21 January 2020

Ms. Jolie Harrison, Chief Permits and Conservation Division Office of Protected Resources National Marine Fisheries Service 1315 East-West Highway Silver Spring, MD 20910-3225

Dear Ms. Harrison:

The Marine Mammal Commission (the Commission), in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the California Department of Fish and Wildlife (CDFW) application seeking authorization under section 101(a)(5)(D) of the Marine Mammal Protection Act (the MMPA) to take small numbers of marine mammals by harassment. The taking would be incidental to construction activities in association with a tidal marsh restoration project in Elkhorn Slough, California, during a one-year period. The Commission also has reviewed the National Marine Fisheries Service's (NMFS) 31 December 2019 notice (84 Fed. Reg. 72308) announcing receipt of the application and proposing to issue the authorization, subject to certain conditions.

CDFW restored 61 acres of tidal marsh in the Minhoto-Hester Restoration Area of Elkhorn Slough during Phase I of the project. For Phase II activities, CDFW plans to restore 58 acres of tidal marsh in the Seal Bend and Minhoto-Hester Restoration Areas. Heavy equipment and human presence would be the main sources of disturbance on up to 180 days of activities. All proposed activities would occur during daylight hours only.

NMFS preliminarily has determined that, at most, the proposed activities could cause Level B harassment of a small number of harbor seals. It also anticipates that any impact on the affected species and stocks would be negligible. NMFS does not anticipate any take of marine mammals by death or serious injury and believes that the potential for disturbance will be at the least practicable level because of the proposed mitigation measures. The proposed mitigation, monitoring, and reporting measures include—

- ceasing construction activities if any marine mammal comes within 10 m of the equipment;
- delaying activities if a pup less than one week of age comes within 20 m of where heavy equipment is in use—if that pup remains at the project site, consulting with NMFS to determine the appropriate course of action
- beginning construction activities gradually each day and starting heavy equipment one at a time;

- using one qualified protected species observer to monitor for marine mammal disturbance for 30 minutes before, during, and for 30 minutes after (1) all in-water activities and (2) all activities occurring within 100 m of tidal waters;
- reporting injured and dead marine mammals to NMFS and the West Coast Regional Stranding Coordinator using NMFS's phased reporting approach and suspending activities, if appropriate; and
- submitting an annual report.

Harbor seal takes

To estimate the number of harbor seals that could be taken by Level B harassment, NMFS used the highest daily count of harbor seals, an assumed take rate of 2 percent, and 180 days of proposed activities. The highest daily count of harbor seals was based on the maximum number of seals observed on a given day at the seven closest haul-out areas to the Seal Bend and Minhoto-Hester Restoration Areas¹ from the Reserve Otter Monitoring Project's dataset (Elkhorn Slough National Estuarine Research Reserve (ESNERR) 2018). ESNERR (2018) only includes the methods for enumerating the numbers of both sea otters and harbor seals observed, it does not include the actual sightings data. As such, the counts presented in Table 4 of the Federal Register notice can only be presumed to be accurate. The 2-percent take rate was based on monitoring data from Phase I activities (Fountain et al. 2019). Specifically, NMFS divided the total number of seals taken by Level B harassment² during Phase I activities (n=62 seals) by the sum of the average number of seals observed during Phase I activities (n=4,713 seals) and rounded up. Similar to ESNERR (2018), Fountain et al. (2019) did not include the raw sightings data, only summarized data. It is unclear whether the numbers of animals taken were enumerated appropriately based on NMFS's definitions of Level 2 and 3 responses, whether the average number of seals is accurate and how the numbers were summed, whether the average number of seals was based on hourly or daily counts, if the average number of seals is reflective of seals in the vicinity³ or in the entire observation area⁴, and the distance from the source of disturbance to the seals.

Based on the highest daily count and the 2-percent take rate, NMFS estimated that only 8.34 harbor seals could be taken on any given day of Phase II activities. That is a vast underestimate of the number of seals that could potentially be taken by Level B harassment. Assuming that NMFS's abundance estimate of 417 seals is accurate, its presumed 2-percent take rate is not. NMFS indicated that all of the harbor seal disturbance events during Phase I activities occurred within 300 m of the source of disturbance (84 Fed. Reg. 72316), and Fountain et al. (2019) indicated that all but one of the instances when animals flushed⁵ occurred when animals were within 100 m of the source of disturbance. During Phase I, the construction activities occurred approximately 183 to 792 m from the main channel and up to 609 m inland from where Phase II activities would occur. Phase II activities would occur along the main channel and within or adjacent to the seven areas where harbor seals haul out. Therefore, CDFW's Phase II activities would occur where or in close

¹ Including Wildlife, Seal Bend, Moonglow, Hester, Main Channel, Yampah, and Avila areas.

² Based on NMFS's definitions of Level 2 and 3 responses.

³ For example, in Table 5 of the *Federal Register* notice, it is unclear how 'proximate' to the disturbance site a seal would need to be to be termed a 'seal in the vicinity'.

⁴ Which appears to be a 1-km radius or more based on Figure 1 in Appendix 2 of Fountain et al. (2019).

⁵ Or Level 3 responses.

proximity to where seals haul out than Phase I activities. The Commission further notes that the least number of harbor seals were observed in the Hester area, which is where the Phase I activities occurred (see Table 4 in the *Federal Register* notice).

If one were to consider only the number of seals taken and the number of seals that occurred in the vicinity during Phase I activities, the take rate would be 29 percent (see Table 5 of the *Federal Register* notice)⁶. However, the PSO was only required to monitor during Phase I activities when activities occurred (1) in water, (2) north of a line starting at 36°48'38.91" N, 121°45'08.03" W and ending at 36°48'38.91" N, 121°45'27.11" W, or (3) within 30.5 m of tidal waters. When activities occurred in other areas, the PSO only needed to monitor for the first three days of construction and until there were three successive days of no observed disturbance. Based on the reduced monitoring schedule, it is unclear whether unobserved taking of harbor seals occurred. Further, PSO monitoring is required when Phase II activities occur within 100 m, not 30.5 m, of tidal waters, which implies that animals were taken at farther distances than expected and than was required to be monitored during Phase I activities. Thus, using the revised 29-percent take rate likely is not sufficient, and the 2-percent take rate is wholly insufficient. To ensure that the number of harbor seal takes is not exceeded and that CDFW can conduct its activities without unnecessary delays, the Commission recommends that NMFS authorize up to 417 harbor seals being taken on up to 180 days of proposed activities.

Mitigation, monitoring, and reporting measures

The Commission notes that some of the mitigation, monitoring, and reporting measures are inconsistent within and between the *Federal Register* notice and draft authorization. Specifically—

- The Federal Register notice indicated that all construction activities would occur during daylight hours and that only in-water construction activities would not be conducted at night (84 Fed. Reg. 72318). Section 4(a) of the draft authorization stated that all construction activities would occur during daylight hours only, which the Commission assumes was NMFS's intent.
- The Federal Register notice indicated that, if poor environmental conditions restrict the full visibility of the shut-down zone, construction activities would be delayed. That measure was missing altogether in the draft authorization, which the Commission assumes was an error.
- The Federal Register notice indicated that, if a pup comes within 20 m of heavy equipment, activities would be delayed and, in the very next statement, indicated that activities would be delayed if a pup less than one week of age comes within 20 m (84 Fed. Reg. 72318). Section 4(c) of the draft authorization indicated that activities would be delayed only if the pup was less than one week of age, which the Commission assumes was NMFS's intent⁸.
- Section 5(b) of the draft authorization included the relevant reporting measures for injured and dead marine mammals. Those measures were missing altogether in the *Federal Register* notice, which the Commission assumes was an error.
- The Federal Register notice included a plethora of data that CDFW would collect before, during, and after each day's activities. Section 4(b) of the draft authorization regarding monitoring did not include all such data to be collected, and section 5(a) included no details

⁶ When pups were present, the take rate ranged from 20 to 100 percent (see Table 7 of the Federal Register notice).

⁷ Consistent with the City of Astoria's final authorization (84 Fed. Reg. 68136).

⁸ And is consistent with the previous authorization.

regarding the data that must be included in the monitoring report, including the requirement to provide the PSO sightings datasheets⁹. It is unclear what data CDFW would be required to collect and report. However, it is imperative that the PSO sightings datasheets be provided, since they were omitted from the monitoring report for Phase I activities (Fountain et al. 2019) and include pertinent data as noted herein.

• Table 9 of the *Federal Register* notice includes the old definitions of NMFS's Level 1, 2, and 3 responses. Level 2 responses are based on movement *in response to* the source of disturbance rather than movements *away from* the source of disturbance¹⁰. The draft authorization is missing those definitions altogether, which the Commission assumes was an error¹¹.

It is imperative that the mitigation, monitoring, and reporting measures are consistent within the Federal Register notice and between the notice and draft authorization to ensure that CDFW is effecting the least practicable impact on the species and that the monitoring and reporting measures are sufficient. In the last year and a half, the Commission has noted informally and formally ongoing inconsistencies and omissions of mitigation, monitoring, and reporting measures¹² for all but one proposed authorization involving construction activities. It is evident that NMFS needs to conduct a more thorough review of the Federal Register notices and draft authorizations before publishing them in the Federal Register for public comment. In addition to conducting a more thorough review of future notices and authorizations, the Commission recommends that in the Federal Register notice for CDFW's authorization issuance and final authorization NMFS (1) specify that all construction activities would be required to be conducted during daylight hours only and remove any references to in-water activities; (2) require that, if poor environmental conditions restrict the full visibility of the shut-down zone, construction activities be delayed; (3) require that, if a pup less than one week of age comes within 20 m of heavy equipment, activities be delayed and remove any references to only a pup; (4) include the relevant reporting measures for injured and dead marine mammals; (5) include the specific data that CDFW would be required to collect before, during, and after each day's activities consistent with those currently included in the Federal Register notice (84 Fed. Reg. 72319) and require that all such data and the PSO sightings datasheets be included in CDFW's monitoring report; and (6) include NMFS's current definitions of Level 1, 2, and 3 responses.

In addition to the inconsistencies noted, NMFS also did not include in either the *Federal* Register notice or the draft authorization the requirement that CDFW delay or cease activities, if the number of takes that have been authorized is met or if a species for which takes were not granted is observed in the project area¹³. It is unclear whether CDFW intends to keep a running tally of the total takes to ensure the authorized takes are not exceeded, but it should. Therefore, the Commission recommends that NMFS (1) include in the *Federal Register* notice for authorization

⁹ The Commission also notes that NMFS included two section 4s in the draft authorization. The mitigation section should be section 4, the monitoring section should be section 5, the reporting section should be section 6, and so on. ¹⁰ Pinnipeds generally move towards and into the water when vessels disturb them rather than away and inland from the disturbance. The same phenomenon is observed when the source of disturbance is on the tidal flat across the channel from where seals haul out. They will flush into the water towards the disturbance rather than move farther upland away from the disturbance.

¹¹ See section 5(c) in the draft authorization for Point Blue Conservation Science https://www.fisheries.noaa.gov/webdam/download/100385916.

¹² Many of which are standard measures.

¹³ See mitigation measure 4(d) in the draft authorization for Point Blue Conservation Science https://www.fisheries.noaa.gov/webdam/download/100385916.

issuance and final authorization the requirement that CDFW delay or cease activities, if the number of takes that have been authorized is met or if a species for which takes were not granted is observed in the project area and (2) ensure that the CDFW keeps a running tally of the total takes to ensure that the number of authorized takes are not exceeded.

Finally, NMFS did not specify whether multiple PSOs would be required to monitor if construction activities occur simultaneously at Seal Bend and Minhoto—Hester Restoration Areas. The two areas are not adjacent to one another. Thus, a PSO in one area could not monitor the other area effectively and placing a PSO between the two areas would not allow for either area to be monitored effectively (see Figures 3 and A-1 in CDFW's application). As such, the Commission recommends that NMFS require CDFW to use at least two PSOs to monitor the restoration areas, with at least one PSO at Seal Bend and one at Minhoto—Hester Marsh, if construction activities occur simultaneously. CDFW also should be cognizant of documenting disturbance of harbor seals hauled out on the tidal flats across the main channel from where the construction activities would occur. As noted herein, Phase II activities have a greater potential to disturb harbor seals that are hauled out in the restoration areas and have a view of the areas where activities could occur, particularly those near the water's edge or in the water.

Proposed one-year authorization renewals

NMFS has indicated that it may issue a one-year incidental harassment authorization renewal for this and other future authorizations if various criteria are met and after an expedited public comment period of 15 days. The Commission notes that the renewal terms and conditions were omitted from CDFW's draft authorization¹⁴ and the Federal Register notice (84 Fed Reg. 72321) did not specify NMFS's current criteria for issuing renewals. The notice stated that a request for a renewal must be received 60 days prior to the expiration of the current incidental harassment authorization rather than 60 days prior to the needed renewal authorization's effective date¹⁵ (see 84 Fed. Reg. 72302 as well). In addition to the omission of the terms and conditions in the draft authorization and the ambiguity of NMFS's revised criteria as discussed in the Commission's 8 January 2019 letter, the Commission and various other entities (e.g., 84 Fed. Reg. 31035 and 52466) have asserted and continue to consider that the renewal process is inconsistent with the statutory requirements under section 101(a)(5)(D) of the MMPA. As such, the Commission recommends that NMFS refrain from issuing renewals for any authorization and instead use its abbreviated Federal Register notice process. That process is similarly expeditious and fulfills NMFS's intent to maximize efficiencies. The Commission further recommends that NMFS ensure that the current renewal terms and conditions are included in section 8 of the final authorization, if issued and notwithstanding the Commission's recommendation to refrain from issuing renewals.

Over the past few years, NMFS informed the Commission that a renewal would be issued as a one-time opportunity, after which time a new authorization application would be required. NMFS also has included such verbiage in its response to comments regarding renewals. Specifically, NMFS indicated that it had modified the language for future proposed incidental harassment authorizations to clarify that all authorizations, including renewal authorizations, are valid for no more than one

¹⁴ Section 8 of CDFW's draft authorization was omitted in its entirety. See section 8 in the draft authorization for Alaska Marine Lines, Inc. https://www.fisheries.noaa.gov/webdam/download/99531775.

¹⁵ https://www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-harassment-authorization-renewals

year and that the agency will consider *only one renewal* for a project at this time (e.g., 84 Fed Reg. 36892 from 30 July 2019). However, NMFS has yet to stipulate that the agency will consider *only one renewal* or that a renewal is a *one-time opportunity* in any *Federal Register* notice requesting comments on the possibility of a renewal, on its webpage detailing the renewal process¹⁶, or in any draft or final authorization that includes a term and condition for a renewal.

In response to the Commission's 29 November 2019 letter recommending that NMFS stipulate those specifics in the relevant documents and on its webpage, NMFS indicated that, in the 'summary' portion of its notices, it requests comments on a possible one-year renewal that could be issued under certain circumstances and if all requirements are met (84 Fed. Reg. 68131). However, neither the notices nor the webpage or final authorizations state that one-year renewals are one-time opportunities. NMFS also indicated that, for notices involving proposed renewals, it has not included an option of an additional renewal (84 Fed. Reg. 68131). Absent specifics regarding one-year renewals being a one-time opportunity in the Federal Register notices, on NMFS's webpage, and more importantly as a term and condition in its draft and final authorizations, NMFS appears to knowingly allow that door to remain open. If NMFS chooses to continue proposing to issue renewals, the Commission recommends that it (1) stipulate that a renewal is a one-time opportunity (a) in all Federal Register notices requesting comments on the possibility of a renewal, (b) on its webpage detailing the renewal process, and (c) in all draft and final authorizations that include a term and condition for a renewal and, (2) if NMFS refuses to stipulate a renewal being a one-time opportunity, justify why it will not do so in its Federal Register notices, on its webpage, and in all draft and final authorizations.

Please contact me if you have questions regarding the Commission's recommendations.

Sincerely,
Pele OThonas

Peter O. Thomas, Ph.D.

Executive Director

References

ESNERR. 2018. Reserve otter monitoring project. Watsonville, California. 27 pages. Fountain, M., R. Jeppesen, C. Endris, A. Woolfolk, E. Watson, I. Aiello, S. Fork, J. Haskins, K. Beheshti, and K. Wasson. 2019. Hester Marsh restoration: Annual report. ESNERR, Watsonville, California. 215 pages.

¹⁶ https://www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-harassment-authorization-renewals.