



Memorandum

To: Michelle King, Principal Planner
City of Sunnyvale, Department of Community Development

From: Amber Sharpe, Project Manager
Maria Kisyova, Project Manager
Kristy L. Weis, Principal Project Manager

Date: June 12, 2023

Re: Responses to Late Comments on the Draft Environmental Impact Report for the Moffett Park Specific Plan (SCH No. 2021080338)

The City of Sunnyvale received late comments on the Draft Environmental Impact Report (EIR) for the Moffett Park Specific Plan after the close of the public comment period for the Draft EIR on February 10, 2023 and after the publication of the Final EIR on April 13, 2023.

Late comments were received from members of the public at the April 24, 2023 Planning Commission Study Session; from Naomi Goodman, MSPH via email on April 27, 2023; and a joint letter from Sierra Club, Santa Clara Valley Audubon Society, and Citizens Committee to Complete the Refuge via email on May 25, 2023. Copies of the comment letter from Naomi Goodman, MSPH and the joint letter are attached to this memo. A summary of the late comments coupled with responses to those comments are provided below. Most of the late comments were the same (or similar to) comments received during the Draft EIR circulation period, which were responded to in the Final EIR (as documented below). Late comments pertaining to the merits of the project are not included in this memorandum, nor are responses to these types of comments required under CEQA. In addition, the City also published an Errata to the Draft EIR dated June 12, 2023.

None of the late comments provided significant new information requiring the recirculation of the EIR, pursuant to CEQA Guidelines Section 15088.5.

Planning Commission Study Session – April 24, 2023

Comment A: Comments were received regarding the impact of shading from tall buildings on riparian corridors, wetlands, open space, and recreation facilities.

Response A: These comments were responded to in the Final EIR in Responses R.8 and R.9 (pages 66 through 68 of the Final EIR) and Responses R.13 through R.15 (pages 69 and 70 of the Final EIR). In summary, Response R.8 explains that the existing wetland and riparian habitats in the northwest corner of Moffett Park are within the Ecological Combining District (ECD). Private development is prohibited in the ECD and other Specific Plan standards, including ones pertaining to impervious surfaces, landscaping, lighting, and raptor perch deterrents, are applicable to the ECD. Response R.9 explains how the Specific Plan’s exterior lighting standard minimizes lighting impacts to riparian and wetland habitats. Response R.13 explains that aesthetic impacts (including light and glare) are discussed on pages 44 through 51 of the Draft EIR. Response R.14 explains that impacts to riparian habitat and wetlands are discussed under Impact BIO-2 and Impact BIO-3 on pages 111 through 114 of the Draft EIR. Response R.15 provides a response to the comment about sunlight at parks and open space.

In addition, City staff prepared a report for the City Council regarding the pros and cons of taller buildings in Moffett Park. This report includes a diagram of potential shadows from tall buildings near Baylands Park and can be accessed here: <https://sunnyvaleca.legistar.com/LegislationDetail.aspx?ID=6176521&GUID=AFA7D520-90D7-426D-91DC-F4B2BEED8654&G=FA76FAAA-7A74-41EA-9143-F2DB1947F9A5&Options=&Search=>. As documented in the report, future development at the maximum allowed height would primarily shade Caribbean Drive and the Baylands Park parking lots. Limited shading would occur of the existing landscaped and vegetated/passive recreation areas in Baylands Park. This shading would generally occur for four months of the year after 3pm and would not significantly impact the recreational use of Baylands Park or the vegetation. None of the shadows would fall on the protected wetland areas of Baylands Park.

Comment B: Comments were received regarding the project’s impact on existing parks and recreational facilities (including Baylands Park and the San Francisco Bay Trail), impacts to migratory birds and special status species due to project residents and employees, and the use of electric/motorized mobility devices at recreational facilities and trails.

Response B: These comments were responded to in the Final EIR. Topic Response 3 on pages 9 through 11 in Final EIR explains where the Draft EIR discusses the project’s impacts to recreational facilities and responds to how the impact is less than significant. Responses R.8 through R.11 on pages 66 through 69 of the Final EIR responds to the comment regarding the increase of future resident/employee activities proximate to natural areas and impacts on sensitive species. Response R.10 on page 68 of the Final EIR responds to the comment regarding the use of electric/mobilized mobility devices.

Comment C: Comments were received suggesting bird façade treatment should be required for buildings at 60 feet above ground and above.

Response C: As discussed on page 115 of the Draft EIR, Specific Plan Standard (2) Façade Treatment requires no more than 10 percent of the surface area of a building's total exterior façade to have untreated glazing between the ground and 60 feet above ground. Requiring building façade treatments up to 60 feet above ground is the same standard used in the San Francisco Planning Bird Design Guidelines and New York City Bird Friendly Building Design and Construction Requirements, which are considered the models for bird-safe design guidelines. Façade treatment is not required for a building's exterior façade above 60 feet because most bird collisions occur from the ground to 60 feet.

Bird strikes occurring above 60 feet are usually due to nighttime migration, therefore, measures relating to controlling nighttime lighting are effective to prevent nighttime collision, not façade treatments. Control measures for lighting are included in the Specific Plan and summarized on page 115 of the Draft EIR and discussed in Response R.9 on pages 67 and 68 of the Final EIR.

Comment D: Comments were received about the potential cumulative groundwater contamination impacts, timely assessment, and mobilization of contaminants in groundwater.

Response D: These comments were responded to in the Final EIR in Responses R.26 through R.29 on pages 76 through 78 of the Final EIR. The responses explain how existing regulations and Specific Plan requirements (including site-specific investigations and remediation) described in the Draft EIR would reduce impacts to a less than significant level. Response R.30 on page 78 of the Final EIR explains how future projects would be subject to the regulations in place at the time the development is proposed. Response R.31 on pages 78 and 79 of the Final EIR provides a response to the comment regarding the effects of sea level rise on contamination.

Comment E: Comments were received regarding the impacts to special status species at waterways, Baylands, former salt ponds, and levees.

Response E: These comments were responded to in the Final EIR in Response R.8 on pages 66 and 67 and Response R.11 on page 69. Also, refer to Topic Response 3 on pages 9 through 11 of the Final EIR, which explains how the current use, operations, and restrictions at existing recreational facilities would not change as part of the project.

Naomi Goodman, MSPH – April 27, 2023

Comment F: A comment was provided regarding cumulative hazards, site-specific hazardous materials evaluation (including investigation of soil, groundwater, and soil vapor contamination) when development is proposed, remediation, and transparency of site investigations and remediation when sites are proposed for development.

Response F: The project's impact on hazards and hazardous materials, including cumulative impacts, are discussed in Section 3.9 Hazards and Hazardous Materials on pages 169 through 195 of the Draft EIR. Site-specific investigations of hazards and hazardous materials are required as part of the City's development review process for all future projects. The City's development review process is a public process, which includes making information about the proposed development and related environmental review available for public review. Pages 190 and 191 of the Draft EIR describes Specific Plan Requirements 10.3.1-1 through 10.3.1-4, which require site-specific Phase I Environmental Site Assessment (ESA), Site Management Plans (which would establish management practices for handling contaminated soil, soil vapor, groundwater, and other materials during construction), Phase II ESA (which would include soil, groundwater, and/or soil vapor sampling and evaluation), and remediation/management measures. Also refer to Response A.7 on pages 13 through 14 of the Final EIR for a response regarding remediation of hazardous materials contamination.

Comment G: A comment was provided claiming text was added to the EIR at the request of the California Department of Toxic Substances Control (DTSC) that 'closed' sites need not go through a Phase I Assessment was inappropriate.

Response G: The assertion in the comment is incorrect. The EIR does not state that sites with closed cases would not require a Phase I ESA. No such text was added or requested to be added to the EIR. Comments provided by the California Department of Toxic Substances Control to the City, with the City's responses, are provided on pages 28 through 29 of the Final EIR. A copy of the comment letter from DTSC is included in Appendix A of the Final EIR.

Comment H: A comment was received requesting data gaps from the SF Estuary's Institute's report on groundwater conditions in Appendix G of the EIR and comments from the Sierra Club Loma Prieta Chapter, Santa Clara Valley Audubon Society, and Citizens Committee to Complete the Refuge dated February 10 be addressed.

Response H: These comments were addressed in the Final EIR. Response R.31 on pages 78 through 79 of the Final EIR responds to the comment about the data gap in the groundwater report in Appendix G of the Draft EIR, and comments from the Sierra Club, Santa Clara Valley Audubon Society, and Citizens Committee to Complete the Refuge dated February 10 are responded to on pages 60 through 91 of the Final EIR.

**Sierra Club Loma Prieta Chapter, Santa Clara Valley Audubon Society, and Citizens
Committee to Complete the Refuge – May 25, 2023**

Comment I: A comment was received regarding Impact REC-1 and Topic Response 3 failing to provide credible analysis of increased employee use of existing park and recreation facilities.

Response I: The comment speculates that the project would result in significant degradation of existing park and recreational facilities. No evidence was provided.

Public park and recreational facilities are open to the public and used by residents and visitors (such as employees who may live out of the area and commute into the area to work). The use and purpose of existing public park and recreational facilities are to serve the public and include amenities such as picnic areas, playgrounds, sports fields, and connecting trails. Public park and recreational facilities are constructed and maintained for public use. The use of existing parks and recreational facilities by residents and employees of Moffett Park would be no different than the use of the facilities by other public members.

As explained in Topic Response 3 on page 10 of the Final EIR, and as noted in the comment letter, the use of existing park and open space facilities in the project area by employees is minimal compared to residents given their purpose in Moffett Park (i.e., to work, not live and recreate) and is offset with the provision of on-site amenities typically provided with non-residential development. For this reason, the City focuses its General Plan goal¹, Zoning Code requirement² and evaluation of impacts to park and recreational facilities in terms of use by residents and residential population. This is exemplified by the environmental review certified for the buildout of the City's General Plan³, and other projects that include large amounts of non-residential development such as the adopted Lawrence Station Area Plan⁴ and original Moffett Park Specific Plan.⁵

The commenter is correct that the park in-lieu fees collected under the City's Municipal Code Chapter 19.74 cannot be used by the City for monitoring impacts, maintenance of trails and other facilities, or habitat protection and restoration unless related to park construction or improvements. The maintenance of parks and open spaces is funded by the General Fund. Non-residential uses, while not subject to the payment of park in-lieu fees, contribute to the General Fund (and, therefore, the upkeep of existing park and recreational facilities) through property tax, sales tax, transient occupancy tax, and other payments. At buildout, the Specific Plan would

¹ City of Sunnyvale. *Sunnyvale General Plan*. June 2022. Page 3-54.

² Sunnyvale Municipal Code Chapter 18.10 Parkland and Open Dedication requires 5.0 acres of public park and recreational facilities per 1,000 residents.

³ City of Sunnyvale. *Land Use and Transportation Element Draft Environmental Impact Report*. SCH# 201232003. August 2016. Pages 4.0-16 through 4.0-19.

⁴ City of Sunnyvale. *Lawrence Station Area Plan Draft Environmental Impact Report*. SCH# 2013082030. May 2016. Pages 3.11-12 through 3.11-13.

⁵ City of Sunnyvale. *Moffett Park Specific Plan Environmental Impact Report*. SCH# 2001052121. Pages 3.11-10 through 3.11-11.

result in a net benefit of \$48 million to the City's General Fund.⁶ This revenue growth is primarily driven by increases in assessed property values due to the Specific Plan. The City, therefore, would continue to maintain existing, city-operated park and recreational facilities if the project were approved.

Based on the discussion in Section 3.15 Public Services under Impact PS-4 on pages 274-275 of the Draft EIR and Section 3.16 Recreation under Impact REC-1 on page 281 of the Draft EIR, Topic Response 3 on page 10 of the Final EIR, and this response, both future residential and non-residential development in Moffett Park would contribute to reducing impacts to existing park and recreational facilities to a less than significant level by providing parkland, open space, and recreational facilities as part of their development, paying park in-lieu fees, and contributing to the General Fund which is used, in part, to the maintenance and upkeep of city-operated park and recreational facilities.

Comment J: A comment was received claiming the EIR failed to evaluate or address impacts from increased demand for "distinct uses" only available in existing shoreline park and recreation facilities adjacent to the plan area. The comment expressed concern that the increase in use of existing park and recreational facilities with "distinct uses," such as Baylands Park and Bay Trail, by future residents and visitors/employees resulting from the Specific Plan would result in the degradation of those facilities and the wildlife at those facilities.

Response J: The existing park and recreational facilities in the project area are described in Section 3.16.1.2 Existing Conditions on page 280 of the Draft EIR. Baylands Park and San Francisco Bay Trail (Bay Trail), which are identified in the comment letter, are among the facilities identified. The impact to existing park and recreational facilities is provided on the next page under Impact REC-1 on page 281 of the Draft EIR. All existing facilities were considered in the impact discussion even though they were not explicitly identified by name. The cumulative impacts to existing parks and recreational facilities are analyzed on pages 281-282 of the Draft EIR. Also, refer to Response I above as to why the project would not result in a significant impact to existing park and recreational facilities in general.

Refer to Topic Response 3 on pages 9-11 of the Final EIR, which reiterates that the Draft EIR acknowledges the implementation of the Specific Plan would increase use of existing park and recreational facilities (which include the facilities with "distinct uses" identified in the comment letter), explains that an impact to existing facilities would occur if the project would increase use such that substantial physical deterioration would occur or be accelerated, and why the project would not result in a significant impact. The project would not result in significant impacts to existing park and recreational facilities with "distinct uses," such as the Trail and Baylands Park, because the purpose and management of those facilities is to be used and enjoyed by the greater public. For reference, a brief description of the Bay Trail and Baylands Park facilities are provided below.

⁶ Strategic Economics, Inc. *Moffett Park Specific Plan Update: Fiscal Impact Analysis Results*. October 4, 2022.

- **The Bay Trail**, which is a joint project between the Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG), is currently a 350-mile shoreline trail that connects communities, parks, open spaces, schools, and transit. The Bay Trail is a regional trail facility that serves the nine Bay Area counties, which include over seven million residents. One of the Bay Area counties is Santa Clara County. Santa Clara County is comprised of 15 cities, one of which is the City of Sunnyvale. Moffett Park is located within Sunnyvale.

The Bay Trail provides recreation and active transportation to work, school, and other destinations. On the Bay Trail website, exploration of the trail is encouraged and activities advertised include walking, bicycling, bringing dogs, picnicking, accessing urban as well as remote areas, birding, fishing, partaking in water activities (kayaks, sailboards, dragon boats, and paddleboards), and accessing beaches, parks, and bridges are identified. The website states: “Get on the trail, then tell your friends.”⁷

The ultimate vision of the Bay Trail is to provide “A total of 500 miles by foot or by wheel through 47 cities, across 7 toll bridges, along shorelines, BBQ spots, over 130 parks, remote locations, and so much more.”⁸ The San Francisco Bay Trail Design Guidelines and Toolkit (June 2016) provides guidance for future expansion and improvements to the Bay Trail to facilitate its vision while continuing to provide protection of Bay resources. The Bay Trail connects over 130 parks and wildlife areas totaling over 57,000 acres of open space.^{9,10}

- One of the parks the Bay Trail connects to is **Baylands Park**. Baylands Park is owned by Santa Clara County and managed by the City of Sunnyvale. The park is open to the public. It includes over 70 acres of developed parkland with active recreation, pathways, and picnic areas. The park includes “Two large group picnic areas can seat 325 people and four small group picnic areas each seat 60-130 people. A large grassy field, a children’s play area and miles of Bay Trail make this a popular park for family gatherings.”¹¹ There are also 11 family picnic sites with two picnic tables each. Amplified sound is permitted at the park.¹² Special events of up to 2,000 people are also permitted at Baylands Park. The park

⁷ Metropolitan Transportation Commission. “San Francisco Bay Trail.” Accessed June 8, 2023. Available at: <https://mtc.ca.gov/operations/regional-trails-parks/san-francisco-bay-trail>.

⁸ Metropolitan Transportation Commission. “San Francisco Bay Trail.” Accessed June 8, 2023. Available at: <https://mtc.ca.gov/operations/regional-trails-parks/san-francisco-bay-trail>.

⁹ 2M Associates, PlaceWorks, Questa Engineering Corporation, De Robertis, Michelle. *San Francisco Bay Trail Design Guidelines and Toolkit*. June 2016. Page 3.

¹⁰ Metropolitan Transportation Commission. San Francisco Bay Trail. Accessed June 8, 2023. <https://mtc.ca.gov/operations/regional-trails-parks/san-francisco-bay-trail>.

¹¹ Metropolitan Transportation Commission. “Map 6 – Ravenswood Slough to Alviso.” Accessed June 8, 2023. Available at: <https://mtc.ca.gov/operations/regional-trails-parks/san-francisco-bay-trail/map-numbers/map-6-ravenswood-slough-alviso>.

¹² City of Sunnyvale. “Baylands Park” Accessed June 8, 2023. Available at: <https://www.sunnyvale.ca.gov/recreation-and-community/parks-and-trails/baylands-park>.

remains open to the public when special events take place. The park offers biking, hiking, nature trails and access to the Bay Trail. An additional 105 acres of the park consists of seasonal wetlands, which are protected as a wetlands preserve. The park has additional restrictions in place to protect wildlife, including prohibiting pets and certain recreational uses.¹³

Over 2.7 million people, which is approximately 40 percent of the Bay Area, live within two miles of the Bay Trail. There are 1.6 million jobs within the same two-mile radius, which accounts for over 50 percent of all jobs in the Bay Area.¹⁴ Moffett Park is within two miles of the Bay Trail and buildout of the Specific Plan is estimated to result in about 42,000 new residents and 60,500 net new jobs/employees compared to existing conditions, as disclosed on page 259 of the Draft EIR. The growth projected to result from the project is a fraction of the existing number of residents and jobs within two miles of the Bay Trail. In addition, when complete, the Bay Trail is projected to be accessible to over nine million people projected to live in the Bay Area by 2040.¹⁵ As discussed in Section 3.14 Population and Housing and 4.0 Growth-Inducing Impacts, the project's projected growth is within the projected growth estimates for the region identified in the current Plan Bay Area adopted by MTC and ABAG.

The project is not inconsistent or incompatible with the Bay Trail, Baylands Park, or other park and recreational facilities. These facilities are intended to be used by the public. Future residents and employees of Moffett Park could use existing park and recreational facilities and the use of these facilities by them would be consistent with the intent of those facilities. As stated in Topic Response 3, Page 9 of the Final EIR, the current use, operations, and restrictions to protect wildlife at existing park and recreational facilities, including the Bay Trail and Baylands Park, would not change as part of the project.

The residents and employees of Moffett Park would contribute to the cumulative use of existing parks and recreational facilities (including the Bay Trail and Baylands Park) and the contribution would not be cumulatively considerable given a multitude of reasons including the existing and projected use of the facilities, proposed park and recreational facilities proposed as part of the project, and the fees paid by future development to purchase and maintain park and recreational facilities (refer to Response I above). As exemplified in the descriptions above for the Bay Trail and Baylands Park, wildlife in and around existing park and recreational facilities are currently subject to human disturbance. The incremental increase in use from the project, coupled with the existing rules and regulations in place for use of those

¹³ City of Sunnyvale. Parks and Trails: Baylands Park. Accessed June 7, 2023.

<https://www.sunnyvale.ca.gov/recreation-and-community/parks-and-trails/baylands-park>.

¹⁴ Metropolitan Transportation Commission. San Francisco Bay Trail Design Guidelines and Toolkit. June 2016. Accessed June 1, 2023. <https://mtc.ca.gov/sites/default/files/documents/2021-10/Bay-Trail-Design-Guidelines-and-Toolkit.pdf>.

¹⁵ 2M Associates, PlaceWorks, Questa Engineering Corporation, De Robertis, Michelle. San Francisco Bay Trail Design Guidelines and Toolkit. Page 3. June 2016. Accessed June 7, 2023. <https://mtc.ca.gov/digital-library/5021001-bay-trail-design-guidelines-toolkit>.

facilities and the protection of wildlife and sensitive habitat, would not result in a significant impact to wildlife. In addition, the environmental review completed for existing facilities, including the Bay Trail and Baylands Park, when they were proposed evaluated the impacts of users of the facilities on wildlife. The operators of park and recreational facilities would continue to have the ability to implement measures to protect wildlife with or without the project.

In addition, no comments were received from MTC, ABAG, or any other park and recreational facility operator expressing concerns about the residents and visitors/employees of Moffett Park using their facilities. The City appreciates collaborating with other agencies and would be open to future collaboration and coordination with park and recreation facility operators.

For the reasons above, the project's use of park and recreational facilities such as the Bay Trail and Baylands Park and its effects on degradation of the facilities and impacts to wildlife at the facilities are not considered cumulatively considerable or significant and mitigation (or additional Specific Plan policies) are not required.

Comment K: A comment was received regarding concerns about the potential for mobilization of hazardous materials contaminants through climate change-induced groundwater rise. Suggestions were made to add a new policy assuring transparency and opportunity for public review and comment; add a new requirement for preparation of soil and groundwater studies (e.g., testing for contaminants and identifying site-specific vulnerability to shallow groundwater rise) for any renovation, modification, or redevelopment project within the Specific Plan area; and modify an implementation action to include monitoring of hazardous soil-borne contaminants and a regularly updated map of chemical testing results.

Response K: The comment is correct that, per California Building Industry Association v. Bay Area Air Quality Management District, 62 Cal. 4th 369 (BIA v. BAAQMD), effects of the environment on a project are not considered CEQA impacts. The comment asserting “no testing has been done for chemicals likely to be present within the Plan area” is incorrect. As summarized in Section 3.9.1.2 Existing Conditions on pages 183 through 188 and detailed in Appendix F of the Draft EIR, there are known contaminants in Moffett Park that have been confirmed based on testing. The comment asserting “the Final EIR indicates that “closed” sites need not go through a Phase I Environmental Site Assessment” is also incorrect. Refer to Response G of this memo for a response to that comment.

The comment included a recommendation for transparency and opportunity for public review and comment regarding hazardous materials analysis for projects. As explained in Response F of this memo, site-specific investigations of hazards and hazardous materials (including testing for hazardous contaminants and identifying groundwater levels) are required as part of the City's standard development review process for all future projects. The City's development review process is a public process, which includes making information about the development and related environmental review available for public review.

As noted in the comment, the effect of sea-level rise on a project is not an impact under CEQA. For this reason, it is discussed for informational purposes in Section 3.10 Hydrology and Water Quality in the Draft EIR and no mitigation (or additional Specific Plan policy) is required under CEQA. Additionally, as discussed in Response D of this memo, Response R.31 on pages 78 and 79 of the Final EIR (as amended via text revisions in the Errata) provides a response to the comment regarding the effects of sea level rise on contamination and clarified that the Specific Plan includes implementation actions to develop an updated citywide Storm Drain Master Plan and to establish a groundwater monitoring plan. The updated Storm Drain Master Plan would assess the condition of the City's existing storm drainage system and identify capital improvement projects (CIPs) to accommodate capacity changes and reduce the risk of flooding and inundation from sea level rise. The groundwater monitoring plan would track groundwater elevation changes and salinity, which would assist in advising adaptation strategies such as those described above. Both plans would reduce the effects of sea level rise in Moffett Park.

Also, the regulatory agencies that have enforcement authority and jurisdiction within the Specific Plan area include the USEPA, California DTSC, San Francisco RWQCB, and Valley Water, all of which have existing programs in place to address climate change (including sea-level and groundwater level rise) in relation to investigation and cleanup of contaminated sites.¹⁶

Comment L: A comment was received suggesting bird façade treatment should be required for buildings at 60 feet above ground and above to reduce nighttime bird collision.

Response L: Refer to Response C of this memo for a response to this comment.

Comment M: A comment was received suggesting Specific Plan facade and glazing treatment standards be revised to achieve reflectivity ratings of no greater than 20 percent.

Response M: The Specific Plan standards have been revised to achieve reflectivity ratings of no greater than 15 percent, which is more stringent than the suggested 20 percent (see revision to page 115 of the Draft EIR in the Errata).

¹⁶ Examples of existing programs addressing climate change are described in the following sources: 1) United States Environmental Protection Agency. "Climate Change Regulatory Actions and Initiatives." Accessed May 31, 2023. <https://www.epa.gov/climate-change/climate-change-regulatory-actions-and-initiatives>. 2) Ocean Protection Council. *State Agency Sea-Level Rise Action Plan for California*. February 2022. Available at https://www.opc.ca.gov/webmaster/media_library/2022/08/SLR-Action-Plan-2022-508.pdf. 3) California Water Boards: San Francisco Bay R2. "Climate Change." Accessed May 31, 2023. https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/climate_change/. 4) Valley Water. "Climate Change Action Plan." Accessed June 5, 2023. <https://www.valleywater.org/your-water/water-supply-planning/climate-change-action-plan>.

Comment N: A comment was received regarding the definition of “qualified biologist” used in the EIR and Specific Plan and the oversight of regulatory wildlife agencies. The comment included suggested language to be added to clarify the definition of a qualified biologist and deferral to responsible agencies.

Response N: The definition of “qualified biologist” is defined in Specific Plan requirement 10.3.5-1 in the Draft EIR (as amended in the Final EIR) and applicable to all other uses of “qualified biologist” in the EIR. The comment is correct that regulatory agencies such as the US Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), and National Marine Fisheries Service (NMFS) have survey protocols for different species that define the qualification requirements for biologists to complete the applicable survey work. Text has been added to page 103 of the Draft EIR in the Errata to clarify these points.

Comment O: A comment was received recommending the Specific Plan add policies limiting Life Sciences labs to Biosafety Levels 1 and 2 (BSL-1 and BSL-2) and prohibiting BSL-3 and BSL-4 in Moffett Park. An error in the text of Specific Plan Policy IU-2.6 was also identified in the comment.

Response O: Refer to Response R.38 on pages 83-84 of the Final EIR. Life science and biotech labs are currently allowed in the City and not new uses in the City. No biosafety labs are proposed as part of the project; therefore, no details about such facilities (including safety measures and design measures) are known. If a biosafety lab is proposed in the future, it would be subject to the City’s development review process. The development review process is a public process and the development proposal would be subject to project- and site-specific environmental review that would include analysis of its hazardous materials impacts and compliance with existing, applicable regulations. The project’s design and safety measures in place would be disclosed and analysis would be completed to determine the adequacy of any proposed safety and design measures to avoid and minimize impacts and whether the project would result in impacts to the environment. Depending on the conclusion of the project-specific environmental review, the City could require additional controls or measures.

In general, all life sciences labs are subject to existing regulations and guidance established including those by the United States Department of Health & Human Services (HHS), United States Occupational Safety and Health Administration (OSHA), National Institutes of Health (NIH), and Centers for Disease Control Prevention (CDC). For example, the United States Code of Federal Regulations (CFR) contain OSHA-issued requirements for safety practices and worker protection.¹⁷ The NIH’s Design Requirements Manual establishes requirements and best practices for design and construction of life science lab facilities. The joint NIH/CDC Biosafety in Microbiological and Biomedical Laboratories manual identifies best practices for operation, including procedures for worker, public, and

¹⁷ United States Department of Health & Human Services. “Occupational Safety and Health Administration Standards for Biological Laboratories.” November 6, 2015. Accessed June 6, 2023. <https://www.phe.gov/s3/BioriskManagement/biosafety/Pages/OSHA.aspx>.

environmental safety.^{18,19} The NIH also established the Institutional Biosafety Committee (IBC) to provide local review and oversight of publicly funded research facilities to ensure consistency with NIH guidelines. Though not intended to be regulatory documents, NIH and CDC guidance are considered the nationwide models and standard codes of practice.^{20,21} For example, Santa Clara University, UC San Diego, and UC San Francisco maintain biosafety manuals consistent with the NIH to guide safe development and management of labs containing potentially hazardous agents.^{22,23} HHS, OSHA, NIH, and CDC regulatory and guidance documents are regularly updated and future life science labs (if proposed) would be subject to current, applicable regulations and guidance.

The City Council can consider the future restriction of biosafety labs in the City as a study issue. The public can suggest study issue topics such as the prohibition of BSL-3 and BSL-4 levels at any time for the City Manager, City Council, or a board or commission to sponsor. For information on how study issues receive consideration, see this website: <https://www.sunnyvale.ca.gov/your-government/governance/city-council/study-issues-and-budget-proposals>.

The text of Specific Plan Policy IU-2.6 was corrected.

Comment P: A comment was received requesting clarification on the prohibition of natural gas use for biotech lab facilities, factories, and hazardous materials manufacturing.

Response P: The City’s Reach Code can be viewed here: <https://sunnyvaleca.legistar.com/LegislationDetail.aspx?ID=4698593&GUID=4CBCB1AA-4CAC-4B23-B9A2-C43DB3ACC07B&FullText=1> and says: “F, H, L Occupancies may utilize natural gas and shall provide installed prewiring for future use of electric appliances.” The “F, H, L” in the Reach Code stands for factories, hazardous materials manufacturing, and laboratory facilities, as discussed in the Draft EIR and noted in the comment. If a future laboratory facility is proposed and applies for an exception to the Reach Code to allow for natural gas use, the City will evaluate the application and only grant an exception for specific processes or uses within the facility where natural gas use is essential. Other general functions of the building or use, such as general building heating, cooling, and air conditioning systems or hot

¹⁸ National Institutes of Health. *Design Requirements Manual*. March 26, 2020.

<https://orf.od.nih.gov/TechnicalResources/Documents/DRM/DRM1.503262020.pdf>.

¹⁹ National Institutes of Health and Centers for Disease Control and Prevention. *Biosafety in Microbiological and Biomedical Laboratories*, 6th Edition. June 2020. https://www.cdc.gov/labs/pdf/SF_19_308133-A_BMBL6_00-BOOK-WEB-final-3.pdf.

²⁰ National Institutes of Health. “FAQs on Institutional Biosafety Committee (IBC) Administration.” May 2019. Accessed June 1, 2023. <https://osp.od.nih.gov/policies/biosafety-and-biosecurity-policy/faqs-on-institutional-biosafety-committee-ibc-administration-may-2019/>.

²¹ United States Department of Health & Human Services. “Biosafety FAQs.” April 26, 2017. Accessed June 6, 2023. <https://www.phe.gov/s3/BioriskManagement/biosafety/Pages/Biosafety-FAQ.aspx>.

²² University of California San Diego. “Biosafety Level (BSL) Practices Chart.” September 13, 2022. Accessed June 1, 2023. <https://blink.ucsd.edu/safety/research-lab/biosafety/containment/chart.html>.

²³ University of California San Francisco. “Biosafety Resources.” Accessed June 1, 2023. <https://ehs.ucsf.edu/biosafety-resources>.

water heating, where electricity use is adequate, electricity would be required and no exception would be granted. The Specific Plan has been revised to say, per existing City policy, all new buildings will be electric and natural gas will be phased out except where required for manufacturing/industrial processes. Immediate, medium, and long-term implementation will phase in programs to decarbonize existing building.

Comment Q: A comment was received expressing concern that the Draft EIR energy use assumptions do not reflect life sciences development and requesting clarification on the applicability of the City's Green Building Program requirement of LEED Gold certification for new and remodeled laboratory (including life science laboratory) facilities exceeding 5,000 square feet.

Response Q: Refer to Response R.17 in the Final EIR, which explains that life sciences projects (if proposed in the future) would be subject to subsequent, project-specific environmental review to evaluate its energy impacts. The City's Green Building Program standard for non-residential development is summarized in the Draft EIR, as noted in the comment letter. More information and details about the program requirements can be viewed here: <https://www.sunnyvale.ca.gov/business-and-development/planning-and-building/green-building>. Laboratory facilities are considered non-residential development and would be subject to the Green Building Program requirements for non-residential development. As detailed in the program requirements, all non-residential major alterations are required to meet CALGreen Mandatory Measures and LEED Silver. Per the Sunnyvale Municipal Code, as referenced in the Green Building Program, "Major Alterations means non-residential alterations where interior finishes are removed and significant upgrades to structural and mechanical, electrical and/or plumbing systems are proposed where areas of such construction are ten thousand gross square feet or more in existing commercial, office and industrial buildings." This comment does not provide new information that would change the analysis or conclusions disclosed in the Draft EIR.

Comment R: A comment was received regarding water and wastewater consumption and plastic waste generation associated with life science facilities and included recommendations to require environmental review and monitoring of water and wastewater needs associated with future life sciences lab facilities, add a goal to the Climate Action Playbook for water and single-use plastic reduction in life sciences lab facilities, and review/revise current strategies for plastic waste reduction.

Response R: As explained in Response R.17 on page 71 of the Final EIR, future development, including life science labs, would be subject to subsequent environmental review by the City. Subsequent environmental review would include a project-specific evaluation of impacts including those related to water demand, wastewater generation, and solid waste generation, pursuant to CEQA.

As part of the subsequent environmental review, the consistency and compliance of future development (including life science labs, if proposed) with applicable regulations (including those pertaining to water, wastewater, and solid waste

reduction) would be discussed. For example, future development would be subject to regulations including Assembly Bill 341, California Green Building Standards Code (CALGreen), Sunnyvale Reach Code, Sunnyvale General Plan, Sunnyvale Municipal Code, and Sunnyvale Climate Action Playbook, which all contain water conservation and waste reduction strategies for building construction and operation. These regulations are described in the Draft EIR and compliance with these regulations by future development are discussed in the Draft EIR, including in Sections 3.6 Energy, 3.8 Greenhouse Gas Emissions, and 3.19 Utilities and Service Systems. For example, as discussed on page 168 of the Draft EIR, future projects under the Specific Plan would contain recycling programs and recycle or salvage a minimum of 65 percent of nonhazardous construction and demolition waste, and lower water demand through water conservation programs and water-efficient design and landscaping. In addition, the Specific Plan includes policies (such as policies IU-3.2, IU-3.3, and IU-3.5) that require water use/conservation requirements and building efficiency beyond City standards.

The City is in the process of updating the Climate Action Playbook and could consider water and plastic waste reduction strategies.

This comment does not identify any specific CEQA issues or inadequacies of the Draft EIR, nor does this comment provide new information that would change the analysis or conclusions disclosed in the Draft EIR.

From: Naomi Goodman <[REDACTED]>
Sent: Thursday, April 27, 2023 7:45 AM
To: Michelle King; PlanningCommission AP
Subject: Comment on Moffett Park Specific Plan and Final EIR
Attachments: [Goodman Comment on MPSP and final EIR 4-27-23.pdf](#)

ATTN: Email is from an external source; Stop, Look, and Think before opening attachments or links.

Michelle King, Principal Planner
Department of Commercial Development
City of Sunnyvale
456 West Olive Avenue
Sunnyvale, CA 94086

Dear Ms. King and Sunnyvale Planning Commissioners,

This email relates to the May 8 continuation of the April 24 study session to review and approve the Moffett Park Specific Plan (MPSP) and the Final Environmental Impact Report (EIR).

I am concerned that the MPSP and EIR do not give enough attention to the cumulative hazard posed by legacy environmental contamination within the Plan Area. The attached letter outlines these concerns and requests additions to the MPSP to provide transparency on decisions on site investigations and cleanup plans as development projects are submitted to the City.

Respectfully,

Naomi Goodman, MSPH

April 26, 2023

Michelle King, Principal Planner
Department of Commercial Development
City of Sunnyvale
456 West Olive Avenue
Sunnyvale, CA 94086
By email to: mking@sunnyvale.ca.gov

Subject: Comment on the Moffett Park Specific Plan and Final Environmental Impact Report

Ms. King,

This communication is related to the May 8 continuation of the April 24 study session to review and approve the Moffett Park Specific Plan (MPSP) and the Final Environmental Impact Report (EIR).

As an environmental scientist with over 40 years of experience in hazardous waste site characterization and remediation, I have conducted site investigations and risk assessments of many military and industrial sites, including several of the semiconductor solvent plumes in the Sunnyvale area. I am concerned that the MPSP and EIR do not give enough attention to the cumulative hazard posed by legacy environmental contamination within the Plan Area.

The MPSP and EIR outline procedures to evaluate and, if necessary, remediate chemical hazards on individual development project sites, assuming that will mitigate overall risks. That is not necessarily the case. Air pollution does not respect property boundaries. There are areas such as the NIROP/Plant One naval cleanup sites that will require decades to remediate the halogenated solvent groundwater plume to the point where vapor intrusion into buildings no longer poses a threat. Until that time, early residents and workers at Moffett Park may be exposed to airborne contamination from multiple sources.

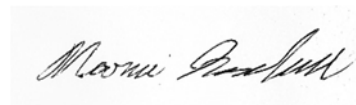
This failure of the EIR to properly evaluate cumulative hazard is not surprising, as the intent of CEQA is to assess the impact of a project on construction workers, surrounding communities and the environment. CEQA is much less useful at assessing the impact of current site conditions on future workers and residents at a project site. However, it is the responsibility of the Planning Commission and the City of Sunnyvale to safeguard public health by incorporating protections into the MPSP.

In many areas of the site, no testing has been done for chemicals likely to be present. Most of the "site closures" listed on the various state and federal maps addressed only fuel tank leaks. Given the history of this area, and its proximity to known or suspected offsite sources of contamination (for example, Moffett Field, Sunnyvale landfill, and upgradient groundwater contamination plumes), a thorough assessment should be made of existing soil and groundwater conditions at every development project. The language added to the final EIR at the request of the Department of Toxic Substances Control that "closed" sites need not go through a Phase I assessment is not appropriate, as the site closures may not have considered the full range of likely contaminants.

Data gaps should be addressed, such as those noted in the SF Estuary Institute's report on groundwater conditions (Appendix G to the EIR), and in the February 10, 2023 comment on the Draft EIR by the Sierra Club, Santa Clara Valley Audubon Society, and Citizens Committee to Complete the Refuge.

Development on sites with known contamination is risky, potentially exposing residents to unhealthy conditions and the City and developers to future litigation. To allay public concerns regarding the risks of living or working in Moffett Park, there needs to be transparency on the basis for decisions on whether additional site investigations will be required, on the scope of new site investigations, and on planned remediation measures. The public should have the opportunity to review and comment on each of the relevant documents before they are finalized.

Sincerely,

A handwritten signature in black ink, appearing to read "Naomi Goodman", is centered on a light gray rectangular background.


Naomi Goodman, MSPH
Menlo Park, CA

Attachment: Naomi Goodman Curriculum Vitae

CC: Sunnyvale Planning Commissioners

CURRICULUM VITAE

Naomi Goodman



PROFESSIONAL EXPERIENCE

1999- Senior Technical Leader
2022 Electric Power Research Institute, Palo Alto, CA

Managed research related to power plant waste stream characterization, environmental permitting, analytical methods evaluation and development, transmission and distribution environmental issues, and power plant wastewater effluents. Managed the development of software for electric power industry applications, including a large relational database of chemical measurements of power plant waste streams, software for preparing oil spill prevention, control and countermeasures (SPCC) plans, and software for reporting annual emissions to the EPA's Toxics Release Inventory program. Launched a PFAS Interest Group to inform the electric power industry on technical and regulatory developments related to per-and poly-fluorinated alkyl hydrocarbons legacy and current uses.

1996- Environmental Chemist
1998 OHM Remediation, Pleasanton, CA

Developed work plans and wrote reports for remediation of hazardous waste and fuel spill sites at military bases. As a contractor to the U.S. Navy, developed work plans for a large remediation effort at Johnston Atoll, involving contamination with dioxins from storage of Agent Orange from the Vietnam War.

1990- Associate Environmental Scientist
1995 Hart Crowser, San Francisco, CA

Managed and prepared work plans and reports for hazardous waste site investigations, marine sediment contamination sites and fuel spills. Managed a sampling effort to investigate an inlet of San Francisco Bay heavily contaminated with polychlorinated biphenyls (PCBs) and other contaminants from historical ship-scraping operations.

1987- Senior Associate Environmental Scientist
1990 ICF/Clement Associates, San Francisco, CA

Conducted human health risk assessments for EPA Region 9 Superfund sites and other hazardous waste sites. Evaluated and modeled chemical fate and transport at manufactured gas plant facilities, hazardous waste landfills, and paper mills. Prepared reports for federal agencies and private clients.

1985- Environmental Scientist
1987 GCA Services Group, Bedford, MA

Performed human health risk assessments, characterization of hazardous waste and PCB spill sites, field sampling, report preparation and regulator response.

1979- Analytical Chemist
1983 Stanford University Environmental Engineering Department

Analyzed wastewaters and groundwater for pollutants, including disinfection byproducts, polar, volatile and semivolatile organic compounds using liquid-liquid extraction, gas chromatography and mass spectrometry.

1977- Quality Control Chemist
1979 Zoecon Inc., Palo Alto, CA

Conducted quality control analyses of innovative pesticides and reagents using chemical analyses.

EDUCATION

MS Public Health – Environmental Chemistry
University of North Carolina – Chapel Hill, 1985

BA Biology
University of California – Santa Cruz, 1976



May 25, 2023

Michelle King
Principal Planner, Department of Community Development
City of Sunnyvale
456 West Olive Avenue
Sunnyvale, CA 94086

Re: Moffett Park Specific Plan and Final Environmental Impact Report, File No. 2021080338

Dear Ms. King,

Sierra Club Loma Prieta Chapter, Santa Clara Valley Audubon Society, and Citizens Committee to Complete the Refuge are environmental organizations with interest in the San Francisco Bay and the region's wildlife and natural resources. Due to the Moffett Park Specific Plan (MPSP) area's proximity to San Francisco Bay, new development in the Plan area raises significant concern about impacts on wildlife, shoreline ecosystems and open space resources as well as community resilience to risks associated with sea level and groundwater rise. We therefore have participated in every opportunity to provide public comment on the Moffett Park Specific Plan as it developed.

We commend the diligent work of City staff and its team of consultants to put forth a comprehensive and thoughtful plan for the future of Moffett Park. We acknowledge and appreciate the extensive research, refinement and public process that underlie the MPSP. Nevertheless, the responses to comments in the Final Environmental Impact Report (EIR) and associated updates to the MPSP did not allay several of our concerns. In particular, we find the lack of policies or mitigation to monitor or manage the ecological impacts of increased human activity in shoreline open spaces to be of dire concern and we lament the lost opportunity to protect nature and reverse the degradation of ecosystems as part of this immense plan.

Our comments below highlight specific areas of continued concern with regard to resilience of existing open space and recreation facilities, biological resources and wildlife protection, hazardous contamination, and unique impacts of development of life sciences laboratories. Our recommendations within each issue area separately identify gaps in the Final EIR that need to be addressed and proposed amendments to strengthen and clarify the MPSP's policies and

strategies. For your convenience, Appendix C, attached, provides a consolidated list of our recommendations.

We hope you will consider our comments and recommendations to strengthen the MPSP and better support its vision for an ecological innovation district. We look forward to meeting with you to discuss further.

EIR TECHNICAL CORRECTION

Please correct page 6 (pdf page 8) and page 60 (pdf page 62) of the Final EIR response file to specifically mention the Citizens Committee to Complete the Refuge and Santa Clara Valley Audubon Society as co-authors of the joint Draft EIR comment letter submitted with the Sierra Club.

PARKS, OPEN SPACE AND RECREATION

The EIR dismisses our concern, shared by multiple other commenters,¹ that adding 42,000 new residents and 60,000 employees to the area will have significant detrimental impacts on existing park, open space and recreation facilities and on wildlife along bayland wetlands and levees. However, without any evidence-based assessment of employee use, and with critical gaps in analysis of impacts, there is insufficient evidence to make the Impact REC-1 or Impact BIO-4 findings of less than significant impact.

The resulting failure to require monitoring and mitigation of the impacts from increased recreation use will have significant detrimental effects on existing park and recreation facilities, wildlife (including migratory and special-status species), community well-being, and the City's budget outlook.

- 1. Impact REC-1 and Topic Response 3 fail to provide credible analysis of increased employee use of existing park and recreation facilities.*

The City's park dedication fee ordinance, Municipal Code Chapter 19.74, is at the core of the City's finding that the MPSP would have less than significant impact on existing park and recreation facilities. However, that ordinance does not purport to address non-resident impacts. By its terms, it is based on a finding that "multifamily rental housing projects have a significant effect on the use and availability of parks and recreation space and facilities." Furthermore, its stated intent is to ensure that *residential* development pays "its fair share toward improvements, and/or purchase and development of parks and recreational facilities."²

Any impact on the degradation of existing facilities attributable to the addition of 60,000 new employees in Moffett Park would be additive. Yet the only assessment of increased use by project

¹ Topic Response 3, FEIR p. 7, "Since many of the comments raised the same concerns and questions, topic responses have been prepared."

² Sunnyvale Municipal Code Chapter 19.74, section 19.74.010.

employees is a single sentence in Topic Response 3 indicating an unsubstantiated expectation that their use will be minimal.³

The California Environmental Quality Act (CEQA) Appendix G requires analysis of the **project's** impact on degradation of parks and recreation facilities, not just new resident impacts. The EIR reliance on a mere assumption that 60,000 new employees will make minimal use of existing facilities is grossly flawed, especially in an area designed for dense development and active transportation and in an era when employee access to nature is recognized as a core element of corporate wellness.^{4 5}

Additionally, we note that Park dedication fees collected pursuant to Municipal Code Chapter 19.74 can only be used to “purchase land, buy equipment or construct improvements.”⁶ The fees cannot be used for monitoring impacts, maintenance of trails and other facilities, or habitat protection and restoration. Furthermore, there is no current mechanism for non-residential development to pay a fair share toward the upkeep of park and recreation facilities or the protection of wildlife and restoration of habitat. Underestimating (and failing to mitigate) increased use, could have budget implications for the City that delay or prevent needed future maintenance and restoration investment for existing facilities.

2. *The EIR fails to evaluate or address impacts from increased demand for distinct uses only available in existing shoreline park and recreation facilities adjacent to the Plan area.*

The EIR acknowledges an expected increase in resident and employee use of existing facilities. Indeed, Specific Plan Policy OSE-1.2 seeks to affirmatively connect residents, employees and visitors to existing “adjacent facilities.” However, the MPSP and Final EIR fail to evaluate and address the cumulative demand for open space uses that are not served by new facilities envisioned within the Plan area.

The Draft EIR and Topic Response 3 assert that new park and open space acreage, in conjunction with Specific Plan Policies OSE-2.1 through OSE-2.8 requiring certain types of facilities, would “offset” the project’s demand for existing park and recreational facilities. However, the claim of offsetting facilities falls flat as applied to the Bay Trail’s distinct function as a regional commute route and recreation trail, or the unique character of existing shoreline trails and vistas (at Baylands Park, the landfill hills, and along many levees abutting Sunnyvale’s water treatment ponds, Guadalupe slough, Calabazas/San Tomas Aquino creek and marsh, and other levees in

³ “While employees in Moffett Park may use existing park and recreational facilities in the area, their use is expected to be minimal given their primary purpose in Moffett Park is to work (verses residents who live and recreate in Moffett Park) and would further be minimized with provision of on-site amenities that are typically provided with non-residential development.” Topic Response 3, FEIR p.10.

⁴ *The Benefits of Green Spaces: How Nature Can Improve Mental Health and Well-being*, Corporate Wellness Magazine <https://www.corporatewellnessmagazine.com/article/the-benefits-of-green-spaces-how-nature-can-improve-mental-health-and-well-being>

⁵ *Reducing Stress at Work is a Walk in the Park*, The Conversation, April 17, 2016 <https://theconversation.com/reducing-stress-at-work-is-a-walk-in-the-park-57634>

⁶ Sunnyvale Municipal Code Chapter 19.74.020(d).

the south end of the San Francisco Bay). Hunting is another recreation activity offered in the Sunnyvale Baylands that cannot be duplicated within the Plan area.

The introduction of a large number of residents and employees without alternative, like-kind facilities, and with ready access facilitated by Policy OSE-1.2, likely will lead to a sharp increase in use of Baylands Park, the Bay Trail and the above-mentioned shoreline trails, with inevitable impacts on wildlife (including migratory birds and special-status species) and degradation of existing facilities. Yet the MPSP relies only on existing protections, such as trail signage directing visitors away from sensitive habitats, and limitations on dogs at Sunnyvale Baylands Park.⁷ Those protections target some specific detrimental behaviors but do nothing to address increased volume of use. The lack of policies or mitigations to monitor or manage the impacts of increased human activity in shoreline open spaces is of dire concern.

3. The EIR fails to evaluate or address impacts of increased recreation use on wildlife.

Our comment letter expressed the concern that impacts to special-status species, migratory birds and other wildlife species are likely to result from the inevitable increase in human and pet activity on levees. This concern remains valid. Indeed, there is substantial scientific evidence to support a fair argument that an increase in human activities and encroachment in or adjacent to wildlife habitat will impact patterns of use and populations of species using these habitats.

Impacts on migratory and nesting birds behavior (including foraging, resting, roosting and nesting) from human activity on trails are well documented globally as well as specifically in the South Bay adjacent to the Sunnyvale Baylands (see Appendix A: Annotated Reference for summary of specific studies' findings). As shown in Appendix A, scientific studies and reviews reveal widespread effects of human presence and recreation on animals, with a large amount of evidence showing negative impacts to raptors and shorebirds. Studies also show consistent negative impacts to shorebird breeding.

In the Bay Area, and specifically in locations near or adjacent to Moffett Park, studies of the responses of migratory birds to human activity on shoreline trails and levees show that the numbers and species richness of migratory shorebirds decreased with an increase in human recreational activities. Migratory duck species seem especially sensitive: all duck species within 80 meters of a levee trail responded to trail use. When disturbed, ducks moved substantially farther from the trail than they were found before pedestrians' presence. Tolerance differed between species, with some more averse to human activity than others. But in a scientific literature review of human impacts on waterbirds in the San Francisco Bay Area, 86% of the studies found that human disturbance affected their study species. The review shows that boating and walking affect bird behavior, causing them to waste time and energy they could have used to feed. Birds flying away in response to human disturbance was noted in 57% of the 50 studies reviewed.

⁷ Topic Response 3, FEIR page 9.

The analysis associated with Impact BIO-4 did not fully address the impact of recreation on wintering migratory shorebirds and ducks. As we have highlighted above, use of trails and levees in the area will increase substantially as a result of the addition of 60,000 employees and 42,000 residents to Moffett Park since walking and biking on Bay levees are popular activities that cannot be fully, or even closely, replicated with the new recreation facilities in the Plan area.

Response R.8 to this concern directed us again to Topic Response 3 which includes no analysis or discussion of impacts from increased recreation activity on migratory birds and special status species, dismissing our concern by stating, "*Baylands Park and San Francisco Bay Trail direct visitors to designated trails (and not sensitive wildlife habitat).*" The missing analysis, discussion, monitoring and mitigation requirements are a fatal flaw of the EIR and must be corrected.

Needed Additions to the EIR

- Provide evidence substantiating the City's expectation that commuting employees will make minimal use of local park and recreation facilities (including trails). This should include an objective evaluation of the expected participation of Moffett Park employees in active transportation commute modes, including use of the Bay Trail.
- Substantiate the City's expectation that the cumulative increase in population - both residents and employees - will not expand trail use in ways that disrupt and harm populations of migratory birds, special status species, and other native resident or migratory wildlife species.

The following mitigation measures should be added to the EIR (*EIR Table 2.3-6: Summary of Key Specific Plan Requirements and Policies by Resource Area - Biological Resources and elsewhere*).

- Proposed new requirement 10.3.5-xx: Limit public access to some of the Sunnyvale Baylands Levees. Closing some levees to recreational activities (see Figure 1, below, levees proposed for closure to recreation are marked in Green). This mitigation measure reserves some levees for use by migratory birds while at the same time providing accessibility and connectivity for people. It reduces encroachment and disturbance of migratory birds.
- Proposed new requirement 10.3.5-xx: With the exception of commute trails (such as Bay Trail and the East and West Channels trails), limit access to human-powered-only, and prohibit electronic or motorized mobility devices except as required for Americans with Disabilities Act accommodation. This mitigation measure reduces encroachment pressure further from the Bay Trail.

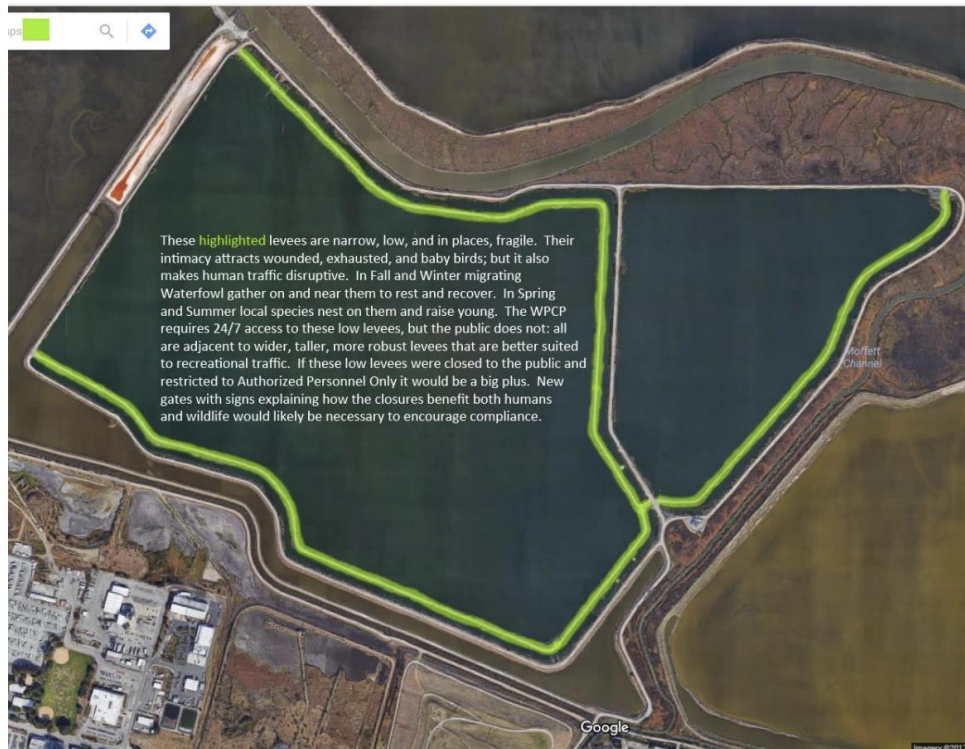
PROPOSED SEASONAL LEVEE CLOSURES

Figure 1

MPSP Recommendations re: Parks, Open Space, and Recreation

MPSP Section 6.2 Open Space and Urban Ecology Principles, Goals, and Policies, Goal OSE-1: INTERCONNECTED AND BIODIVERSE OPEN SPACE NETWORK. Moffett Park provides a high level of service with ample open space for residents, employees, and visitors through an interconnected network of open spaces that supports healthy ecosystems, improves air and water quality, improves public health, and adapts to a changing climate.

- Proposed new policy OSE-1.X: Protect and enhance habitat in open space and Bayland ecosystems to maintain and support biodiversity over time.
- Proposed new policy OSE-1.4.X: Monitor usage of open space in and near the Plan area as Moffett Park grows and densifies, and use dynamic strategies to regulate use as needed to reduce impacts to wildlife and maintain the quality of recreation facilities.
- Proposed new policy OSE-1.4.X: Identify financing strategies to ensure fair share contributions to facility maintenance and habitat restoration costs.

MPSP Section 6.2 Open Space and Urban Ecology Principles, Goals, and Policies, Goal OSE-3: ECOLOGICAL DEVELOPMENT. New developments' parks and open spaces enhance ecosystems and support biodiversity, benefiting both people and natural habitat.

- Proposed text change (in **bold**) to Policy OSE-3.1: Facilitate the removal of existing and transfer of future development away from the Lockheed Martin stormwater holding ponds, **other stormwater, emergent and potential wetlands, grasslands and other undeveloped lands north of 1st Street** through implementation of an Ecological Combining District to expand and enhance wetland habitat, ecosystem health, and climate resilience.

CONTAMINATION HAZARDS

We remain quite concerned about the potential for mobilization and spread of legacy hazardous chemical contamination in Moffett Park, with potentially significant site-specific and cumulative impacts that can be exacerbated by climate change effects, including sea level rise, shallow groundwater rise, and fluvial flooding. Because CEQA does not address impacts of the environment on a project, the EIR leaves significant gaps in public understanding of these threats to public and ecosystem health within the Plan area. We urge the City to include robust policies in the MPSP to ensure transparency and enable full assessment, management, and mitigation of future project-specific and cumulative contamination impacts as the MPSP unfolds over time.

Despite the Plan area's proximity to known or suspected sources of contamination, no testing has been done for chemicals likely to be present within the Plan area. An April 23, 2023 comment letter submitted by environmental scientist Naomi Goodman, indicated that "most of the 'site closures' listed on the various state and federal maps addressed only fuel tank leaks."⁸ As a result, site closures may not have considered the full range of likely contaminants currently present. Nevertheless, the Final EIR indicates that "closed" sites need not go through a Phase I Environmental Site Assessment.

Climate change also significantly complicates assessment and management of potential chemical hazards as sea level rise, shallow groundwater rise, and fluvial flooding threaten to spread contamination more widely. Contaminant disruption from development at one site may have wider ranging impacts than anticipated under current conditions, resulting in a greater cumulative impact. Unfortunately, CEQA is an inadequate tool for addressing that challenge and a programmatic EIR, by its nature, defers much analysis to future project-by-project environmental review, often with less public visibility and engagement. We hope the City will exercise its discretion to strengthen the MPSP with additional attention to hazardous contamination.

We recommend the following additions and amendments to the MPSP in order to build public confidence that legacy contamination is appropriately identified and remediated and to improve the City's capacity to monitor, evaluate and respond to potential cumulative impacts.

⁸ April 27, 2023 letter submitted by Naomi Goodman, an environmental scientist with over 40 years of experience in hazardous waste site characterization and remediation. [Goodman Comment on MPSP and final EIR 4-27-23.pdf](#)

MPSP Recommendations Regarding Contamination Hazards

MPSP Section 4.1 Land Use Goals and Policies, Goal LU-1 COMPLETE NEIGHBORHOODS. A series of neighborhoods with access to public amenities, quality housing, good jobs, and healthy and safe environments that weave together into a vibrant ecological innovation district.

- Proposed new Policy LU-1.7: Assure transparency and opportunity for public review and comment regarding hazardous materials analysis for all projects, including the decision basis and findings regarding additional site investigations, the scope of new site investigations, and planned remediation measures.

MPSP Chapter 10 Implementation, Section 10.2.1 Hazards and Hazardous Materials

- Proposed new submittal requirement: **Soil and Groundwater Study**. For any renovation, modification, or redevelopment of a property within Moffett Park, an assessment of existing soil and groundwater conditions shall be completed, including testing for hazardous contaminants and identifying site-specific vulnerability to shallow groundwater rise.

MPSP Chapter 10 Implementation, Section 10.4 Implementation Actions, Table 29

- Proposed text change (in **bold**) to Groundwater Data Collection description: Establish a monitoring plan of groundwater elevations, **hazardous soil-borne contaminants**, and salinity within Moffett Park that includes the development and publication of a three-dimensional map of subsurface geology **as well as a regularly updated map of chemical testing results**. [Note: the proposed 10.2.1 submittal requirement above would be a valuable data source for this Groundwater Data Collection effort.]

BIOLOGICAL RESOURCES

1. **Bird Safety**

The MPSP limits Bird Facade treatment requirements to the first 60 feet of building height. We ask that you expand this requirement to include all building heights on building facades that face parks, open space and water features. Increasingly, evidence shows⁹ that nocturnally migrating birds are attracted to light at night (such as from residential towers) and collide with towers and tall structures, sometimes in great numbers. Collision risk is especially visible in areas near bays and rivers. To reduce the risk of bird collision, we ask that the MPSP strengthen the requirements for safety treatment. Similar to the San Jose City Wide Design Standards and Guidelines, we ask that glazing achieves reflectivity of no more than 20%. Similar to the City of Cupertino, we ask for

⁹ <https://www.fws.gov/story/2022-04/dim-lights-birds-night>

facades taller than 60 feet to implement bird safety treatment when facing open space and water features.

MPSP Recommendations Regarding Bird Safety

MPSP Section 5.4 Ecological Development Standards

- Proposed MPSP text change (in **bold**) to section 5.4.2 BIRD SAFE DESIGN Section 2. Façade treatment: No more than 10% of the surface area of a building's total exterior façade shall have untreated glazing between the ground and 60 feet above ground. **Building facades that face open space or water features will have treated glazing at all heights.** Bird Friendly glazing treatments can include the use of opaque glass, the covering of clear glass surface with patterns, the use of paned glass with fenestration patterns, and the use of external screens over non-reflective glass. All façade glazing shall have reflectivity ratings no greater than **20%**.
- Proposed MPSP text change (in **bold**) to section 5.4.2 BIRD SAFE DESIGN Section 4. Façade treatment: No more than 10% of the surface area of a building's total exterior façade between the ground and 60 feet above ground or within 15 feet above a green roof shall have untreated glazing. **Building facades that face open space or water features will have treated glazing at all heights.** Bird Friendly glazing treatments can include the use of opaque glass, the covering of clear glass surface with patterns, the use of paned glass with fenestration patterns, and the use of external screens over non-reflective glass. All façade glazing shall have reflectivity ratings no greater than **20%**.

2. Oversight for Special Status Species

Final EIR Response R.5 to our comment asking for criteria to be provided for "qualified biologist" in regard to Special Status Species, modifies the following text in the MPSP (highlight added):

Requirement 10.3.5-1: Special Status Plants. At the time development is proposed, focused special status plant surveys shall be completed by a qualified biologist (**defined as a person with a minimum of a four-year degree in wildlife sciences, biology, environmental sciences, or equivalent experience in the biological sciences**) for alkali milk-vetch and Congdon's tarplant in the grasslands and vernal mesic areas (e.g., areas with a moderate supply of moisture) of Moffett Park's northwestern corner.

We have two concerns about this response. One is that the City only added this definition to the category of Special Status Plants but did not apply it to any of the seven other Special Status Species or Sensitive Habitat included in the Draft EIR nor in Section 10.3.5 of the MPSP. The second concern is that the definition added is inadequate when applied to Special Status Species and habitats on which those species depend.

Categorically, Special Status Species are subject to the oversight of responsible wildlife agencies, applying and ensuring species protection intended by one or more of the wildlife regulatory

authorities cited in the Draft EIR. Qualifications for performing these protective actions include *species-specific* training and experience with permitting, including survey protocols and construction requirements. These are qualifications that can only be acquired through post-undergraduate field work and study and *must be* species-specific. Further, as sensitive habitats are often associated with Special Status Species, biologists involved in surveys and permitting in those habitats discussed in 10.3.5 must have related advanced qualifications.

The 10.3.5 discussion of the salt marsh harvest mouse¹⁰ (SMHM) can serve as an example. It is identified¹¹ as endangered at both the Federal and State level and also Fully Protected by the State. Thereby the responsibility of protection of the SMHM and habitats on which it depends falls on the US Fish and Wildlife Service (USFWS) and the California Fish and Wildlife Service (CDFW). Actions potentially disturbing habitat or the SMHM itself, including surveys of its presence and permits for certain actions, fall under protocols established by the USFWS.

Unfortunately, the 10.3.5 SMHM discussion¹² describes certain survey requirements without any annotation that survey protocols need USFWS approval, nor that the “qualified biologist” must have “special status marsh species experience.”¹³

Broadly we note that the 10.3.5 discussion of Special Status Species and sensitive habitats omits any annotation that actions required thereunder are subject to confirmation as protocols and standards by the wildlife agencies responsible for Special Status Species and Habitats protection per Federal and State Law cited.¹⁴

MPSP Recommendations Regarding Oversight for Special Status Species

Chapter 10: Implementation, 10.3 General Submittals and Site Master Plans, Section 10.3.5 Special Species

- *Definition of Qualified Biologist.* We recommend that the following definition be prominently inserted at the beginning of Section 10.3.5 to be applied to actions related to all the species and habitats discussed.

For actions described below regarding Special Status Species and Sensitive habitats discussed, a qualified biologist will be a person with a minimum of a four-year degree in wildlife sciences, biology, environmental sciences having post-graduate species and/or habitat-specific experience and, when required by the US Fish and Wildlife Service, California Department of Fish and Wildlife, or National Marine Fisheries Service, appropriate permit or other authorization.

¹⁰ Moffett Park Specific Plan Update, Public Review Draft, December 2022, p.274.

¹¹ Moffett Park Specific Plan Update, Draft Environmental Review Report, Table 3.4-1, p.99

¹² Moffett Park Specific Plan Update, Public Review Draft, p.274

¹³ Personal email, Kim Squires, Section 7 Division Manager, SF Bay Delta USFWS Office.

¹⁴ Ibid MPSP Update DEIR, pp.85-86

- *Deferral to responsible agencies.* Section 10.3.5 could address this topic in one of two ways. Here we provide and recommend inclusion as a statement at the beginning of the section, before the Definition of Qualified Biologist. An alternative to that single statement is to modify each of the 11 species and habitat discussions to include deferral to the species/habitat-appropriate agency or agencies.

Discussion below includes actions related to biological surveys, reporting and construction mitigations. As each such discussion applies to either Special Status Species or Sensitive habitats, survey requirements commonly fall under protocols defined by responsible wildlife agencies. As such, persons or organizations subject to Section 10.3.5 Implementation are responsible minimally to seek informal consultation with the appropriate wildlife agency before proceeding with any 10.3.5 listed requirements.

LIFE SCIENCES LABORATORIES

1. *Biosafety*

There are four biosafety levels (BSLs) that define proper laboratory techniques, safety equipment, and design, depending on the types of agents being studied.¹⁵ We strongly recommend the addition of an MPSP policy limiting Life Sciences labs to Biosafety Levels 1 and Level 2 (BSL-1 and BSL-2) and prohibiting Biosafety Level 3 or Level 4 (BSL-3 and BSL-4) laboratories in Moffett Park.

The Sierra Club Loma Prieta Chapter recently organized a webinar, "[Planning for Life Sciences Development for Bay Area Cities.](#)" The event featured experts from the Boston/Cambridge area, a historic hub for life sciences in the US, and included biosafety experts. An important fact emerged: With decades of experience in the industry and the growing awareness of the increasingly lethal infectious agents used in high-containment BSL-3 and maximum containment BSL-4 labs, several cities in the greater Boston/Cambridge metropolitan area are reversing or have already reversed their biosafety policies to no longer allow BSL-3 or higher labs in their cities, and more are joining their ranks. Some do not even allow BSL-2 labs. Please see [here](#) a partial list of cities and links to their ordinances.

BSL-3 high-containment labs, as defined by the U.S. Department of Health & Human Services,¹⁶ work with indigenous or exotic infectious agents with known potential for airborne transmission of pathogens that may cause serious and potentially lethal infections.¹⁷ They require complete dependence on mechanical systems that can fail through human error, mechanical failure or

¹⁵ <https://www.niaid.nih.gov/research/biodefense-biosafety-labs>

¹⁶ <https://www.phe.gov/s3/BioriskManagement/biosafety/Pages/Biosafety-FAQ.aspx#biocont8>

¹⁷ *Gao-18-145, High-Containment Laboratories: Coordinated Actions Needed ...*
<https://www.gao.gov/assets/gao-18-145.pdf>.

disasters, as well as safety oversight issues.¹⁸ ¹⁹ They may work well in institutions that have rigorous scientific safety oversight, committees that ensure an understanding of risks, transparency, regular reporting and inspections, and biosafety procedures for worker, public and environmental safety. Sunnyvale does not have such mechanisms in place for this responsibility.

MPSP Recommendations Regarding Biosafety

Goal LU-3: A CENTER FOR INNOVATION. Moffett Park continues to be a center of innovation and the knowledge economy.

- Proposed new Policy LU-3.5: Encourage Life Sciences innovation by allowing facilities that commit to public health and safety by limiting Life Sciences Labs to only biosafety levels BSL-1 and BSL-2.

5.1 Development Standards Goals and Policies, Goal DS-4: HEALTHY, CLIMATE-READY SITE AND BUILDING DESIGN. Site and building design reduce energy use and water use, protect public health, and increase climate resilience.

- Proposed new Policy DS-4.10: For public health and safety, any life sciences development proposed in the R&D or Commercial Office zones will limit its labs to biosafety levels BSL-1 and BSL-2. No BSL-3 or BSL4 labs will be permitted. Further all life sciences labs shall abide by the guidelines of the National Institutes of Health.

9.1 Infrastructure Goals and Policies, Goal IU-2: SUSTAINABLE AND RESILIENT INFRASTRUCTURE. To achieve the vision of an ecological innovation district, Moffett Park invests in sustainable and resilient infrastructure and practices to illustrate leadership.

- Text correction to Policy IU-2.6: Ensure that infrastructure development considers and avoids impacts due to potential rising groundwater and overall ~~low~~ **high** water tables in the Plan area.

2. Additional Concerns and Recommendations Regarding Life Sciences Projects

Even as the local market for office space struggles with increasing vacancy rates and declining rents, the Bay Area life sciences industry continues to expand, with a 27% growth in employment

¹⁸ [Boston University](#), June 1, 2016: A typical example- “A malfunctioning network switch at BU’s [National Emerging Infectious Diseases Laboratories \(NEIDL\)](#) resulted in a shutdown of parts of the lab’s ventilation monitoring system ... The University has suspended BSL-3 research until the outside engineers review recommended remedial work to prevent future ventilation system malfunctions.” There are many such examples.

¹⁹ [You should be afraid of the next “lab leak.”](#) NY Times Nov 23, 2021. “.... In fact, the most concerning aspect about high-containment biolabs is that, considered as a collective, they may only be as safe as the worst lab among them. A breach or a breakdown at one could imperil us all.”

from 2019 to second quarter 2022 and a massive development pipeline going into this year.²⁰ We believe this trend will likely lead to significant developer interest in life sciences facilities within the MPSP's innovation district. In addition to the biosafety concerns raised above, life sciences facilities pose unique climate sustainability challenges by producing disproportionate energy and water demands, noise, and plastics waste as compared to typical office use.

Although life sciences facilities are not specifically addressed in the draft MPSP or EIR, we urge you to consider how the MPSP, in conjunction with Sunnyvale's Reach Code and Climate Action Plan, can best assure that life sciences development in Moffett Park will be consistent with the district's eco-innovation vision. Appendix B offers additional information and recommendations for improved clarity and attention to the particular challenges posed by life science facilities.

Thank you for your consideration of our comments. We welcome the opportunity to meet with you to discuss further once you have had an opportunity to review them.

Sincerely,

James Eggers
Senior Director
Sierra Club Loma Prieta Chapter

Matthew Dodder
Executive Director
Santa Clara Valley Audubon Society

Eileen Mclaughlin
Board Member
Citizens Committee to Complete the Refuge

cc:
Gladwyn D'Souza
Conservation Committee Chair
Sierra Club Loma Prieta Chapter

Jennifer Chang Hetterly
Bay Alive Campaign Coordinator
Sierra Club Loma Prieta Chapter

Appendix A - Consolidated list of Recommended Amendments to the EIR and MPSP

Appendix B - Annotated Reference of Studies: Human Impacts on Wildlife

Appendix C - Additional recommendations related to life science development

²⁰ Bucking Trends, Bay Area Life Science Market Shows Resilience, The Real Deal, April 18, 2023. https://therealdeal.com/sanfrancisco/2023/04/18/bucking-trends-bay-area-life-science-market-shows-resilience/?utm_medium=social&utm_campaign=single_content_share&utm_source=clipboard

APPENDIX A

Consolidated list of Recommended Amendments to the EIR and MPSP

EIR TECHNICAL CORRECTION

Please correct page 6 (pdf page 8) and page 60 (pdf page 62) of the FEIR response file to specifically mention the Citizens Committee to Complete the Refuge and Santa Clara Valley Audubon Society as co-authors of the joint DEIR comment letter submitted with the Sierra Club.

PARKS, OPEN SPACE AND RECREATION

Needed Additions to the EIR

- Provide evidence substantiating the City's expectation that commuting employees will make minimal use of local park and recreation facilities (including trails). This should include an objective evaluation of the expected participation of Moffett Park employees in active transportation commute modes, including use of the Bay Trail.
- Substantiate the City's expectation that the cumulative increase in population - both residents and employees - will not expand trail use in ways that disrupt and harm populations of migratory birds, special status species, and other native resident or migratory wildlife species.

The following mitigation measures should be added to the EIR (*EIR Table 2.3-6: Summary of Key Specific Plan Requirements and Policies by Resource Area - Biological Resources and elsewhere*):

- Proposed new requirement 10.3.5-xx: Limit public access to some of the Sunnyvale Baylands Levees. Closing some levees to recreational activities (see Figure 1, below, levees proposed for closure to recreation are marked in Green). This mitigation measure reserves some levees for use by migratory birds while at the same time providing accessibility and connectivity for people. It reduces encroachment and disturbance of migratory birds.
- Proposed new requirement 10.3.5-xx: With the exception of commute trails (such as Bay Trail and the East and West Channels trails), limit access to human-powered-only, and prohibit electronic or motorized mobility devices except as required for ADA accommodation. This mitigation measure reduces encroachment pressure further from the Bay Trail.

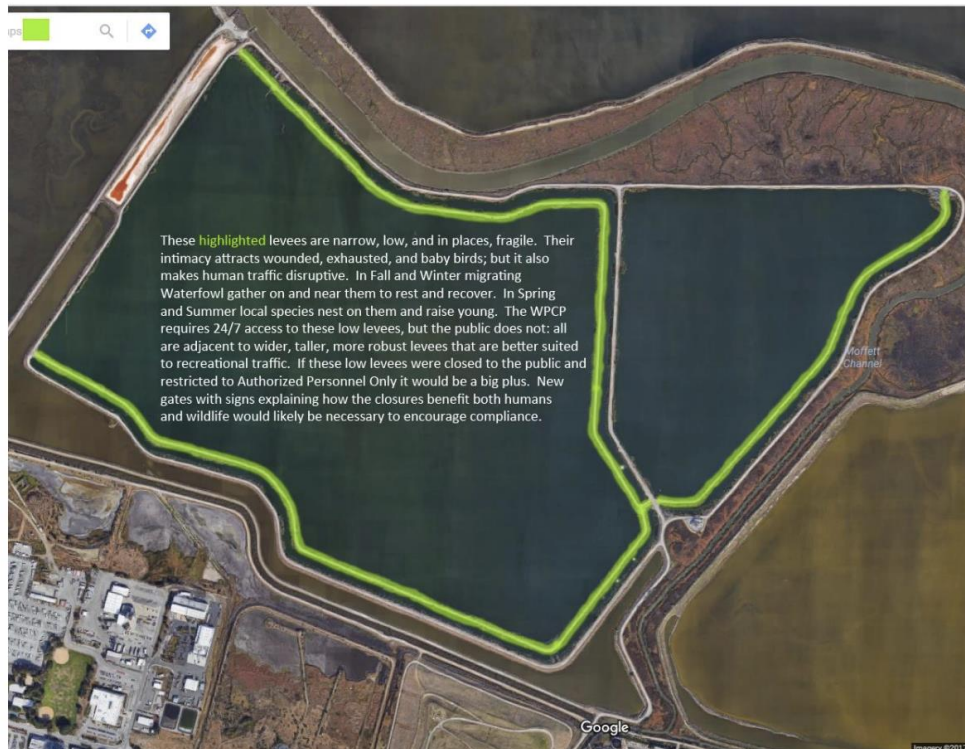
PROPOSED SEASONAL LEVEE CLOSURES

Figure 1

MPSP Recommendations re: Parks, Open Space, and Recreation

MPSP Section 6.2 Open Space and Urban Ecology Principles, Goals, and Policies, Goal OSE-1: INTERCONNECTED AND BIODIVERSE OPEN SPACE NETWORK. Moffett Park provides a high level of service with ample open space for residents, employees, and visitors through an interconnected network of open spaces that supports healthy ecosystems, improves air and water quality, improves public health, and adapts to a changing climate.

- Proposed new policy OSE-1.X: Protect and enhance habitat in open space and Bayland ecosystems to maintain and support biodiversity over time.
- Proposed new policy OSE-1.4.X: Monitor usage of open space in and near the Plan area as Moffett Park grows and densifies, and use dynamic strategies to regulate use as needed to reduce impacts to wildlife and maintain the quality of recreation facilities.
- Proposed new policy OSE-1.4.X: Identify financing strategies to ensure fair share contributions to facility maintenance and habitat restoration costs.

MPSP Section 6.2 Open Space and Urban Ecology Principles, Goals, and Policies, Goal OSE-3: ECOLOGICAL DEVELOPMENT. New developments' parks and open spaces enhance ecosystems and support biodiversity, benefiting both people and natural habitat.

- Proposed text change (in **bold**) to Policy OSE-3.1: Facilitate the removal of existing and transfer of future development away from the Lockheed Martin stormwater holding ponds, **other stormwater, emergent and potential wetlands, grasslands and other undeveloped lands north of 1st Street** through implementation of an Ecological Combining District to expand and enhance wetland habitat, ecosystem health, and climate resilience.

CONTAMINATION HAZARDS

MPSP Recommendations re: Contamination Hazards

MPSP Section 4.1 Land Use Goals and Policies, Goal LU-1 COMPLETE NEIGHBORHOODS. A series of neighborhoods with access to public amenities, quality housing, good jobs, and healthy and safe environments that weave together into a vibrant ecological innovation district.

- Proposed new Policy LU-1.7DS-4.10: Assure transparency and opportunity for public review and comment regarding hazardous materials analysis for all projects, including the decision basis and findings regarding additional site investigations, the scope of new site investigations, and planned remediation measures.

MPSP Chapter 10 Implementation, Section 10.2.1 Hazards and Hazardous Materials

- Proposed new submittal requirement: **Soil and Groundwater Study**. For any renovation, modification, or redevelopment of a property within Moffett Park, an assessment of existing soil and groundwater conditions shall be completed, including testing for hazardous contaminants and identifying site-specific vulnerability to shallow groundwater rise.

MPSP Chapter 10 Implementation, Section 10.4 Implementation Actions, Table 29

- Proposed text change (in **bold**) to Groundwater Data Collection description: Establish a monitoring plan of groundwater elevations, **hazardous soil-borne contaminants**, and salinity within Moffett Park that includes the development and publication of a three-dimensional map of subsurface geology **as well as a regularly updated map of chemical testing results**. [Note: the proposed 10.2.1 submittal requirement above would be a valuable data source for this Groundwater Data Collection effort.]

BIOLOGICAL RESOURCES

MPSP Recommendations re: Bird Safety

MPSP Section 5.4 Ecological Development Standards

- Proposed MPSP text change (in **bold**) to section 5.4.2 BIRD SAFE DESIGN Section 2. Façade treatment: No more than 10% of the surface area of a building's total exterior façade shall have untreated glazing between the ground and 60 feet above ground. **Building facades that face open space or water features will have treated glazing at all heights.** Bird Friendly glazing treatments can include the use of opaque glass, the covering of clear glass surface with patterns, the use of paned glass with fenestration patterns, and the use of external screens over non-reflective glass. All façade glazing shall have reflectivity ratings no greater than **20%**.
- Proposed MPSP text change (in **bold**) to section 5.4.2 BIRD SAFE DESIGN Section 4. Façade treatment: No more than 10% of the surface area of a building's total exterior façade between the ground and 60 feet above ground or within 15 feet above a green roof shall have untreated glazing. **Building facades that face open space or water features will have treated glazing at all heights.** Bird Friendly glazing treatments can include the use of opaque glass, the covering of clear glass surface with patterns, the use of paned glass with fenestration patterns, and the use of external screens over non-reflective glass. All façade glazing shall have reflectivity ratings no greater than **20%**.

MPSP Recommendations re: Oversight for Special Status Species*Chapter 10: Implementation, 10.3 General Submittals and Site Master Plans, Section 10.3.5 Special Species*

- *Definition of Qualified Biologist.* We recommend that the following definition be prominently inserted at the beginning of Section 10.3.5 to be applied to actions related to all the species and habitats discussed.

For actions described below regarding Special Status Species and Sensitive habitats discussed, a qualified biologist will be a person with a minimum of a four-year degree in wildlife sciences, biology, environmental sciences having post-graduate species and/or habitat-specific experience and, when required by the US Fish and Wildlife Service, California Department of Fish and Wildlife or National Marine Fisheries Service, appropriate permit or other authorization.

- *Deferral to responsible agencies.* Section 10.3.5 could address this topic in one of two ways. Here we provide and recommend inclusion as a statement at the beginning of the section, before the Definition of Qualified Biologist. An alternative to that single statement is to modify each of the 11 species and habitat discussions to include deferral to the species/habitat-appropriate agency or agencies.

Discussion below includes actions related to biological surveys, reporting and construction mitigations. As each such discussion applies to either Special Status Species or Sensitive habitats, survey requirements commonly fall under protocols

defined by responsible wildlife agencies. As such, persons or organizations subject to Section 10.3.5 Implementation are responsible minimally to seek informal consultation with the appropriate wildlife agency before proceeding with any 10.3.5 listed requirements.

BIOSAFETY

MPSP Recommendations re: Biosafety

Goal LU-3: A CENTER FOR INNOVATION. Moffett Park continues to be a center of innovation and the knowledge economy.

- Proposed new Policy LU-3.5: Encourage Life Sciences innovation by allowing facilities that commit to public health and safety by limiting Life Sciences Labs to only biosafety levels BSL-1 and BSL-2.

5.1 Development Standards Goals and Policies, Goal DS-4: HEALTHY, CLIMATE-READY SITE AND BUILDING DESIGN. Site and building design reduce energy use and water use, protect public health, and increase climate resilience.

- Proposed new Policy DS-4.10: For public health and safety, any life sciences development proposed in the R&D or Commercial Office zones will limit its labs to biosafety levels BSL-1 and BSL-2. No BSL-3 or BSL4 labs will be permitted. Further all life sciences labs shall abide by the guidelines of the National Institutes of Health.

9.1 Infrastructure Goals and Policies, Goal IU-2: SUSTAINABLE AND RESILIENT INFRASTRUCTURE. To achieve the vision of an ecological innovation district, Moffett Park invests in sustainable and resilient infrastructure and practices to illustrate leadership.

- Text correction to Policy IU-2.6: Ensure that infrastructure development considers and avoids impacts due to potential rising groundwater and overall ~~low~~ **high** water tables in the Plan area.

APPENDIX B

Annotated Reference of Studies: Human Impacts on Wildlife

Locally focused studies:

Trulio, L. & Sokale J. 2008. Foraging Shorebird Response to Trail Use around San Francisco Bay. *Journal of Wildlife Management* 72:1775-1780. <https://www.jstor.org/stable/40208460>
Two-year study of the effects of human trail use on foraging shorebirds around San Francisco Bay. The number of shorebirds decreased with the increase in human traffic. An average of 25% fewer birds were found on higher-use days.

Trulio et al. 2013. Experimental Study of Shorebird Response to New Trail Use in the South Bay Salt Pond Restoration Project. https://www.southbayrestoration.org/sites/default/files/documents/final_shorebird_report_trulio_etal.pdf
Experimental study of shorebird response to new trail walkers around the San Francisco Bay. The methods involved having two pedestrians walk back and forth on the levees/boardwalks for 10 minutes. After walkers were introduced, bird numbers decreased by 2.5% and species richness decreased by 18%.

White, H.R. 2009. Wintering Duck Response to Trail Use at Former San Francisco Bay Salt Ponds. <https://doi.org/10.31979/etd.hyvm-4ayk>
Seven-month study of wintering ducks' movement away from previously unused trails around San Francisco Bay salt ponds when used by pedestrians (two individuals). All duck species within 80 meters of the levee trail responded to trail use. When disturbed, ducks moved more than 106 meters on average, which is substantially farther from the trail than they were found before pedestrians were introduced.

Trulio et al. 2008. Study of Waterbird Response to Trail Use in the South Bay Salt Pond Restoration Project. https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.southbayrestoration.org%2Frfq-rfp%2F2008-rfp-awards%2FTrulio_4Final.pdf&uct=1669676011&usg=jqTQEAE-QVDWJit1teHKOR1Ce7A.&source=meet
Research proposal for four studies to be conducted in the South Bay Salt Pond Restoration project area. Justifications include evidence of seven species of dabbling ducks responding to all nearby trail use (especially walking and biking) and data collected by White in which species richness and the overall number of birds became considerably lower after trail use disturbance (at distances of up to 120 meters).

Trulio, L. & White, H.R. (2017). Wintering Waterfowl Avoidance and Tolerance of Recreational Trail Use. *Waterbirds: The International Journal of Waterbird Biology*, 40(3), 252–262. <http://www.jstor.org/stable/26428223>
Experimental study conducted in the south San Francisco Bay measuring the amount of trail users and the number of birds present before and after the introduction of trail use. Overall, comparison of before/after bird counts and number of trail users did not show any increase in habituation (increasing tolerance) to trail use. Tolerance differed between species; Northern Shovelers increased in number with increasing trail use, while significantly fewer Ruddy Ducks were found as trail use increased.

Borgmann, K. A Review of Human Disturbance Impacts on Waterbirds <https://ca.audubon.org/sites/default/files/documents/humandisturbanceimpactsreportfinal.pdf>
Scientific Literature review of human impacts on waterbirds in the San Francisco Bay area. Out of 50 studies, 86% found that human disturbance affected their study species. Boating and walking affect bird behavior, causing them to waste time and energy they could have used to feed. Birds flying away in response to human disturbance was noted in 57% of the 50 studies reviewed.

Studies from elsewhere:

Larson et al. 2016. Effects of Recreation on Animals Revealed as Widespread through a Global Systematic Review. <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0167259>
Review of scientific literature on the effects of human recreation on animals. Over 93% of articles reviewed noted at least one effect of recreation on animals. Approximately 55% of these effects were negative. Raptors and shorebirds had an especially large amount of evidence of negative effects from recreation.

Burger et al. 2009. Ecotourism and Birds in Coastal New Jersey: Contrasting Responses of Birds, Tourists, and Managers. <https://www.cambridge.org/core/journals/environmental-conservation/article/abs/ecotourism-and-birds-in-coastal-new-jersey-contrasting-responses-of-birds-tourists-and-managers/8F21C5F819C4B87C3DBA68317BBA49CB>
Collection of case studies focusing on the effects of ecotourism on the New Jersey coast. Human presence within heronries can lead to damage and death by scaring the young away from their nests too early. Least Tern colonies with many tourist visitors tend to have lower nesting rates and less successful breeding. Piping Plovers commit more time and energy to staying alert than feeding with increasing human presence, which can be especially harmful to chicks learning how to forage for the first time. Shorebirds and migratory gulls at Caven Point stay further away when more people are present, meaning that they lose access to foraging opportunities near paths. On the shore of Delaware Bay shorebirds fly away from humans and can even completely abandon beaches with high levels of human disturbance.

Tarr et al. 2008. An Experimental Assessment of Vehicle Disturbance Effects on Migratory Shorebirds. *Journal of Wildlife Management* 74:1776- 1783.
https://www.academia.edu/download/39770412/An_Experimental_Assessment_of_Vehicle_Di20151107-4773-186xg2s.pdf
Study of the effect of off-road (ATV) traffic on number and location of shorebirds at a “migratory stopover area” on the coast of North Carolina, with a particular focus on one species: Sanderlings. Motorized vehicle disturbance led to overall decreasing numbers of migrant shorebirds and reduced use of microhabitats above the tidal zone, as birds shifted to increased use of the tidal zone to get farther away from vehicle disturbance. Sanderlings were more active with the presence of motorized vehicles and fewer Sanderlings used the study area to rest in.

APPENDIX C

Additional recommendations to address sustainability concerns related to life science development

Even as the local market for office space struggles with increasing vacancy rates and declining rents, the Bay Area life sciences industry continues to expand, with 27 percent growth in employment from 2019 to the second quarter of 2022 and a massive development pipeline going into this year.²¹ We believe this trend will likely lead to significant developer interest in life sciences facilities within the MPSP's innovation district. In addition to biosafety concerns, life sciences facilities pose unique climate sustainability challenges by producing disproportionate energy and water demands, noise, and plastics waste as compared to typical office use.

Although life sciences facilities are not specifically addressed in the draft MPSP or EIR, we urge you to consider how the MPSP, in conjunction with Sunnyvale's Reach Code and Climate Action Plan, can best assure that life sciences development in Moffett Park will be consistent with the district's eco-innovation vision.

1. Applicability of all-electric exceptions for laboratory facilities.

Response M.1 of the Environmental Impact Report (EIR) for the Moffett Park Specific Plan refers to pages 133 and 134 of the Draft EIR which indicates that the City's Reach Code prohibits gas appliances with the exception of certain non-residential uses such as factories, hazardous materials manufacturing, and laboratory facilities, as well as emergency operation centers and commercial dryers in large hotels. However, those exceptions appear inconsistent with the MPSP Policy IU-5.1: Prohibit new natural gas services in **all** buildings and infrastructure to transition to all electric [emphasis added].

We support Policy IU-5.1 and encourage you to eliminate or narrowly tailor the Reach Code exception for laboratory facilities. All-electric new and remodeled biotech lab buildings, with the exception of gas allowed for lab experiments, are growing fast in the Bay Area and in many communities now.^{22 23 24}

²¹ Bucking Trends, Bay Area Life Science Market Shows Resilience, The Real Deal, April 18, 2023. https://therealdeal.com/sanfrancisco/2023/04/18/bucking-trends-bay-area-life-science-market-shows-resilience/?utm_medium=social&utm_campaign=single_content_share&utm_source=clipboard

²² <https://betterbuildingssolutioncenter.energy.gov/partners/genentech-inc>

Between 2015 and 2019, Genentech reduced GHG emissions from onsite energy use by 30% despite the expansion of its site operations. To achieve further reductions, Genentech is implementing energy conservation projects in its buildings, optimizing HVAC systems and converting to electric heat pumps, as well as transitioning sites to renewable energy.

Genentech's 60-building South San Francisco headquarters has transitioned 100% of its grid power to CO2-free

²³ Announcement of all-electric life science campus in Millbrae, CA <https://lfrep.com/longfellow-celebrates-groundbreaking-of-avia-labs-upcoming-state-of-the-art-all-electric-science-center/> (March 1, 2023)

²⁴ Laboratories require a great deal of energy-use and [finding sustainable solutions](#) to support it are critical for both the planet and for operational costs. Bakar BioEnginuity Hub (in Berkeley) is LEED Gold certified. Representative elements of mechanical, electrical and plumbing systems include [conversion to](#)

Recommendation

Please clarify that any exception, in the Reach Code or elsewhere, for use of gas in laboratory facilities applies only for use in the lab for experiments. The general HVAC systems and hot water heating for lab facilities should be required to be all-electric. This should also be clarified for factories and hazardous materials manufacturing.

2. Consumption of energy.

Life Science lab facilities have been shown to make disproportionate demands on the electrical grid.²⁵ Response R.17 on page 71 of the Final EIR indicates that energy use assumptions for the MPSP, “including R&D uses, were based on CalEEMod model defaults.”²⁶ We are concerned that CalEEMod model defaults may not reflect the intensity of current Bay Area demand for Life Sciences facilities (and their disproportionate energy demands), nor the likelihood that Moffett Park’s innovation district would attract and include substantial new life sciences development. Underestimation of the volume of high-energy-demand Life Sciences development in the Plan area could have significant cost and infrastructure implications.

Additionally, page 133 of the Draft EIR states that under the City’s green building standards for new construction, additions, and remodels of buildings, “[a]t minimum, new non-residential projects greater than 5,000 square feet are required to meet CALGreen Mandatory Measures and LEED Gold.” Because of the apparent inconsistency noted above regarding all-electric requirements, we urge greater clarity as to how the City’s standards and requirements will be applied to life sciences development projects.

Recommendation

Please confirm that laboratory facilities, like all other non-residential projects exceeding 5,000 square feet, will be required to meet the City’s LEED Gold certification and also include a policy in the Specific Plan clarifying that LEED Gold certification will be required in both new lab construction *and* major lab remodels.

3. Life Sciences water, sewer and plastic waste

all-electric building. <https://www.commercialsearch.com/news/mbh-architects-on-trends-in-bay-area-life-science-design/>

²⁵ **MassBio Talks Showcase That Massachusetts Needs Cooperation From Biology Labs To Achieve Sustainability.** “... Strikingly, the building firm ARUP showed data that buildings in Massachusetts are making huge demands on the electrical grid - especially lab facilities.” May 21, 2019

<https://www.labconscious.com/blog/massbio-talks-energy-massachusetts-biology-labs-sustainability>

²⁶ An incomplete sentence at the end of Response R.17 on page 71 makes oblique reference to “assumptions in the Draft EIR,” but offers no transparency into the details of those assumptions.

Life Sciences labs consume as much as five times more water than typical office buildings of the same size and generate waste water proportionately. In addition, life sciences labs generate an inordinate amount of plastic waste from single use plastics.²⁷

Recommendations

Require that anticipated water usage and waste water needs for lab buildings shall be specified early, subject to environmental review, and monitored, with corrective action taken as needed.²⁸

Include a goal in the Climate Action Playbook for the reduced use of water and single-use disposable plastics in life sciences lab facilities to acknowledge and address the disproportionate climate impacts of such facilities.

Review current strategies for plastic waste reduction and revise as needed to ensure effective application to life science facilities.

²⁷ Research scientists have largely gone unnoticed as major users of unrecyclable material. Now some universities are helping them kick the habit, The Guardian, November 10, 2019
<https://www.theguardian.com/environment/2019/nov/10/research-labs-plastic-waste>

²⁸ Menlo Park's Life Sciences ordinance, Municipal Code Chapter 16.44.130(3)(C), for example, requires project applicants to submit a water use budget and the City monitors water usage for compliance.
<https://www.codepublishing.com/CA/MenloPark/html/MenloPark16/MenloPark1644.html#16.44.130>

employees is a single sentence in Topic Response 3 indicating an unsubstantiated expectation that their use will be minimal.³

The California Environmental Quality Act (CEQA) Appendix G requires analysis of the **project's** impact on degradation of parks and recreation facilities, not just new resident impacts. The EIR reliance on a mere assumption that 60,000 new employees will make minimal use of existing facilities is grossly flawed, especially in an area designed for dense development and active transportation and in an era when employee access to nature is recognized as a core element of corporate wellness.^{4 5}

Additionally, we note that Park dedication fees collected pursuant to Municipal Code Chapter 19.74 can only be used to "purchase land, buy equipment or construct improvements."⁶ The fees cannot be used for monitoring impacts, maintenance of trails and other facilities, or habitat protection and restoration. Furthermore, there is no current mechanism for non-residential development to pay a fair share toward the upkeep of park and recreation facilities or the protection of wildlife and restoration of habitat. Underestimating (and failing to mitigate) increased use, could have budget implications for the City that delay or prevent needed future maintenance and restoration investment for existing facilities.

2. *The EIR fails to evaluate or address impacts from increased demand for distinct uses only available in existing shoreline park and recreation facilities adjacent to the Plan area.*

The EIR acknowledges an expected increase in resident and employee use of existing facilities. Indeed, Specific Plan Policy OSE-1.2 seeks to affirmatively connect residents, employees and visitors to existing "adjacent facilities." However, the MPSP and Final EIR fail to evaluate and address the cumulative demand for open space uses that are not served by new facilities envisioned within the Plan area.

The Draft EIR and Topic Response 3 assert that new park and open space acreage, in conjunction with Specific Plan Policies OSE-2.1 through OSE-2.8 requiring certain types of facilities, would "offset" the project's demand for existing park and recreational facilities. However, the claim of offsetting facilities falls flat as applied to the Bay Trail's distinct function as a regional commute route and recreation trail, or the unique character of existing shoreline trails and vistas (at Baylands Park, the landfill hills, and along many levees abutting Sunnyvale's water treatment ponds, Guadalupe slough, Calabazas/San Tomas Aquino creek and marsh, and other levees in

³ "While employees in Moffett Park may use existing park and recreational facilities in the area, their use is expected to be minimal given their primary purpose in Moffett Park is to work (verses residents who live and recreate in Moffett Park) and would further be minimized with provision of on-site amenities that are typically provided with non-residential development." Topic Response 3, FEIR p.10.

⁴ *The Benefits of Green Spaces: How Nature Can Improve Mental Health and Well-being*, Corporate Wellness Magazine <https://www.corporatewellnessmagazine.com/article/the-benefits-of-green-spaces-how-nature-can-improve-mental-health-and-well-being>

⁵ *Reducing Stress at Work is a Walk in the Park*, The Conversation, April 17, 2016 <https://theconversation.com/reducing-stress-at-work-is-a-walk-in-the-park-57634>

⁶ Sunnyvale Municipal Code Chapter 19.74.020(d).

the south end of the San Francisco Bay). Hunting is another recreation activity offered in the Sunnyvale Baylands that cannot be duplicated within the Plan area.

The introduction of a large number of residents and employees without alternative, like-kind facilities, and with ready access facilitated by Policy OSE-1.2, likely will lead to a sharp increase in use of Baylands Park, the Bay Trail and the above-mentioned shoreline trails, with inevitable impacts on wildlife (including migratory birds and special-status species) and degradation of existing facilities. Yet the MPSP relies only on existing protections, such as trail signage directing visitors away from sensitive habitats, and limitations on dogs at Sunnyvale Baylands Park.⁷ Those protections target some specific detrimental behaviors but do nothing to address increased volume of use. The lack of policies or mitigations to monitor or manage the impacts of increased human activity in shoreline open spaces is of dire concern.

3. The EIR fails to evaluate or address impacts of increased recreation use on wildlife.

Our comment letter expressed the concern that impacts to special-status species, migratory birds and other wildlife species are likely to result from the inevitable increase in human and pet activity on levees. This concern remains valid. Indeed, there is substantial scientific evidence to support a fair argument that an increase in human activities and encroachment in or adjacent to wildlife habitat will impact patterns of use and populations of species using these habitats.

Impacts on migratory and nesting birds behavior (including foraging, resting, roosting and nesting) from human activity on trails are well documented globally as well as specifically in the South Bay adjacent to the Sunnyvale Baylands (see Appendix A: Annotated Reference for summary of specific studies' findings). As shown in Appendix A, scientific studies and reviews reveal widespread effects of human presence and recreation on animals, with a large amount of evidence showing negative impacts to raptors and shorebirds. Studies also show consistent negative impacts to shorebird breeding.

In the Bay Area, and specifically in locations near or adjacent to Moffett Park, studies of the responses of migratory birds to human activity on shoreline trails and levees show that the numbers and species richness of migratory shorebirds decreased with an increase in human recreational activities. Migratory duck species seem especially sensitive: all duck species within 80 meters of a levee trail responded to trail use. When disturbed, ducks moved substantially farther from the trail than they were found before pedestrians' presence. Tolerance differed between species, with some more averse to human activity than others. But in a scientific literature review of human impacts on waterbirds in the San Francisco Bay Area, 86% of the studies found that human disturbance affected their study species. The review shows that boating and walking affect bird behavior, causing them to waste time and energy they could have used to feed. Birds flying away in response to human disturbance was noted in 57% of the 50 studies reviewed.

⁷ Topic Response 3, FEIR page 9.

The analysis associated with Impact BIO-4 did not fully address the impact of recreation on wintering migratory shorebirds and ducks. As we have highlighted above, use of trails and levees in the area will increase substantially as a result of the addition of 60,000 employees and 42,000 residents to Moffett Park since walking and biking on Bay levees are popular activities that cannot be fully, or even closely, replicated with the new recreation facilities in the Plan area.

Response R.8 to this concern directed us again to Topic Response 3 which includes no analysis or discussion of impacts from increased recreation activity on migratory birds and special status species, dismissing our concern by stating, "*Baylands Park and San Francisco Bay Trail direct visitors to designated trails (and not sensitive wildlife habitat).*" The missing analysis, discussion, monitoring and mitigation requirements are a fatal flaw of the EIR and must be corrected.

Needed Additions to the EIR

- Provide evidence substantiating the City's expectation that commuting employees will make minimal use of local park and recreation facilities (including trails). This should include an objective evaluation of the expected participation of Moffett Park employees in active transportation commute modes, including use of the Bay Trail.
- Substantiate the City's expectation that the cumulative increase in population - both residents and employees - will not expand trail use in ways that disrupt and harm populations of migratory birds, special status species, and other native resident or migratory wildlife species.

The following mitigation measures should be added to the EIR (*EIR Table 2.3-6: Summary of Key Specific Plan Requirements and Policies by Resource Area - Biological Resources and elsewhere*).

- Proposed new requirement 10.3.5-xx: Limit public access to some of the Sunnyvale Baylands Levees. Closing some levees to recreational activities (see Figure 1, below, levees proposed for closure to recreation are marked in Green). This mitigation measure reserves some levees for use by migratory birds while at the same time providing accessibility and connectivity for people. It reduces encroachment and disturbance of migratory birds.
- Proposed new requirement 10.3.5-xx: With the exception of commute trails (such as Bay Trail and the East and West Channels trails), limit access to human-powered-only, and prohibit electronic or motorized mobility devices except as required for Americans with Disabilities Act accommodation. This mitigation measure reduces encroachment pressure further from the Bay Trail.

PROPOSED SEASONAL LEVEE CLOSURES

Figure 1

MPSP Recommendations re: Parks, Open Space, and Recreation

MPSP Section 6.2 Open Space and Urban Ecology Principles, Goals, and Policies, Goal OSE-1: INTERCONNECTED AND BIODIVERSE OPEN SPACE NETWORK. Moffett Park provides a high level of service with ample open space for residents, employees, and visitors through an interconnected network of open spaces that supports healthy ecosystems, improves air and water quality, improves public health, and adapts to a changing climate.

- Proposed new policy OSE-1.X: Protect and enhance habitat in open space and Bayland ecosystems to maintain and support biodiversity over time.
- Proposed new policy OSE-1.4.X: Monitor usage of open space in and near the Plan area as Moffett Park grows and densifies, and use dynamic strategies to regulate use as needed to reduce impacts to wildlife and maintain the quality of recreation facilities.
- Proposed new policy OSE-1.4.X: Identify financing strategies to ensure fair share contributions to facility maintenance and habitat restoration costs.

MPSP Section 6.2 Open Space and Urban Ecology Principles, Goals, and Policies, Goal OSE-3: ECOLOGICAL DEVELOPMENT. New developments' parks and open spaces enhance ecosystems and support biodiversity, benefiting both people and natural habitat.

- Proposed text change (in **bold**) to Policy OSE-3.1: Facilitate the removal of existing and transfer of future development away from the Lockheed Martin stormwater holding ponds, **other stormwater, emergent and potential wetlands, grasslands and other undeveloped lands north of 1st Street** through implementation of an Ecological Combining District to expand and enhance wetland habitat, ecosystem health, and climate resilience.

CONTAMINATION HAZARDS

We remain quite concerned about the potential for mobilization and spread of legacy hazardous chemical contamination in Moffett Park, with potentially significant site-specific and cumulative impacts that can be exacerbated by climate change effects, including sea level rise, shallow groundwater rise, and fluvial flooding. Because CEQA does not address impacts of the environment on a project, the EIR leaves significant gaps in public understanding of these threats to public and ecosystem health within the Plan area. We urge the City to include robust policies in the MPSP to ensure transparency and enable full assessment, management, and mitigation of future project-specific and cumulative contamination impacts as the MPSP unfolds over time.

Despite the Plan area's proximity to known or suspected sources of contamination, no testing has been done for chemicals likely to be present within the Plan area. An April 23, 2023 comment letter submitted by environmental scientist Naomi Goodman, indicated that "most of the 'site closures' listed on the various state and federal maps addressed only fuel tank leaks."⁸ As a result, site closures may not have considered the full range of likely contaminants currently present. Nevertheless, the Final EIR indicates that "closed" sites need not go through a Phase I Environmental Site Assessment.

Climate change also significantly complicates assessment and management of potential chemical hazards as sea level rise, shallow groundwater rise, and fluvial flooding threaten to spread contamination more widely. Contaminant disruption from development at one site may have wider ranging impacts than anticipated under current conditions, resulting in a greater cumulative impact. Unfortunately, CEQA is an inadequate tool for addressing that challenge and a programmatic EIR, by its nature, defers much analysis to future project-by-project environmental review, often with less public visibility and engagement. We hope the City will exercise its discretion to strengthen the MPSP with additional attention to hazardous contamination.

We recommend the following additions and amendments to the MPSP in order to build public confidence that legacy contamination is appropriately identified and remediated and to improve the City's capacity to monitor, evaluate and respond to potential cumulative impacts.

⁸ April 27, 2023 letter submitted by Naomi Goodman, an environmental scientist with over 40 years of experience in hazardous waste site characterization and remediation. [Goodman Comment on MPSP and final EIR 4-27-23.pdf](#)

MPSP Recommendations Regarding Contamination Hazards

MPSP Section 4.1 Land Use Goals and Policies, Goal LU-1 COMPLETE NEIGHBORHOODS. A series of neighborhoods with access to public amenities, quality housing, good jobs, and healthy and safe environments that weave together into a vibrant ecological innovation district.

- Proposed new Policy LU-1.7: Assure transparency and opportunity for public review and comment regarding hazardous materials analysis for all projects, including the decision basis and findings regarding additional site investigations, the scope of new site investigations, and planned remediation measures.

MPSP Chapter 10 Implementation, Section 10.2.1 Hazards and Hazardous Materials

- Proposed new submittal requirement: **Soil and Groundwater Study**. For any renovation, modification, or redevelopment of a property within Moffett Park, an assessment of existing soil and groundwater conditions shall be completed, including testing for hazardous contaminants and identifying site-specific vulnerability to shallow groundwater rise.

MPSP Chapter 10 Implementation, Section 10.4 Implementation Actions, Table 29

- Proposed text change (in **bold**) to Groundwater Data Collection description: Establish a monitoring plan of groundwater elevations, **hazardous soil-borne contaminants**, and salinity within Moffett Park that includes the development and publication of a three-dimensional map of subsurface geology **as well as a regularly updated map of chemical testing results**. [Note: the proposed 10.2.1 submittal requirement above would be a valuable data source for this Groundwater Data Collection effort.]

BIOLOGICAL RESOURCES

1. *Bird Safety*

The MPSP limits Bird Facade treatment requirements to the first 60 feet of building height. We ask that you expand this requirement to include all building heights on building facades that face parks, open space and water features. Increasingly, evidence shows⁹ that nocturnally migrating birds are attracted to light at night (such as from residential towers) and collide with towers and tall structures, sometimes in great numbers. Collision risk is especially visible in areas near bays and rivers. To reduce the risk of bird collision, we ask that the MPSP strengthen the requirements for safety treatment. Similar to the San Jose City Wide Design Standards and Guidelines, we ask that glazing achieves reflectivity of no more than 20%. Similar to the City of Cupertino, we ask for

⁹ <https://www.fws.gov/story/2022-04/dim-lights-birds-night>

facades taller than 60 feet to implement bird safety treatment when facing open space and water features.

MPSP Recommendations Regarding Bird Safety

MPSP Section 5.4 Ecological Development Standards

- Proposed MPSP text change (in **bold**) to section 5.4.2 BIRD SAFE DESIGN Section 2. Façade treatment: No more than 10% of the surface area of a building's total exterior façade shall have untreated glazing between the ground and 60 feet above ground. **Building facades that face open space or water features will have treated glazing at all heights.** Bird Friendly glazing treatments can include the use of opaque glass, the covering of clear glass surface with patterns, the use of paned glass with fenestration patterns, and the use of external screens over non-reflective glass. All façade glazing shall have reflectivity ratings no greater than **20%**.
- Proposed MPSP text change (in **bold**) to section 5.4.2 BIRD SAFE DESIGN Section 4. Façade treatment: No more than 10% of the surface area of a building's total exterior façade between the ground and 60 feet above ground or within 15 feet above a green roof shall have untreated glazing. **Building facades that face open space or water features will have treated glazing at all heights.** Bird Friendly glazing treatments can include the use of opaque glass, the covering of clear glass surface with patterns, the use of paned glass with fenestration patterns, and the use of external screens over non-reflective glass. All façade glazing shall have reflectivity ratings no greater than **20%**.

2. Oversight for Special Status Species

Final EIR Response R.5 to our comment asking for criteria to be provided for "qualified biologist" in regard to Special Status Species, modifies the following text in the MPSP (highlight added):

Requirement 10.3.5-1: Special Status Plants. At the time development is proposed, focused special status plant surveys shall be completed by a qualified biologist (**defined as a person with a minimum of a four-year degree in wildlife sciences, biology, environmental sciences, or equivalent experience in the biological sciences**) for alkali milk-vetch and Congdon's tarplant in the grasslands and vernal mesic areas (e.g., areas with a moderate supply of moisture) of Moffett Park's northwestern corner.

We have two concerns about this response. One is that the City only added this definition to the category of Special Status Plants but did not apply it to any of the seven other Special Status Species or Sensitive Habitat included in the Draft EIR nor in Section 10.3.5 of the MPSP. The second concern is that the definition added is inadequate when applied to Special Status Species and habitats on which those species depend.

Categorically, Special Status Species are subject to the oversight of responsible wildlife agencies, applying and ensuring species protection intended by one or more of the wildlife regulatory

authorities cited in the Draft EIR. Qualifications for performing these protective actions include *species-specific* training and experience with permitting, including survey protocols and construction requirements. These are qualifications that can only be acquired through post-undergraduate field work and study and *must be species-specific*. Further, as sensitive habitats are often associated with Special Status Species, biologists involved in surveys and permitting in those habitats discussed in 10.3.5 must have related advanced qualifications.

The 10.3.5 discussion of the salt marsh harvest mouse¹⁰ (SMHM) can serve as an example. It is identified¹¹ as endangered at both the Federal and State level and also Fully Protected by the State. Thereby the responsibility of protection of the SMHM and habitats on which it depends falls on the US Fish and Wildlife Service (USFWS) and the California Fish and Wildlife Service (CDFW). Actions potentially disturbing habitat or the SMHM itself, including surveys of its presence and permits for certain actions, fall under protocols established by the USFWS.

Unfortunately, the 10.3.5 SMHM discussion¹² describes certain survey requirements without any annotation that survey protocols need USFWS approval, nor that the “qualified biologist” must have “special status marsh species experience.”¹³

Broadly we note that the 10.3.5 discussion of Special Status Species and sensitive habitats omits any annotation that actions required thereunder are subject to confirmation as protocols and standards by the wildlife agencies responsible for Special Status Species and Habitats protection per Federal and State Law cited.¹⁴

MPSP Recommendations Regarding Oversight for Special Status Species

Chapter 10: Implementation, 10.3 General Submittals and Site Master Plans, Section 10.3.5 Special Species

- *Definition of Qualified Biologist.* We recommend that the following definition be prominently inserted at the beginning of Section 10.3.5 to be applied to actions related to all the species and habitats discussed.

For actions described below regarding Special Status Species and Sensitive habitats discussed, a qualified biologist will be a person with a minimum of a four-year degree in wildlife sciences, biology, environmental sciences having post-graduate species and/or habitat-specific experience and, when required by the US Fish and Wildlife Service, California Department of Fish and Wildlife, or National Marine Fisheries Service, appropriate permit or other authorization.

¹⁰ Moffett Park Specific Plan Update, Public Review Draft, December 2022, p.274.

¹¹ Moffett Park Specific Plan Update, Draft Environmental Review Report, Table 3.4-1, p.99

¹² Moffett Park Specific Plan Update, Public Review Draft, p.274

¹³ Personal email, Kim Squires, Section 7 Division Manager, SF Bay Delta USFWS Office.

¹⁴ Ibid MPSP Update DEIR, pp.85-86

- *Deferral to responsible agencies.* Section 10.3.5 could address this topic in one of two ways. Here we provide and recommend inclusion as a statement at the beginning of the section, before the Definition of Qualified Biologist. An alternative to that single statement is to modify each of the 11 species and habitat discussions to include deferral to the species/habitat-appropriate agency or agencies.

Discussion below includes actions related to biological surveys, reporting and construction mitigations. As each such discussion applies to either Special Status Species or Sensitive habitats, survey requirements commonly fall under protocols defined by responsible wildlife agencies. As such, persons or organizations subject to Section 10.3.5 Implementation are responsible minimally to seek informal consultation with the appropriate wildlife agency before proceeding with any 10.3.5 listed requirements.

LIFE SCIENCES LABORATORIES

1. *Biosafety*

There are four biosafety levels (BSLs) that define proper laboratory techniques, safety equipment, and design, depending on the types of agents being studied.¹⁵ We strongly recommend the addition of an MPSP policy limiting Life Sciences labs to Biosafety Levels 1 and Level 2 (BSL-1 and BSL-2) and prohibiting Biosafety Level 3 or Level 4 (BSL-3 and BSL-4) laboratories in Moffett Park.

The Sierra Club Loma Prieta Chapter recently organized a webinar, "[Planning for Life Sciences Development for Bay Area Cities.](#)" The event featured experts from the Boston/Cambridge area, a historic hub for life sciences in the US, and included biosafety experts. An important fact emerged: With decades of experience in the industry and the growing awareness of the increasingly lethal infectious agents used in high-containment BSL-3 and maximum containment BSL-4 labs, several cities in the greater Boston/Cambridge metropolitan area are reversing or have already reversed their biosafety policies to no longer allow BSL-3 or higher labs in their cities, and more are joining their ranks. Some do not even allow BSL-2 labs. Please see [here](#) a partial list of cities and links to their ordinances.

BSL-3 high-containment labs, as defined by the U.S. Department of Health & Human Services,¹⁶ work with indigenous or exotic infectious agents with known potential for airborne transmission of pathogens that may cause serious and potentially lethal infections.¹⁷ They require complete dependence on mechanical systems that can fail through human error, mechanical failure or

¹⁵ <https://www.niaid.nih.gov/research/biodefense-biosafety-labs>

¹⁶ <https://www.phe.gov/s3/BioriskManagement/biosafety/Pages/Biosafety-FAQ.aspx#biocont8>

¹⁷ Gao-18-145, *High-Containment Laboratories: Coordinated Actions Needed ...*
<https://www.gao.gov/assets/gao-18-145.pdf>.

disasters, as well as safety oversight issues.¹⁸ ¹⁹ They may work well in institutions that have rigorous scientific safety oversight, committees that ensure an understanding of risks, transparency, regular reporting and inspections, and biosafety procedures for worker, public and environmental safety. Sunnyvale does not have such mechanisms in place for this responsibility.

MPSP Recommendations Regarding Biosafety

Goal LU-3: A CENTER FOR INNOVATION. Moffett Park continues to be a center of innovation and the knowledge economy.

- Proposed new Policy LU-3.5: Encourage Life Sciences innovation by allowing facilities that commit to public health and safety by limiting Life Sciences Labs to only biosafety levels BSL-1 and BSL-2.

5.1 Development Standards Goals and Policies, Goal DS-4: HEALTHY, CLIMATE-READY SITE AND BUILDING DESIGN. Site and building design reduce energy use and water use, protect public health, and increase climate resilience.

- Proposed new Policy DS-4.10: For public health and safety, any life sciences development proposed in the R&D or Commercial Office zones will limit its labs to biosafety levels BSL-1 and BSL-2. No BSL-3 or BSL4 labs will be permitted. Further all life sciences labs shall abide by the guidelines of the National Institutes of Health.

9.1 Infrastructure Goals and Policies, Goal IU-2: SUSTAINABLE AND RESILIENT INFRASTRUCTURE. To achieve the vision of an ecological innovation district, Moffett Park invests in sustainable and resilient infrastructure and practices to illustrate leadership.

- Text correction to Policy IU-2.6: Ensure that infrastructure development considers and avoids impacts due to potential rising groundwater and overall ~~low~~ high water tables in the Plan area.

2. Additional Concerns and Recommendations Regarding Life Sciences Projects

Even as the local market for office space struggles with increasing vacancy rates and declining rents, the Bay Area life sciences industry continues to expand, with a 27% growth in employment

¹⁸ [Boston University](#), June 1, 2016: A typical example- "A malfunctioning network switch at BU's [National Emerging Infectious Diseases Laboratories \(NEIDL\)](#) resulted in a shutdown of parts of the lab's ventilation monitoring system ... The University has suspended BSL-3 research until the outside engineers review recommended remedial work to prevent future ventilation system malfunctions." There are many such examples.

¹⁹ [You should be afraid of the next "lab leak."](#) NY Times Nov 23, 2021. ".... In fact, the most concerning aspect about high-containment biolabs is that, considered as a collective, they may only be as safe as the worst lab among them. A breach or a breakdown at one could imperil us all."

from 2019 to second quarter 2022 and a massive development pipeline going into this year.²⁰ We believe this trend will likely lead to significant developer interest in life sciences facilities within the MPSP's innovation district. In addition to the biosafety concerns raised above, life sciences facilities pose unique climate sustainability challenges by producing disproportionate energy and water demands, noise, and plastics waste as compared to typical office use.

Although life sciences facilities are not specifically addressed in the draft MPSP or EIR, we urge you to consider how the MPSP, in conjunction with Sunnyvale's Reach Code and Climate Action Plan, can best assure that life sciences development in Moffett Park will be consistent with the district's eco-innovation vision. Appendix B offers additional information and recommendations for improved clarity and attention to the particular challenges posed by life science facilities.

Thank you for your consideration of our comments. We welcome the opportunity to meet with you to discuss further once you have had an opportunity to review them.

Sincerely,

James Eggers
Senior Director
Sierra Club Loma Prieta Chapter

Matthew Dodder
Executive Director
Santa Clara Valley Audubon Society

Eileen Mclaughlin
Board Member
Citizens Committee to Complete the Refuge

cc:
Gladwyn D'Souza
Conservation Committee Chair
Sierra Club Loma Prieta Chapter

Jennifer Chang Hetterly
Bay Alive Campaign Coordinator
Sierra Club Loma Prieta Chapter

Appendix A - Consolidated list of Recommended Amendments to the EIR and MPSP
Appendix B - Annotated Reference of Studies: Human Impacts on Wildlife
Appendix C - Additional recommendations related to life science development

²⁰ Bucking Trends, Bay Area Life Science Market Shows Resilience, The Real Deal, April 18, 2023.
https://therealdeal.com/sanfrancisco/2023/04/18/bucking-trends-bay-area-life-science-market-shows-resilience/?utm_medium=social&utm_campaign=single_content_share&utm_source=clipboard

APPENDIX A

Consolidated list of Recommended Amendments to the EIR and MPSP

EIR TECHNICAL CORRECTION

Please correct page 6 (pdf page 8) and page 60 (pdf page 62) of the FEIR response file to specifically mention the Citizens Committee to Complete the Refuge and Santa Clara Valley Audubon Society as co-authors of the joint DEIR comment letter submitted with the Sierra Club.

PARKS, OPEN SPACE AND RECREATION

Needed Additions to the EIR

- Provide evidence substantiating the City's expectation that commuting employees will make minimal use of local park and recreation facilities (including trails). This should include an objective evaluation of the expected participation of Moffett Park employees in active transportation commute modes, including use of the Bay Trail.
- Substantiate the City's expectation that the cumulative increase in population - both residents and employees - will not expand trail use in ways that disrupt and harm populations of migratory birds, special status species, and other native resident or migratory wildlife species.

The following mitigation measures should be added to the EIR (*EIR Table 2.3-6: Summary of Key Specific Plan Requirements and Policies by Resource Area - Biological Resources and elsewhere*):

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- Proposed new requirement 10.3.5-xx: With the exception of commute trails (such as Bay Trail and the East and West Channels trails), limit access to human-powered-only, and prohibit electronic or motorized mobility devices except as required for ADA accommodation. This mitigation measure reduces encroachment pressure further from the Bay Trail.

PROPOSED SEASONAL LEVEL CLOSURES

Figure 1

MPSP Recommendations re: Parks, Open Space, and Recreation

MPSP Section 6.2 Open Space and Urban Ecology Principles, Goals, and Policies, Goal OSE-1: INTERCONNECTED AND BIODIVERSE OPEN SPACE NETWORK. Moffett Park provides a high level of service with ample open space for residents, employees, and visitors through an interconnected network of open spaces that supports healthy ecosystems, improves air and water quality, improves public health, and adapts to a changing climate.

- Proposed new policy OSE-1.X: Protect and enhance habitat in open space and Bayland ecosystems to maintain and support biodiversity over time.
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CONTAMINATION HAZARDS

MPSP Recommendations re: Contamination Hazards

MPSP Section 4.1 Land Use Goals and Policies, Goal LU-1 COMPLETE NEIGHBORHOODS. A series of neighborhoods with access to public amenities, quality housing, good jobs, and healthy and safe environments that weave together into a vibrant ecological innovation district.

- Proposed new Policy LU-1.7DS-4.10: Assure transparency and opportunity for public review and comment regarding hazardous materials analysis for all projects, including the decision basis and findings regarding additional site investigations, the scope of new site investigations, and planned remediation measures.

MPSP Chapter 10 Implementation, Section 10.2.1 Hazards and Hazardous Materials

- Proposed new submittal requirement: **Soil and Groundwater Study**. For any renovation, modification, or redevelopment of a property within Moffett Park, an assessment of existing soil and groundwater conditions shall be completed, including testing for hazardous contaminants and identifying site-specific vulnerability to shallow groundwater rise.

MPSP Chapter 10 Implementation, Section 10.4 Implementation Actions, Table 29

- Proposed text change (in **bold**) to Groundwater Data Collection description: Establish a monitoring plan of groundwater elevations, **hazardous soil-borne contaminants**, and salinity within Moffett Park that includes the development and publication of a three-dimensional map of subsurface geology **as well as a regularly updated map of chemical testing results**. [Note: the proposed 10.2.1 submittal requirement above would be a valuable data source for this Groundwater Data Collection effort.]

BIOLOGICAL RESOURCES

MPSP Recommendations re: Bird Safety

MPSP Section 5.4 Ecological Development Standards

- Proposed MPSP text change (in **bold**) to section 5.4.2 BIRD SAFE DESIGN Section 2. Façade treatment: No more than 10% of the surface area of a building's total exterior façade shall have untreated glazing between the ground and 60 feet above ground. **Building facades that face open space or water features will have treated glazing at all heights.** Bird Friendly glazing treatments can include the use of opaque glass, the covering of clear glass surface with patterns, the use of paned glass with fenestration patterns, and the use of external screens over non-reflective glass. All façade glazing shall have reflectivity ratings no greater than **20%**.
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MPSP Recommendations re: Oversight for Special Status Species

Chapter 10: Implementation, 10.3 General Submittals and Site Master Plans, Section 10.3.5 Special Species

- *Definition of Qualified Biologist.* We recommend that the following definition be prominently inserted at the beginning of Section 10.3.5 to be applied to actions related to all the species and habitats discussed.

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Discussion below includes actions related to biological surveys, reporting and construction mitigations. As each such discussion applies to either Special Status Species or Sensitive habitats, survey requirements commonly fall under protocols

defined by responsible wildlife agencies. As such, persons or organizations subject to Section 10.3.5 Implementation are responsible minimally to seek informal consultation with the appropriate wildlife agency before proceeding with any 10.3.5 listed requirements.

BIOSAFETY

MPSP Recommendations re: Biosafety

Goal LU-3: A CENTER FOR INNOVATION. Moffett Park continues to be a center of innovation and the knowledge economy.

- Proposed new Policy LU-3.5: Encourage Life Sciences innovation by allowing facilities that commit to public health and safety by limiting Life Sciences Labs to only biosafety levels BSL-1 and BSL-2.

5.1 Development Standards Goals and Policies, Goal DS-4: HEALTHY, CLIMATE-READY SITE AND BUILDING DESIGN. Site and building design reduce energy use and water use, protect public health, and increase climate resilience.

- Proposed new Policy DS-4.10: For public health and safety, any life sciences development proposed in the R&D or Commercial Office zones will limit its labs to biosafety levels BSL-1 and BSL-2. No BSL-3 or BSL4 labs will be permitted. Further all life sciences labs shall abide by the guidelines of the National Institutes of Health.

9.1 Infrastructure Goals and Policies, Goal IU-2: SUSTAINABLE AND RESILIENT INFRASTRUCTURE. To achieve the vision of an ecological innovation district, Moffett Park invests in sustainable and resilient infrastructure and practices to illustrate leadership.

- Text correction to Policy IU-2.6: Ensure that infrastructure development considers and avoids impacts due to potential rising groundwater and overall **low high** water tables in the Plan area.

APPENDIX B

Annotated Reference of Studies: Human Impacts on Wildlife

Locally focused studies:

Trulio, L. & Sokale J. 2008. Foraging Shorebird Response to Trail Use around San Francisco Bay. *Journal of Wildlife Management* 72:1775-1780. <https://www.jstor.org/stable/40208460>
Two-year study of the effects of human trail use on foraging shorebirds around San Francisco Bay. The number of shorebirds decreased with the increase in human traffic. An average of 25% fewer birds were found on higher-use days.

Trulio et al. 2013. Experimental Study of Shorebird Response to New Trail Use in the South Bay Salt Pond Restoration Project. https://www.southbayrestoration.org/sites/default/files/documents/final_shorebird_report_trulio_et_al.pdf
Experimental study of shorebird response to new trail walkers around the San Francisco Bay. The methods involved having two pedestrians walk back and forth on the levees/boardwalks for 10 minutes. After walkers were introduced, bird numbers decreased by 2.5% and species richness decreased by 18%.

White, H.R. 2009. Wintering Duck Response to Trail Use at Former San Francisco Bay Salt Ponds. <https://doi.org/10.31979/etd.hyvm-4ayk>
Seven-month study of wintering ducks' movement away from previously unused trails around San Francisco Bay salt ponds when used by pedestrians (two individuals). All duck species within 80 meters of the levee trail responded to trail use. When disturbed, ducks moved more than 106 meters on average, which is substantially farther from the trail than they were found before pedestrians were introduced.

Trulio et al. 2008. Study of Waterbird Response to Trail Use in the South Bay Salt Pond Restoration Project. https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.southbayrestoration.org%2Frfq-rfp%2F2008-rfp-awards%2FTrulio_4Final.pdf&uct=1669676011&usq=jqtQEAE-QVDWJit1teHK0R1Ce7A.&source=meet
Research proposal for four studies to be conducted in the South Bay Salt Pond Restoration project area. Justifications include evidence of seven species of dabbling ducks responding to all nearby trail use (especially walking and biking) and data collected by White in which species richness and the overall number of birds became considerably lower after trail use disturbance (at distances of up to 120 meters).

Trulio, L. & White, H.R. (2017). Wintering Waterfowl Avoidance and Tolerance of Recreational Trail Use. *Waterbirds: The International Journal of Waterbird Biology*, 40(3), 252-262. <http://www.jstor.org/stable/26428223>
Experimental study conducted in the south San Francisco Bay measuring the amount of trail users and the number of birds present before and after the introduction of trail use. Overall, comparison of before/after bird counts and number of trail users did not show any increase in habituation (increasing tolerance) to trail use. Tolerance differed between species; Northern Shovelers increased in number with increasing trail use, while significantly fewer Ruddy Ducks were found as trail use increased.

Borgmann, K. A Review of Human Disturbance Impacts on Waterbirds <https://ca.audubon.org/sites/default/files/documents/humandisturbanceimpactsreportfinal.pdf>
Scientific Literature review of human impacts on waterbirds in the San Francisco Bay area. Out of 50 studies, 86% found that human disturbance affected their study species. Boating and walking affect bird behavior, causing them to waste time and energy they could have used to feed. Birds flying away in response to human disturbance was noted in 57% of the 50 studies reviewed.

Studies from elsewhere:

Larson et al. 2016. Effects of Recreation on Animals Revealed as Widespread through a Global Systematic Review. <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0167259>
Review of scientific literature on the effects of human recreation on animals. Over 93% of articles reviewed noted at least one effect of recreation on animals. Approximately 55% of these effects were negative. Raptors and shorebirds had an especially large amount of evidence of negative effects from recreation.

Burger et al. 2009. Ecotourism and Birds in Coastal New Jersey: Contrasting Responses of Birds, Tourists, and Managers. <https://www.cambridge.org/core/journals/environmental-conservation/article/abs/ecotourism-and-birds-in-coastal-new-jersey-contrasting-responses-of-birds-tourists-and-managers/8F21C5F819C4B87C3DBA68317BBA49CB>
Collection of case studies focusing on the effects of ecotourism on the New Jersey coast. Human presence within heronries can lead to damage and death by scaring the young away from their nests too early. Least Tern colonies with many tourist visitors tend to have lower nesting rates and less successful breeding. Piping Plovers commit more time and energy to staying alert than feeding with increasing human presence, which can be especially harmful to chicks learning how to forage for the first time. Shorebirds and migratory gulls at Caven Point stay further away when more people are present, meaning that they lose access to foraging opportunities near paths. On the shore of Delaware Bay shorebirds fly away from humans and can even completely abandon beaches with high levels of human disturbance.

Tarr et al. 2008. An Experimental Assessment of Vehicle Disturbance Effects on Migratory Shorebirds. *Journal of Wildlife Management* 74:1776- 1783. https://www.academia.edu/download/39770412/An_Experimental_Assessment_of_Vehicle_Di20151107-4773-186xq2s.pdf
Study of the effect of off-road (ATV) traffic on number and location of shorebirds at a "migratory stopover area" on the coast of North Carolina, with a particular focus on one species: Sanderlings. Motorized vehicle disturbance led to overall decreasing numbers of migrant shorebirds and reduced use of microhabitats above the tidal zone, as birds shifted to increased use of the tidal zone to get farther away from vehicle disturbance. Sanderlings were more active with the presence of motorized vehicles and fewer Sanderlings used the study area to rest in.

APPENDIX C

Additional recommendations to address sustainability concerns related to life science development

Even as the local market for office space struggles with increasing vacancy rates and declining rents, the Bay Area life sciences industry continues to expand, with 27 percent growth in employment from 2019 to the second quarter of 2022 and a massive development pipeline going into this year.²¹ We believe this trend will likely lead to significant developer interest in life sciences facilities within the MPSP's innovation district. In addition to biosafety concerns, life sciences facilities pose unique climate sustainability challenges by producing disproportionate energy and water demands, noise, and plastics waste as compared to typical office use.

Although life sciences facilities are not specifically addressed in the draft MPSP or EIR, we urge you to consider how the MPSP, in conjunction with Sunnyvale's Reach Code and Climate Action Plan, can best assure that life sciences development in Moffett Park will be consistent with the district's eco-innovation vision.

1. Applicability of all-electric exceptions for laboratory facilities.

Response M.1 of the Environmental Impact Report (EIR) for the Moffett Park Specific Plan refers to pages 133 and 134 of the Draft EIR which indicates that the City's Reach Code prohibits gas appliances with the exception of certain non-residential uses such as factories, hazardous materials manufacturing, and laboratory facilities, as well as emergency operation centers and commercial dryers in large hotels. However, those exceptions appear inconsistent with the MPSP Policy IU-5.1: Prohibit new natural gas services in **all** buildings and infrastructure to transition to all electric [emphasis added].

We support Policy IU-5.1 and encourage you to eliminate or narrowly tailor the Reach Code exception for laboratory facilities. All-electric new and remodeled biotech lab buildings, with the exception of gas allowed for lab experiments, are growing fast in the Bay Area and in many communities now.^{22 23 24}

²¹ Bucking Trends, Bay Area Life Science Market Shows Resilience, The Real Deal, April 18, 2023.

https://therealdeal.com/sanfrancisco/2023/04/18/bucking-trends-bay-area-life-science-market-shows-resilience/?utm_medium=social&utm_campaign=single_content_share&utm_source=clipboard

²² <https://betterbuildingssolutioncenter.energy.gov/partners/genentech-inc>

Between 2015 and 2019, Genentech reduced GHG emissions from onsite energy use by 30% despite the expansion of its site operations. To achieve further reductions, Genentech is implementing energy conservation projects in its buildings, optimizing HVAC systems and converting to electric heat pumps, as well as transitioning sites to renewable energy.

Genentech's 60-building South San Francisco headquarters has transitioned 100% of its grid power to CO2-free

²³ Announcement of all-electric life science campus in Millbrae, CA <https://frep.com/longfellow-celebrates-groundbreaking-of-avia-labs-upcoming-state-of-the-art-all-electric-science-center/> (March 1, 2023)

²⁴ Laboratories require a great deal of energy-use and finding sustainable solutions to support it are critical for both the planet and for operational costs. Bakar BioEngenuity Hub (in Berkeley) is LEED Gold certified. Representative elements of mechanical, electrical and plumbing systems include conversion to

Recommendation

Please clarify that any exception, in the Reach Code or elsewhere, for use of gas in laboratory facilities applies only for use in the lab for experiments. The general HVAC systems and hot water heating for lab facilities should be required to be all-electric. This should also be clarified for factories and hazardous materials manufacturing.

2. Consumption of energy.

Life Science lab facilities have been shown to make disproportionate demands on the electrical grid.²⁵ Response R.17 on page 71 of the Final EIR indicates that energy use assumptions for the MPSP, "including R&D uses, were based on CalEEMod model defaults."²⁶ We are concerned that CalEEMod model defaults may not reflect the intensity of current Bay Area demand for Life Sciences facilities (and their disproportionate energy demands), nor the likelihood that Moffett Park's innovation district would attract and include substantial new life sciences development. Underestimation of the volume of high-energy-demand Life Sciences development in the Plan area could have significant cost and infrastructure implications.

Additionally, page 133 of the Draft EIR states that under the City's green building standards for new construction, additions, and remodels of buildings, "[a]t minimum, new non-residential projects greater than 5,000 square feet are required to meet CALGreen Mandatory Measures and LEED Gold." Because of the apparent inconsistency noted above regarding all-electric requirements, we urge greater clarity as to how the City's standards and requirements will be applied to life sciences development projects.

Recommendation

Please confirm that laboratory facilities, like all other non-residential projects exceeding 5,000 square feet, will be required to meet the City's LEED Gold certification and also include a policy in the Specific Plan clarifying that LEED Gold certification will be required in both new lab construction *and* major lab remodels.

3. Life Sciences water, sewer and plastic waste

all-electric building. <https://www.commercialsearch.com/news/mbh-architects-on-trends-in-bay-area-life-science-design/>

²⁵ **MassBio Talks Showcase That Massachusetts Needs Cooperation From Biology Labs To Achieve Sustainability.** "... Strikingly, the building firm ARUP showed data that buildings in Massachusetts are making huge demands on the electrical grid - especially lab facilities." May 21, 2019

<https://www.labconscious.com/blog/massbio-talks-energy-massachusetts-biology-labs-sustainability>

²⁶ An incomplete sentence at the end of Response R.17 on page 71 makes oblique reference to "assumptions in the Draft EIR," but offers no transparency into the details of those assumptions.

Life Sciences labs consume as much as five times more water than typical office buildings of the same size and generate waste water proportionately. In addition, life sciences labs generate an inordinate amount of plastic waste from single use plastics.²⁷

Recommendations

Require that anticipated water usage and waste water needs for lab buildings shall be specified early, subject to environmental review, and monitored, with corrective action taken as needed.²⁸

Include a goal in the Climate Action Playbook for the reduced use of water and single-use disposable plastics in life sciences lab facilities to acknowledge and address the disproportionate climate impacts of such facilities.

Review current strategies for plastic waste reduction and revise as needed to ensure effective application to life science facilities.

²⁷ Research scientists have largely gone unnoticed as major users of unrecyclable material. Now some universities are helping them kick the habit, The Guardian, November 10, 2019
<https://www.theguardian.com/environment/2019/nov/10/research-labs-plastic-waste>

²⁸ Menlo Park's Life Sciences ordinance, Municipal Code Chapter 16.44.130(3)(C), for example, requires project applicants to submit a water use budget and the City monitors water usage for compliance.
<https://www.codepublishing.com/CA/MenloPark/html/MenloPark16/MenloPark1644.html#16.44.130>

