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November 15, 2022

Mr. Nathan Nguyen
City of Santa Cruz
809 Center Street, Room 201
Santa Cruz, CA 95060
nnguyen@cityofsantacruz.com

Subject: Coastal Rail Trail Segments 8 and 9, Draft Environmental Impact Report,
SCH No. 2021090262, City and County of Santa Cruz

Dear Mr. Nguyen:

The California Department of Fish and Wildlife (CDFW) has reviewed the Draft Environmental Impact Report (DEIR) prepared by the City of Santa Cruz (City) for the Coastal Rail Trail Segments 8 and 9 (Project), located in Santa Cruz County, pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹

CDFW is submitting comments on the DEIR to inform the City, as the Lead Agency, of potentially significant impacts to biological resources associated with the Project.

CDFW ROLE

CDFW is a **Trustee Agency** with responsibility under CEQA pursuant to CEQA Guidelines § 15386 for commenting on projects that could impact fish, plant, and wildlife resources (i.e., biological resources). CDFW is also considered a **Responsible Agency** if a project would require discretionary approval, such as permits issued under the California Endangered Species Act (CESA) or Native Plant Protection Act (NPPA), the Lake and Streambed Alteration (LSA) Program, and other provisions of the Fish and Game Code that afford protection to the state's fish and wildlife trust resources.

REGULATORY AUTHORITY

California Endangered Species Act and Native Plant Protection Act

Please be advised that a CESA Incidental Take Permit (ITP) must be obtained if the Project has the potential to result in "take" of plants or animals listed under CESA or NPPA, either during construction or over the life of the Project. If the Project will impact

¹ CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

Mr. Nathan Nguyen
City of Santa Cruz
November 15, 2022
Page 2 of 10

CESA or NPPA listed species, early consultation with CDFW is encouraged, as significant modification to the Project and mitigation measures may be required to obtain an ITP. Issuance of an ITP is subject to CEQA documentation; the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program.

CEQA requires a Mandatory Finding of Significance if a project is likely to substantially impact threatened or endangered species (Pub. Resources Code, §§ 21001(c), 21083, and CEQA Guidelines §§ 15380, 15064, 15065). Impacts must be avoided or mitigated to less-than-significant levels unless the CEQA Lead Agency makes and supports Findings of Overriding Consideration (FOC). The CEQA Lead Agency's FOC does not eliminate the Project proponent's obligation to comply with Fish and Game Code, § 2080 et. seq.

Lake and Streambed Alteration

CDFW requires an LSA Notification, pursuant to Fish and Game Code section 1600 et seq., for Project activities affecting lakes or streams and associated riparian habitat. Notification is required for any activity that may substantially divert or obstruct the natural flow; change or use material from the bed, channel, or bank (including associated riparian or wetland resources); or deposit or dispose of material where it may pass into a river, lake, or stream. Work within ephemeral streams, drainage ditches, washes, watercourses with a subsurface flow, and floodplains are generally subject to notification requirements. In addition, infrastructure installed beneath such aquatic features, such as through hydraulic directional drilling, is also generally subject to notification requirements. **The Project has the potential to impact resources including mainstems, tributaries and floodplains associated with the San Lorenzo River, Pilkington Creek, Woods Lagoon, Leona Creek, and Schwan Lagoon.** Any impacts to the mainstems, tributaries and floodplains or associated riparian habitat would likely require an LSA Notification. CDFW, as a responsible agency under CEQA, will consider the DEIR for the Project. CDFW may not execute a final LSA Agreement until it has complied with CEQA as the responsible agency.

Raptors and Other Nesting Birds

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

Mr. Nathan Nguyen
City of Santa Cruz
November 15, 2022
Page 3 of 10

Fully Protected Species

Fully Protected species may not be taken or possessed at any time (Fish & G. Code, §§ 3511, 4700, 5050, & 5515).

PROJECT DESCRIPTION SUMMARY

Proponent: The City of Santa Cruz (City) in coordination with the County of Santa Cruz (County) and the Santa Cruz County Regional Transportation Commission (RTC)

Objective: The Project consists of a 2.2-mile bicycle and pedestrian system extending along the RTC owned railroad corridor from Beach Street/Pacific Avenue roundabout on the west to the eastern side of 17th avenue on the east. The construction of Segment 8 (0.6 mile) would improve the existing Class IV Cycle Track for bicycles and sidewalk for pedestrians. The construction of Segment 9 (1.6 miles) would include a 12-foot-wide multi-use pedestrian and bicycle trail on the inland side of the tracks. The optional first phase, Trail on the Rail Line (Interim Trail), would keep the same improvements on Segment 8, but the multi-use trail for Segment 9 would be located along the rail centerline, with the existing tracks and ties removed.

Timeframe: The construction of the trail without the optional Interim Trail would begin in 2023 or 2024 and would be completed within 24 months.

ENVIRONMENTAL SETTING AND LOCATION

The Project is located along a 2.2-mile-long stretch of the RTC-owned Santa Cruz Branch Rail Line corridor in central Santa Cruz County, within the California Coastal Zone. The Project alignment extends through developed portions of the City and County, including residential, commercial, industrial, and recreational land uses, as well as Twin Lakes State Beach open space. Multiple habitat types exist within the Project footprint including but not limited to coast live oak woodland and forest, mixed riparian forest, aquatic/riverine, coastal terrace prairie, non-native grassland and forest, and developed and landscaped.

COMMENTS AND RECOMMENDATIONS

CDFW offers the following comments and recommendations to assist the City in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on biological resources.

COMMENT 1: Santa Cruz Tarplant ITP or Management MOU

Issue: The DEIR states that Santa Cruz tarplant (*Holocarpha macradenia*) may be impacted by the Project, but the mitigation measures do not reference obtaining an

Mr. Nathan Nguyen
City of Santa Cruz
November 15, 2022
Page 4 of 10

Incidental Take Permit if there is the potential for take of Santa Cruz tarplant. The DEIR states that Project activities will require vegetation removal less than 75 feet away from the northernmost tarplant occurrence at Twin Lakes State Beach open space. Santa Cruz tarplant is an annual species and occurrences can vary from year to year. Santa Cruz tarplant also establishes a lasting seed bank. Multiple years of surveys may be needed to confirm if Santa Cruz tarplant occurs within the proposed vegetation removal areas. Furthermore, Mitigation Measure BIO-1a states that the existing Santa Cruz tarplant population will be monitored and enhanced with activities such as seeding and out-planting among other management actions without reference to obtaining a Memorandum of Understanding (MOU) for management of an endangered species from CDFW.

Evidence the impact would be significant: Santa Cruz tarplant is an endangered species under CESA (Fish & G. Code, § 2050 et seq.). Species listed under CESA may not be taken² at any time except under the provisions of an NCCP, (Fish & G Code § 2081.7), an MOU for scientific education or management purposes (Fish & G. Code §2081, subd. (a)), or an ITP (Fish & G. Code § 2081 (b)).

Santa Cruz tarplant is an annual species and the number of individuals recorded in a year is highly dependent on rainfall and other factors. Santa Cruz tarplant produces two types of seeds, ray achenes and disk achenes (U.S. Fish and Wildlife Service (USFWS) 2014). Generally, the seeds fall within the vicinity of the plant and not have a structural means for dispersal, although it is possible that some ray achenes may be dispersed long distances by animals (USWFS 2014). Ray achenes also form lasting seed banks with seeds that remain viable for an unknown amount of time, with seeds up to 15 years old successfully germinating (USFWS 2014). Surveys over consecutive seasons may be necessary to increase the likelihood of detection and account for variances in weather and other disturbances from year to year to determine the potential for take.

Recommendation: CDFW recommends the lead agency conduct additional focused surveys for Santa Cruz tarplant during the blooming period of the species and obtain appropriate permits for incidental take or management of the species.

Recommended Mitigation Measure 1 – Focused Survey: An experienced botanist, familiar with the native plant communities of Santa Cruz County shall conduct a focused Santa Cruz tarplant survey during the blooming period of the species, from June to October, over a minimum of two consecutive seasons. The surveys shall occur throughout the entire Project where potential Santa Cruz tarplant habitat has been identified, prior to the initiation of construction and the results shall be included in the

² Take is defined in Fish & G. Code, § 86 as hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.

Mr. Nathan Nguyen
City of Santa Cruz
November 15, 2022
Page 5 of 10

Project environmental document. Surveys shall be conducted according to: *Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities* (CDFW 2018), available at: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline>.

Recommended Mitigation Measure 2 – Santa Cruz Tarplant Mapping Data: A qualified biologist shall map the potential for Santa Cruz tarplant occurrence using data collected from the surveys and other sources such as aerial imagery; historical survey data; field reconnaissance; scientific literature and reports; findings from positive occurrence databases such as the California Natural Diversity Database (CNDDDB); and sensitive natural community information available through the Vegetation Classification and Mapping Program (VegCAMP). Based on the data and information from the surveys and habitat assessment, the analysis should adequately assess whether Santa Cruz tarplant is likely to occur on or near the Project site, and whether the species could be impacted by the Project.

If Santa Cruz tarplant is detected or likely to occur within the Project area, additional measures may be needed to avoid, minimize, and/or mitigate potential Project impacts. Measures may include work stoppage, flagging and avoidance of occurrences, collection of propagation material, site restoration and/or obtaining an Incidental Take Permit (Fish & G. Code § 2081, subd., (b)). If management actions are proposed for the existing Santa Cruz tarplant population, an MOU for scientific education or management purposes management shall be obtained (Fish & G. Code § 2081, subd. (a)).

COMMENT 2: Monarch Overwintering

Issue: The DEIR states that the Project would have an adverse effect on monarch butterfly overwintering roost sites through tree removal during construction and disturbance from trail operation, but the DEIR does not identify appropriate Monarch specific avoidance and minimization measures. There is one known and three potential monarch roost sites within the Project area as identified in the DEIR. CDFW is concerned about the loss of trees and host plants needed to support the monarch butterfly life cycle. The loss of suitable overwintering habitat for monarchs would contribute to extirpation of western monarch populations. If the Project would remove trees used by over-wintering monarchs, tree planting alone is unlikely to be sufficient to mitigate impacts to a less-than-significant level.

Evidence the impact would be significant: The data gathered from the Western Monarch Thanksgiving Count show that western overwintering monarchs are at an all-time critical low level and have significantly declined to approximately two percent of their numbers since 1997 (Xerces Society Western Monarch Thanksgiving Count, 2019). The decrease in Western Monarch butterflies may be due to the loss of overwintering habitat and loss of its host plant (milkweed) (Pelton et al. 2019).

Mr. Nathan Nguyen
City of Santa Cruz
November 15, 2022
Page 6 of 10

According to the Xerces Society, “Western monarchs use the same sites each year, even the same trees, and need intact overwintering habitat, which provides a very specific microclimate and protection from winter storms,” (Xerces Society, 2020).

Recommendations: The DEIR should incorporate protective measures for western monarch butterflies that includes protecting trees used for overwintering.

Recommended Measure: Protect, Manage, Enhance and Restore Monarch Butterfly Overwintering Sites: A qualified biologist shall conduct overwintering grove habitat assessment(s) and develop and implement long-term grove management plans (<https://www.westernmonarchcount.org/>). Management plan actions for groves may include, but are not limited to: Enhance roosting trees within overwintering groves and within ½ mile of groves by planting native insecticide-free trees (e.g., Monterey pine (*Pinus radiata*), Monterey cypress (*Cupressus macrocarpa*), coast redwood (*Sequoia sempervirens*), coast live oak (*Quercus agrifolia*), Douglas-fir (*Pseudotsuga menziesii*), Torrey pine (*Pinus torreyana*), western sycamore (*Platanus acemose*), Bishop pine (*Pinus radiata*) and others, as appropriate for location).

Avoid the removal of trees or shrubs within ½ mile of overwintering groves, except for specific grove management purposes, and/or for human health and safety concerns. The maintenance of trees and shrubs within a ½ mile of these sites provides a buffer to preserve the microclimate conditions of the winter habitat.

Conduct management activities such as tree trimming, mowing, burning and grazing in monarch overwintering habitat in coordination with a monarch biologist and outside of the estimated timeframe March 16-September 14 when monarchs are likely present.

Enhance native, insecticide-free nectar sources by planting fall/winter blooming forbs or shrubs within overwintering groves and within one mile of the groves (https://xerces.org/sites/default/files/publications/18-003_02_Monarch-NectarPlant-Lists-FS_web%20-%20Jessa%20Kay%20Cruz.pdf).

Avoid the use of pesticides within one mile of overwintering groves, particularly when monarchs may be present. If pesticides are used, then conduct applications from March 16-September 14, when possible. Avoid the use of neonicotinoids or other systemic insecticides, including coated seeds, any time of the year in monarch habitat due to their ecosystem persistence, systemic nature, and toxicity. Avoid the use of soil fumigants.

Consider non-chemical weed control techniques, when possible (<https://www.cal-ipc.org/resources/library/publications/non-chem/>). Remove tropical milkweed that is detected, and replace it with native, insecticide-free nectar plants suitable for the location (https://xerces.org/sites/default/files/publications/18-003_02_Monarch-NectarPlant-Lists-FS_web%20-%20Jessa%20Kay%20Cruz.pdf).

Mr. Nathan Nguyen
City of Santa Cruz
November 15, 2022
Page 7 of 10

To assist in maintaining normal migration behavior, do not plant any type of milkweed within five miles of the coast from Mendocino County south through Santa Barbara County, and within one mile of the coast south of Santa Barbara County, unless the species of milkweed is native to the local area. Conduct grove monitoring for butterflies during the Western Monarch Counts each fall and winter. When possible, report when monarchs arrive and depart the groves each year (<https://www.westernmonarchcount.org/>).

COMMENT 3: Riparian Encroachment

Issue: The DEIR states that Project trail design has the potential to impact the stream bank and riparian zone at Leona Creek and Stream 1545 and trail operation can increase impacts to the riparian zone through foot traffic and the potential for trash and debris. Encroachment in the riparian zone can negatively impact sensitive riparian species and can lead to increased pollutants and deleterious materials entering the stream. Riparian habitat is also of critical importance to protecting and conserving the biotic and abiotic integrity of an entire watershed.

Evidence the impact would be significant: Riparian trees and vegetation, and associated floodplains, provide many essential benefits to stream and aquatic species habitat (Moyle 2002, CDFW 2007), including thermal protection, cover, and large woody debris. Substantial removal of trees and other vegetation significantly reduces suitable nesting and roosting habitat for many bird and bat species, such as pallid bat, an SSC, and causes the loss of important refugia for small mammals. Development adjacent to the riparian zone can result in fragmentation of riparian habitat and decreases in native species abundance and biodiversity (Davies et al. 2001, Hansen et al. 2005, CDFW 2007). An estimated 2 to 7 percent of California's riparian habitat remains intact and has not been converted to other land uses (Katibah 1984, Dawdy 1989). Riparian buffers help keep pollutants from entering adjacent waters through a combination of processes including dilution, sequestration by plants and microbes, biodegradation, chemical degradation, volatilization, and entrapment within soil particles. Narrow riparian buffers are considerably less effective in minimizing the effects of adjacent development than wider buffers (Castelle et al. 1992, Brososke et al. 1997, Dong et al. 1998, Kiffney et al. 2003, Moore et al. 2005).

Recommendation: CDFW recommends the Project establish riparian buffer zones to limit development and vegetation clearing to outside of and away from riparian areas. CDFW is available to consult with the City to determine appropriate site-specific riparian buffers to reduce impacts to sensitive species and riparian habitat to less-than-significant. For Project activities that cannot avoid impacts to the riparian zone, CDFW recommends that the DEIR incorporate the following mitigation measure:

Mr. Nathan Nguyen
City of Santa Cruz
November 15, 2022
Page 8 of 10

Recommended Mitigation Notification of Lake and Streambed Alteration: For Project activities that may substantially alter the bed, bank, or channel including but not limited to riparian vegetation disturbance, an LSA Notification shall be submitted to CDFW pursuant to Fish and Game Code section 1602 prior to Project construction. As part of the LSA permit process, permanent and temporary impacts to the stream and associated riparian habitat must be mitigated to off-set those impacts. Mitigation shall be as close to the Project area as possible and within the same watershed and year as the impact. Temporary impacts shall be restored on-site in the same year as the impact.

The lead agency should develop a mitigation plan in coordination with CDFW for any permanent Project impacts that cannot be avoided that will be subject to LSA permitting and include that plan as part of the DEIR. The mitigation plan should include in detail any proposed on and/or off-site mitigation needs necessary to compensate for net-loss of river or stream resources. Example of permanent impacts include but are not limited to hardscape materials and geo-textile fabric within the bed, bank or channel of a stream, loss of riparian vegetation and mature trees and expansion of existing infrastructure footprint(s). CDFW recommends proposed mitigation plan(s) include details such as mitigation location(s), proposed actions, monitoring, success criteria and any corrective actions.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to the CNDDDB. The CNDDDB online field survey form and other methods for submitting data can be found at the following link: <https://wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. The types of information reported to CNDDDB can be found at the following link: <https://wildlife.ca.gov/Data/CNDDDB/Plantsand-Animals>.

FILING FEES

CDFW anticipates that the Project will have an impact on fish and/or wildlife, and assessment of filing fees is necessary (Fish & G. Code, § 711.4; Pub. Resources Code, § 21089). Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW.

Mr. Nathan Nguyen
City of Santa Cruz
November 15, 2022
Page 9 of 10

CONCLUSION

Thank you for the opportunity to comment on the Project's DEIR. If you have any questions regarding this letter or for further coordination with CDFW, please contact Ms. Serena Stumpf, Environmental Scientist, at (707) 337-1364 or Serena.Stumpf@wildlife.ca.gov; or Mr. Wesley Stokes, Senior Environmental Scientist (Supervisory), at Wesley.Stokes@wildlife.ca.gov.

Sincerely,

DocuSigned by:

Erin Chappell

B77F9A6211EF486
Erin Chappell
Regional Manager
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ec: State Clearinghouse # 2021090262

REFERENCES

- Brosofske, K.D., J. Chen, R.J. Naiman, and J.F. Franklin. 1997. Harvesting effects on microclimatic gradients from small streams to uplands in western Washington. *Ecological Applications* 7:1188-1200.
- Castelle, A.J., C. Conolly, M. Emers, E.D. Metz, S. Meyer, M. Witter, S. Mauermann, T. Erickson, and S.S. Cooke. 1992. Wetlands buffers use and effectiveness. Adolfsen Associates, Inc., Shorelands and Coastal Zone Management Program, Washington Department of Ecology, Olympia, WA. Pub. No. 92-10.
- CDFW. 2007. California wildlife: conservation challenges. California Department of Fish and Game, Sacramento, CA.
- Davies, K.F., C. Gascon, and C.R. Margules. 2001. Habitat fragmentation: consequences, management, and future research priorities. Pages 81-97 in: M.E. Soule and G. H. Orians, (eds.) *Conservation Biology: Research Priorities for the Next Decade*. Island Press, Washington, DC.
- Dawdy, D.R. 1989. Feasibility of mapping riparian forests under natural conditions in California. pages 63-68 in: *Proceedings of the California Riparian Systems Conference*. GTR PSW-110. Davis, CA.
- Dong, J., J. Chen, Brosofske, K.D., and R.J. Naiman, 1998. Modeling air temperature gradients across managed small streams in western Washington. *Journal of Environmental Management* 53:309-321.

Mr. Nathan Nguyen
City of Santa Cruz
November 15, 2022
Page 10 of 10

- Hansen, A. J., R. L. Knight, J. M. Marzluff, S. Powell, K. Brown, P. A. Gude, and K. Jones. 2005. Effects of exurban development on biodiversity patterns, mechanisms, and research needs. *Ecological Applications* 15:1893-1905.
- Katibah, E.F. 1984. A brief history of riparian forests in the Central Valley of California. Pages 23-29 in: R.E. Warner and K.M. Hendrix (eds) *California riparian systems: ecology, conservation and productive management*. University of California Press, Berkeley, CA.
- Kiffney, P. M., J. S. Richardson, and J. P. Bull. 2003. Responses of periphyton and insects to experimental manipulation of riparian buffer width along forest streams. *Journal of Applied Ecology* 40:1060-1076.
- Moore, R. D., D. L. Spittlehouse, and A. Story. 2005. Riparian microclimate and stream temperature response to forest harvesting: a review. *Journal of the American Water Resources Association* 41:813-834.
- Moyle P.B. 2002. *Inland fishes of California*. University of California Press. Berkeley, CA.
- Pelton, E.M., Schultz C.B., Jepsen S.J., Black S.H. and Crone E.E. 2019. Western Monarch Population Plummet: Status, Probable Causes, and Recommended Conservation Actions. *Front. Ecol. Evol.* 7:258. doi: 10.3389/fevo.2019.00258.
- [USFWS] U.S. Fish and Wildlife Service. 2014. *Holocarpha macradenia* (Santa Cruz tarplant) 5-Year Review: Summary and Evaluation. U.S. Fish and Wildlife Service, Ventura, California.
- Xerces Society Western Monarch Thanksgiving Count. 2019. Western Monarch Thanksgiving Count Data from 1997–2018. Available online at: www.westernmonarchcount.org
- Xerces Society Website 2020. <https://xerces.org/press/western-monarch-butterflypopulation-still-at-critical-level>. Accessed February 5