Attachment H

COAST RIDGE ECOLOGY LLC

BIOLOGICAL SURVEYS • MONITORING • PERMITTING • RESEARCH

October 2, 2017

Carlos Zubieta
1725-A Abbot Kinney Boulevard
Venice, CA 90291

Subject: *Update to Biological Resources Assessment Report and Response to Biological Information Requests for 199 Arbor Lane, Moss Beach, CA. (APN 037-123-043).*

Dear Mr. Zubieta:

This letter-report provides an update to the Biological Resources Assessment for 199 Arbor Lane, Moss Beach, California (APN 037-123-043), prepared by Kopitov Environmental, LLC in May 2015. Included in this report is an updated CNDDB map and review of potential presence of special status species on the property, and a map of the adjacent riparian corridor associated with Dean Creek.

This report addresses all biological related comments from the San Mateo County Coastside Design Review Committee (CDRC letter dated July 24, 2017; PLN 2016-00444), and from the California Coastal Commission (CCC letter dated July 14, 2017; PLN 2016-00444) to the applicant in regards to biological resources on or adjacent to the property. Information reviewed included the following resources:

- County of San Mateo Local Coastal Program Polices (June 18, 2013)
- California Natural Diversity Database (CNDDB)
- California Native Plant Society (CNPS) Rare Plant Inventory
- Biological Resource Assessment for 199 Arbor Lane, Moss Beach, CA, APN 037-123-043 prepared by Kopitov Environmental LLC, May 2015.

The project area is located on 199 Arbor Lane (a cul-de-sac) approximately 0.17 miles west of Highway 1 (The Cabrillo Highway), in Moss Beach, an unincorporated area of San Mateo County, California. The property is located on a coastal bluff approximately 40 feet from a bluff edge that drops steeply to the beach and the Pacific Ocean. The proposed building envelope is approximately 80 feet from the bluff edge and the Pacific Ocean (Figure 1). The proposed project is the construction of a single-family residence covering an estimated area of 3,198 square feet, plus a two-car garage of approximately 400 square feet.

Map of Riparian Buffer Zone for Dean Creek and Consistency with Section 7 of the San Mateo County LCP

Figure 1 shows a map of Dean Creek and the riparian corridor associated with Dean Creek, in proximity to the property at 199 Arbor Lane. Dean Creek is an intermittent creek that flows near the south side of the property. A Trimble GeoExplorer submeter accuracy GPS unit was used to map the creek, and the adjacent floodplain/riparian corridor on September 22, 2017. A 30-foot buffer from this corridor was measured and delineated from the outside edge of the riparian zone and is shown on Figure 1. Dean Creek is considered an intermittent creek, and the LCP states that for intermittent creeks, a 30-foot buffer is required from the outside edge of the riparian vegetation.

Section 7 of the San Mateo County Local Coastal Program Policies (2013) states the following:

ESTABLISHMENT OF BUFFER ZONES
7.11 a. On both sides of riparian corridors, from the "limit of riparian vegetation" extend buffer zones 50 feet outward for perennial streams and 30 feet outward for intermittent streams.

Under the definition of riparian corridors, the following is stated:

RIPARIAN CORRIDORS
7.7 Definition of Riparian Corridors
Define riparian corridors by the "limit of riparian vegetation" (i.e., a line determined by the association of plant and animal species normally found near streams, lakes and other bodies of freshwater: red alder, jaumea, pickleweed, big leaf maple, narrow-leaf cattail, arroyo willow, broadleaf cattail, horsetail, creek dogwood, black cottonwood, and box elder). Such a corridor must contain at least a 50% cover of some combination of the plants listed.

None of the plants listed in the LCP Section 7.7 definition of riparian are present within the riparian corridor section of Dean Creek downslope of the property at 199 Arbor Lane. Plant species within the creek and associated flood zone include a combination of native and non-native plant species such as Bur Reed (*Sparganium sp*.), California blackberry (*Rubus ursinus*), stinging nettle (*Urtica dioica*), wild radish (*Raphanus sp.*), nasturtium (*Tropaeolum majus*), and cape ivy (*Delairea oderata*). To delineate the outside edge of the riparian zone, the outside edge of the riparian wetland floodplain feature of Dean Creek was used. The boundary between the floodplain and upland area is evidenced by a visible soil, slope and vegetative change, and therefore this boundary was used as the practical boundary to measure the 30-foot buffer from the riparian zone (Figure 1, and Photos 1 and 2).

Dean Creek is shown as an unnamed intermittent stream on the USGS Montara Mountain OE W 7.5 minute quadrangle (2015). In most years, Dean Creek has intermittent flow whereas in higher rainfall years, such as 2016/2017, Dean Creek may have year-round flow. Residential land-uses in the area contribute additional flow to the creek, especially during the dry season due to yard irrigation and runoff/ seepage to the Creek. During the riparian mapping on September 22, 2017, Dean Creek had some water present, in the low flow channel, and the wetted channel was approximately 1.5 feet wide and 2 inches deep.

The steep canyon upland slope that is in between the property and the riparian zone is dominated by large Monterey Cypress trees. There is very little understory vegetation, with the exception of invasive plants such as cape ivy (Photos 3 and 4). The riparian buffer zone extends upslope from the floodplain area and encompasses a large section of the steep slope dominated by Monterey Cypress trees. The development footprint for the project is located on the top of the coastal bluff, and is well outside of the riparian buffer zone. The distance from the floodplain/riparian boundary to the property line varies from approximately 50 to 70 feet. No impacts are expected to occur to the riparian buffer zone due to the placement of the project site on the top of the bluff. The project as designed is consistent with LCP policies 7.4, 7.9, and 7.10 (Permitted Uses in Riparian Corridors/ Sensitive Areas) as no components of the project are within or adjacent to, the riparian buffer zone (Figure 1).

Impacts to California Wild Strawberry (*Fragaria californica*)

Section 7.49 of the San Mateo County LCP states:

7.49 CALIFORNIA WILD STRAWBERRY (FRAGARIA CALIFORNICA)
Require any development, within one-half mile of the coast, to mitigate against the destruction of any California wild strawberry in one of the following ways:

a. Prevent any development, trampling, or other destructive activity which would destroy the plant; or
b. After determining specifically if the plants involved are of particular value, successfully transplant them or have them successfully transplanted to some other suitable site. Determination of the importance of the plants can only be made by a professional doing work in strawberry breeding.

Botanist Neal Kramer of Kramer Botanical, LLC identified the strawberry plants on the property as California beach strawberry (*Fragaria chiloensis*), and not California wild strawberry (*F. californica*). Mr. Kramer is a leading expert on coastside flora and made this determination based on the following:

The leaflets of the beach strawberry (Fragaria chiloensis) are leathery, generally shiny and hairless on the upper surface, the marginal serrations are rounded obtuse and the central tooth on the tip of the leaflet is generally much smaller than adjacent teeth. Flower petals on the beach strawberry are generally 10-18mm, are larger than the those of the wood strawberry (Fragaria vesca), generally only 5-8mm. Leaflets on the wood strawberry are thinner, upper surface is sparsely hairy - not shiny and veins are distinctly depressed, marginal serrations are obtuse to acute and the central tooth may be larger to only slightly smaller than adjacent teeth.

Wood strawberry (*Fragaria vesca*) is the currently accepted Jepson Manual 2012 name for the California wild strawberry (*F. californica)* referred to in the San Mateo County LCP. Based on this information, no mitigation requirements should apply to the property due to the lack of California wild strawberry on site.

Updated CNDDB Report and Review of Special Status Species

A CNDDB report and maps of special status plants and animals was included in the Biological Resource Assessment prepared by Kopitov Environmental in May 2015 for the property. An updated CNDDB map for 2017 showing special status plants and animals within a 3-mile radius of the site is shown in Figure 2.

The project site was surveyed for rare plants by local coastside botanical expert, Neal Kramer of Kramer Botanical, LLC on April 24, 2015 as part of the biological resource assessment prepared by Kopitov Environmental. No rare plants were documented on the site during Mr. Kramer's survey. Additional information based on more recent special status plant observation data in the CNDDB (2017) is provided below.

Additional information based on more recent special status animal and plant records in the CNDDB (as of September 2017) is provided below.

California red-legged frog
The California red-legged frog (CRF) was evaluated for its potential on site and was determined to have a potential for occurrence within Dean Creek, though Dean Creek does not provide suitable breeding habitat (Kopitov Environmental, 2015). One additional observation of CRF was found in our recent (September 2017) CNDDB search, and this location is approximately 0.8 miles north of the project area.

There are no recommended changes to the mitigation measures listed for CRF in the BRA prepared by Kopitov Environmental.

San Francisco garter snake

The San Francisco garter snake (SFGS) was evaluated for its potential on site and was determined to have a potential for occurrence within Dean Creek (Kopitov Environmental, 2015). No additional observations of SFGS were found in our recent (September 2017) CNDDB search, as the nearest locations of the species was found to be 1.5 miles south of the project area. There are no recommended changes to the mitigation measures listed for SFGS in the BRA prepared by Kopitov Environmental.

Fogbelt Bumblebee (*Bombus caliginoses*).

This species was not discussed in the 2015 BRA report for the project. The fogbelt bumblebee does not have federal or state listing protection, but is ranked as an S1/S2 (State Critically Imperiled/ State Imperiled) by the state of California. Based on the CNDDB, this bumblebee has not been seen in the region since the late 1920's, when it was recorded in the Moss Beach, Pacifica and Hillsborough areas. This species is unlikely to be present on site as it has likely been extirpated from the region for decades.

Blasdale's bent grass

Blasedale's bent grass (*Agrostis blasdalei*) was observed approximately 0.2 miles north of the site in May 2015 (CNDDB 2017). This species is not expected to be present on the property, as this species was not detected when surveyed by a knowledgeable botanical expert in April 2015.

Perennial goldfields

Perennial goldfields (*Lasthenia californica ssp. macrantha*) was observed approximately 1.0 mile north of the site at Montara State Beach in May 2015. This species is not expected to be present on the property, as this species was not detected when surveyed by a knowledgeable botanical expert in April 2015.

No additional special status plant or animal species were determined to have any potential for presence in the project area, other than those identified in the 2015 BRA report.

Impact of Story Pole Installation

Story poles were installed on the site on July 3rd 2017. The contractors that installed the story poles mowed the vegetation within the building footprint area to install the story poles. Vegetation that was mowed looked to be primarily California blackberry. No evidence of San Francisco dusky-footed woodrat (SFDFW) middens was found within the mowed area during a site inspection on September 14, 2017 (Photos 5 and 6). In addition, no SFWDFW middens were observed on the remainder of the parcel or within the riparian corridor of Dean Creek downslope of the property.

Tree Removals Proposed for Removal on Site, and Potential Impacts to Dean Creek:

Two Monterey Cypress trees are to be removed, (27" and 36" Diameter Breast Height (DBH)). These will be replaced with two Monterey Cypress trees on the east end of the property. These trees are located on the flat bluff top, within the building envelope (Photo 5). Removal of these trees would not cause any impact to Dean Creek, as there would be no disturbance to the steep slope that slopes down to Dean Creek.

Recommendations on Plantings for Landscape Plan

The site is a coastal bluff, and a combination of native grasses and shrubs as proposed in the landscape plan is appropriate for the site based on the native plant community in this habitat type. There are no

invasive species on the proposed plan, (Delta # 3 Plan), which has incorporated changes in response to comments in the CDRC letter dated July 24, 2017.

If you have any questions or require further information, please contact me.

Sincerely,

Patrick Kobernus
Senior Biologist/ Managing Member
Coast Ridge Ecology, LLC

References

Kopitov Environmental, LLC 2015. Biological Resource Assessment for 199 Arbor Lane, Moss Beach, CA. Prepared May, 2015.

San Mateo County Local Coastal Program Policies (2013). http://planning.smcgov.org/documents/local-coastal-program

USGS Montara Mountain OE W 7.5 minute quadrangle (2015).

Attachment H

Photo 1. View of lighter green vegetation below taller darker green Monterey Cypress trees. Riparian boundary runs along approximately the lower 1/3 of the photo. Photo date: 09/14/2017.

Photo 2. Far right side of photo shows boundary between riparian floodplain and upland at Dean Creek. Photo date: 09/22/2017.

Attachment H

Photo 3. Understory vegetation is lacking on the steep slope underneath the Monterey Cypress trees. Photo date: 09/14/2017.

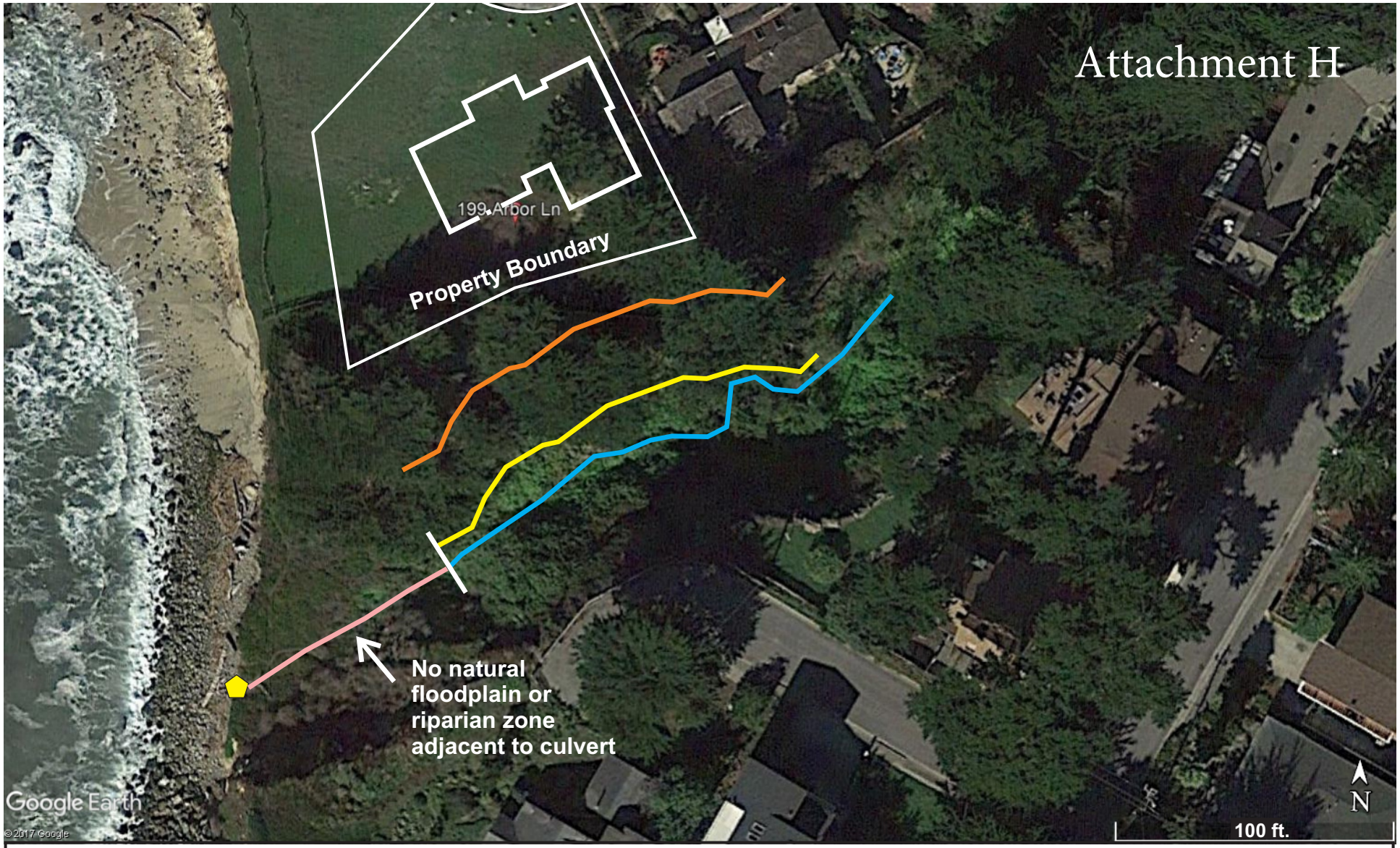
Photo 4. Understory of Monterey cypress trees. Photo date: 09/22/17.

Attachment H

Photo 5. View of property where brush was mowed and story poles were erected. Monterey Cypress Tree on right side of photo would be removed as part of project. Photo date: 09/14/2017.

Photo 6. View of property where brush was mowed and story poles were erected. Monterey Cypress Tree on right side of photo would be removed as part of project. Photo date: 09/14/2017.

Figure 1. Approximate 30-foot buffer from riparian zone associated with Dean Creek for 199 Arbor Lane, Moss Beach, CA.



Map by Coast Ridge Ecology LLC, base map Google Earth Image: 11/2/2016

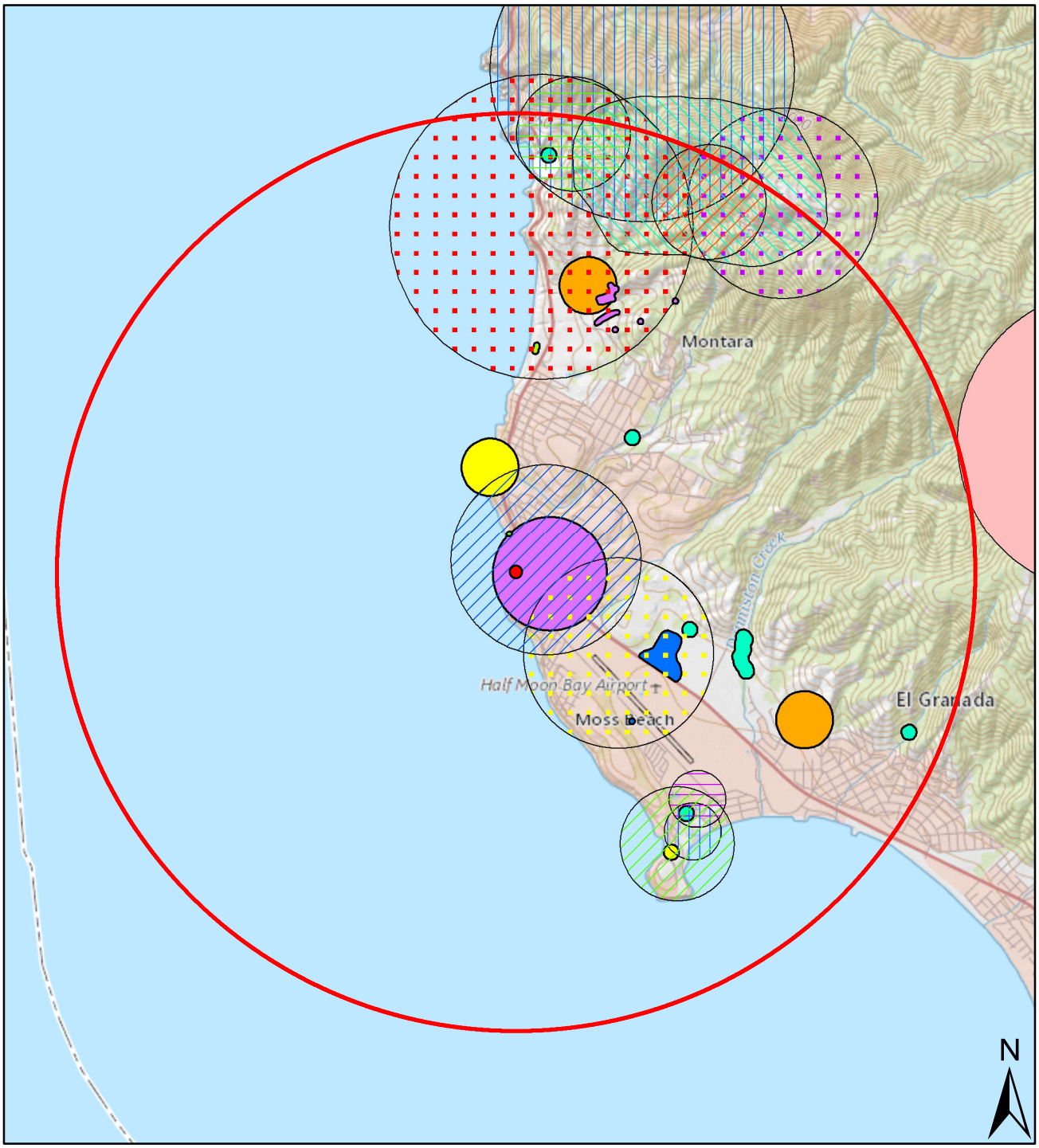


Figure 2: CNDDB Occurrences Map