” ☐ Milestone “Develop study and complete and disseminate report synthesizing a study on use of water by the CII sector throughout the Estuary.”	This task has been deleted.
18	Recycled Water	18-4	John Bourgeois, Kirsten Struve, Brian Mendenhall	Valley Water	Note “regional” is emphasized, which may or may not be possible given different conditions within the Estuary. Consider revising.	Suggested edit made.
18	Recycled Water	Overall Action	Susan Schwartz	Friends of Five Creeks	This is notably weak, which makes me think nothing will happen. If recycling really does not make economic sense at this stage (basically EBMUD's position), maybe just say that. Maybe should not include 18-4, which I think means desal of brackish water.	Thank you for your comments. Task 18-4 is intended to examine how to manage and permit one of the problematic by-products of recycled water. This task focuses on horizontal levee wastewater filtration capacity and work being done at wastewater treatment facilities to achieve large-scale, regional benefits of recycled water while protecting the health of the estuary.
18	Recycled Water	Task 18-1	John Bourgeois, Kirsten Struve, Brian Mendenhall	Valley Water	Should water retailers and regulators be specifically referenced ☐ The sharing platform should be electronic, web-based and open to the public. Funding should also be provided for annual upkeep and maintena	Thank you for your comments. The working group removed the general public aspect of this web-based platform to narrow the audience for now, but recognizes that a platform for the public is important, but likley a separate work product. The task currently lives with and will be hosted by SFEP, and staff will work with industry members to develop the idea further.
18	Recycled Water	Task 18-2 & 18-3	John Bourgeois, Kirsten Struve, Brian Mendenhall	Valley Water	Suggest these tasks could be a joint effort between wastewater and water agencies.	Yes, both water and wastewater agencies are Collaborating Partners
18	Recycled Water	Task 18-3	John Bourgeois, Kirsten Struve, Brian Mendenhall	Valley Water	TASK 18-3 Collaborate with the Bay Area Clean Water Agencies' (BACWA) Recycled Water Committee, water agencies and others to convene stakeholders to identify opportunities for the broader use of recycled water including potable reuse, understand funding and planning gaps and address regulatory and permitting constraints, and assist with public acceptance and outreach. MILESTONE Hold forum to discuss overcoming challenges to regional recycled water projects and promoting public acceptance.	The working group discussed public acceptance vs. the need for wastewater and alignment of water agencies as the first priority; the public piece will need to be tackled after that.
19	Stormwater	19-2	John Bourgeois, Kirsten Struve, Brian Mendenhall	Valley Water	Milestone: Ensure the tool is compatible with systems that have already been developed such as the SCVURPPP Stormwater Treatment Measure Data Portal	Yes, LID TRacker Tool has been built to be compatible with other GIS-based databases.
19	Stormwater	19-4	John Bourgeois, Kirsten Struve, Brian Mendenhall	Valley Water	It might be good to explicitly do this in a way that is consistent with requirements in stormwater permits.	With collaborating partners, the expectaton is that NPDES requirements will be considered.
19	Stormwater	Overall Action	Susan Schwartz	Friends of Five Creeks	Yes on alternative or in-lieu LID compliance, maybe especially for treating that last bit of runoff and maybe to encourage letting developers of sites where little pollution is likely provide LID for large areas of streets or other public infrastructure with significant polluted runoff. (I am not sure about this.) Yes on evaluating the likelihood that LID/Green Infrastructure will have statistical effects on pollution.	Thank you for your comments.
19	Stormwater	Overall Action	John Bourgeois, Kirsten Struve, Brian Mendenhall	Valley Water	There ought to be efforts to promote and accelerate region-wide implementation of low impact development (LID)and green infrastructure (GI). There are financial, technique, and institutional barriers to widespread green infrastructure implementation. There ought to be a strategy on identifying and removing some of the barriers. While desirable, LID and GI are not the only ways to reduce polluted runoff from reaching the Estuary. It seems short-sighted to focus only on those methods. It seems unlikely that even with our best efforts and funding, we will treat the entire landscape with LID and GI (at least within the life of the Blueprint).	Thank you for your comments. The Action Background under Climate Change Considerations has been revised to address that LID and GSI may not be enough to treat polluted runoff from the entire urban landscape.
20	Nutrients	20-5	John Bourgeois, Kirsten Struve, Brian Mendenhall	Valley Water	Consider expanding beyond the Delta. There have also been HABs in the Bay and there already exists far better monitoring, modeling, and information dissemination in the Delta than there is in the Bay.	Thank you for your comment. This task was created under the guidance of Delta partners and is compatible with priority management needs identified in the Delta Science Program's draft 2022-2026 Science Action Agenda. Discussions with Bay partners did not result in task language for this update, but may be included in future Blueprint updates.
20	Nutrients	Overall Action	Susan Schwartz	Friends of Five Creeks	Algae blooms in lakes and reservoirs, apparently due to drought and heat, are increasing significantly and affecting people's lives -- e.g. they can't go swimming. Does this fall within SFEP's remit?	Thank you for your comments. While the Estuary Partnership's planning area includes all of the watersheds that drain to the Estuary, lakes and reservoirs and other upland or disconnected lands and waters tend to fall outside of our purview.
20	Nutrients	Overall Action	John Bourgeois, Kirsten Struve, Brian Mendenhall	Valley Water	The description is the same as for Action 19 and only peripherally related to nutrient management.	Error corrected.
20	Nutrients	Task 20-1	LaueI Larsen	Delta Science Program	Could be expanded to Delta, including USGS and Interagency Ecological Program as leads or collaborating partners.	US Geological Survey, Interagency Ecological Program, Central Valley Regional Water Quality Control Board have all been listed as collaborating partners on Task 20-1.
20	Nutrients	Task 20-5	Laurel Larsen	Delta Science Program	Aligns with Science Actions 2A and 5C in draft 2022-2026 SAA (see below). Further, this is related to work that DSP is currently funding, led by Pls at the USGS and UNC-Chapel Hill. Also, the SWRCB runs a HABs program and should be included as lead, together with the USGS that is working to develop a detection/early warning system. Lastly, the Delta Science Program, along with CDFW and the CVWQCB is planning a workshop focused on HABs monitoring in the Delta (to ultimately inform a HABs monitoring plan) in November 2022, and would welcome the involvement of SFEP and other entities with shared interests.	Suggestions have been incorporated.
21	Emerging Contaminants	21-2	John Bourgeois, Kirsten Struve, Brian Mendenhall	Valley Water	Consider expanding beyond pet flea and tick control products. Suggest expanding this to reduce residential sources of pesticides coming into the Estuary.	Thank you for your comment. This will be considered as part of the next update.
21	Emerging Contraminant s	Overall Action	Susan Schwartz	Friends of Five Creeks	Yes, this seems like basically "carry on," which SFEI especially definitely should.	Thank you for your comments.
21	Emerging Contaminants	Overall Action	John Bourgeois, Kirsten Struve, Brian Mendenhall	Valley Water	Description: May want to mention true source control specifically as an overarching goal for this action. Suggest adding a task to support toxicity testing in the Estuary including developing better scientific information on the effects of mixtures of contaminants on sensitive aquatic organisms.	Thank you for your comment. This will be considered as part of the next update.
21	Emerging Contaminants	Task 21-3	Laurel Larsen	Delta Science Program	Milestone should include supporting State Water Boards’ management of microplastics in drinking water.	Milestone has been revised to more broadly support actions of various agencies.
21	Emerging Contaminants	Task 21-4	Laurel Larsen	Delta Science Program	Are there efforts to align with the State Water Boards’ Panel on CECs in Aquatic Ecosystems? We’d also argue that PFAS are no longer CECs as USEPA issued lifetime health advisories for PFOA and PFOS and California established drinking water notification levels for PFOA, PFOS, and PFBS- exhibiting that they are indeed constituents of concern.	At present, the Bay RMP and the Region 2 Water Board consider PFAS to be emerging contaminants.
22	Health Risks of Fish	22-3	John Bourgeois, Kirsten Struve, Brian Mendenhall	Valley Water	Should there be specific reference to working with OEHHA here?	OEHHA would certainly be consulted as needed though they aren't listed specifically as a collaborating partner.

22	Health Risks of Fish	Overall Action	Jay Davis	SFEI	<p>My main feedback is on Action 22 (Reduce health risks due to contaminants in fish). The tasks listed cover most of the important bases, but do not explicitly address a key one: we need more thorough monitoring of contaminants in fish from the locations that are used by subsistence fishers and groups with high consumption rates. Contaminant concentrations in fish vary greatly between locations. The RMP covers a few key locations, but there are many gaps in coverage of the Bay as a whole. CBOs want information for the areas where they are fishing so they can understand their exposure and the degree of cleanup needed.</p> <p>Task 22-4 touches on this, but is more focused on sediment and not direct about it. I suggest adding another task as follows: Proposed Task 22-5 Conduct thorough fish monitoring in the locations where communities with high rates of consumption collect fish from the Bay. Analyze the species they consume and the pollutants that they are concerned about. Coordinate this monitoring with the consumption survey work of Action 22-2, and conduct it in partnership with community-based organizations.</p> <p>MILESTONE Monitor fish contamination in priority locations identified by at least two communities in the San Francisco Estuary.</p>	Suggested edit made.
22	Health Risks of Fish	Overall Action	Susan Schwartz	Friends of Five Creeks	This seems like an area where working with community-based organizations, as well as working to educate individual fishers, should have high priority. Could lead to other ways to work with and strengthen such groups.	Thank you for your comment.
22	Health Risks of Fish	Overall Action	John Bourgeois, Kirsten Struve, Brian Mendenhall	Valley Water	Make clear connection with Action 2.	Edits made to clarify connection
23	Trash	Overall Action	Susan Schwartz	Friends of Five Creeks	Yes on 23-1. Attempts to develop trash metrics have been notably unsuccessful. Don't waste time and money on this. Support community groups and individuals who do this work (don't let cities stop supporting them, as proposed by next Regional Board draft MRP). Be realistic about how reducing homelessness (and addiction) would reduce trash. Share info on successful efforts.	Thank you for your comments.
24	Public Access	24-4	John Bourgeois, Kirsten Struve, Brian Mendenhall	Valley Water	Mention encouraging this open space as a climate change measure as well.	Suggestion has been incorporated.
24	Public Access	24-5	John Bourgeois, Kirsten Struve, Brian Mendenhall	Valley Water	Should acknowledge impacts to corridors from people. Maybe focus this on riparian corridor widths with benefits for natural adaptation to climate change. ☐ Existing metrics exist for tracking riparian corridor widths	Thank you for your comment. As the indicator for riparian corridors is developed, various impacts and benefits will need to be considered.
24	Public Access	Overall Action	Susan Schwartz	Friends of Five Creeks	The Water Trail is a lovely idea, but I believe high cost for relatively few, and well-off, individuals. Why does this have specific goals, while there are none for, say, increasing access to nature in urban low-income areas, increasing transit access (if that would help), etc. I suspect that the remaining Bay Trail segments are relatively high cost, as well. Is this concept more important than increasing outdoor enjoyment for large numbers of city dwellers?	Thank you for your comments. The 2019 State of the Estuary Report included an emerging indicator on access to green space, which noted inequities. This is a complex topic, since increasing green space in low-income areas can result in unintended consequences including gentrification; therefore, any regional effort would need to proceed very thoughtfully. The Working Group was not able to identify a task at this time but it may be developed in the next Blueprint.
24	Public Access	Overall Action	John Holder	<u>East Bay Regional Park District</u>	<p>The East Bay Park District (Park District) would like to thank the San Francisco Estuary Partnership for its continued work to protect and restore the San Francisco Estuary, and appreciates the opportunity to comment on the Draft Actions for the 2022 Estuary Blueprint. The Park District manages 50 miles of shoreline in Alameda and Contra Costa County and continues to advance climate adaptation and restoration projects at the Hayward Regional Shoreline, Coyote Hills Regional Park, and McLaughlin Eastshore State Park. We recently completed the San Francisco Bay Trail Risk Assessment and Adaptation Prioritization Plan (RAAPP) to provide a roadmap for future adaptation projects to protect and enhance public access on the Bay Trail.</p> <p>The Park District particularly appreciates the inclusion of Action 24 to “Provide equitable public access and recreational opportunities compatible with wildlife”. Sustainable and equitable public access is key to building support for restoration and to providing places of natural respite accessible to all. While the Park District, and many others, work to acquire and restore shoreline properties on the San Francisco Estuary, funding of long-term operations and maintenance will be increasingly important to ensure public access can be sustained.</p> <p>The Park District looks forward to working collaboratively with the San Francisco Estuary Partnership to continue to identify sources of funding to provide for long-term maintenance and operation of publicly accessible shorelines. Thank you for your consideration and if you have any questions or concerns, please feel free to contact me at (510) 544-2323 or jholder@ebparks.org.</p>	Thank you for your comment.
24	Public Access	Task 24-2	Barbara Ohler		<p>The plan is ambitious and critically needed.</p> <p>Regarding item 24, public access to the estuary, many people with small human and wind powered boats require paved boat ramps to participate, appreciate and contribute. Kayaks and hand launch vessels are not the only small boat.</p> <p>As a 70 year old boater and boat camper, I row a small boat that I can no longer hand launch.</p> <p>Accessibility should not be limited.</p>	The Water Trail Program supports/advances various boat launch and vessel types, working with willing landowners and partners.
24	Public Access	Task 24-2	Peter Guerrero	<u>studio374photography@gmail.com</u>	I’m please to see that Blueprint Action item 24 calls for increased public water access--too few access points are currently provided in our densely populated region. Getting people to champion the protection of the Bay requires they have opportunities to actually get out on it, not just to view it from the shore. Importantly, active small boat recreation provides for the monitoring of water quality and marine wildlife conditions. While the plan specifically mentions kayaks, non-motorized small craft need to also be accommodated with hand and vehicle launch facilities.	The Water Trail Program has an Accessibility Plan and Design Guidelines and the program is aware of various boat launch types, vessel types, and user abilities. The program aslo has a small grants program funding accesssability upgrades.
24	Public Access	Task 24-5	Carin High, Gita Dev, William Hoppes, Sadie Wilson	Citizens Committee to Complete the Refuge, Ohlone Audubon Society, Sierra Club, and Greenbelt Alliance	Noticeably missing from the Tasks and Milestones listed under this action is an estuarine equivalent of Task 24-5 for riparian corridors. Task 24-5: “Track progress towards increasing climate resilience in upland areas for people and wildlife using riparian corridor widths to allow for both wildlife and compatible public use.” Milestone: “Develop emerging indicator for the State of the Estuary Report to track riparian corridor widths. For tidal wetlands ecosystems, we are painfully aware that along much of San Francisco Bay’s shoreline, we have developed right up to the edges of the Bay or to the edges of salt ponds/diked baylands. Much of the public access is located atop shoreline levees that front tidal wetland complexes and fringes of tidal wetlands. As sea levels continue to rise, “tidal squeeze,” must be evaluated within the Bay to ensure recreational opportunities continue to be compatible with wildlife. Public access trails that obstruct opportunities for inland migration of tidal wetlands as sea levels continue to rise should be evaluated and if necessary, relocated. This cannot be accomplished without mapping of such areas.	Task 24-1 is focused on shoreline public access. Efforts to sustain and increase shoreline public access will certainly need to consider potential impacts of sea level rise, including inland migration space.
25	Champion	Overall Action	Susan Schwartz	Friends of Five Creeks	"Pearls" is a gem that should be maintained, with more recognition.	Thank you for your comment.
25	Champion	Overall Action	John Bourgeois, Kirsten Struve, Brian Mendenhall	Valley Water	This should be the overarching theme of the Blueprint, and therefore should be the first Action or the Umbrella for the rest of actions.	Thank you for your comment. Goal 4 of the Estuary Blueprint is also to Champion the Estuary, and thus serves as an umbrella for this and other actions.
25	Champion	Task 25-2	Laurel Larsen	Delta Science Program	<p>I like this idea! In particular, I'd like to see the milestones be less specific about the number of SoE and BDSC conferences and instead focus on promoting a greater degree of integration. I'm time-limited now but happy to work with you on revising this task more specifically. Suggested revision to the task as written: "and move toward developing a more integrated conference that spans the estuary in scale and targets both scientists and policymakers". Suggested milestone:</p> <p>☐Hold a BDSC centered on the theme One Estuary. And/or:</p> <p>☐Revised milestone: Hold annual conferences that focus on the San Francisco Estuary.</p>	These suggestions have been incorporated.
General Comment	General Comment	General Comment	Rachael Hartofelis	Association of Bay Area Governments	<p>On a more general note, we are curious about the roles that you anticipate for some tasks and their milestones. Will roles be identified as a part of the final 2022 Estuary Blueprint? To clarify, we support identifying roles for specific actions, so that stakeholders have buy-in on the implementation of the Blueprint. As such, we are comfortable with being listed alongside actions that are aligned with Plan Bay Area 2050 implementation actions.</p> <p>There are also some specific actions which we were curious about regarding this topic - do you have an idea of who may lead the following tasks?</p> <p>Task 1-3 Regional Equity Consortium Task 1-5 Climate Science Consortium Task 3.2 Resilience Help Desk Tasks 17-3 and 17-4 Water Efficiency Measures</p>	ABAG/MTC has been added as leads and/or collaborating partners for relevent tasks. Leads and collaborating partners for all tasks are listed in the complete Blueprint.

General Comment	General Comment	General Comment	Doug Kobold (Executive Director)	California Product Stewardship Council	<p>Dear San Francisco Estuary Partnership: The California Product Stewardship Council (CPSC) would like to submit the following comments on the SFEP's Draft Action for the 2022 Estuary Blueprint. We want to thank SFEP for including CPSC in the deliberations, providing a thoughtful update, and for allowing the public to comment on the blueprint. We would also like to commend SFEP for including elements of product stewardship and extended producer responsibility (EPR) in the Estuary Blueprint. Local governments alone can't solve complex problems, such as single-use packaging, microplastics, or per-and polyfluoroalkyl substances (PFAS) ending up in the waterways, so producer engagement is key for lasting solutions. CPSC supports work done by government agencies that inspires producers to reconsider the impacts of their products, such as inspiring green design by avoiding PFAS or designing reusable products to replace single-use products. CPSC has several active CalRecycle funded projects promoting reusable marine flares in the Bay Area to reduce the prevalence of single-use pyrotechnic flares, which contain perchlorate and other heavy metals. We believe that SFEP can really lead the way with supporting local reuse opportunities alongside local ordinances for reusable foodware, marine flare disposal, PFAS bans, and extended producer responsibility (EPR) for hard to manage products, as well as encouraging private companies and public agencies to focus more on green purchasing. Pushing agencies to consider prioritizing reuse, repair, recycling, and reporting within their purchasing process is essential as the purchases made from collective partners can impact the next generation of products entering the market. Ways the SFEP can drive green purchasing:•Require reusable foodware at all event and on-site eating locations and compost all food waste;•Provide uniforms to their employees that are durable and when no longer usable, more recyclable, along with having more recycled content materials used in them, and offer repair services for all agency uniforms and other durable goods;•Purchase recyclable carpet with recycled content, while prioritizing products that avoid the use of PFAS and reduce the potential for microfiber shedding.CPSC would like to thank the San Francisco Estuary Partnership for their collaboration and partnership.</p>	Thank you for your comment. Local ordinances to encourage extended producer responsibility are part of the Action on Trash. In terms of the suggestions regarding office operations, purchasing processes, and other related practices, these are areas in which the Estuary Partnership is working to improve practices with its parent administrative agency, Metropolitan Transportation Commission, where applicable.
General Comment	General Comment	General Comment	Susan Schwartz	Friends of Five Creeks	<p>These are comments of the head of an all-volunteer, mainly hands-on group that in addition has observed broader efforts for almost 25 years. In general, the blueprint draft seems unobjectionable, but to me appears to put too much emphasis on bureaucratic paper plans and meetings and to lack prioritization for urgent tasks (cooperation to get climate-relevant projects done, for example), fail to recognize fairly urgent areas where there has been little progress for a generation (lack of sediment and beneficial re-use, for example) or where general approaches should be re-evaluated (urban creeks, for example). I realize that this is difficult for your agency.</p>	Thank you for your comment.
General Comment	General Comment	General Comment	Tom Kendall	U.S. Army Corps of Engineers, San Francisco District	<p>Thank you for spearheading and maintaining the SF Estuary Blueprint. It is a critical tool in tracking our progress as a region, toward healthier and more adaptable ecosystems. As you know, the U.S. Army Corps of Engineers has three main missions: Navigation, Flood Risk Management, and Ecosystem Restoration. Many of the comments below are intended to provide information about how USACE is engaged in the draft Estuary Blueprint actions, particularly in the Ecosystem Restoration arena, and how we fit in with the efforts of other agencies. We have been remiss by not providing this information earlier. Additionally, after some inspired discussion, we have some suggestions for furthering our engagement. Given the current administration, we may be able to contribute both funding and passion to specific actions, with climate resilience and adaptation planning/implementation offering the greatest opportunities for making a difference in our region.</p> <p>Below we have written short descriptions of some of the work we are undertaking in areas of the Blueprint where we would like to suggest USACE be considered a collaborating partner.</p> <p>Thank you for considering these additions to the document. We welcome your feedback or would be happy to schedule a meeting to discuss. Overall, we would like to be more active partners in the ecosystem restoration community around the San Francisco Bay, and seek to highlight both the work we currently are doing, but also stay accountable and part of the regular discussions that the Estuary Blueprint engenders.</p>	Thank you for your comment. US Army Corps of Engineers has been incorporated as a Collaborating Partner in many relevant tasks. The Estuary Partnership looks forward to continued collaboration and conversation with USACE through membership and participation in the Implementation Committees and beyond as needed.
General Comment	General Comment	General Comment	Kristina Hill	UC Berkeley	<p>I would like to highlight the new and pressing need to consider how rising sea levels could create very serious water quality problems that may limit and undermine the resilience of the SF Bay's ecosystems. We know that rising seas will cause shallow, unconfined groundwater to rise as well within some distance of the changing shoreline. Based on our preliminary analyses, there may be hundreds or even thousands of sites with contaminated soil that are affected by rising groundwater in the SF Bay area alone. Some existing sites with very serious contamination issues are already likely to be impacting Bay habitat. For example, the Zeneca site in Richmond appears to be leaking contaminants into Stege Marsh. Bioindicator research that was done there in the past decade by scholars at UC Davis have found tumors in fish as well as both male and female reproductive organs in individual fish (mudsuckers). As another example, the United Heckathorn Superfund site appears to have already leaked into sediment outside that parcel, in an area where Richmond residents are known to fish. Both of these sites are vulnerable to rising groundwater, since it could mobilize metals, hydrocarbons and persistent organic pollutants, and PFAS chemicals (from Zeneca in particular). The Blair Landfill site next to the Zeneca site contains uncapped radioactive pollution, which could enter the Bay when groundwater or surface water flows to Baxter creek. As an example of likely contamination of the Bay by surface flooding, the Liquid Gold Superfund site adjacent to the Zeneca site is likely to be inundated by rising seawater at only 1 foot of sea level rise. These risks are imminent. Recent research has also shown longer-term risks of increased nutrients flowing to nearshore environments as groundwater rises to fluctuate seasonally around new permanent levels. A 2012 study in New Haven by the USGS showed that 3' of sea level rise could cause groundwater to rise as far inland as 3 miles from the shoreline. Unless the acutely exposed areas of polluted soil around the Bay are removed, sequestered, or treated in situ, the health of the Bay's nearshore environment faces very serious risks as sea level rises here in California. I would ask that you consider this imminent risk in your update of the Estuary Blueprint and its priority actions.</p>	Thank you for your comment. Task 1-8 directly addresses the need for more groundwater modeling, and Action 22 also recognizes the potential impact of sea level rise and associated groundwater rise in mobilizing contaminants.
General Comment	General Comment	General Comment	Tribal Historic Preservation Officer	Yocha Dehe Wintun Nation	<p>The Cultural Resources Department has reviewed the project and the Tribe concurs with the draft Estuary Blueprint. (letter on file at https://bayareametro.sharepoint.com/:b/s/estblueprintupdate/EcJuGPV6J3FMu09oXL4nRjOBhoKD0dExrytukzJRTNdBW?e=ZTmHcH)</p>	Thank you for your review and concurrence.
General Comment	General Comment	General Comment	John Holder	East Bay Regional Parks District	<p>The East Bay Park District (Park District) would like to thank the San Francisco Estuary Partnership for its continued work to protect and restore the San Francisco Estuary, and appreciates the opportunity to comment on the Draft Actions for the 2022 Estuary Blueprint. The Park District manages 50 miles of shoreline in Alameda and Contra Costa County and continues to advance climate adaptation and restoration projects at the Hayward Regional Shoreline, Coyote Hills Regional Park, and McLaughlin Eastshore State Park. We recently completed the San Francisco Bay Trail Risk Assessment and Adaptation Prioritization Plan (RAAPP) to provide a roadmap for future adaptation projects to protect and enhance public access on the Bay Trail. The Park District particularly appreciates the inclusion of Action 24 to "Provide equitable public access and recreational opportunities compatible with wildlife". Sustainable and equitable public access is key to building support for restoration and to providing places of natural respite accessible to all. While the Park District, and many others, work to acquire and restore shoreline properties on the San Francisco Estuary, funding of long-term operations and maintenance will be increasingly important to ensure public access can be sustained. The Park District looks forward to working collaboratively with the San Francisco Estuary Partnership to continue to identify sources of funding to provide for long-term maintenance and operation of publicly accessible shorelines.</p>	Thank you for your comments.
General Comment	General Comment	General Comment	Carin High, Gita Dev, William Hoppes, Sadie Wilson	Citizens Committee to Complete the Refuge, Ohlone Audubon Society, Sierra Club, and Greenbelt Alliance	<p>It is evident that implementation of the Draft Blueprint hinges on the identification and/or establishment of funding sources to implement the actions. Also significant, is the need to close governance gaps. Without regional regulatory oversight of areas that could serve as migration pathways for tidal wetlands, we risk drowning of tidal wetlands as sea levels continue to rise. As we indicated in our opening comments, we deeply appreciate the level of thoughtful consideration that has gone into the development of this Draft Blueprint.</p>	Thank you for your comments. As part of the Blueprint update, the Estuary Partnership is required to conduct a funding analysis that will include identification of potential funding sources. Several tasks and the Action on Transition Zones focus on improving regulatory oversight with an eye to sea level rise; this will be a continuing area of focus in future Blueprints as well.



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January 21, 2022

VIA ELECTRONIC MAIL

Attn: Draft Estuary Blueprint Comments (blueprint@sfestuary.org)

MTC Public Information

375 Beale Street, Suite 800

San Francisco, CA 94105

To Whom It May Concern:

Subject: Draft Actions for the 2022 Estuary Blueprint

The Alameda County Water District (ACWD) wishes to thank you for the opportunity to review the Draft Actions for the 2022 Estuary Blueprint (Draft) and would like to share the comments below for consideration.

1. Action 1 ("Climate Resilience"):

a. *Task 1-8*

Groundwater within the San Francisco Bay Area is complex and managed by various programs, regulations, and agencies. As a result, the SFEP is encouraged to coordinate with and to provide draft findings with all agencies providing oversight (e.g., San Francisco Bay Regional Water Quality Control Board, California Department of Toxic Substances Control, Groundwater Sustainability Agencies, etc.) prior to publishing such information.

2. Action 17 ("Water Conservation")

a. *Task 17-1*

ACWD supports the inclusion of Task 17-1 and the advancement of "smart" water meters and monitors, but suggests modifying Task 17-1 and its milestone language as follows to further encourage agencies throughout the Estuary to pursue smart water meter and monitor installation:

“TASK 17-1: Advance the installation of ‘smart’ water meters and monitors, including Advanced Metering Infrastructure or AMI, as industry best practice throughout the Estuary and provide support for obtaining funding for agencies working towards this goal.

Milestone: (By 2027) All major water agencies to be substantially advanced in early phase conversion to ‘smart’ water meters, such as piloting testing or proof of concept.

Cost Estimate: The 5-year target is estimated to cost between \$25 million to \$60 million and assumes conversion or replacement of up to 100,000 meters to smart water meters at a cost ranging between \$250 to \$600 per meter. The actual cost would depend on the cost of the separate projects, as developed by each water agency, and would require budget approval by the Board of the respective water agency implementing the project.”

b. *Task 17-2*

ACWD supports making improvements in indoor and outdoor water use efficiency through programs like BayREN, but the milestone of enrollment of 18 municipal water utilities specifically in the BayREN Water Upgrades Save Program may pose some logistical challenges for some agencies, such as billing system configurations and other potential issues with implementation. SFEP is encouraged to update this task to reflect an approach that would provide flexibility for agencies and achieve the same goal with the addition of the following language in bold:

“TASK 17-2: Expand BayREN **or similar water efficiency programs** to expedite customer participation and utility investment in indoor and outdoor water efficiency projects for single-family, multifamily, commercial, and institutional customers to reduce water waste from inefficient fixtures and leaks.”

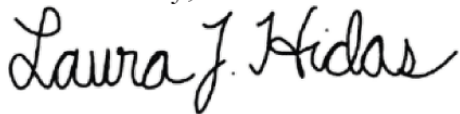
“Milestone: (By 2027) Enrollment of 18 municipal water utilities in the Water Upgrades Save Program **or similar program**.”

3. ACWD Contacts: The following ACWD contacts are provided so that the San Francisco Estuary Partnership/Metropolitan Transportation Commission-Association of Bay Area Governments can coordinate with ACWD as needed during the 2022 Estuary Blueprint process:
 - a. Michelle Myers, Groundwater Resources Manager, at (510) 668-4454, or by email at michelle.myers@acwd.com, for coordination regarding ACWD’s groundwater resources, groundwater wells, and drilling permits.
 - b. Stephanie Nevins, Water Use Efficiency Supervisor, at (510) 668-4207, or by email at stephanie.nevins@acwd.com, for coordination regarding ACWD’s water use efficiency.

- c. Thomas Niesar, Water Supply and Planning Manager, at (510) 668-6549, or by email at thomas.niesar@acwd.com, for coordination regarding ACWD's water supply and planning.

Thank you again for the opportunity to comment on the Draft. We look forward to coordinating further with you on this Draft.

Sincerely,

A handwritten signature in black ink that reads "Laura J. Hidas". The script is fluid and cursive, with the first letters of each name being capitalized and prominent.

Laura J. Hidas
Manager of Water Resources

ko/tn

By E-mail

cc: Michelle Myers, ACWD
Stephanie Nevins, ACWD
Thomas Niesar, ACWD
Tom Francis, BAWSCA
Grace Su, BARR EBMUD Representative

San Francisco Bay Conservation and Development Commission

375 Beale Street, Suite 510, San Francisco, California 94105 tel 415 352 3600 fax 888 348 5190

State of California | Gavin Newsom – Governor | info@bcdc.ca.gov | www.bcdc.ca.gov

January 21, 2022

Darcie Luce
San Francisco Estuary Partnership
375 Beale Street
San Francisco, CA 94105

SUBJECT: San Francisco Estuary Partnership Draft Estuary Blueprint

Dear Ms. Luce:

Thank you for the opportunity to provide staff comments on the draft Estuary Partnership's Estuary Blueprint. The Blueprint provides a plan to restore and maintain the health of the San Francisco Bay and Sacramento-San Joaquin Delta and its habitats. How we collectively restore and manage the Bay will help shape not only the health and prosperity of the Bay and Bay Area, but also play a significant role in determining how resilient the region will be to rising sea level.

As you know, the San Francisco Bay Conservation and Development Commission (BCDC) is a State planning and regulatory agency with permitting authority over San Francisco Bay, the Bay shoreline, and Suisun Marsh, as established in the McAteer-Petris Act and the Suisun Marsh Preservation Act. BCDC has adopted the *San Francisco Bay Plan* and the *Suisun Marsh Protection Plan* that contain policies for conservation and development of the Bay as a single regional resource, which provides the basis for the Commission's review and actions on proposed projects. BCDC's policies form the San Francisco Bay segment of the California coastal zone program, approved by the National Oceanic and Atmospheric Administration (NOAA) Office for Coastal Management pursuant to the federal Coastal Zone Management Act. BCDC, the nation's first coastal management agency, continues to lead the Bay Area's development of a regional strategy to protect people, habitat, and commerce in light of rising sea level.

Staff at BCDC commend the Estuary Partnership for the draft Estuary Blueprint, which presents a compelling, forward-thinking vision to manage the Bay's natural resources and improve the Bay's resilience. The draft Blueprint addresses a range of pressing actions for the estuary, including restoring and protecting wetlands, elevating frontline and indigenous communities, beneficially reusing sediments, and adapting to rising sea level — to call out but a few of the twenty-five actions.

As addressed in the draft Blueprint, Bay Adapt is a BCDC-led process to gain consensus on the actions necessary to protect people and the natural and built environment from rising sea levels. Collaboratively developed with a diverse leadership advisory group and hundreds of stakeholders, Bay Adapt puts the spotlight on the range of actions that many stakeholders in the region will need to undertake to facilitate the community involvement, plans, projects, and funding that will help the region achieve its adaptation goals. Alignment between the Estuary Blueprint and Bay Adapt is an important way to secure the region's long-term outcomes and



prepare its residents and natural habitat for climate change. Following are some specific comments and suggestions to help improve the draft Blueprint.

Specific Comments on the draft actions and tasks

Action 3: Task 3-3. BCDC does not have sediment management policies, suggest changing sediment management to dredging policies, or deleting. BCDC's Bay Fill Policy Amendment adopted in 2019 did address this task (relating to green infrastructure and adaptation). Alternately, include "create" in the first sentence of the task, and instead of "such as BCDC...." State: "Create sediment management policies."

Also, suggest adding a task that includes increasing funding and staff for regulatory agencies to reduce permitting backload and accelerate permit processing for nature based adaptation projects.

Task 4-4 Milestone: Suggest amending the Milestone language to say "Launch the Shoreline Adaptation Project Mapping Program within EcoAtlas for San Francisco Bay."

Task 5-4 Milestone: It is unclear what is meant by the latter half of this sentence, there appears to be a typo.

Action 5: Task 5-5. The strategy for coarse grain sediments should also take into consideration the need for coarse grain sediment in the watershed for species such as salmon, as well as the need for coarse grain sediment in marshes. This concept should be incorporated into the task and milestone.

Action 6: Description. Suggest eliminating the word "mineral" sediments because most sediment (and soil for that matter) has a mix of mineral and organic matter.

Also, this action appears to have inconsistent use of "beneficial reuse" and "beneficial use." We suggest that the terms in the final document are consistently used where appropriate. Example, title use, and task 6-7 and milestone

Action 6: Task 6-1. The milestone does not seem directly connected to the task. Perhaps make the milestone less specific so it tracks better, or create a new task that works better with the milestone. Suggested language change for this milestone:

"Evaluate the net impacts/benefits of beneficially reusing sediment to support state and federal funding and selection of beneficial reuse of dredged sediment from federal and other projects. Use the SF Bay Regional Water Quality Control Board's CEQA analysis for the USACE multi-year permit to incorporate findings supporting beneficial reuse, including, but not limited to hydraulically dredged sediment."

Action 6: Task 6-2. Suggest revising the first sentence to read: "Pilot shallow water placement of sediment to determine efficacy in increasing sediment accretion in tidal marshes, and conduct...."

Task 6-4: It is unclear how the meetings will help develop a programmatic roadmap for beneficial reuse opportunities. Perhaps expand on the outcome or goals of the meetings to support this task?

Action 6: Task 6-4. Suggest removing the term “long term” before working group, and change the word “increasing” in the second to last line to “increase.”

Milestone: suggest removing word: “interagency” from in front of “working group.” As noted in the action, this is more than an interagency working group.

Action 7: Carbon Management. The second sentence of the action description appears to be garbled. It currently reads: “Projects should focus on converting the more subsided locations on conversion to managed wetlands and in less subsided locations on conversion to tidal wetlands.”

Suggest revising the Milestone in Task 7-4 to read: “Complete at least one scientific paper on the impacts of submerged aquatic vegetation (SAV) on carbon management and the potential of native SAVs to provide sustained carbon storage.”

Action 9: Subtidal Habitat. The description and Task 9-5 states “... enhance non-tidal marsh intertidal, unvegetated tidal flat, and subtidal habitats...”. This sentence is not clear, why is “non-tidal marsh” included in a Subtidal Habitat task?

Does Task 9-2 take into consideration that some SAV, particularly eelgrass beds, expand and contract seasonally?

Suggest revising Task 9-3 to read “Increase populations of native oysters (*Ostrea lurida*) by expanding the extent of existing beds or establishing new beds, including as use for living shorelines.”

Action 9: Task 9-4. It may be that working directly with the regulatory agencies rather than through BRRIT would more quickly advance the milestone due to limited capacity of BRRIT staff, and issues that are broader than BRRIT. Also, if you change to work with regulatory agencies, it does not preclude working with the BRRIT.

Suggest revising Task 9-4 to read “Work with the regulatory agencies, including the Bay Restoration Regulatory Integration Team (BRRIT) to raise awareness of the status of eelgrass, native oysters (*Ostrea lurida*), and other types of subtidal habitat restoration projects and benefits documented to date; and advance discussions on permitting issues with respect to native oyster (*Ostrea lurida*), gravel beach, and other restoration projects.

Task 9-5 milestone. Please correct spelling of “course” to coarse sediment beaches in.

Action 10- Tidal Marsh. Task 10-2 States “Protect San Francisco Bay historical Baylands (tidal marsh and non-tidal wetlands and waters)....” to support migration and preservation of tidal habitats. Suggest clarifying the wording to include subsided historical baylands that are not currently wetlands.

Do the acres of tidal marsh restored in Task 10-1 milestone include the number of tidal marsh acres enhanced in Task 10-3 milestone?

Action 12- Managed Wetlands. It appears that this action is intended to encompass any non-tidal wetlands that are under management. However, the next action addresses seasonal wetlands, so it is unclear whether they are part of this action as well if they are managed? it might be useful to clarify this section. There also appears to be overlap in what is being described in Action 9, Action 10, and 12. Given that habitat management in the region has evolved to consider complete landscapes, including both subtidal areas and transitional uplands, perhaps there might be ways to express that understanding across the actions.

The Task 12-2 text is the same as Task 11-2 and appears to be language more suited for Action 11.

Several members of BCDC's staff helped prepare various sections of the draft Blueprint and we look forward to helping to finalize and implement the Estuary Blueprint, and continuing our collaboration in the Estuary Partnership.

If you have any questions, please do not hesitate to contact me at 415-352-3611 or steve.goldbeck@bcdc.ca.gov.

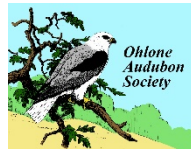
Sincerely,
DocuSigned by:

Steve Goldbeck

2015CA32FC25415
STEVE GOLDBECK

Deputy Executive Director





MTC-ABAG Public Information
Attn: Draft Estuary Blueprint Comments
375 Beale Street, Suite 800
San Francisco, CA 94105
blueprint@sfestuary.org

20 January 2022

Re: Draft Actions for the 2022 Estuary Blueprint

Dear Executive Director Sweeney,

These comments are submitted on behalf of the Citizens Committee to Complete the Refuge (CCCR), Ohlone Audubon Society, Sierra Club and Greenbelt Alliance regarding the *Draft Actions for the 2022 Estuary Blueprint* (Draft Blueprint). We thank you for the opportunity to provide comment and we commend you, your staff and stakeholders for the thoughtful consideration and expertise that has been employed in the development of this draft document.

Overall, we are extremely supportive of the Tasks and Milestones that have been identified and view their implementation as critically important to ensure climate resiliency for the Bay-Delta ecosystem and our communities, and to ensure long-term protection of the incredible biodiversity of the Bay-Delta ecosystem.

Action 1: "Plan for increased climate resiliency that incorporates natural resource protection."

We strongly support this action item and, based upon our experience, feel that it is imperative that Task 1-4 is implemented: "Explore establishment of new, or modification of existing, regulatory authority to protect shoreline habitats and open space while pursuing measures to protect communities and infrastructure from climate impacts."

So much of our efforts to protect and improve the Bay's ecosystem resilience and biodiversity, as well as protecting our communities and existing and future residents, rely heavily on our ability implement the Tasks identified in the Draft Blueprint. It is evident that we cannot adequately protect our shorelines, open spaces and migration pathways for tidal wetland ecosystems through the existing federal and state regulations. Shoreline habitats may receive some regional regulatory oversight through agency coordination of review, as long as Section 404 Clean Water Act and Bay Conservation and Development Commission (BCDC) permits are required. However, many areas that could support transition zone/uplands habitats (Action 11) that support Bay ecosystem function and could act as future migration pathways as sea levels continue to rise have no such regional and regulatory oversight.

We remain deeply concerned that governance gaps exist that allow continued local permitting of new development in undeveloped areas along the edges of the Bay that continue to put additional people in harm's way as sea levels rise. In doing so, such developments place the burden of providing future flood protection or compensation for poorly-planned development, on future generations. As important, such

development squanders increasingly limited opportunities to provide tidal wetland migration pathways, potential flood accommodation space to protect communities and to sustain crucial services provided by tidal wetlands such as carbon sequestration, wave attenuation, water quality functions, flood desynchronization, support of fisheries and biodiversity, etc.

During the Bay Adapt process we commented that local permits continue to be issued for projects that will require future protection from sea level rise. These projects fall through existing federal and state regulatory gaps. A common refrain when we raise the issue of sea level rise is “this project is small and won’t increase the overall impacts of sea level rise on Bay Area communities” which may or may not be true at the individual project level depending on the project’s location, but is certainly not true from a cumulative perspective. Another response is that “future flood risk is something that needs to be addressed at a regional level” and yet another is “there is no regulation saying we cannot permit development (in an area that will be vulnerable to future inundation from sea level rise).” Comments such as these highlight the concern that despite the good intentions of the Bay Adapt Joint Platform, Bay Area communities collectively are not all rowing in the same direction, and that the actions of a few may be at cross purposes or inconsistent with “increased climate resiliency that incorporates natural resource protection” at the local and regional levels.

Milestone for Task 1-4:

We are extremely concerned that the draft language for the accompanying Milestone is too open ended and that there is no action proposed beyond development of an Impact and Needs Analysis: “Establish collaborative working group and develop an Impact and Needs Analysis.” A concrete timeline needs to be set, else we fear the process of establishing the working group and developing an Impacts and Needs Analysis may drag on, without the identification and implementation of actions that may actually close existing governance gaps. It is imperative that we find ways to implement changes to the existing regulations to ensure long-term protection of our communities, the resilience and health of the ecosystems of the Bay, and the biodiversity of Bay ecosystems. As you are so well aware, time is of the essence, the threats posed by climate change are already upon us, and the push to develop lands that could serve as transition zone/uplands habitats adjacent to tidal wetlands continues unabated. We do not have the luxury of waiting six years more years for the next Draft Blueprint to identify and implement actions that will close the existing governance gaps.

Action 2: " Elevate frontline and Indigenous communities in planning for and benefiting from a healthy, resilient Estuary"

We strongly support this action, but believe there should be a strategy for ensuring frontline and Indigenous communities have the necessary funding to participate in planning processes.

Recommended Additional Milestone under Task 2-2: Create and identify designated, ongoing funding sources to support ongoing community participation and capacity-building, rather than one-time funding for capacity-building projects.

Action 3: “Overcome challenges to accelerate implementation of climate adaptation projects that prioritize natural and nature-based strategies.”

Task 3-3: “Revise regulatory policies, guidelines, or regulations to accelerate natural and nature-based adaptation projects consistent with the overall protection of the health of the Estuary, such as BCDC’s policies on sediment management and Suisun Marsh Protection Plan, RWQCBs’ sediment reuse and climate change policies, and DSC’s Delta Plan climate change policies.”

Milestone: “Revise three policies, guidelines, or regulations to facilitate natural or nature-based adaptation projects.”

We support revision of policies pertaining to sediment management and in particular, of beneficial reuse of suitable dredged sediment. However, we strongly urge that efforts to “streamline” or “cut the green tape” for natural and nature-based adaptation projects very narrowly define what actions qualify for consideration as natural and nature-based adaptation projects. Projects that include grey infrastructure or development should not be included in policy or regulation revisions that expedite permit processes and circumvent opportunities for full agency and public review.

Milestone for Task 3-6: “Complete a sea level rise funding and investment strategy for the San Francisco Bay Area.”

This is issue absolutely crucial if we are to encourage local communities to consider natural and nature-based solutions in place of traditional grey infrastructure (as appropriate given the location).

In reality, sufficient funding will be the limiting factor for implementation of most of the Draft Blueprint identified Actions and Tasks, e.g. Task 2-2, Task 4-1, Task 4-2, Task 10-1, Task 10-2, Task 11-1, Task 11-2, etc. and we need to be working to identify funding mechanisms to support implementation of the Action items.

“Task 7-2: Applied research to better understand the processes of carbon sequestration and greenhouse gas emissions generated from wetlands and open water systems in the Bay-Delta.”

Milestone: Complete 1-3 scientific papers on the carbon implications of land management and wetlands restoration activities in the Delta...”

We are encouraged and strongly supportive of the January 18, 2022 SFEP Staff Memo that recommends that this and milestone be modified to include the Bay: “Support and promote carbon sequestration in the Bay as well as the Delta by revising Task 7-2 to support applied research in both the Delta and Bay regions.” We urge that this recommendation be incorporated into the 2022 Blueprint.

Furthermore, given the governance gaps that we discussed earlier in this comment letter, we strongly urge SFEP to further modify the Carbon Management Action by introducing the potential for voluntary carbon credit funding for wetland restoration within the Bay. We also believe it is imperative that a pilot tidal wetland restoration project that “uses American Carbon Registry Standards to qualify for the voluntary carbon market” be established within the Bay and not just in the Delta as was mentioned during the public comment session. The process of closing governance gaps may take time, the implementation of a pilot project within the boundaries of the Bay may help to incentivize communities to consider tidal wetlands restoration projects in their Climate Adaptation Strategies and signals the importance of tidal wetlands in the draw down and sequestration of atmospheric carbon.

Action 10: “Protect, restore, and enhance complete tidal marsh ecosystems taking into account sea level rise and other climate change stressors in the restoration design.”

We urge that the following language be added to the 2022 Blueprint:

Task 10-4: “Ensure protection of San Francisco Bay tidal wetlands and adjacent habitats from projected and newly scheduled and on-demand water-based transportation.”

Milestone: “Develop reporting metrics for impacts caused by water-based transportation moving into new areas of the bay.¹”

Environmental impacts of proposed new ferry routes that utilize existing facilities are currently not being analyzed by the California Public Utilities Commission. The CPUC is the only agency overseeing common carrier movement on the bay and all its navigable tributaries, including rivers, creeks and delta waters. Moreover, MTC/ABAG at their last public meeting ² (January 14, 2022) emphasized revising policy to include ferry services as new transit systems that will serve as hubs for new development. An “on-demand” ferry service (somewhat like Uber-style ferry boats) was authorized by the CPUC in 2021³. The most recent privatized ferry proposal was to approve “on-demand” ferry service, utilizing existing facilities, for the entire bay including navigable tributaries. Existing studies by the USGS have demonstrated impacts to waterbirds from ferries when crossing the Bay. Wakes from ferries can erode tidal wetlands adjacent to ferry routes.

Tidal wetland ecosystems and existing and potential wildlife habitat, along new proposed ferry routes, should be protected from the wakes of water-based transportation such as ferry boats, including hovercraft.

Action 24: “Provide equitable public access and recreational opportunities compatible with wildlife.”

Noticeably missing from the Tasks and Milestones listed under this action is an estuarine equivalent of Task 24-5 for riparian corridors.

Task 24-5: “Track progress towards increasing climate resilience in upland areas for people and wildlife using riparian corridor widths to allow for both wildlife and compatible public use.”

Milestone: “Develop emerging indicator for the State of the Estuary Report to track riparian corridor widths.

For tidal wetlands ecosystems, we are painfully aware that along much of San Francisco Bay’s shoreline, we have developed right up to the edges of the Bay or to the edges of salt ponds/diked baylands. Much of the public access is located atop shoreline levees that front tidal wetland complexes and fringes of tidal wetlands. As sea levels continue to rise, “tidal squeeze,” must be evaluated within the Bay to ensure recreational opportunities continue to be compatible with wildlife. Public access trails that obstruct opportunities for inland migration of tidal wetlands as sea levels continue to rise should be evaluated and if necessary, relocated. This cannot be accomplished without mapping of such areas.

¹Ferry operations (speed, distance, etc.) would be examined to determine appropriate operational protocols to protect species from habitat loss, nest inundation, acoustic disturbance, or other potential effects of ferry operations.

Marine Mammal Rescue Center maintains statistics for boat strikes on marine mammals.

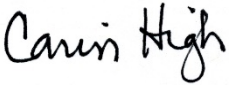
² See MTC/ABAG Agenda item: Transit-Oriented Communities (TOC) Policy- Seek feedback on the Update to MTC’s Transit-Oriented Development Policy.

³ Proposal that “Tideline may provide “unscheduled service as a vessel common carrier to transport passengers and their baggage and bicycles between points and places in the San Francisco Bay and its navigable tributaries”

Conclusion:

It is evident that implementation of the Draft Blueprint hinges on the identification and/or establishment of funding sources to implement the actions. Also significant, is the need to close governance gaps. Without regional regulatory oversight of areas that could serve as migration pathways for tidal wetlands, we risk drowning of tidal wetlands as sea levels continue to rise. As we indicated in our opening comments, we deeply appreciate the level of thoughtful consideration that has gone into the development of this Draft Blueprint.

Respectfully submitted,



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Comment on the **Draft Action on Invasive Species** in the *2022-2027 San Francisco Estuary Blueprint*

The San Francisco Bay/Delta ecosystem is generally recognized as the most invaded estuary in the world; ballast water is the dominant vector introducing non-native species into the estuary from other parts of the world; and preventing new invasions is the most important and effective action that can be taken to address the problem of aquatic invasive species.¹

It is thus striking that the proposed *San Francisco Estuary Blueprint* says nothing whatsoever about ballast water and contains no action of any kind to reduce the introduction of non-native species in ballast discharges. This oversight should be corrected. Specific actions to promote the effective regulation of ballast water discharges to reduce the risk of introducing harmful invasive species should be included in the *Blueprint* as priority actions.

Two relevant points should be recognized.

First, the failure to effectively regulate ballast water discharges is a public health threat as well as a critical environmental threat. Scores of human pathogens, including bacteria, viruses and protozoans, have been identified in ballast water. These include the causative agents of infectious and non-infectious diseases, nosocomial and wound infections, as well as microbes that produce air-borne toxins. Studies have also shown alarmingly high levels of antibiotic resistance in ballast water bacteria.² Some of these pathogenic bacteria have been carried by ballast water into new parts of the world, including the United States, where they contaminated food or water supplies and made people ill.³ In the 1990s, ballast water introduced an emergent strain of infectious waterborne disease into South America that killed over 10,000 people.⁴ Note that ballast water from overseas is discharged into the Delta upstream of intakes that provide

¹ Accelerating invasion rate in a highly invaded estuary, *Science* 279: 555-558 (1998).

² Pandemic serotypes of *Vibrio cholerae* isolated from ships' ballast tanks and coastal waters: assessment of antibiotic resistance and virulence genes (*tcpA* and *ctxA*), *Microbial Ecology* 65: 969-974 (2013). The occurrence of pathogenic bacteria in some ships' ballast water incoming from various marine regions to the Sea of Marmara, Turkey, *Marine Environmental Research* 81: 35-42 (2012).

³ Isolation of Latin America epidemic strain of *Vibrio cholerae* O1 from US Gulf Coast, *Lancet* 339: 624 (1992). International dissemination of epidemic *Vibrio cholerae* by cargo ship ballast and other nonpotable water, *Applied and Environmental Microbiology* 60(7): 2597-2601 (1994). Emergence of a new *Vibrio parahaemolyticus* serotype in raw oysters, *JAMA* 284(12): 1541-1545 (2000). Characteristics of *Vibrio parahaemolyticus* O3:K6 from Asia, *Applied and Environmental Microbiology* 66(9): 3981-3986 (2000). PCR detection of a newly emerged pandemic *Vibrio parahaemolyticus* O3:K6 pathogen in pure cultures and seeded waters from the Gulf of Mexico, *Applied and Environmental Microbiology* 69(4): 2194-2200 (2003).

⁴ Health and climate change: Marine ecosystems, *Lancet* 342: 1216-1219 (1993). Factors in the emergence of infectious diseases, *Emerging Infectious Diseases* 1(1): 7-15. Epidemic cholera in the new world: Translating field epidemiology into new prevention strategies, *Emerging Infectious Diseases* 1(4): 141-146 (1995).

drinking water to over 25 million Californians. Also, the communities most at risk from the spread of introduced waterborne diseases are generally poorer communities and communities of color, due to generally weaker water treatment, wastewater treatment and public health infrastructure, so that the government's ongoing failure to implement the level of protection from the discharge of human pathogens in ballast water mandated by the Clean Water Act could be construed as an environmental injustice.

Second, although in 2006 the California Legislature drafted and passed and the Governor signed into law the strongest ballast water discharge regulations in the world in order to protect the health and environmental safety of all Californians, the responsible state agency never implemented those regulations. Eventually, Congress took away California's authority to implement its own ballast water law, when it passed the Vessel Incidental Discharge Act (VIDA) in December 2018. Thus, the only remaining possible pathway to effective regulation of ballast discharges is to persuade the federal government to adopt and implement the necessary discharge limits.

The *Blueprint* should be amended to include the following actions:

(1) The Estuary Partners, including the State of California, should use all available means to persuade the U.S. Environmental Protection Agency (US EPA) to adopt limits on harmful non-native organisms and human pathogens in ballast discharge that comply with the Clean Water Act. The Act requires US EPA to base these discharge limits on what can be achieved by use of the "Best Available Technology." Specifically, US EPA should (a) immediately withdraw its proposed discharge limits (published in late 2020 by the previous administration), which had already been rejected by the Second Circuit Court of Appeals for failing to comply with the minimum requirements of the Clean Water Act, and had earlier been found by US EPA and other federal agencies to be far too weak to protect the environment or public health; and (b) immediately develop and publish a new proposed rule based on the Best Available Technology as defined by the Clean Water Act.

(2) The Estuary Partners should insist that US EPA base the ballast water discharge limits on the highest level of treatment that could be achieved using the best available water or wastewater treatment technology employed in purpose-built ballast water treatment plants constructed onshore at or near ports, consistent with long-established Clean Water Act case law holding that "available technology" includes treatment technology used by other industries; unless it is determined that onshore treatment is "economically infeasible" within the meaning of the Clean Water Act. In that case, US EPA should adopt discharge limits based on the highest level of treatment that can be achieved by shipboard treatment systems, as demonstrated by the publicly-available test performance of the most effective shipboard ballast water treatment system. The publicly-available test data have been reviewed twice: in a report released by Friends of the Earth,⁵ and in an article published in a peer-reviewed scientific journal by three former members of the US EPA's Science Advisory Board Panel on Ballast Water

⁵ *An Assessment of Ballast Water Treatment to Protect Arctic Waters*, a report for Friends of the Earth US (2018).

Treatment.⁶ Both reviews found that the best commercially-available ballast water treatment systems currently in use on some ships consistently demonstrated levels of treatment that are hundreds or thousands of times more effective than is required by US EPA's current proposed rule.

(3) US EPA has argued that the best data for determining the Best Available Technology among shipboard ballast water treatment systems are test data submitted by shipboard ballast water treatment system manufacturers to obtain US Coast Guard approval for the use of their treatment systems in US waters. However, the Coast Guard has refused to release those data to the public and denied Freedom of Information Act requests submitted by the State of California and by scientists. The State of California should sue the Coast Guard to immediately release to the public all test data in its possession on the effectiveness of shipboard ballast water treatment systems.

(4) The Governor should submit to the US EPA Administrator (pursuant to the relevant section in VIDA) a formal objection to the proposed discharge limits and request their replacement with limits based on the Best Available Technology as required by the Clean Water Act, ordered by the Second Circuit Court of Appeals, and described above.

(5) Because US EPA has failed to meet the legal deadlines in VIDA for adopting new ballast water discharge limits, and by its actions has demonstrated that it is in no hurry to adopt new limits but rather is willing to continue to leave in place, indefinitely, the limits rejected by the Second Circuit in 2015, and because VIDA allows states to enforce their own ballast water laws and regulations until US EPA promulgates new limits, California should immediately begin enforcing the discharge limits that the State enacted in 2006. Alternatively, California could expeditiously develop, adopt and enforce discharge limits based on the Best Available Technology, as described above.

(6) If US EPA fails to adopt ballast water discharge limits based on the Best Available Technology as described above, Estuary Partners including the State of California should join with regional and national environmental organizations in suing the US EPA under the Clean Water Act. It should be noted that since the initial *Comprehensive Conservation and Management Plan* was published (forerunner to the *Estuary Blueprint*), environmental organizations have sued US EPA four times over its failure to implement ballast water discharge limits as required by the Clean Water Act, and won each time; that the Court held in the most recent lawsuit that the discharge limits that US EPA is now proposing fail to meet the minimum requirements of the Clean Water Act; that the Court ordered US EPA to revise those limits accordingly; and that by proposing to simply re-adopt the limits that the Court rejected US EPA is openly defying the Court order. Note that the states of New York, Wisconsin, Michigan, Minnesota, Illinois and Pennsylvania previously filed amici curiae briefs in support of the environmental position.

(7) In addition, the California Department of Health, local public health authorities, and the offices of the Attorney General and District Attorneys should consider what other

⁶ Revisiting the basis for US ballast water regulations, *Marine Pollution Bulletin* 118: 348-353 (2017).

powers they may have pursuant to their responsibilities to protect the health and safety of Californians that could be used to prevent the release of potentially fatal human pathogens into the drinking water sources for 25 million Californians, or into marine or fresh waters where such pathogens could infect seafood consumed by Californians or could infect wounds of people working or bathing in such waters.

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Miyoko Sakashita
Oceans Director and Senior Counsel, Center for Biological Diversity

William Jennings
Executive Director, California Sportfishing Protection Alliance

Marcie Keever
Oceans & Vessels Program Director, Friends of the Earth

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Linda Sheehan
Executive Director, Environment Now

Glenn Phillips
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Delta Stewardship Council – Draft Estuary Blueprint Comments

Contributors include:

- Dr. Laurel Larsen, Delta Lead Scientist
- Rachael Klopfenstein, Senior Environmental Scientist, Delta Science Program
- Dr. Jessica Rudnick, Social Science Extension Specialist
- Henry DeBey, Environmental Program Manager, Delta Science Program
- Eva Bush, Senior Environmental Scientist, Delta Science Program
- Harriet Ross, Assistant Planning Director, Planning Division
- Daniel Constable, Environmental Program Manager, Planning Division

We have noted specific alignment with the 2022-2026 Science Action Agenda in italics (many of these were previously noted on pre-draft comments sent by Laurel Larsen). For the sake of all DSP comments being in the same place, we include the other previously sent comments in gray.

Comments by order of appearance in the Draft:

- **Action 1:**
 - **Task 1-2:** The Delta Adapts adaptation strategy is anticipated to be complete in 2023-2024. Implementation of identified strategies is under the jurisdiction of multiple other agencies and groups. We agree that completion of the adaptation strategy is an appropriate milestone but note that implementation will extend beyond the estuary blueprint timelines.
 - **Task 1-5:** *This links well with a suite of science actions in the 2022-2026 [draft Science Action Agenda](#), in which there is an entire Management Need focused on climate science—Management Need 6: Assess and anticipate climate change impacts to support successful adaptation strategies.*
 - **Science Action 6A:** *“Evaluate how climate change, sea level rise, and more frequent extremes will impact habitats, water quality and sediment supply changes, the long-term persistence of native and non-native species, productivity, and food web support”.*
 - **Science Action 6B:** *“Evaluate individual and cumulative impacts and tradeoffs of drought management actions on ecological and human communities over multiple timescales”.*
 - **Science Action 6C:** *“Evaluate the possible multi-benefits of management actions that promote groundwater recharge for ecological functions and water resilience under multiple dry year scenarios”.*
 - **Science Action 6D:** *“Identify how human communities connected to the Delta watershed are adapting to climate change, what opportunities and tradeoffs exist for climate adaptation approaches, and how behaviors vary with adaptive capacity”.*
 - **Science Action 6E:** *“Test and predict how water allocation and ecological flow scenarios under projected climate change will influence habitat conditions, target species' access to critical habitat, and interactions among native and invasive species”.*
 - **Task 1-5:** Also, consider further clarifying the scope/purpose of the consortium. Will it include social and natural scientists, policy makers, science managers?

- **Action 2:**

- Aligns with **Science Action 4B** in the draft 2022-2026 SAA, “Measure and evaluate the effects of using coproduction or community science approaches (in management and planning processes) on communities' perceptions of governance and decision-making processes”.
- DSC is developing an Environmental Justice white paper and could be listed as a collaborating partner. BARHII is another group that would be good to partner with here and on Task 2.
- **Task 2-1:** The Delta Stewardship Council will continue working with CBOs and an [Environmental Justice Expert Panel](#) focused on the Delta and Suisun Marsh areas. Outputs and lessons learned – as well as network capacity – can be shared with similar activities in the Bay Area. The Council can also share work around identifying vulnerabilities and web mapping if useful to the Bay Area network (please see: https://deltascience.shinyapps.io/Delta_vulnerability_map/).
- **Task 2-2:** Suggest a slight reframing through an environmental justice lens to better align it with DSC’s EJ initiatives. In other words, consider mentioning the importance of also assessing the impacts of water quality and habitat on these disadvantaged communities. With the addition of a social science evaluation component for the pilot program, the task could be well aligned with **action 4B** in our draft 2022-2026 Science Action Agenda, “Measure and evaluate the effects of using coproduction or community science approaches (in management and planning processes) on communities' perceptions of governance and decision-making processes”. There is a great 501(c)(3) program: <https://streetsteam.org/about> for downtown beautification through the Bay Area, Sacramento, and more. The focus is on the streets but could be expanded? Romie Nottage presented their program at the State of the Estuary Summit.
- **Task 2-2:** Could also build capacity through education, job training or professional development? Opportunity to work with state agencies to increase job opportunities and recruitment form underrepresented communities.
- **Task 2-3:** The Delta Science Program is holding a climate smart restoration and adaptation [workshop](#) on February 2-3, 2022, and plans to develop a set of climate-smart plant “palettes” that could be used in projects. While not specific to CBOs, this could be a helpful resource to share with the network and is aligned with the BMP milestone. Also, The Franks Tract Futures project provides a great example to look to in the Delta. Partners on that project are DSC, CDFW, DWR, and UC Davis (Brett Milligan). Also, regarding collaborating partners, CRNA and Dept of Conservation has expertise and training on community engagement and public participation based in principles of racial equity

- **Action 3:**

- **Task 3-3:** The Delta Stewardship Council is working on an amendment to Chapter 4 of the Delta Plan (focused on ecosystems). The Draft PEIR for this effort includes guidelines, a new regulatory policy, recommendations, and performance measures related to ecosystem function and adaptation. This effort is also being carried out in light of new science and understanding of climate change impacts on ecosystems. The Draft PEIR also includes a focus on improving coordination and funding. The background research informing the amendment and the analyses in the Draft PEIR could help inform Task 3-3 and related tasks and actions.

- **Action 4:**

- aligns with **Science Action 3A** in the draft 2022-2026 SAA, “Conduct studies to inform restoration approaches that are resilient to interannual hydrologic variation and climate change impacts”.

- **Action 5:**
 - aligns with **Science Action 3B** in the draft 2022-2026 SAA, “Develop integrated frameworks, data visualization tools, and models of the Delta social-ecological system that evaluate the distribution of environmental benefits and burdens of management actions alongside anticipated climate change impacts”.
 - **Task 5-2:** Please see above comment on Task 3-3.
 - **Task 5-4:** aligns with **Science Action 1C** in draft 2022-2026 SAA, “Identify and carry out large-scale experiments that can address uncertainties in the outcomes of management actions for water supply, ecosystem function, and socioeconomic conditions in the Delta”.
- **Action 6:**
 - Great idea! There is a big need for studies on whether the planned restoration in the Delta would be feasible over the long term without active management of sediment supply to the Delta. There has been a lot of focus on organic sediment accumulation (i.e., for carbon sequestration), but very little work done on how mineral sediment supply affects the long-term persistence of wetlands. Reading on, we see some actions dealing with the use of dredged sediment. Using dredged sediment to support wetland restoration hasn't been seriously considered in the Delta, so there are likely missed opportunities. I strongly encourage inclusion of the Delta in any regional coordination on the use of dredged sediment.
- **Action 7:**
 - **Task 7-2:** This is highly relevant to work we are funding by Dennis Baldocchi at UC Berkeley. The project will synthesize long-term information on greenhouse gas budgets and soil carbon accumulation in tidal, nontidal, and restored wetlands.
 - **Task 7-4:** It may be that we lack the context, but we question why this action is specific to SAV, as well as the basic premise that SAV can provide sustained carbon management services. Judy Drexler has done some definitive work on the extent to which nonnative SAV sequester carbon. She found that while *Egeria densa* may capture sediment and sequester carbon, it may inhibit long-term sequestration on marshes by capturing the sediment that would otherwise be routed to long-term storage on the marsh platform (and hence potentially endanger the persistence of the marsh in the face of SLR).
 - Drexler, J. Z., Khanna, S., & Lacy, J. R. (2021). Carbon storage and sediment trapping by *Egeria densa* Planch., a globally invasive, freshwater macrophyte. *Science of the Total Environment*, 755, 142602.
 - Lacy, J. R., Foster-Martinez, M. R., Allen, R. M., & Drexler, J. Z. (2021). Influence of invasive submerged aquatic vegetation (*E. densa*) on currents and sediment transport in a freshwater tidal system. *Water Resources Research*, 57(8), e2020WR028789.
 - **Task 7-5:** Highly relevant to work that DSC is funding, including Dennis Baldocchi at Berkeley (see above comment) and Peter Hernes at the USGS, who is working on detrital contributions to food webs in the Delta. Dennis Baldocchi is an excellent point person for new and existing flux towers in the Delta. A new one is being installed as part of the project DSC is funding.
 - **Task 7-6:** The Delta Conservancy has led a lot of work on this and should be listed as a task lead.
- **Action 9:**
 - Also aligns with **Science Action 3E** in draft 2022-2026 SAA, “Test and monitor the ability of tidal, nontidal, and managed wetlands and inundated floodplains to achieve multiple

benefits over a range of spatial scales, including potential management costs, tradeoffs, and unintended consequences”.

- **Action 12:**

- These topics are quite relevant to the Delta, but the "managed ponds" terminology in the main action is a bit restrictive. "Managed wetlands" or "managed ponds and wetlands" may be more appropriate to encompass the nontidal habitats in the upper SFE that are managed for food web subsidies, carbon sequestration, and wildlife. This also includes seasonally inundated, managed floodplains in places like the Yolo Bypass, where experiments have been underway to evaluate pulsed flow strategies to provide fish rearing habitats and food web subsidies to local and downstream habitats. This set of tasks is relevant to the science **action 3E** in the 2022-2026 draft SAA, “Test and monitor the ability of tidal, nontidal, and managed wetlands and inundated floodplains to achieve multiple benefits over a range of spatial scales, including potential management costs, tradeoffs, and unintended consequences”. Additional collaborating science partners for these actions in the Delta include Ducks Unlimited, Suisun Resource Conservation District, California Waterfowl, UC Davis, the Yolo Basin Foundation, and CDFW.
- **Task 12-4:** Expanding the terminology to include managed ponds, managed wetlands, and inundated floodplains is particularly important here. The methodology should also account for the costs/benefits of how the water is "sourced" from the upper Estuary and how the actions impact partners that must undertake particular reservoir operations and/or use of agricultural infrastructure to make flow actions happen.

- **Action 15:**

- Relevant to **Action 3D** of draft 2022-2026 Science Action Agenda, “Synthesize existing knowledge and conduct applied, interdisciplinary research to evaluate the costs and benefits of different strategies for minimizing introduction and spread of invasive species, and to inform early detection and rapid response strategies”.
- Also, there is frequent mentioning of “key invasive species” – consider clarifying what these are, how they are defined, and/or if they should be identified as part of a task.
- **Task 15-3:** The Delta Interagency Invasive Species Committee (or DIISC), after organizing a December 15, 2021, [symposium](#) on EDRR is in the process of developing a draft EDRR plan for the Delta. This work is being led by the Delta Conservancy and the Delta Science Program.
- **Task 15-5:** Aligns with **Science Action 5A** in draft 2022-2026 SAA, “Identify and test innovative methods for effective control or management of invasive aquatic vegetation in tidal portions of the Delta under current and projected climate conditions”.

- **Action 16:**

- **Task 16-2:** The Sacramento River Science Partnership is working on this. NMFS has been taking the lead on life cycle modeling for winter-run Chinook salmon, which also seems relevant.
- **Task 16-4:** aligns with **Science Action 4C** in draft 2022-2026 SAA, “Use multi-method approaches (e.g., surveys, interviews, oral histories, and/or observations) to develop an understanding of how stakeholder values, and cultural, recreational, natural resource, and agricultural uses vary geographically and across demographics”.
- **Task 16-5:** It is a little unclear about whether this action is seeking to promote institutional change or take action on specific science items (e.g., the synthesis component). Is there a way to clarify the intent of this task, perhaps via the milestone(s).
 - In 2014 the Delta Science Program chartered a synthesis effort for the SWRCB about instream flow methods for tributaries to the Bay-Delta:

https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/flow_objectives/docs/delta_science_rpt_022014.pdf

- And SWRCB (and many others) are working on instream flow/unimpaired flow requirements for (cold water beneficial uses like Chinook salmon) Sacramento River and the entire Estuary.
- A DSP independent review in 2019 “Biological Goals Advisory Panel” has also informed the process: <https://deltacouncil.ca.gov/pdf/science-program/biological-goals/2019-09-18-April-2019-biological-goals-final-report.pdf>
- SWRCB has drafted goals for the lower San Joaquin, including a good synthesis of existing science: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/docs/biological_goals/draft_biological_goals.pdf

- **Action 17:**

- **Task 17-1:** In case of interest, we’d like to highlight a remote sensing-based effort to quantify water use. Although focused on agricultural fields, it can help augment or replace water meter data in some areas: <https://openetdata.org/>.

- **Action 20:**

- **Task 20-1:** Could be expanded to Delta, including USGS and Interagency Ecological Program as leads or collaborating partners.
- **Task 20-5:** aligns with **Science Actions 2A and 5C** in draft 2022-2026 SAA (see below). Further, this is related to work that DSP is currently funding, led by PIs at the USGS and UNC-Chapel Hill. Also, the SWRCB runs a HABs program and should be included as lead, together with the USGS that is working to develop a detection/early warning system. Lastly, the Delta Science Program, along with CDFW and the CVWQCB is planning a workshop focused on HABs monitoring in the Delta (to ultimately inform a HABs monitoring plan) in November 2022, and would welcome the involvement of SFEP and other entities with shared interests.
 - **Science Action 2A:** *“Develop a framework for monitoring, modeling, and information dissemination in support of operational forecasting and near real-time visualization of the extent, toxicity, and health impacts of Harmful Algal Blooms (HABs)”.*
 - **Science Action 5C:** *“Identify the drivers and impacts of HABs severity and persistence”.*

- **Action 21:**

- **Task 21-3:** Milestone should include supporting State Water Boards’ management of [microplastics in drinking water](#).
- **Task 21-4:** Are there efforts to align with the State Water Boards’ Panel on [CECs in Aquatic Ecosystems](#)? We’d also argue that PFAS are no longer CECs as USEPA issued lifetime health advisories for PFOA and PFOS and California established drinking water notification levels for PFOA, PFOS, and PFBS- exhibiting that they are indeed constituents of concern.

- **Action 22:**

- **Task 22-2:** Relevant to **action 4C** of 2022-2026 Science Action Agenda, *“Use multi-method approaches (e.g., surveys, interviews, oral histories, and/or observations) to develop an understanding of how stakeholder values, and cultural, recreational, natural resource, and agricultural uses vary geographically and across demographics”.*
- **Task 22-4:** Aligns with **Science Action 5E** in draft 2022-2026 SAA, *“Quantify spatial and temporal “hotspots” of chemical contaminants and evaluate ecosystem effects through monitoring, modeling, and laboratory studies”.*

- **Action 25:**

- **Task 25-2:** I like this idea! In particular, I'd like to see the milestones be less specific about the number of SoE and BDSC conferences and instead focus on promoting a greater degree of integration. I'm time-limited now but happy to work with you on revising this task more specifically. Suggested revision to the task as written: "and move toward developing a more integrated conference that spans the estuary in scale and targets both scientists and policymakers". Suggested milestone:
 - Hold a BDSC centered on the theme One Estuary. And/or:
 - Revised milestone: Hold annual conferences that focus on the San Francisco Estuary.

January 19, 2022

MTC-ABAG Public Information
Attn: Draft Estuary Blueprint Comments
375 Beale Street, Suite 800
San Francisco, CA 94105

RE: Comments on the Draft Actions for the 2022 Estuary Blueprint

Dear Darcie Luce,

The East Bay Park District (Park District) would like to thank the San Francisco Estuary Partnership for its continued work to protect and restore the San Francisco Estuary, and appreciates the opportunity to comment on the Draft Actions for the 2022 Estuary Blueprint. The Park District manages 50 miles of shoreline in Alameda and Contra Costa County and continues to advance climate adaptation and restoration projects at the Hayward Regional Shoreline, Coyote Hills Regional Park, and McLaughlin Eastshore State Park. We recently completed the San Francisco Bay Trail Risk Assessment and Adaptation Prioritization Plan ([RAAPP](#)) to provide a roadmap for future adaptation projects to protect and enhance public access on the Bay Trail.

The Park District particularly appreciates the inclusion of Action 24 to “Provide equitable public access and recreational opportunities compatible with wildlife”. Sustainable and equitable public access is key to building support for restoration and to providing places of natural respite accessible to all. While the Park District, and many others, work to acquire and restore shoreline properties on the San Francisco Estuary, funding of long-term operations and maintenance will be increasingly important to ensure public access can be sustained.

The Park District looks forward to working collaboratively with the San Francisco Estuary Partnership to continue to identify sources of funding to provide for long-term maintenance and operation of publicly accessible shorelines. Thank you for your consideration and if you have any questions or concerns, please feel free to contact me at (510) 544-2323 or jholder@ebparks.org.

Sincerely,



John Holder
Senior Planner - Acquisition | Stewardship | Development Division

Board of Directors

Dee Rosario
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Sabrina B. Landreth
General Manager

Comments on the 2022-2027 San Francisco Estuary Blueprint Draft Actions

Submitted by Paula White, The Watershed Project

Overall, I think this is an important work to help guide actions and allocate funding for projects that improve the overall health of the San Francisco Estuary.

Some specific comments: Task 6 and its subtasks address sediment management. Task 6-4 mentions Sedimatch, a database used to match sediment suppliers with available sediment. I agree that this tool needs to be more widely promoted, especially to small dredgers.

Task 6-5 addresses federal and non-federal funding for the cost of using dredged sediments, including transport costs. I expect that there are already in place set aside mechanisms to ensure that projects proposed for disadvantaged and underserved communities would have access to these sediments before they run out.

Task 14-5 describes the creation of a Stream Steward Pilot Program at a selected creek side location where unsheltered people live and congregate. The goal of the program is to provide resources for protecting the waterway and support services for people experiencing homelessness.

I believe this is critically important—the Bay Area, and California as a whole, need a robust model to provide guidance for governments, agencies and watershed stewardship groups in coordinating services to this most vulnerable and challenging population that can be widely applied. Is there funding earmarked for this? If not, there needs to be.

Task 19-2 mentions an LID tracker tool. Has such a tool been developed? If so, does it simply measure the volume/area of treated stormwater or does it also include more specific measurements of various kinds of pollutants and the effectiveness of their removal from the green infrastructure component?

Task 19-3 discusses the creation of an in lieu fee or other LID compliance program that will provide funding for ongoing maintenance of green infrastructure in the public realm. This is critically important, as there is currently no funding for maintenance of green infrastructure, to say nothing of the overall lack of funding for parks and other public amenities, especially in underserved communities.

Task 23-1 advocates for exploring effective EPR and product bans to reduce sources of trash coming into the SF Bay. Any support and leadership that the SFEP can provide is most helpful.

January 20, 2022

MTC-ABAG Public Information
Attn: Draft Estuary Blueprint Comments
375 Beale Street, Suite 800
San Francisco, CA 94105

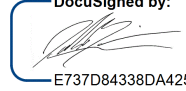
To: San Francisco Estuary Partnership

In response to the request for comments on the Estuary Blueprint 2022 Update, Valley Water provides the following comments for your consideration. General comments are provided below, while action and task-specific comments may be found on pages 2 thru 5.

- Add specific time-based deliverables to milestones.
- Improve connections to existing efforts throughout the actions. Examples already in the update include references to using EcoAtlas and the Bay Area Greenprint.
- Make note of potentially competing goals, for example, the implementation of green infrastructure and the need for sediment supply to marsh areas.
- Consider this as an opportunity to clarify that this effort includes watershed areas connected to the estuary and not just tidal habitat areas.
- Suggest to move tasks 5-3 thru 5-5 to Task 6 with other sediment-related actions/tasks.

Please contact Brian Mendenhall (BMendenhall@valleywater.org) if you have any questions on any of the comments.

Sincerely,

DocuSigned by:

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John Bourgeois
Deputy Operating Officer
Watershed Stewardship and Planning Division
Valley Water

DocuSigned by:

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Kirsten Struve
Assistant Officer
Water Supply Division
Valley Water

ACTION and TASK-SPECIFIC COMMENTS

Action 2

- Action 2 should be moved after Action 4 so all climate related topics can be grouped together.

Action 4

- Completing design and implementation are good milestones but is funding associated with this or is it just a tracking mechanism?

Task 4-4

- Add to description "recognize interactions between projects"

Task 5-1

- Under milestone section, suggest adding the following at the end: "Also include in demonstration how watershed-based approach leads to ease of permitting and reduced compensatory mitigation."
- Valley Water's One Water Plan and may be valid pilot projects for SF Estuary Partnership to consider.

Task 5-2

- Under milestone section, suggest adding following at the end: "Also during the workshops present sample multi-benefit projects from various watersheds to illustrate how the tools and documents could be utilized in individual project setting and specific benefits that can be gained."

Task 5-4

- Under milestone section, suggest adding following at the end: "Also add detailed discussion of any potential hurdles associated with implementation of the management measures and provide strategies how to overcome such hurdles and choose one project to demonstrate success of such strategies. "

Task 5-5

- Remove wording 'Coarse'
- Under milestone section, suggest adding the following: "Also apply the bay regional sediment strategy to a routine sediment removal program from representative flood protection agency to demonstrate how to optimize opportunities and ways to reduce barriers."

Task 6-4

- To increase the use of Sedimatch consider making project information entry mandatory and provide added incentive to sediment suppliers by providing mitigation credits

Task 6-6

- Prioritize research efforts that lead to acceleration of implementation of individual projects to increase future sediment supplies

Task 6-7

- Under milestone section, suggest adding following at the end: “As a part of the report, develop different sets of sediment management and monitoring strategies under various future climate scenarios for select OLU.”

Action 13

- This action should be either combined with Action 8 (Wetland Regional Monitoring Program) or placed next to it.

Task 14-2

- Milestone: BAWN is not a well-funded or attended association. Suggest adding a milestone to fund BAWN to expand their influence.

Task 14-3

- Milestone: Rather than annual lists, put effort and funding into watershed plans that identify priority actions. This would also meet the intent of Regional Board watershed plans/profiles.

Task 16-1

- How is this task different from the existing SWRCB public process for updating and implementing the Bay-Delta WQCP?

Task 16-5

- In order to be actionable, development of instream flow recommendations needs to consider all beneficial uses of those flows and balance the environmental and human needs as well as the needs of salmon with those of other native species like delta and longfin smelt. Suggest that this task include a robust stakeholder engagement element.

Task 17-3

- Milestone “Offer 20 regenerative landscape and MWELO trainings throughout the Estuary.”

Task 17-4

- Description: “Develop a model ordinance for water efficient retrofit on resale or retrofit on listing, based on such examples as existing City of Davis, Santa Cruz County, and/or City and County of San Francisco ordinances, taking into account contingencies that do not delay close of escrow. Develop a model ordinance to encourage water efficient new development based on examples developed by Santa Clara Valley Water District.”
- Milestone, “Develop model retrofit and new development ordinances for use by Estuary cities and counties. Adoption by X% of Estuary cities and counties in Y years.”

Task 17-5

- Milestone “Hold one workshop with Estuary stakeholders and produce report.”

Task 17-6

- Description: “Address knowledge gaps on the use of water by the Commercial, Industrial, and Institutional (CII) sector within the Estuary by completing...”
- Milestone “Develop study and complete and disseminate report synthesizing a study on use of water by the CII sector throughout the Estuary.”

Task 18.1

- Should water retailers and regulators be specifically referenced
- The sharing platform should be electronic, web-based and open to the public. Funding should also be provided for annual upkeep and maintenance.

Task 18.2 and 18.3

- Suggest these tasks could be a joint effort between wastewater and water agencies.

TASK 18-3

Collaborate with the Bay Area Clean Water Agencies' (BACWA) Recycled Water Committee, **water agencies** and others to convene stakeholders to identify opportunities for the broader use of recycled water **including potable reuse**, understand funding and planning gaps and address regulatory and permitting constraints, **and assist with public acceptance and outreach**.

MILESTONE

Hold forum to discuss overcoming challenges to regional recycled water projects **and promoting public acceptance**.

Task 18.4

- Note “regional” is emphasized, which may or may not be possible given different conditions within the Estuary. Consider revising.

Action 19

- There ought to be efforts to promote and accelerate region-wide implementation of low impact development (LID) and green infrastructure (GI).
- There are financial, technique, and institutional barriers to widespread green infrastructure implementation. There ought to be a strategy on identifying and removing some of the barriers.
- While desirable, LID and GI are not the only ways to reduce polluted runoff from reaching the Estuary. It seems short-sighted to focus only on those methods. It seems unlikely that even with our best efforts and funding, we will treat the entire landscape with LID and GI (at least within the life of the Blueprint).

Task 19-2

- Milestone: Ensure the tool is compatible with systems that have already been developed such as the SCVURPPP Stormwater Treatment Measure Data Portal

Task 19-4

- It might be good to explicitly do this in a way that is consistent with requirements in stormwater permits.

Action 20

- The description is the same as for Action 19 and only peripherally related to nutrient management.

Task 20-5

- Consider expanding beyond the Delta. There have also been HABs in the Bay and there already exists far better monitoring, modeling, and information dissemination in the Delta than there is in the Bay.

Action 21

- Description: May want to mention true source control specifically as an overarching goal for this action.
- Suggest adding a task to support toxicity testing in the Estuary including developing better scientific information on the effects of mixtures of contaminants on sensitive aquatic organisms.

Task 21-2

- Consider expanding beyond pet flea and tick control products. Suggest expanding this to reduce residential sources of pesticides coming into the Estuary.

Action 22

- Make clear connection with Action 2.

Task 22-3

- Should there be specific reference to working with OEHHA here?

Task 24-4

- Mention encouraging this open space as a climate change measure as well.

Task 24-5

- Should acknowledge impacts to corridors from people. Maybe focus this on riparian corridor widths with benefits for natural adaptation to climate change.
- Existing metrics exist for tracking riparian corridor widths

Action 25

- This should be the overarching theme of the Blueprint, and therefore should be the first Action or the Umbrella for the rest of actions.



YOCHA DEHE
CULTURAL RESOURCES

October 25, 2021

California Indian Environmental Alliance
Sherri Norris, Executive Director
PO Box 2128
Berkeley, CA 94702

RE: San Francisco Estuary Blueprint YD-01042022-04

Dear Mr. Burke:

Thank you for your project notification, regarding cultural information on or near the proposed San Francisco Estuary Blueprint. We appreciate your effort to contact us.

The Cultural Resources Department has reviewed the project and the Tribe concurs with the draft Estuary Blueprint.

Should you have any questions, please feel free to contact:

CRD Administrative Staff
Yocha Dehe Wintun Nation
Office: (530) 796-3400
Email: THPO@yochadehe-nsn.gov

Please refer to identification number YD -01042022-04 in any correspondence concerning this project.

Thank you for providing us with this notice and the opportunity to comment.

Sincerely,

DocuSigned by:

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Tribal Historic Preservation Officer