

Technical Memorandum

То:	Ms. Afifa Awan, Senior Environmental Scientist Environmental Planning and Management Division California State Lands Commission
From:	Steve Yonge, Wildlife Biologist, ICF
Date:	January 2022
Re:	Terrestrial Biological Resources Technical Memorandum – Grover Beach Subsea Fiber Optic Cables Project Addendum, San Luis Obispo County, California

Introduction

This technical memorandum provides a summary of the methods and results for the terrestrial biological resource assessment conducted to support the Addendum to the Mitigated Negative Declaration for the RTI Infrastructure, Inc. (RTI) Grover Beach Subsea Fiber Optic Cables Project (Project). On June 23, 2020, the California State Lands Commission (CSLC) adopted a Mitigated Negative Declaration (MND) for the Project (State Clearinghouse No. 2020040309) that authorized the installation, use, and maintenance of four marine cables across the Pacific Ocean, one landing manhole (LMH), four landing pipes (LPs), and a land conduit system in the incorporated community of Grover Beach (Figure B-1).

In November 2020, RTI installed one marine cable, one LMH, two LPs, the land conduit system, and associated components. The revised Project includes additional infrastructure, two new LMHs (for a total of three LMHs), a new offshore and onshore route for the two previously approved subsea cables, and two new offshore marine cables (for a total of six marine cables) (Figure B-2).

- This memorandum evaluates installation of the following components. Two new LMHs would be installed approximately 450 feet southeast of the installed LMH #1. LMH #1 would be connected to LMH #2 and LMH #3 via an underground conduit system approximately 600 feet in length. This conduit system would be constructed entirely beneath the Grover Beach parking lot (Figure B-2 [see Photos 1–3 in Attachment A]).
- The remaining two approved LPs plus two new LPs would be constructed approximately 450 feet southeast of the two installed LPs using the horizontal directional drilling (HDD) method. The HDD bore site would be at the same location in the Grover Beach parking lot that was used

Biological Technical Memorandum Grover Beach Subsea Fiber Optic Cables Project Addendum Page 2 of 19

- to install the first two LPs (see Photos 6–8 at the end of the memorandum). These four LPs would be installed westerly into the Pacific Ocean. Each LP would accommodate a marine cable.
- A new onshore underground conduit system approximately 1 mile long would be installed from LMH #3 under city streets to an existing cable landing station (Figure B-2). Installation of the new onshore conduit would require boring beneath Meadow Creek using the HDD method at a crossing approximately 600 feet south of the previous bore (completed in 2020) along Le Sage Drive (see Photos 4 and 5 at the end of the memorandum]). The original HDD bore beneath Meadow Creek was addressed in Lake or Streambed Alteration Agreement No. 1600-2020-0093-R4 correspondence (California Department of Fish and Wildlife 2020).

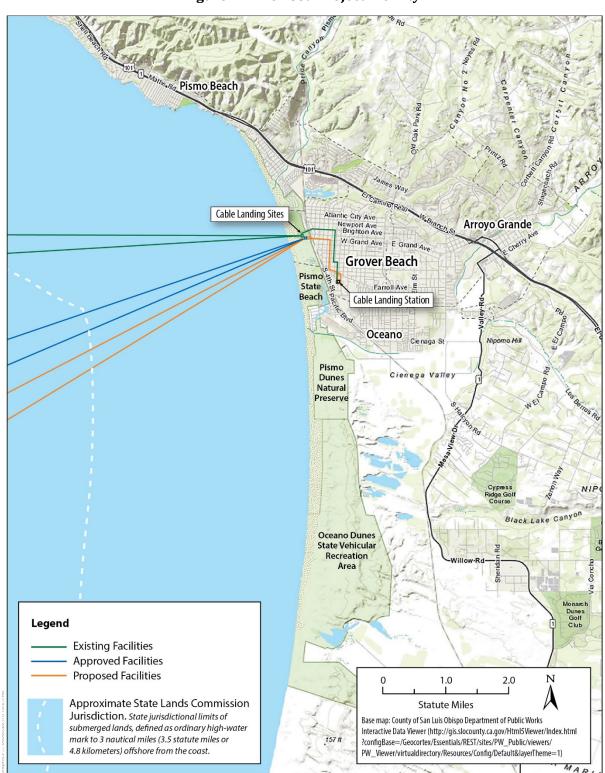


Figure B-1. Revised Project Vicinity

LPs #1 & #2 New Conduit System Legend Green – Existing Facilities Constructed in 2020 Blue - Approved Facilities to Be Placed in New Location **Orange** - Proposed Added Facilities LMH - Landing Manhole LP - Landing Pipe (installed by HDD)

Figure B-2. Revised Project Components

Terrestrial Biological Study Area

For this analysis, the terrestrial biological study area (BSA) includes areas that could be directly and indirectly affected by the revised Project (Figure B-3). Developed areas along the onshore cable alignment were not included in the BSA because they lacked natural habitat areas (primarily City streets and pavement).

As described in the adopted MND (California State Lands Commission 2020), the terrestrial BSA is within the Central Coast Geographic Subdivision of the California Floristic Province (Baldwin et al. 2012). The climate is characterized by cool, wet winters and dry (foggy) summers, with annual average temperatures ranging from 49 to 68° Fahrenheit (Natural Resources Conservation Service 2019). Average annual rainfall in the Project vicinity is 16 inches, most of which falls between December and March.

The BSA primarily consists of urban areas that are paved and occasionally intermixed with landscape vegetation along sidewalks and in residential areas. Land cover types in the BSA are described in the adopted MND and include annual brome grassland, ice plant mats, upland mustard and ruderal forbs, arroyo willow thicket, hardstem bulrush marsh, intermittent stream (Meadow Creek), and urban/landscaped (California State Lands Commission 2020). Meadow Creek is the primary sensitive resource in the BSA which flows into Meadow Creek Lagoon (a tributary to Arroyo Grande Creek and is directly connected to the Pacific Ocean) (Figure B-3). Attachment A contains representative photographs of the terrestrial BSA.

Terrestrial BSA-Revised Project Terrestrial BSA – Approved Project Sensitive Plant Occurrences Blochman's leafy daisy (Erigeron blochmaniae) CRPR 1B.2 Dune ragwort (Senecio blochmaniae) CRPR 4.2 Aquatic Resources Non-Wetland Waters Intermittent Stream (RUB) → Flow Direction Elevation Contour (1ft Interval) ➤ Elevation Contour (5ft Index) Map Information: PLSS: N/A (Not Surveyed) USGS Topo: Oceano, CA Coordinate System: California State Plane, Zone 5 Projection: Lambert Conformal Conic Datum: North American Datum 1983 Elevation Source: NED 1/3 arc-second n36w121 (USGS, 2013) Vertical Datum: North American Vertical Datum 1988 magery: USDA NAIP (Conus) (2020) entact: Sue Bushnell (ICF) 916.752.0959

Figure B-3. Revised Project - Terrestrial Biological Study Area

Methods

This section describes the methods used to assess the biological resources (special-status species and sensitive habitat types) and baseline conditions documented in the BSA.

Special-Status Species

Special-status species are plants and animals that are legally protected under the federal Endangered Species Act (FESA), California Endangered Species Act (CESA), or other regulations, and species that are considered sufficiently rare by the scientific community to qualify for such listing. Special-status species are defined as follows.

- Species that are listed or proposed for listing as threatened or endangered under FESA (50 Code of Federal Regulations [CFR] 17.11 [listed animals], 50 CFR 17.12 [listed plants], and various notices in the Federal Register [FR]).
- Species that are candidates for possible future listing as threatened or endangered under FESA (81 FR 87246 87272, December 2, 2016).
- Species that are listed or proposed for listing by the State of California as threatened or endangered under CESA (California Code of Regulations 33 670.5).
- Animals listed as California species of special concern on the California Department of Fish and Wildlife (CDFW) Special Animals List (California Natural Diversity Database 2021a).
- Animals fully protected in California (California Fish and Game Code sections 3511 [birds], 4700 [mammals], and 5050 [amphibians and reptiles]).
- Plants listed as rare under the California Native Plant Protection Act (California Fish and Game Code 1900 et seq.).
- Plants with a California Rare Plant Rank (CRPR) of 1A, 1B, 2A, and 2B on CDFW's Special Vascular Plants, Bryophytes, and Lichens List (California Natural Diversity Database 2021b) and considered threatened or endangered in California by the scientific community.
- Plants designated as CRPR 3 and 4 that may warrant legal consideration if the population is locally significant and meets the criteria under California Environmental Quality Act Guidelines section 15380(d).

Sensitive Habitat Types

Sensitive habitat types are defined as follows:

- Sensitive natural communities as defined by CDFW (California Department of Fish and Wildlife 2021a).
- Sensitive habitats protected by San Luis Obispo County and the CCC.
- Rare habitats protected by local professional organizations or the scientific community.

To evaluate the potential for special-status plant and wildlife species, sensitive natural communities, and other sensitive resources to occur in the BSA, the following existing natural resource information was reviewed:

- Initial Study/Mitigated Negative Declaration for the Grover Beach Subsea Fiber Optic Cables Project (California State Lands Commission 2020).
- The U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) species report for the BSA (U.S. Fish and Wildlife Service 2021).
- Final designated critical habitat as mapped by the USFWS Environmental Conservation Online System (ECOS).
- California Natural Diversity Database (CNDDB) records search of the 7.5-minute U.S. Geological Survey quadrangle containing the BSA (Oceano) and the seven neighboring quadrangles (Pismo Beach, Arroyo Grande, Tar Springs Ridge, Nipomo, Point Sal, Guadalupe, and Santa Maria) (California Department of Fish and Wildlife 2021b).
- USFWS concurrence letter for the Grover Beach Subsea Fiber Optics Cable Project (U.S. Fish and Wildlife Service 2020).
- Biological assessment for the Grover Beach Subsea Fiber Optics Cable Project (ICF 2020).
- Results of ICF's August 2021 summer floristic survey (D. Jokerst, personal communication, August 23, 2021).

Botanical/Wetland Survey

To determine the suitability of the BSA to support special-status plant species, sensitive natural communities, and potential aquatic resources, ICF botanist/wetland ecologist Devin Jokerst conducted a late season botanical survey on August 20, 2021. To capture the early blooming period for special-status plants, a spring survey will be conducted in April/May 2022.

The 2021 summer floristic survey was conducted by following CDFW's *Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Sensitive Natural Communities* (California Department of Fish and Wildlife 2018). The floristic survey was timed to coincide with the identifiable periods of the special-status plant species with the potential to occur (California State Lands Commission 2020). The survey was floristic, with every species encountered identified to the lowest taxonomic level necessary to determine whether it was a special-status species. Mr. Jokerst traversed the BSA, not including the city streets of Grover Beach, on foot using meandering parallel transects spaced at a distance that enabled visibility of all plant species present.

A follow up survey to assess and characterize Meadow Creek and dune habitat west of the Project was conducted by ICF biologist Sean O'Brien on December 2, 2021. In describing Meadow Creek, Mr. O'Brien used the routine on-site determination methods described in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and the supplemental procedures and wetland indicators provided in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (U.S. Army Corps of Engineers 2010); and *A Guide to Ordinary High Water Mark (OHWM) Delineation for Non-Perennial Streams in the Western Mountains, Valleys, and Coast Region of the United States* (Mersel and Lichvar 2014).

The U.S. Army Corps of Engineers defines jurisdictional wetlands under Clean Water Act section 404 as areas that exhibit positive field indicators for all three wetland parameters: hydrophytic vegetation, hydric soils, and wetland vegetation. The CCC regulates features that display one or more of the wetland parameters provided above, as defined in the *Definition and Delineation of Wetlands in the Coastal Zone* (California Coastal Commission 2011).

Wildlife Survey

ICF biologist Sean O'Brien also conducted a habitat-based field survey for wildlife in the terrestrial BSA on December 2, 2021. The survey consisted of visually scanning the terrestrial BSA for suitable habitat where special-status species could occur. Meandering transects were conducted in accessible areas. During the field survey, Mr. O'Brien evaluated existing conditions, including vegetation composition, aquatic resources, and land use to determine the potential for special-status wildlife species to occur.

Results

As described in the adopted MND (California State Lands Commission 2020) and evaluated as part of this review, 19 terrestrial special-status fish and wildlife species were identified with the potential to occur in or near the Project (refer to the adopted MND for detailed plant and wildlife species tables). Of these 19 special-status species, the following 8 species were identified as having a low to high potential to occur or be affected by Project activities.

- California red-legged frog (Rana draytonii, federally threatened [FT], State species of special concern [SSC]) Moderate potential to occur within the BSA; known to occur in Meadow Creek Lagoon (Terra-Verde Environmental Consulting 2012) that is downstream of the BSA. Also known to occur in Arroyo Grande Creek (California Department of Fish and Wildlife 2021b). The reach of Meadow Creek in the BSA is intermittent, providing dispersal habitat. Use of HDD to install the fiber cable beneath Meadow Creek, would avoid suitable dispersal habitat.
- Northern California legless lizard (Anniella pulchra, SSC) Moderate potential to occur.
 Habitat present in grassland, disturbed dune, and arroyo willow thicket cover types. Historical occurrence overlaps the BSA (California Department of Fish and Wildlife 2021b), but the disturbed nature of the BSA limits their potential to occur. Preconstruction surveys and biological monitoring of the HDD beneath Meadow Creek would ensure that the northern California legless lizard is not affected by construction activities.
- Western pond turtle (Emys marmorata, SSC) Moderate potential to occur. Known from Meadow Creek Lagoon (Terra-Verde Environmental Consulting 2012). The intermittent nature of Meadow Creek reduces the potential for western pond turtle to occur in BSA. Suitable habitat would be avoided by using HDD to install the fiber cable beneath Meadow Creek.
- **Blainville's horned lizard** (coast horned lizard; *Phrynosoma blainvillii*, SSC) Moderate potential to occur. Grassland, disturbed dune, and arroyo willow thicket cover types provide suitable habitat but the disturbed nature of the BSA limits their potential to occur.

Preconstruction surveys and biological monitoring of the HDD beneath Meadow Creek would ensure that Blainville's horned lizard is not affected by construction activities.

- Two-striped garter snake (Thamnophis hammondii, SSC) Moderate potential to occur.
 Grassland and riparian cover types provide suitable habitat, but the disturbed nature of the BSA limits their potential to occur. Preconstruction surveys and biological monitoring of the HDD beneath Meadow Creek would ensure that the two-striped garter snake is not affected by construction activities.
- White-tailed kite (Elanus leucurus, State fully protected) Moderate potential to occur. Arroyo
 willow thicket provides suitable nesting habitat while adjacent dune habitat supports foraging
 habitat. The species is known to nest near Meadow Creek approximately 1.4 miles south of the
 BSA (California Department of Fish and Wildlife 2021b). Implementation of pre-construction
 nest surveys would reduce or eliminate the effects of construction activities on nesting and
 foraging activity.
- Western snowy plover (*Charadrius nivosus*, FT, SSC) Low potential to occur. No suitable habitat exists in the BSA. The species is known to nest approximately 2 miles south of the BSA near Arroyo Grande Creek (California Department of Parks and Recreation 2019). The high level of human activity in and adjacent to the BSA likely precludes nesting. Suitable wintering dune and beach habitat is present immediately south and west of the BSA. Implementation of preconstruction nest surveys and a noise control plan (installation of a temporary sound wall) would reduce or eliminate the effects of construction activities on nesting and foraging activity.
- California least tern (*Sternula antillarum browni*, federally endangered [FE], State endangered)

 Low potential to occur. No suitable habitat exists in the BSA. California least tern has been documented nesting approximately 4 miles south of the BSA but not in Grover Beach (California Department of Parks and Recreation 2019). Dune habitat immediately south and west of the BSA provides wintering habitat. Implementation of pre-construction nest surveys and a noise control plan (installation of a temporary sound wall) would reduce or eliminate the effects of construction activities on nesting and foraging activity

Special-Status Plant Species

As described in the adopted MND (California State Lands Commission 2020) and evaluated as part of this review, 15 special-status plant species were identified with the potential to occur in or near the Project (refer to the adopted MND for detailed plant species tables). To determine the presence/absence of special-status plants in the BSA, floristic surveys were conducted on April 23 and July 25, 2019. While special status species are known from the Project region, no special-status species were identified in the Project impact area in 2019. This was mainly due to the disturbed nature of the BSA (e.g., the cable landing site was in a dirt/sand parking lot).

For this analysis, a floristic survey was conducted on August 20, 2021. The cable landing site remains in the dirt/sand parking lot (Figures B-2 and B-3), which is heavily disturbed by vehicle and human traffic (see photographs at the end of this memo), precluding special-status plants from occurring. No special-status plant species were identified within the 200-foot BSA. Within the disturbed dune habitat southwest of the cable landing site and adjacent to the BSA, the following two special-status plant species were identified (shown in Figure B-3).

- Blochman's leafy daisy (Erigeron blochmaniae, CRPR 1B.2 [Plants rare, threatened, or endangered in California and elsewhere; moderately threatened in California]). Blochman's leafy daisy is a perennial rhizomatous herb that occurs in coastal dune and coastal scrub habitat and blooms June-August. During the August 20, 2021 survey, Blochman's leafy daisy was found in multiple polygons within the disturbed coastal dune habitat southwest of the cable landing site. Blochman's leafy daisy is known from this location (City of Grover Beach 2012) and general area. CNDDB occurrence #30 that is immediately south of the BSA was identified in 1980 and updated in 2018 (California Department of Fish and Wildlife 2021b).
- **Blochman's ragwort** (*Senecio blochmaniae*, CRPR 4.2 [uncommon in California, moderately threatened in California]). Bochman's ragwort is a perennial herb found in coastal dune habitat. This species blooms May-October and is known to occur in the disturbed dune habitat southwest of the cable landing site (City of Grover Beach 2012). This species was found in the dune habitat during the August 20, 2021 survey.

The occurrences of Blochman's leafy daisy and Blochman's ragwort are known occurrences that were previously described by the City of Grover Beach (2012) and CDFW (2021b). Using the HDD method to install the fiber cables beneath dune habitat where both Blochman's leafy daisy and Blochman's ragwort were identified would avoid both species and not affect suitable habitat. Delineating the work limits to protect Blochman's leafy daisy and Blochman's ragwort also would ensure that both species are protected and impacts are avoided.

Sensitive Natural Communities

Sensitive natural communities are habitats that have been assessed for their range, distribution, trends, and threats. Vegetation communities observed in the BSA were identified and described in the adopted MND (California State Lands Commission 2020). Based on CDFW's (2021a) *California Natural Community List* descriptions, arroyo willow (*Salix lasiolepis*) thicket is the only sensitive natural community that occurs in the BSA. Arroyo willow thicket occupies a narrow band of habitat within the bed and banks of Willow Creek. This sensitive natural community also is present on the south side of West Grand Avenue and within the path of the four proposed landing pipes. Use of HDD techniques to install the fiber cable beneath Meadow Creek and to install the landing pipes into the Pacific Ocean would avoid the arroyo willow thicket sensitive natural community.

Wetlands and Non-Wetland Waters

Both wetland and non-wetland waters as defined by the U.S. Army Corps of Engineers (U.S. Army Corps of Engineers 2010) are within the BSA for the revised Project. Wetland and non-wetland waters in the BSA include Meadow Creek and a freshwater forested/shrub wetland on the south side of West Grand Avenue, respectively. Within the BSA, Meadow Creek is approximately 25 feet wide and composed of sand, pebble, and cobble substrates. The creek's overstory is dominated by arroyo willow. Common understory species include hardstem bulrush and Himalayan blackberry (*Rubus armeniacus*). Coyote brush (*Baccharis pilularis*), pampas grass (*Cortaderia* sp.), ice plant (*Carpobrotus edulis*), and grasses also were present, but less common.

The arroyo willow thicket on the south side of West Grand Avenue that is within the path of the landing pipes is classified as a freshwater forested/shrub wetland (broad-leaved deciduous, scrubshrub, palustrine, seasonally flooded wetland). This area is dominated by arroyo willow and there is evidence of ponding water. Similar plant composition to that described for Meadow Creek is present.

Coastal zone wetlands as defined by the CCC (2011) include Meadow Creek and the arroyo willow thicket that is associated with Meadow Creek. The freshwater forested/shrub wetland dominated by arroyo willow on the south side of West Grand Avenue also would qualify as a coastal zone wetland.

To avoid wetland and non-wetland waters, HDD techniques would be used to install the fiber cable and landing pipes. A biological monitor would be onsite during the HDD bore beneath Meadow Creek, and work areas would be delineated to ensure that wetland and non-wetland waters are completed avoided.

Environmentally Sensitive Habitat Areas

The California Coastal Act (section 10107.5) defines ESHA as "any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments." ESHAs in the BSA consist of the intermittent drainage (Meadow Creek) that supports arroyo willow thicket. and the wetland dominated by arroyo willow south of West Grand Avenue. The disturbed dune habitat where Blochman's leafy daisy and Blochman's ragwort are known to occur is outside of the BSA but also qualifies as an ESHA. The City of Grover Beach's local coastal plan (City of Grover Beach 2014) also classifies and regulates these areas as ESHA.

Per the City of Grover Beach local coastal plan, the minimum construction set back from an ESHA is 50 feet. Surface disturbance associated with the two LMHs and the HDD work beneath Meadow Creek and the disturbed dune habitat would be more than 50 feet from these ESHAs. In addition to the 50-foot avoidance buffer (City of Grover Beach 2014), using HDD to install the fiber cable beneath Meadow Creek and to install the landing pipes beneath dune habitat would avoid these ESHAs.

Biological Resource Mitigation Measures

As described in the MND and adopted as part of the Project Mitigation Monitoring and Reporting Program (California State Lands Commission 2020), all mitigation measures (MM) will be implemented and adhered to during construction. Measures specifically designed to protect terrestrial biological resources that would be implemented during the revised Project include the following.

- MM BIO-1: Provide Environmental Awareness Training
- MM BIO-2: Conduct Biological Surveying and Monitoring
- MM BIO-3: Delineate Work Limits to Protect Sensitive Biological Resources

Biological Technical Memorandum Grover Beach Subsea Fiber Optic Cables Project Addendum Page 13 of 19

- MM BIO-4: Install Metal Covers or Some Kind of Escape Ramps in Open Trenches
- MM BIO-5: Implement Best Management Practices for Horizontal Directional Drilling Activities
- MM BIO-6: Prepare and Implement an Inadvertent Return Contingency Plan
- MM BIO-7: Conduct Pre-Construction Nesting Bird Surveys and Implement Avoidance Measures

Significance Conclusion

The potential impacts on biological resources from implementation of the revised Project evaluated in this memorandum would be the same as those described in the previously adopted MND. No new potentially significant impacts or mitigation measures have been identified for the revised Project. To ensure that potential impacts on biological resources are avoided or reduced to a less than significant level, the mitigation measures listed above and described in the adopted MND (California State Lands Commission 2020) would be implemented for the revised Project.

References

Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken (eds.). 2012. The Jepson Manual: Vascular Plants of California. (Second Edition). Berkeley, CA: University of California Press.

California Coastal Commission. 2011. Definition and Delineation of Wetlands in the Coastal Zone. Available: https://documents.coastal.ca.gov/reports/2011/10/ w4-10-2011.pdf. Accessed: November 2021.

California Department of Fish and Wildlife. 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. March 20. Available: https://wildlife.ca.gov/Conservation/Survey-Protocols#377281280-plants. Accessed: January 2022.



_____. 2021b. California Natural Diversity Database. Records search of the Arroyo Grande NE, Guadalupe, Nipomo, Oceano, Pismo Beach, Point Sal, Santa Maria and Tar Spring Ridge U.S. Geological Survey 7.5-minute quadrangles. Accessed: November 2021.

- California Department of Parks and Recreation. 2019. Nesting of the California Least Tern and Western Snowy Plover at Oceano Dunes State Vehicular Recreation Area, San Luis Obispo County, California, 2019 Season. Off-Highway Motor Vehicle Division Oceano Dunes District. November.
- California Natural Diversity Database. 2021a. Special Animals List. October. California Department of Fish and Wildlife. Sacramento, CA.
- _____. 2021b. Special Vascular Plants, Bryophytes, and Lichens List. October. California Department of Fish and Wildlife. Sacramento, CA.
- California State Lands Commission. 2020. Initial Study/Mitigated Negative Declaration, RTI Infrastructure, Inc., Grover Beach Subsea Fiber Optic Cables Project. April 2020. CEQA Lead Agency; California State Lands Commission, Sacramento, CA. Applicant, RTI Infrastructure, Inc., San Francisco. CA.
- City of Grover Beach. 2012. Revised Final Grover Beach Lodge & Conference Center, Environmental Impact Report. SCH NO. 2010051002. Prepared by SWCA Environmental Consultants, San Luis Obispo, CA. January.
- _____. 2014. City of Grover Beach Local Coastal Program. August. Available: https://www.grover.org/DocumentCenter/Home/View/1808. Accessed: November 2021.
- Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. (Technical Report Y-87-1.) U.S. Army Waterways Experiment Station. Vicksburg, MS.
- ICF. 2020. Biological Assessment for the Grover Beach Subsea Fiber Optic Cables Project, San Luis Obispo County, California. Submitted to: U.S. Army Corps of Engineers, Los Angeles District, Regulatory Division. Los Angeles, CA. Prepared for: RTI Infrastructure, Inc. San Francisco, CA. Prepared by: ICF, Sacramento, CA.
- Mersel, M.K. and R.W. Lichvar. 2014. A Guide to Ordinary High Water Mark (OHWM) Delineation for Non-Perennial Streams in the Western Mountains, Valleys, and Coast Region of the United States. Available: http://acwc.sdp.sirsi.net/client/search/asset/1036027.
- Natural Resources Conservation Service. 2019. Custom Soil Resource Report for San Luis Obispo County, California. Web Soil Survey. Available: https://websoilsurvey.sc.egov.usda.gov. Accessed: September 25, 2019.
- Terra-Verde Environmental Consulting. 2012. Biological Resources Assessment Meadow Creek Lagoon. Prepared for San Luis Obispo County Flood Control and Water Conservation District. San Luis Obispo, CA. October.
- U.S. Army Corps of Engineers. 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0) J.S. Wakeley, R.W. Lichvar, and C.V. Noble (eds.). (ERDC/EL TR-10-3.)

Biological Technical Memorandum Grover Beach Subsea Fiber Optic Cables Project Addendum Page 15 of 19

U.S. Fish and Wildlife Service. 2020. Request for Concurrence on the RTI Grover Beach Subsea Cables Project in Grover Beach, San Luis Obispo County, California (Corps File No. SPL-2020-00246-TS). U.S Fish and Wildlife Service, Ecological Services, Ventura Fish and Wildlife Office. Ventura, CA.

_____. 2021. Information for Planning and Consultation Trust Report. List of Federal Endangered and Threatened Species That Occur in or May Be Affected by the Project. Ventura Fish and Wildlife Office. Ventura, CA. Available: http://ecos.fws.gov/ipac. Accessed: November 8, 2021.

Attachment A. Representative Photographs of the BSA



Photo 1. Work area near proposed landing manhole (LMH) #2, view facing north.



Photo 2. Work area near proposed LMH #3, view facing north.



Photo 3. Parking lot adjacent to the work area near approved LMH #2 in a different location and proposed LMH #3, view facing southeast.



Photo 4. Meadow Creek immediately north of West Grand Avenue, view facing north.



Photo 5. Meadow Creek immediately north of West Grand Avenue, view facing east.



Photo 6. Disturbed dune habitat dominated by ice plant south of West Grand Avenue, view facing southwest.



Photo 7. Disturbed dune habitat southwest of cable landing site, view facing west.



Photo 8. Disturbed dune habitat south of cable landing site, facing north.



December 21, 2021

Ms. Afifa Awan, Environmental Scientist California State Lands Commission

RE: RTI Infrastructure's Grover Beach Subsea Fiber Optic Cables Project CEQA Addendum and Relevancy of Document Entitled Marine Aquatic Habitats and Biological Resources Offshore Grover Beach, California

This letter is in response to a request to review proposed modifications related to RTI Infrastructure's (RTI's) Grover Beach Subsea Fiber Optic Cables Project CEQA Addendum (referred to as the "revised Project"). Applied Marine Sciences (AMS) reviewed the previously prepared *Marine Aquatic Habitats and Biological Resources Offshore Grover Beach*, *California* (AMS prepared in April 2019 and revised in November 2019) to determine if the baseline information contained in the 2019 report was relevant to the revised Project (as described in the CEQA Addendum). In addition, AMS reviewed the "Biological Resources" section of the *Initial Study/Mitigated Negative Declaration; RTI Infrastructure, Inc. Grover Beach Subsea Fiber Optic Cables Project* (California State Lands Commission, April 2020) to determine if the revised Project components would result in any new or greater impacts on marine biological resources or if there would be any new mitigation measures required to reduce potentially significant impacts to a less than significant level. In addition, AMS reviewed the previously adopt mitigation measures to determine if there were any mitigation measures that have been determined to be infeasible.

Although the AMS 2019 report contains technical data and information dated 2019 or earlier, the characterization of marine habitats and associated marine biological communities offshore Grover Beach, California remains essentially unchanged and the data is relevant to current conditions in the revised Project area. Although minor shifts in fish and marine mammal populations inhabiting the Marine Study Area may have occurred between 2019 and 2021, these shifts are not substantive enough to have any effect on the overall analysis of potential revised Project-related effects, nor the determination of potential significant impacts and previously adopted mitigation measures. In summary, AMS' characterization of the marine environment and associated biological communities offshore Grover Beach, California remains relevant and supportive of the potential impact assessment for the revised Project. No new mitigation measures have been identified and all previously adopted mitigation measures remain feasible and relevant to the revised Project.

If you have any additional questions concerning the original Grover Beach cable projects Marine Study Area and environmental effects and impacts analysis, please do not hesitate to contact me either by email (johnson@amarine.com) or by cell phone (925-819-0386).

Sincerely

Jay A. Johnson

Sr. Oceanographer, Principal