DEPARTMENT OF THE ARMY
SAN FRANCISCO DISTRICT, U.S. ARMY CORPS OF ENGINEERS
1455 MARKET STREET
SAN FRANCISCO, CALIFORNIA 94103-1398

DEPARTMENT OF THE ARMY PERMIT

PERMITTEE: City of Fortuna

PERMIT NO.: 2014-00393

ISSUING OFFICE: San Francisco District

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate District or Division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below:

PROJECT DESCRIPTION: You are authorized to complete the project described below and install 1,000 cubic yards of fill impacting 0.75 acres of wetlands and 1.3 acres of temporary impacts and 700 cubic yards of fill in other waters, during project implementation. The project would reduce flooding from Rohner Creek, incorporate seismic upgrades, and improve habitat along the target reach of Rohner Creek. The project is located within the Federal Emergency Management Agency (FEMA) floodplain and the incorporated limits of the City of Fortuna, on the east side of Highway 101, Humboldt County, California.

The project is located in the Rohner Creek watershed. The project reach encompasses approximately 5,300 feet of the Rohner Creek channel and 2,300 feet of the Hillside Creek channel as well as portions of the Rohner Creek floodplain. The overall watershed area at Rohner Creek’s confluence with Strong Creek is about 4.5 square miles and ranges in elevation from 25 feet to 1,600 feet. This area includes Hillside Creek, the largest tributary to Rohner Creek. The upper portion of the watershed, north of the project area, is predominately comprised of second and third-growth redwood forest, whereas the mid-section consists of rural residential areas. The lower portion of the watershed is comprised of a mix of residential, commercial, and industrial uses. Development has encroached on the channels throughout much of the project reach. Vegetation is heavily overgrown and debris jams are common within the channel.

As shown in the attached drawings, titled “City of Fortuna Rohner Creek Flood Control, Habitat, and Seismic Improvements Project” dated January 13, 2015, in 9 figures prepared by GHD, the applicant plans to: reduce flood frequency and duration of Rohner Creek and Hillside Creek, provide a minimum 10-year storm event conveyance in Rohner Creek between Main Street and 12th Street crossings, design and construct as funding becomes available future phases that reduce flooding up to the 100-year storm event, implement seismic improvements through new infrastructure and retrofits, and integrate stream habitat enhancements that improves salmonid access and stream function.

Phases 1 and 2 of the project are anticipated to be implemented during the instream work window (June 15-October 15) of 2016. Vegetation clearing would occur during the preceding winter to avoid impacts to nesting birds. Cofferdams would be installed to isolate work areas that would be dewatered and streamflow bypassed downstream. Phases 3 and 4 would be constructed at a later date subject to available funding. Phase 1 activities can be constructed without additional phases and result in conveyance of the 10-year storm. Minor traffic control would be a component of this project when access routes are limited to private residences and for
construction material import and off-haul.

The following activities are part of the Project:

- Three bridges will be replaced with two bridges.
- One bridge will be removed.
- Three culverts will be replaced on Hillside Creek.
- One culvert in the existing drainage ditch near 12th Street will be replaced.
- Fish passage will be restored at the 12th Street culvert.
- A floodplain swale will be constructed to convey flows above the 10-year event around a lower capacity reach of Rohner Creek.
- The channel will be widened.
- Banks will be stabilized throughout the project area.
- Habitat will be improved by creating off-channel habitat in one reach and adding 19 wood structures throughout the project area.
- The channel will be dewatered and fishes will be relocated.
- Vegetation will be cleared in some areas and planted in the cleared areas and other areas.
- Minimization measures will be used.

The locations of these activities are shown in Figure 1. Plan designs and associated impacts are described in the “Rohner Creek Flood Control, Habitat and Seismic Improvement Project - Project Description” report dated February 2015 and prepared by GHD.

The majority of the construction work would include: excavation, grading, rock slope protection (RSP) placement and channel armoring, planting, pre-cast bridge placement, and construction of retaining walls. Typical earth moving equipment would be the majority of the equipment used including: small bulldozers, excavators, backhoes, and small cranes. Other equipment and vehicles used would include: dump trucks, concrete pump trucks, portable generator sets, and other various power and hand-tools. Best Management Practices (BMP’s) and other minimization measures would be implemented to minimize project impacts to aquatic and sensitive resources.

The overall project purpose is to reduce flood frequency and duration on Rohner Creek and Hillside Creek, provide a minimum 10-year storm event conveyance in Rohner Creek between Main Street and 12th Street crossings, design and construct as funding becomes available future phases that reduce flooding up to the 100-year storm event, implement seismic improvements through new infrastructure and retrofits, and integrate stream habitat enhancements that improves salmonid access and stream function.

**Project Impacts:** Approximately 1,700 cubic yards of fill would be installed in jurisdictional waters permanently impacting about 0.75 acres of wetlands and 600 linear feet of other waters and temporarily impacting 1.3 acre of wetlands and 1,135 linear feet of other waters.

**Proposed Mitigation:** The mitigation site is located on-site. Often the impacts will be mitigated at the same location where the impacts occur. Mitigation actions will occur in tandem to each phase being built so no temporal loss to wetlands or habitats will occur over the lifetime of the four phased project. Permanent impacts to wetlands will be mitigated at a ratio of 1.95:1 through 1.45-acres of wetland establishment. About 1.9 acres of wetlands will be enhanced/reestablished. Temporary impacts to riverine wetlands (other waters) will be mitigated at a ratio of 1.41:1 through establishment of 0.25-acre riverine wetlands and 0.65-acre reestablished for a total of 0.90 acre. Other mitigation monitoring and restoration success criteria are identified in Sections 7-9 (pages 36-64) of the mitigation plan entitled: “Rohner Creek Flood Control, Habitat and Seismic Improvements Project: Habitat Mitigation and Monitoring Plan” dated July 2015.
Timing of Operations: Phases 1 and 2 of the project are anticipated to be implemented during the instream work window (June 15-October 15) of 2016. Vegetation clearing would occur during the preceding winter to avoid impacts to nesting birds. Cofferdams would be installed to isolate work areas that would be dewatered and streamflow bypassed downstream. Phases 3 and 4 would be constructed at a later date subject to available funding. Phase 1 activities can be constructed without additional phases and result in conveyance of the 10-year storm. All construction would occur within the existing channel. Minor traffic control would be a component of this project when access routes are limited to private residences and for construction material import and off-haul. The mitigation construction would occur simultaneously with construction. Long term maintenance of the project and approved activities, reporting, and schedule are described in the “Rohner Creek Flood Control, Habitat and Seismic Improvements Project: Stream corridor Management Plan” dated June 2015.

PROJECT LOCATION: The project is located at T2N, R3E, S18 (Fortuna topographic quadrangle map) with coordinates of 40.5929N latitude and -124.1474W longitude.

PERMIT CONDITIONS:

GENERAL CONDITIONS:

1. The time limit for completing the work authorized ends on December 31, 2025. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. A conditioned water quality certification has been issued for your project (Rohner Creek Flood Control, Habitat and Seismic Improvement Project, WDID No. 1B150118WNHU issued on August 28, 2015), and you must comply with the conditions specified in the certification. The conditioned certification expires on August 28, 2020, and a new certification will be required in order for this permit to be valid beyond that date. Work will be completed between mid-June through mid-October of the work years, during the in-stream work window.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.
7. You understand and agree that, if future operations by the United States require the removal, relocation or other alteration of the structure or work authorized herein, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, you will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

SPECIAL CONDITIONS:

1. You shall implement the minimization measures and best management practices as identified in Section 3.9.1 on pages 3-42 to 3-44 of the project Initial Study & Proposed Mitigated Negative Declaration (State Clearing House # 20140162010, Adopted August 4, 2014) and in Section 11 on pages 67-70 of the Rohner Creek Flood Control, Habitat and Seismic Improvements Project: Habitat Mitigation and Monitoring Plan dated July 2015.

2. This Corps permit does not authorize you to take an endangered species. In order to legally take a listed species, you must have a separate authorization under the Endangered Species Act (ESA) (e.g., an ESA section 10 permit or a biological opinion (BO) under ESA section 7 with "incidental take" provisions with which you must comply). The NMFS BO (File Number: WCR-2015-2623) dated October 26, 2015, contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with "incidental take" that is also specified in the BO. Your authorization under this Corps permit is conditional upon your compliance with all of the mandatory terms and conditions associated with incidental take authorized by the attached BO, whose terms and conditions are incorporated by reference in this permit. Failure to comply with the terms and conditions associated with incidental take of the BO, where a take of the listed species occurs, would constitute an unauthorized take and it would also constitute non-compliance with this Corps permit. The NMFS is the appropriate authority to determine compliance with the terms and conditions of its BO and with the ESA.

3. Your responsibility to complete the required compensatory mitigation as set forth in the “Rohner Creek Flood Control, Habitat and Seismic Improvements Project: Habitat Mitigation and Monitoring Plan” (Plan) dated July 2015, will not be considered fulfilled until you have demonstrated mitigation success and have received written verification from the Corps.

4. The proposed mitigation is located on-site. Often the impacts will be mitigated at the same location where the impacts occur. Mitigation actions will occur in tandem to each phase being built so no temporal loss to wetlands or habitats will occur over the lifetime of the four phased project. Permanent impacts to wetlands will be mitigated at a ratio of 1.95:1 through 1.45-acres of wetland establishment. About 1.75-acres of wetlands will be enhanced/ reestablished. Temporary impacts to riverine wetlands (other waters) will be mitigated at a ratio of 1.4:1 through establishment of 0.25-acre riverine wetlands and 0.65-acre reestablished for a total of 0.90 acre. Completion times, minimization measures and best management practices would be implemented as identified in Section 7 and Section 11 of the Plan (July 2015).

5. The Permittee shall fully implement the mitigation plan specified in the Plan (July 2015) and elsewhere in this permit. According to the mitigation plan, responsible parties would be as follows: a) Implementation: City of Fortuna; b) Performance: City of Fortuna; and c) long-term management: City of Fortuna. The Permittee retains ultimate legal responsibility for meeting the
requirements of the Plan. The following components shall be implemented in addition/conjunction with the Plan:

a. Reference sites have been identified by the City of Fortuna’s consultant GHD, as cited in Section 4 of the Plan (July 2015).

b. The Plan addresses performance standards in Section 8 (on pages 60-61) and also shall incorporate the following performance standards:

i. The permittee shall ensure the sites for permanent impacts to wetlands will be mitigated at a ratio of 1.95:1 through 1.45-acres of wetland establishment. About 1.75-acres of wetlands will be enhanced/reestablished. Temporary impacts to riverine wetlands (other waters) will be mitigated at a ratio of 1.4:1 through establishment of 0.25-acre riverine wetlands and 0.65-acre reestablished for a total of 0.90 acre.

ii. The permittee shall ensure >80% relative cover of native species in the wetland reestablishment and establishment sites by year 5. These native species are listed on page 52 of the Plan.

iii. The permittee shall ensure target native species richness values greater than or equal to 100% of the number of species in Corps approved reference sites (as addressed above in special condition a), occur in the wetland reestablishment and establishment sites and are met by year 5. Restoration of temporary impacts sites will be to pre-project condition.

iv. The permittee shall ensure <10% absolute cover of non-native/invasive plant species listed in the Plan as “Priority Species Targeted for Invasive Plant Control” (pages 49-50), with the exception of the species that are identified as “Cal-IPC plants Invasive plants NOT Prioritized for control and fall under non-native category in success criteria” (page 50). There will be a zero tolerance for species considered highly invasive as identified by the Cal-IPC rating.

c. For vegetation sampling of mitigation areas, the number and location of the transects will be sufficient to adequately represent the mitigation unit’s plant species composition and plant species distribution (i.e., percent cover and abundance). The proposed vegetation sampling is presented in Section 9.1.1 on page 62 of the Plan (July 2015).

d. The final financial assurance commitment (February 13, 2015) provides that compensatory mitigation funding for a minimum of Phase 1 has been secured through the Department of Water Resources Proposition 1E Stormwater Flood Management Grant and City matching funds (Agreement 46000009596). Construction and mitigation funding will occur/be received concurrently, prior to any construction to ensure permit compliance.

6. The permittee shall ensure baseline data using monitoring methods described on pages 62-64 of the Plan (July 2015).

7. The permittee shall ensure that the contractor bid on the mitigation work plans occurs by the following winter.
8. The Permittee shall obtain performance standards as outlined on page 61 of the Plan's (July 2015) Performance Standards plus the additional Performance Standards required by Special Condition 5b. If the site fails to meet a performance standard for three consecutive years, the Stream Corridor Management Plan (June 2015) shall be implemented or alternative mitigation shall be identified. The HMMP and SCMP were developed based on the Corps performance standards.

9. The 5-year monitoring program will be implemented as outlined on pages 62-64 of the Plan (July 2015). Annual monitoring reports shall be submitted to the Corps by December 31, of each year.

10. The Permittee retains ultimate legal responsibility for meeting the requirements of the final mitigation plan and the performance standards outlined in the Plan pages 60-61 Performance Standards.

11. Within 6 months of initiation of work in waters of the U.S., the Permittee shall record a Permanent Stream Corridor Drainage Easement (PDE) to protect the Rohner Creek floodplain, in a form approved by the Corps, which shall run with the land, obligating the Permittee, its successors and assignees to protect and maintain the site in perpetuity, consistent with the project intent and subject to the Natural and Cultural Resources provisions set forth in the City of Fortuna General Plan 2010 and described in Section 5, pages 20-21 of the Plan (July 2015). The Permittee shall receive written approval (by letter or e-mail) from the Corps for this PDE prior to its being executed and recorded. Copies of the recorded documents shall be provided to the Corps once recorded.

12. Within 1 year of initiation of the project site impacts to waters of the U.S., permittee shall re-contour the temporarily impacted area and replant it with appropriate soil-stabilizing native species as outlined in pages 50-54 of the Plan (July 2015). A 2-year (temporary impact areas) or 5-year (permanent impact areas) management and monitoring program will be implemented as outlined in the Section 9 and 10 Plan (July 2015) and Stream Corridor Management Plan (June 2015). Annual monitoring reports shall be submitted to the Corps within six weeks following the end of each monitoring year (ending on December 31). A final monitoring report shall be submitted to the Corps documenting attainment of final success criteria. Requirements shall be deemed complete upon written notification from the Corps. Wetland delineation results documenting the final reestablished and established mitigation wetlands acreage relative to project impacts will be submitted with the year-5 report.

13. In accordance with Performance Standards indicated in the Plan (July 2015) (pages 60-61), required wetland delineations at year-5 shall be completed by an independent third party and shall be submitted to the Corps for verification.

14. You shall employ sediment and erosion control best management practices as needed throughout the project area. No objects or fill shall be placed where they can be eroded or washed into drainage systems in the project area. All debris generated as a result of the project, shall be removed from the site and disposed of at an approved location outside of Corps jurisdiction. All project staging and equipment storage areas shall be located away from areas subject to the jurisdiction of the Corps. After construction, any materials used to dewater areas within the creeks shall be removed in their entirety.

15. Mitigation shall commence in accordance with the schedules outlined on page 59 of the Plan (July 2015). If construction of mitigation does not commence within 12-24 months from impact to waters of the U.S., this authorization is automatically suspended, and the permittee could face Class I Administrative Penalties for each violation of a Special Condition of this permit (pursuant to
Section 309(g) of the Clean Water Act); or an action in the Federal District Court for fines and injunctions requiring work cessation and/or restoration. The Corps may also require that the restoration and/or mitigation proposal account for temporal loss of jurisdictional waters impacted during the delay period. This may be required to be performed by a third party and be funded through a money judgment against the permittee.

16. Following installation of each mitigation phase(s), the Permittee shall submit to the Corps a memo ("as-built" submittal) in accordance with the Plan (July 2015) and Stream Corridor Management Plan (June 2015), indicating the following:

   e. Date(s) all mitigation was installed and monitoring was initiated;

   f. Schedule for future mitigation monitoring, implementation, and reporting pursuant to final, Corps-approved Plan (July 2015);

   g. Summary of compliance status with each special condition of this permit (including any noncompliance that previously occurred or is currently occurring and corrective actions proposed to achieve compliance);

   h. One copy of “as built” drawings for all mitigation sites (all sheets must be signed, dated, to-scale, and no larger than 11 x 17-inches).

17. Performance Standards must be met each year for each mitigation action on each mitigation unit. Annual sampling documentation, as part of monitoring reports, shall include maps showing locations of sampling points/transects and photos representative of sampling locations. Reports should provide quantitative data and other information necessary for the Corps to verify the site conditions and whether the compensatory mitigation project is meeting its performance standards. Such information includes, for each site, field data forms (raw data) and summary tables of the following: relative cover by wetland plant species, percent change in relative cover by wetland plant species over baseline conditions, relative cover of native wetland plant species, species richness (including a list of species), absolute percent cover by invasive plants, hydrology measurements (percent surface area and duration of ponded areas). If a performance standard is not met, the City shall propose possible remedial actions for Corps review and approval.

18. The Permittee shall clearly mark the limits of disturbance on the construction plans so that all areas of Corps jurisdiction, and any associated riparian vegetation, that are not to be removed or otherwise adversely impacted during project implementation so that movement of equipment and personnel will occur within the authorized construction/impact areas only. Adverse impacts to waters of the U.S. beyond the Corps-approved construction footprint are not authorized. Such impacts could result in permit suspension and revocation, administrative, civil or criminal penalties, and/or substantial, additional, compensatory mitigation requirements.

19. The Permittee shall provide the Corps with final design plans/engineering plans for the mitigation sites by April 30th preceding construction, and shall receive written Corps approval prior to implementation.

20. The Permittee shall provide the Corps with final Permanent Stream Corridor Drainage Easement (PDE) for the mitigation sites by December 31st following construction, and shall receive written Corps approval prior to implementation.
21. The permittee shall ensure long term management plans are developed (per Section 10, page 67 of the Plan) and approved in writing by the Corps. The permittee shall provide the Stream Corridor Management Plan (June 2015) and written documentation that the City has plans for the long term financing of the mitigation sites to the Corps before the project commences. The funding commitment must be sufficient to cover expected costs as estimated in the Engineers Opinion of Probable Construction Cost for the project mitigation sites.

FURTHER INFORMATION:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

   ( ) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. Section 403).
   (X) Section 404 of the Clean Water Act (33 U.S.C. Section 1344).

2. Limits of this authorization:
   a. This permit does not obviate the need to obtain other Federal, State, or local authorizations required by law.
   b. This permit does not grant any property rights or exclusive privileges.
   c. This permit does not authorize any injury to the property or rights of others.
   d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability: In issuing this permit, the Federal Government does not assume any liability for the following:
   a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
   b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
   c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
   d. Design or construction deficiencies associated with the permitted work.
   e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision: This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:
a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate. (See item 4 above.)

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 C.F.R. Section 325.7 or enforcement procedures such as those contained in 33 C.F.R. Sections 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 C.F.R. Section 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions: General Condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

(PERMITTEE) 5.17.16

DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

Digitally signed by
COSTA HOLLY N.1249736780
DN: c=US, o=U.S. Government, ou=DoD,
qu=PKI, ou=USA,
cn=COSTA HOLLY N.1249736780
Date: 2016.07.12 15:50:38 -07'00'

John Morrow
Lieutenant Colonel, U.S. Army
District Commander

12 July 2016

DATE)

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.