RED Exhibit B

San Francisco Bay Conservation and Development Commission
375 Beale Street, Suite 510, San Francisco, California 94105 tel 415 352 3600 fax 888 348 5190
State of California | Gavin Newsom – Governor | info@bcdc.ca.gov | www.bcdc.ca.gov

Via Certified Mail & Email

September 19, 2024

Union Pacific Railroad Company
ATTN: Peggy Ygbuhay, Sr. Director of Public Affairs
915 L Street
Sacramento, CA 95814
Email: pygbuhay@up.com

SUBJECT: Violation Report and Complaint for Administrative Civil Penalties (BCDC Enforcement No. ER2023.019.00)

Dear Ms. Ygbuhay:

Please see the enclosed Violation Report and Complaint for Administrative Civil Penalties. BCDC is initiating a formal enforcement proceeding to compel Union Pacific Railroad Company (UPR) to remove the toxic and other waste from the bay and to remove the encampment from the 100-foot shoreline band.

This action is being taken in light of the fact that UPR has failed to act voluntarily to resolve these issues since it was first notified about them on February 23, 2024.

Within thirty-five days, you must submit to me the completed statement of defense form and a certified cashier's check in the amount of the proposed administrative civil penalty.

Signed,

DocuSigned by:
Matthew A. Trujillo
01D29D76CC1B4EA...

MATTHEW TRUJILLO
Enforcement Policy Manager

MT/mm

cc: Robert Bylsma, Sr. General Attorney (via email: rcbylsma@up.com; via FAX: 916/847-9019)
Rod Carroll, General Director of Real Estate (via email: rscarroll@up.com)
Adrian Guerrero, Asst. Vice President of Public Affairs-West (via email: aguerre@up.com)
Liisa Stark, Vice President of Public Affairs (via email: llstark@up.com)

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BCDC Enforcement File: ER2023.019.00
Date Mailed: 9/19/2024
35th Day After Mailing: 10/24/2024
60th Day After Mailing: 11/18/2024
Hearing Date: 11/14/2024

Violation Report/Complaint for Administrative Civil Liability Enforcement Case No. 2023.019.00
Union Pacific Railroad Company (Respondent)

Guidance to Respondents

FAILURE TO RESPOND TO THIS VIOLATION REPORT/COMPLAINT FOR ADMINISTRATIVE CIVIL LIABILITY BY COMPLETING THE ENCLOSED STATEMENT OF DEFENSE FORM AND ENCLOSING ALL PERTINENT DECLARATIONS UNDER PENALTY OF PERJURY, PHOTOGRAPHS, LETTERS, AND OTHER WRITTEN DOCUMENTS COULD RESULT IN A CEASE AND DESIST ORDER, A PERMIT REVOCATION ORDER, OR AN ORDER SETTING ADMINISTRATIVE CIVIL LIABILITY AND IMPOSING A SUBSTANTIAL CIVIL PENALTY BEING ISSUED TO YOU WITHOUT YOUR HAVING AN OPPORTUNITY TO CONTEST THEM BY RAISING ANY DEFENSES OR MITIGATING FACTORS OR TO INTRODUCE ANY EVIDENCE.

The San Francisco Bay Conservation and Development Commission is issuing this violation report/complaint for administrative civil liability and the enclosed statement of defense form because the Commission's staff believes that you may be responsible for or involved with a possible violation of either the Commission's laws or a Commission permit. The report/complaint contains a brief description of the alleged violation, a summary of all the pertinent information currently known to staff, and a list of all supporting evidence relied on by staff. All the listed supporting evidence is attached to or accompanies this report/complaint or will be provided to you in electronic format upon request. You can arrange to review the Commission's enforcement file for this matter located at the Commission's offices and/or have copies of these materials made at your expense by contacting Margie Malan of the Commission's staff at telephone number 415-352-3675. The report/complaint informs you of the nature of the possible violation and lists the supporting evidence so that you can fill out the enclosed Statement of Defense form and otherwise be prepared for the Commission enforcement proceedings.

Receipt of the report and the enclosed statement of defense form is the first step in Commission enforcement proceedings. Subsequently, either the Commission or its enforcement committee shall hold an enforcement hearing and the Commission will determine what, if any, enforcement action to take.

Careful reading and a timely response to these materials are essential to allow you to present your side of the case to the Commission. A copy of the Commission's enforcement regulations is also included so that you can fully understand the Commission's enforcement procedures. If you have any questions concerning either the report/complaint, the enclosed statement of defense form, the procedures that the Commission and its enforcement committee follow, or anything else pertinent to this matter, contact Matthew Trujillo of the Commission's staff as quickly as possible at telephone number 415-352-3633. Thank you for your cooperation.

Violation Report and Complaint for Administrative Imposition of Civil Penalties

1. **Person or persons believed responsible for illegal activity:**
   Union Pacific Railroad Company, c/o: Peggy Ygbuhay, Sr. Director, Public Affairs, and/or Adrian Guerrero, Assistant Vice President, Public Affairs – West, and/or Robert Bylsma, Sr. General Attorney, and/or Rod Carroll, General Director of Real Estate, and/or Liisa Stark, Vice President of Public Affairs
   Supporting evidence: Contra Costa County Assessor's Parcel Map

2. **Brief description of the nature of the violation or unauthorized activity:**
   1. Tons of toxic waste and debris in the bay consisting of used automotive tires, shopping carts, plastic and sundry rubbish.
   2. At least one homeless encampment in the 100-foot shoreline band.

3. **Description of and location of the property on which the violation or unauthorized activity occurred:**
   Address: 751702T Private Crossing, Rodeo, California, Latitude: 3803865555, Longitude: -122.26826165

   BCDC jurisdiction(s): Bay and 100-foot shoreline band

4. **Name of owner, lessee (if any), and other person(s) (if any) who controls property on which violation or unauthorized activity occurred:**
   Union Pacific Railroad Company

5. **Approximate date (and time if pertinent and known) that the violation or unauthorized activity occurred:**
   The toxic waste has been present consistently since at least February 2008, according to available satellite imagery (credit: Google Earth). The homeless encampment has been present since circa February 2022, according to satellite imagery (credit: Google Earth).

6. **Summary of all pertinent information currently known to the staff in the form of proposed findings of fact with references to all pertinent supporting evidence listed in an attachment to the report/complaint:**
    a. Date complaint received by BCDC Enforcement and summary of complaint: 2/1/2023; Homeless encampment(s), refuse, hazardous waste in the form of tires; Supporting evidence: Enforcement Report Form (initial)
    b. Date of initial investigation and findings: 3/15/2023; initial complaint validated, photographic evidence collected; Supporting evidence: Enforcement Report Form, photographs dated 3/15/2023
    c. Date of initial contact attempt with respondent(s): 2/23/2024; Supporting evidence: Initial Contact Notice
    d. Date of initial response by respondent(s) and summary of response: 3/1/2024; Via a phone call, Ms. Ygbuhay acknowledged that the property does belong to UPRR Co. She asked for photographs of the violation, which were supplied via e-mail on 3/11/2024; Supporting evidence: Enforcement Report Form staff notes
    e. Further attempts to compel voluntary compliance (Supporting evidence: Enforcement Report Form staff notes):
        i. 6/27/2024. Staff called and spoke to Ms. Ygbuhay wherein she pledged to check in with her team and follow up with staff the week of 7/1/2024. No follow-up occurred.
        ii. 8/15/2024. Staff e-mailed Ms. Ygbuhay to request a status report on the clean-up effort, asked for a response by 8/19/2024. Ms. Ygbuhay responded on 8/20/2024 stating that she would be working with her team to schedule the clean-up soon and would respond once she received confirmation. No further follow-up received thereafter.
    f. Date of commencement of Commission Enforcement Proceedings and summary of rationale: 9/19/2024; Continuous failure to voluntarily resolve these matters nor communicate consistently and effectively with BCDC Enforcement staff compels action after no less than six months following initial contact notice to Respondent; Supporting evidence: Enforcement Report Form

7. **Provisions of law or Commission permit that the staff alleges have been violated:**
   McAteer-Petris Act § 66632

8. **If the staff is proposing that the Commission impose an administrative civil penalty as part of this enforcement proceeding:**

(FOR INTERNAL USE ONLY: Check this box if no penalty is being proposed at this time. ☐)

(a) A list or table of all alleged violations for which staff is proposing a penalty:

1. Tons of toxic and sundry waste in the bay. 2. Persistent homeless encampment numbering at least one in the 100-foot shoreline band.

(b) The total amount of proposed administrative civil penalties:
$60,000 ($30,000 per violation)

(c) A statement of the applicable factors set forth in Government Code Section 66641.9 that the Executive Director considered, consistent with the Administrative Civil Penalty Policy in Appendix J of the Commission's regulations, in determining the total amount of the proposed administrative civil penalties:
A summary of the penalty calculation methodology used herein is as follows:

1) Determined the total initial base penalty amount for each violation by evaluating: (a) the gravity of harm of the violation; and (b) the extent of deviation from the requirement at issue. Based on those evaluations, use Table 1 to determine the initial base penalty amount for the violation. Multiply the initial base penalty amount by the number of days that the violation has persisted to determine the total initial base penalty for the violation.
2) Adjustments specific to the violator were made to the base penalty amount for each violation. The following additional factors were considered for potential adjustment of the total initial base penalty for each violation:
    a. the violator's degree of culpability for the violation;
    b. any history of violations by the violator;
    c. any voluntary removal or resolution efforts and cooperation by the violator.
3) The total base penalty amount was determined by calculating the sum for all violations of the total initial base penalty amount for each violation (i.e., the initial base penalty amount for the violation multiplied by the number of days of violation) multiplied for each violation by the percentages of any adjustments for the violator's culpability, history of violations, and voluntary efforts to resolve the violation.
4) Considered adjustments to the total base penalty amount based on additional factors and determine the final penalty amount. (Depending on the available information, the Executive Director may recommend adjusting or the Commission may adjust the total base penalty amount based on consideration of the following factors: (a) any economic benefit to the violator; (b) the violator's ability to pay or continue in business; (c) costs to the State in pursuing the enforcement action; (d) other factors as justice may require.) The final penalty amount was determined by making any appropriate adjustments to the total base penalty amount based on consideration of these additional factors.

9. **Any other statement or information that the staff believes is either pertinent to the alleged violation or unauthorized activity or important to a full understanding of the alleged violation or unauthorized activity:**
   1) This enforcement case does not qualify for resolution under BCDC Regulations Article 3 (14 CCR § 11386 to § 11391) because at least one of the violations has resulted in significant harm to the bay's resources.
   2) Recent studies have shown that the chemical compounds released by automotive tires into waterways is highly toxic to native bay fish species including coho salmon, which is "nearly extinct" in the San Francisco Bay. Central California Coast coho salmon were listed as endangered under the Endangered Species Act in 2005. Examples of supporting resources of information (not an exhaustive accounting):
      1. Bartlett, A. (2022, January 9). Rare salmon spawn in Bay Area for first time in 18 years. SFGATE. https://www.sfgate.com/local/article/Nearly-extinct-coho-salmon-spawns-in-Bay-Area-16761425.php?fbclid=IwAR3r6Btvx8nZZQtEF8-9jgjGirQ49Muh8kZ-a7jKrTAxnt2Ze4zazCRd_jc
      2. National Oceanic and Atmospheric Administration. (2024, January 17). Coho Salmon (protected). Species Directory: Coho Salmon (Protected). https://www.fisheries.noaa.gov/species/coho-salmon-protected/overview
      3. Zhenyu Tian et al., A ubiquitous tire rubber–derived chemical induces acute mortality in coho salmon. Science 371,185-189(2021). DOI:10.1126/science.abd6951

10. **List of all supporting evidence relied on by staff, including any declarations under penalty of perjury (these records will be provided to you in electronic format upon request):**

Description	Record Date
Enforcement Report Form (initial)	4/12/2023
Enforcement Report Form (continuing to-date)	n.d.
Contra Costa Assessor's Parcel Map, book 357, page 18	n.d.
Staff site photographs	3/15/2023
Initial contact notice to Respondent	2/23/2024
Bartlett, A. Rare salmon spawn in Bay Area for first time in 18 years. SF GATE. [periodical]	1/9/2022
National Oceanic and Atmospheric Administration. Coho Salmon (protected). [website]	1/17/2024
Zhenyu Tian et al., A ubiquitous tire rubber–derived chemical induces acute mortality in coho salmon. [journal article]	12/3/2020
Google Earth satellite imagery	2008-2024

RED Exhibit B

Statement of Defense Form

Enforcement Case ER2023.019.00

Union Pacific Railroad Company

FAILURE (1) TO COMPLETE THIS FORM, (2) TO INCLUDE WITH THE COMPLETED FORM ALL DOCUMENTS, DECLARATIONS UNDER PENALTY OF PERJURY, AND OTHER EVIDENCE YOU WANT PLACED IN THE RECORD AND TO BE CONSIDERED BY THE COMMISSION, (3) TO LIST ANY WITNESSES WHOSE DECLARATION IS PART OF THE STAFF'S CASE AS IDENTIFIED IN THE VIOLATION REPORT THAT YOU WISH TO CROSS-EXAMINE, THE AREA OF KNOWLEDGE ABOUT WHICH YOU WANT TO CROSS-EXAMINE THE WITNESS, AND THE INFORMATION YOU HOPE TO ELICIT BY CROSS-EXAMINATION, AND (4) TO RETURN THE COMPLETED FROM AND ALL INCLUDED MATERIALS TO THE SAN FRANCISCO BAY CONSERVATION AND DEVELOPMENT COMMISSION STAFF OR TO CONTACT **MATTHEW TRUJILLO** OF THE SAN FRANCISCO BAY CONSERVATION AND DEVELOPMENT COMMISSION ENFORCEMENT STAFF BY October 24, 2024, **MEANS THAT THE COMMISSION CAN REFUSE TO CONSIDER SUCH STATEMENTS AND EVIDENCE WHEN THE COMMISSION HEARS THIS MATTER.**

DEPENDING ON THE OUTCOME OF FURTHER DISCUSSIONS THAT OCCUR WITH THE SAN FRANCISCO BAY CONSERVATION AND DEVELOPMENT COMMISSION ENFORCEMENT STAFF AFTER YOU HAVE COMPLETED AND RETURNED THIS FORM, ADMINISTRATIVE OR LEGAL ENFORCEMENT PROCEEDINGS MAY NEVERTHELESS BE INITIATED AGAINST YOU, IF THAT OCCURS, ANY STATEMENTS THAT YOU MAKE ON THIS FORM WILL BECOME PART OF THE ENFORCEMENT RECORD AND MAY BY USED AGAINST YOU.

YOU MAY WISH TO CONSULT WITH OR RETAIN AND ATTORNEY BEFORE YOU COMPLETE THIS FORM OR OTHERWISE CONTACT THE SAN FRANCISCO BAY CONSERVATION AND DEVELOPMENT COMMISSION ENFORCEMENT STAFF.

This form is enclosed with a violation report. The violation report indicates that you may be responsible for or in some way involved in either a violation of the Commission's laws, a Commission permit, or a Commission cease and desist order. The violation report summarizes what the possible violation involves, who may be responsible for it, where and when it occurred, if the Commission staff is proposing any civil penalty and, if so, how much, and other pertinent information concerning the possible violation.

This form requires you to respond to the alleged facts contained in the violation report, to raise any affirmative defenses that you believe apply, to request any cross-examination that you believe necessary, and to inform the staff of all facts that you believe may exonerate you of any legal responsibility for the possible violation or may mitigate your responsibility. This form also requires you to enclose with the completed statement of defense form copies of all written documents, such as letters, photographs, maps drawings, etc. and written declarations under penalty of perjury that you want the Commission to consider as part of this enforcement hearing. This form also requires you to identify by name any person whom you may want to cross-examine prior to the enforcement hearing on this matter, the area of knowledge that you want to cover in the cross-examination, the nature of the testimony that you hope to elicit, and the reasons that you believe other means of producing this evidence are unsatisfactory. Finally, if the staff is only proposing a civil penalty, i.e., no issuance of either a cease or desist order or a permit revocation order, this form allows you alternatively to pay the proposed fine without contesting the matter subject to ratification of the amount by the Commission.

IF YOU WANT TO CROSS-EXAMINE ANY PERSON ON WHOSE TESTIMONY THE STAFF HAS RELIED IN THE VIOLATION REPORT, YOU MUST COMPLETE PARAGRAPH SEVEN TO THIS STATEMENT OF DEFENSE FORM. THIS PARAGRAPH REQUIRES YOU TO SET OUT (1) THE NAME(S) OF THE PERSON(S) YOU WANT TO CROSS-EXAMINE, ()2) REFERENCES TO ANY DOCUMENTS ABOUT WHICH YOU WANT TO CROSS-EXAMINE THE PERSON, (3) THE AREA OF KNOWLEDGE ABOUT WHICH YOU WANT TO CROSS-EXAMINE THE PERSON, (4) THE INFORMATION THAT YOU BELIEVE CAN BE ELICITED BY CROSS-EXAMINATION, AND (5) THE REASON WHY YOU BELIEVE THIS INFORMATION CANNOT BE PRESENTED BY DECLARATION OR OTHER DOCUMENT.

You should complete the form as fully and accurately as you can as quickly as you can and return it no later than 35 days after its having been mailed to you to the Commission's enforcement staff at the address:

San Francisco Bay Conservation and Development Commission
375 Beale Street, Suite 510
San Francisco, California 94105

The forms should also be emailed to Margie Malan at margie.malan@bcdc.ca.gov.

If you believe that you have good cause for not being able to complete this form within 35 days of its having been mailed, please complete it to the extent that you can and within 35 days of the mailing of the violation report send the statement of defense form completed as much as possible with a written explanation of what additional information you need to complete the form in its entirety, how long it will take to obtain the additional information needed to complete the form, and why it will take longer than 35 days to obtain the additional information, send all of this to the Commission's staff at the above address. Following this procedure does not mean that the Executive Director will automatically allow you to take the additional time to complete the form. Only if the Executive Director determines that you have shown good cause for the delay and have otherwise complete the form as much as is currently possible will be grant an extension to complete the form.

If the staff violation report that accompanied this statement of defense form included a proposed civil penalty, you may, if you wish, resolve the civil penalty aspect of the alleged violation by simply providing to the staff a certified cashier's check in the amount of the proposed fine within the 35-day time period. If you choose to follow this alternative, the Executive Director will cash your check and place a brief summary of the violation and proposed penalty along with a notation that you are choosing to pay the penalty rather than contesting it on an administrative permit listing. If no Commissioner objects to the amount of the penalty, your payment will resolve the civil penalty portion of the alleged violation. If a Commissioner objects to the proposed payment of the penalty, the Commission shall determine by a majority of those present and voting whether to let the proposed penalty stand. If such a majority votes to let the proposed penalty stand, your payment will resolve the civil penalty portion of the alleged violation. If such a majority does not let the proposed penalty stand, the Commission shall direct the staff to return the money paid to you and shall direct you to file your completed statement of defense form and all supporting documents within 35 days of the Commission's action. Of course, you also have the opportunity of contesting the fine from the outset by completing this form and filing it and all supporting documents within 35 days of its having been mailed to you.

If you have any questions, please contact as soon as possible **MATTHEW TRUJILLO** of the Commission Enforcement Staff at telephone number **415-352-3633**.

1. Facts or allegations contained in the violation report that you admit (with specific reference to the paragraph number in the violation report/Complaint):

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2. Facts or allegations contained in the violation report that you deny (with specific reference to paragraph number in the violation report/Complaint):

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3. Facts or allegations contained in the violation report of which you have no personal knowledge (with specific reference to paragraph number in the violation report/Complaint):

4. Other facts which may exonerate or mitigate your possible responsibility or otherwise explain your relationship to the possible violation (be as specific as you can; if you have or know of any documents, photographs, maps, letters, or other evidence that you believe are relevant, please identity it by name, date, type, and any other identifying information and provide the original or a copy if you can):

5. If the Executive Director is proposing that the Commission impose an administrative civil penalty as part of this enforcement proceeding and if you would be unable to pay the proposed penalty or paying the proposed penalty would have a substantial adverse effect on your ability to continue in business, provide factual information establishing such inability to pay or such adverse effect. Submit all relevant supporting documentation which may include but not limited to audited financial statements and reports (or if not audited, then those that are the basis of tax returns or regulatory filings), balance sheets, profit and loss statements, statements of net worth, annual budgets, bond prospectuses, and tax returns including supporting forms and schedules as may be applicable. Before submitting this information redact (cover or blackout) all personal information including your social security or tax-payer identification number, driver's license/state identification number, financial account number and any other private non-public personal information including a residential address, telephone numbers, or personal email address.

6. Any other information, statement, etc. that you want to make:

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7. Documents, exhibits, declarations under penalty of perjury or other materials that you have attached to this statement to support your answers or that you want to be made part of the administrative record for this enforcement proceeding (Please list in chronological order by date, author, title and enclose a copy with this completed form):

_____

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8. Name of any person whose declaration under penalty of perjury was submitted with the violation report/complaint as being part of the staff's case who the respondent wants to cross-examine, identify all documents referred to in such person's declaration about which you want to cross-examine the person, the area or areas of information about which the respondent wants to cross-examine the person, and the information that the respondent hopes to elicit in cross-examination, and state the reason(s) why some other method of proving this information is unsatisfactory.

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9. Name of any person whose declaration under penalty of perjury was listed in the violation report as being part of the staff's case who the respondent wants to cross-examine, all documents about which you want to cross-examine the person, area or areas of information about which the respondent wants to cross-examine the witness, information that the respondent hopes to elicit in cross-examination, and the reason(s) why some other method of proving this information is unsatisfactory:

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NOTE: Authority cited: Section 29418(c), Public Resources Code. Reference: Section 29418(c), Public Resources Code.

HISTORY

1. New section filed 5–18–87; operative 6–17–87 (Register 87, No. 30).

§ 11214. Designation of an Amendment as Minor.

(a) If the Executive Director intends to determine that a proposed amendment is minor, he or she shall notify the Commission of this intent by summarizing the proposed amendment and stating the intent as part of the administrative listing of administrative permits and consistency determinations that Section 10620 requires.

(b) The Executive Director shall send the listing to or shall otherwise notify in writing the County of Solano, the Cities of Benicia, Fairfield, and Suisun City, the Solano County Local Agency Formation Commission, the Solano County Mosquito Abatement District, the Suisun Resource Conservation District, the California Department of Fish and Game, the United States Fish and Wildlife Service, and the United States Bureau of Reclamation at least nine (9) working days before the meeting at which the Commission may comment on the listing.

(c) If two (2) or more members of the Commission object to the Executive Director's proposed determination that the proposed amendment is minor, the determination shall not become effective and the Commission shall process the amendment pursuant to Section 11212.

(d) If less than two (2) members of the Commission object to the Executive Director's proposed determination that the proposed amendment is minor, the proposed determination shall become effective and the amendment shall become effective on the tenth (10th) working day following the meeting at which the amendment was listed.

(e) The Executive Director shall give written notice of final action on the proposed amendment to the entity that proposed the amendment and to all persons who have requested in writing that they receive such notice.

NOTE: Authority cited: Section 29418(c), Public Resources Code. Reference: Section 29418(c), Public Resources Code.

HISTORY

1. New section filed 5–18–87; operative 6–17–87 (Register 87, No. 30).

§ 11215. Frequency of Amendments.

No local government, district, nor the Solano County Local Agency Formation Commission shall submit an amendment to the Commission or the Executive Director for certification more frequently than three (3) times during any calendar year.

NOTE: Authority cited: Section 29201(e), Public Resources Code. Reference: Section 29418, Government Code; and Section 65361, Government Code.

HISTORY

1. New section filed 5–18–87; operative 6–17–87 (Register 87, No. 30).

Chapter 13. Enforcement Procedures

Subchapter 1. General Provisions

§ 11300. Grounds for the Issuance of Cease and Desist Orders.

Any one of the following actions shall constitute grounds for the issuance by the Commission of a cease and desist order: (1) the undertaking or threat to undertake an activity that requires a Commission permit without having obtained a Commission permit, (2) the violation of a term or condition of a Commission permit, or (3) the inclusion of inaccurate information in a permit application or at the public hearing on the permit application.

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Section 66638, Government Code; and Section 29601, Public Resources Code.

HISTORY

1. Renumbering and amendment of former Section 11300 to Section 11301, and new Section 11300 filed 10–11–89; operative 11–10–89 (Register 89, No. 43). For prior history, see Register 87, No. 30.

§ 11301. Grounds for Permit Revocation.

Any one of the following actions shall be grounds for the complete or partial revocation of a Commission permit:

(a) the violation of a term or condition of a permit,

(b) the violation of a Commission cease and desist order or an Executive Director's cease and desist order, or

(c) the inclusion of inaccurate information in a permit application or at the public hearing on a permit application.

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Sections 66638 and 66641(d), Government Code; Section 29601, Public Resources Code; and *Sunset Amusement Company v. Board of Police Commissioners* (1972) 7 Cal.3d 64, 80.

HISTORY

1. Renumbering and amendment of former Section 11301 to Section 11303, and renumbering and amendment of former Section 11300 to Section 11301 filed 10–11–89; operative 11–10–89 (Register 89, No. 43). For prior history, see Register 87, No. 30.
2. Redesignation of former subsections (1)–(3) as subsections (a)–(c) and amendment of NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11302. Grounds for the Imposition of Administrative Civil Liability.

Any one of the following actions shall constitute grounds for the imposition of administrative civil liability by the Commission:

(a) the undertaking of any activity that requires a Commission permit without having obtained the Commission permit or

(b) the violation of any term or condition of a Commission permit.

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Sections 66641.5(e) and 66641.6, Government Code; and Sections 29610 and 29611, Public Resources Code.

HISTORY

1. New section filed 5–18–87; operative 6–17–87 (Register 87, No. 30).
2. Repealer and new section filed 10–11–89; operative 11–10–89 (Register 89, No. 43).
3. Amendment of section heading, designation of former subsection (1)–(2) as subsection (a)–(b) and amendment of NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11303. Referral to the Attorney General by the Commission or the Executive Director.

(a) A violation of any one of the following shall be grounds for the referral of the violation by the Commission or the Executive Director to the Attorney General's Office without the Commission's having issued either a cease and desist order or a permit revocation order: (1) the McAteer–Petris Act, (2) the Suisun Marsh Preservation Act, (3) the Federal Coastal Zone Management Act, or (4) a term or condition of a Commission permit.

(b) In addition, a violation of either a Commission cease and desist order or a Commission permit revocation order shall also be grounds for the referral of the violation by either the Commission or the Executive Director to the Attorney General's Office.

(c) A referral made to the Attorney General's Office pursuant to subsections (a) and (b) may include any other unresolved, alleged violation including those of the type enumerated in Section 11390.

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Sections 66640(a), 66641(b) and 66642(a), Government Code; and Section 29601, Public Resources Code.

HISTORY

1. Repealer of former Section 11303, and renumbering and amendment of former Section 11301 to Section 11303 filed 10–11–89; operative 11–10–89 (Register 89, No. 43). For prior history, see Register 87, No. 30.
2. Amendment filed 5–22–2003; operative 6–21–2003 (Register 2003, No. 21).
3. Amendment of subsection (c) and amendment of NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

Subchapter 2. Procedures for the Issuance of Cease and Desist Orders, Permit Revocation Orders, and Orders Setting Administrative Civil Liability

Article 1. Definitions

§ 11310. Definitions.

The following definitions are applicable to this chapter:

(a) "Complaint," as used in subsection (b) of Section 66641.6 of the Government Code, means the document that initiates the possible imposition of administrative civil liability by the Commission. A complaint shall contain the information required by Government Code Section 66641.6(b) and follow the format and include the information for a staff violation report/complaint as set out in Appendix H.

(b) "Enforcement committee," as used in this chapter, means a committee that the Commission has established pursuant to Commission resolution. The Chair shall appoint Commission members or other representatives of the Commission to the enforcement committee with the concurrence of the Commission to assist the Commission in carrying out its enforcement responsibilities. The enforcement committee shall consist of no fewer than four and no more than six Commission members or other representatives of the Commission. A quorum of the enforcement committee necessary to conduct business, to hold hearings and to vote on recommended enforcement decisions shall consist of three members notwithstanding the total number of enforcement committee members. The enforcement committee shall select from its members a chair, who shall serve for a period agreed upon by a majority of the enforcement committee members. The enforcement committee shall conduct its hearings in accordance with the Commission's laws and regulations upon matters referred to it by either the Executive Director or the Commission. The Chair of the Commission may change the members of the enforcement committee from time to time as necessary due to changes in membership of the Commission or to fill vacancies on the committee provided that the Chair notifies the Commission prior to such change at a Commission meeting and the Commission concurs.

(c) "Enforcement hearing," as used in this chapter, means any public hearing held before the enforcement committee or the Commission as part of a Commission enforcement proceeding.

(d) "Person," as used in Sections 66637 through 66642 of the Government Code and in this chapter, means any individual, firm, association, organization, partnership, business trust, corporation, company, or governmental agency.

(e) "Respondent," as used in this chapter, means a person to whom the Commission staff has issued a violation report or complaint and a statement of defense form in accordance with Section 11321(c).

(f) As used in this Chapter, "significant harm to the Bay's resources or to existing or future public access" shall be determined based on both the context and intensity of the violation.

(1) "Context" refers to the location of the violation and the characteristics of the area where it occurs. Areas with important environmental or ecological significance (*e.g.*, habitat or refugia for sensitive species) are generally considered to be more significant than previously degraded habitat or areas with limited habitat value, and highly visible and/or frequently used areas are generally considered to be more significant than isolated areas with low visibility or infrequent usage.

(2) "Intensity" refers to the severity of the impact and the degree to which it affects the environment or public access. Violations presenting significant ecosystem hazards (*e.g.*, toxic or biohazardous fill) or involving large portions of a particular site shall generally be considered to be more severe. In addition, violations that substantially interfere with the ability to use designated public access or encompass large portions of a designated public access area will be considered to be more significant.

(3) Where multiple violations are alleged at a site, if a single violation results in harm that is individually limited but cumulatively significant when added to other violations at the site, it shall be determined that the violation has resulted in significant harm to the Bay's resources or to existing or future public access.

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(c), Public Resources Code. Reference: Sections 66637, 66638, 66641.5(c), 66641.6 and 66643, Government Code; and Section 29601, Public Resources Code.

HISTORY

1. Renumbering and amendment of former Section 11310 to Section 11710, and renumbering and amendment of Section 11010 to Section 11310 filed 5–18–87; operative 6–17–87 (Register 87, No. 30). For prior history, see Registers 86, No. 39 and 73, No. 50.
2. Renumbering of former subsection (a) to subsection (e), repealer of former subsections (b) and (c), new subsections (a)–(d), and renumbering of former subsection (d) to subsection (f) filed 10–11–89; operative 11–10–89 (Register 89, No. 43).
3. Amendment of subchapter heading, section and NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

Article 2. Commission Cease and Desist Orders, Permit Revocation Orders, and Orders Setting Administrative Civil Liability

§ 11320. Staff Investigation and Discovery, and Appointment of a Hearing Officer.

(a) As part of any enforcement investigation, the Executive Director may issue subpoenas and the staff may send interrogatories, conduct depositions, and inspect property at any time.

(b) At the request of the Executive Director or the chair of the enforcement committee, or on its own initiative, the Commission may appoint a hearing officer to conduct an investigation or hold a hearing, make proposed findings of fact, and recommend to the Commission what action it should take on an enforcement matter. A hearing officer appointed to hold an enforcement hearing shall proceed in accordance with the procedural requirements of Section 11327 and shall adopt a recommended enforcement decision in accordance with Section 11330.

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Sections 11180, 11181, 66637, 66638, 66641.5(e), 66641.6 and 66643, Government Code; and Section 29601, Public Resources Code.

HISTORY

1. Repealer of former Section 11320, and renumbering and amendment of former Section 11331 to Section 11320 filed 10–11–89; operative 11–10–89 (Register 89, No. 43). For prior history, see Register 87, No. 30.
2. Amendment of article heading, section and NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11321. Commencing Commission Enforcement Proceedings.

(a) If the Executive Director believes, as a result of an enforcement investigation, that any person has caused or threatens to cause significant harm to the Bay's resources or to existing or future public access, or that the nature, circumstances, extent, and gravity of the violation or violations so warrant, the Executive Director shall commence Commission enforcement proceedings by issuing at least 45 days prior to holding an enforcement hearing on the matter the following materials to the last known address of each party that the Executive Director believes may be legally responsible in some manner for the alleged violation:

(1) a violation report that follows the format and contains the information set out in Appendix H,

(2) a complaint for administrative civil liability that follows the format and contains the information set out in Appendix H if the staff seeks civil penalties, and

(3) a statement of defense form that follows the format and requests the information set out in Appendix I. The violation report and complaint for administrative civil liability can be combined into a single document so long as it contains all the information required for both.

(b) The violation report and/or complaint shall list all documents, including any declarations under penalty of perjury, on which the staff relies to provide a prima facie case of the violations alleged and copies of all such documents shall be attached to or accompany the violation report and/or complaint or shall be provided to the respondent in electronic format upon request.

(c) Issuance of a violation report and/or complaint shall occur when the violation report and/or complaint is mailed by certified mail to all persons or entities named as a respondent in the violation report and/or complaint. Upon written consent of the respondent or respondent's authorized representative, a violation report and/or complaint shall be mailed to the respondent or the respondent's authorized representative by email.

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Sections 66638, 66641.5(e) and 66641.6, Government Code; and Sections 29601, 29610 and 29611, Public Resources Code.

HISTORY

1. Renumbering and amendment of former Section 11330 to Section 11321 and Section 11322 filed 10–11–89; operative 11–10–89 (Register 89, No. 43). For prior history, see Register 87, No. 30.
2. Amendment of section and NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11322. Respondent's Required Response to the Violation Report or Complaint, the Executive Director's Consideration of the Respondent's Response, and Extensions of Time.

(a) Within thirty–five (35) days of the issuance of the violation report and/or complaint and the statement of defense form, each respondent shall submit to the Commission at its office an original and one copy of the completed statement of defense form (or an original and one copy of a document providing the information requested by the form) and an original (or verified copy) and one copy of all documents that the respondent wants to be made part of the record of the enforcement proceeding, including any declarations under penalty of perjury and any documentary evidence such as letters, photographs, and similar matters. Once submitted, all such declarations and documents shall be permanently retained by the Commission as part of the enforcement record.

(b) If a respondent believes that cross–examination of a person whose declaration under penalty of perjury has been submitted with the violation report and/or complaint is needed to show or contest a fact alleged in the violation report and/or complaint, the respondent shall request such cross–examination in the completed statement of defense form. The completed statement of defense form or an addendum shall list the name of each person whose declaration under penalty of perjury has been submitted with the violation report and/or complaint that the respondent wants to cross examine, all documents referred to in such person's declaration about which the respondent wants to cross– examine, a description of the area of knowledge about which the respondent wants to cross–examine the person, including a specific reference to the fact or information respondent disputes, the information that respondent believes can be elicited by cross–examination, and the reasons the respondent believes that the information can best be provided by cross–examination rather than by the submittal of declarations or other written evidence.

(c) Within 35 days of the issuance of a complaint for administrative civil liability and a statement of defense form, each respondent shall submit to the Commission at its office either (1) a certified cashier's check in the amount of the proposed administrative civil penalty or (2) the completed statement of defense form, copies of all documents that the respondent wants to be made part of the record of the enforcement proceeding in accordance with subsection (a), and any request to allow cross–examination in accordance with subsection (b).

(d) If the staff wants to cross–examine any person whose declaration under penalty of perjury has been submitted with a respondent's completed statement of defense form, the staff shall, within seven days of receiving the completed statement of defense form, mail to all respondents a list of all persons whose declaration under penalty of perjury has been submitted by respondent that the staff wants to cross examine, all documents referred to in such person's declaration about which staff wants to cross–examine the person, a description of the area or areas of knowledge about which the staff wants to cross–examine the witness, and the information that the staff hopes to elicit in cross–examination.

(e) If the Executive Director sends a violation report and a complaint for administrative civil liability together, paying the civil penalties will not release the respondent from the possible issuance of a cease and desist order or permit revocation order.

(f) If the Executive Director issues a violation report only, and not a complaint for administrative civil liability, the Executive Director shall for good cause extend the 35–day time limit imposed by subsection (a) upon receipt within the 35–day time limit of a written request for such extension and demonstration of good cause. If the Executive Director issues a violation report and complaint for administrative civil liability or only a complaint for administrative civil liability, the Executive Director shall for good cause extend the 35–day time limit imposed by paragraphs (a) and (c) of this section upon receipt within the 35–day time limit of a written request for such extension, demonstration of good cause, and waiver of and consent to extend the 60–day time limit for a hearing on the complaint under Government Code Section 66641.6(b). Any extension shall be valid only to those specific items or matters that the Executive Director identifies to the requesting party as being exempt from the 35–day filing requirement and shall be valid only for such additional time as the Executive Director allows.

(g) If a respondent responds to a complaint for administrative civil liability by submitting a cashier's check in the amount of the penalty proposed in the complaint to the Executive Director in a timely fashion, the Executive Director shall cash the check and list the violation, the amount of the proposed penalty, and the fact that the respondent has agreed to pay the penalty as part of the administrative permit listing within 30 days of receipt of the check.

(h) At the next Commission meeting after receiving the listing, the Commission can object to the amount of a proposed administrative civil penalty that a respondent has paid by voting by a majority of those present and voting. If the Commission so objects, the Executive Director shall return the respondent's money and the respondent shall submit his or her completed statement of defense form and supporting documents within 35 days of the Commission's action. Thereafter, the enforcement matter shall proceed according to these regulations.

(i) At any time after issuance of a violation report and/or complaint, the Executive Director and a respondent may agree on the terms of a proposed stipulated order or a proposed settlement agreement to resolve a violation or violations, which may include a schedule of corrective actions to be implemented by the respondent and payment of administrative civil penalties. The Executive Director shall include the proposed stipulated order or proposed settlement agreement in his or her recommended enforcement decision prepared in accordance with Section 11326. If the Commission fails to adopt the proposed stipulated order or proposed settlement agreement, and the respondent has not submitted a completed statement of defense form, copies of any supporting documents, and any request for cross–examination in accordance with subsections (a) and (b), the respondent shall submit his or her completed statement of defense form, copies of any supporting documents, and any request for cross–examination within 35 days of the Commission's failure to adopt the proposed stipulated order or proposed settlement agreement. Thereafter, the enforcement matter shall proceed according to these regulations. If the Commission fails to adopt the proposed stipulated order or proposed settlement agreement, and the respondent has previously submitted a completed statement of defense form, copies of any supporting documents, and any request for cross–examination, the Executive Director shall prepare a new recommended enforcement decision in accordance with Section 11326 within 30 days of the Commission's failure to adopt the proposed stipulated order or proposed settlement agreement, and thereafter, the enforcement matter shall proceed according to these regulations.

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Sections 11415.60, 66638,

66641.5(e) and 66641.6, Government Code; and Sections 29601, 29610 and 29611, Public Resources Code.

HISTORY

1. Renumbering and amendment of former Section 11330(d) to Section 11322 filed 10–11–89; operative 11–10–89 (Register 89, No. 43). For prior history, see Register 87, No. 30.
2. Amendment of section heading, section and NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11323. Distribution of Notice of Enforcement Hearings.

(a) At least ten (10) days prior to the initial enforcement hearing on a proposed Commission cease and desist order, a proposed permit revocation order, or a proposed Commission civil penalty order, whether held before the enforcement committee or the Commission the Executive Director shall mail by first class mail or send by email, and shall also make available on the Commission's website, a written notice of the date, time, and place of the initial enforcement hearing to all respondents at their last known address, the Deputy Attorney General advising the enforcement committee or Commission, and to all members of the public who have requested in writing that they receive such notice, provided that no notice need be mailed to the respondent if the respondent has already received notice of the hearing in a cease and desist order issued by the Executive Director. A meeting notice mailed and posted on the Commission's website pursuant to California Government Code Section 11125 will meet this notice requirement.

(b) After the initial enforcement hearing, notice of further enforcement hearings may be given by either announcing the date, time, and place of the further meeting on the record at the close of the preceding enforcement hearing or by mailing by first class mail or sending by email, and also making available on the Commission's website, written notice of the date, time, and place of the further meeting to all respondents at least 10 days prior to the further enforcement hearing.

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Sections 66638, 66641.5(e) and 66641.6, Government Code; and Section 29601, Public Resources Code.

HISTORY

1. Renumbering and amendment of Former Section 11337 to Section 11323 filed 10–11–89; operative 11–10–89 (Register 89, No. 43). For prior history, see Register 87, No. 30.
2. Amendment of section and NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11324. Distribution of the Violation Report, Complaint, Statement of Defense Form(s), and Recommended Enforcement Decision.

At least ten (10) days prior to the enforcement hearing, the Executive Director shall make available on the Commission's website and shall mail by first class mail or send by email the following materials to each respondent, to the committee members if the enforcement hearing will be held before the enforcement committee or to the Commission if the enforcement hearing will be held before the Commission, and to the Deputy Attorney General advising the enforcement committee or Commission: (1) the violation report and/or complaint for administrative civil liability and all documents or other evidence cited therein or listed on an index of supporting documents or evidence attached thereto, (2) each completed statement of defense form and the enclosed exhibits, with a notation that indicates if any of the statements have been filed in an untimely fashion, and (3) a recommended enforcement decision that complies with Section 11326.

NOTE: Authority cited: Section 66632(f), Government Code and Section 29201(e), Public Resources Code. Reference: Sections 66638 and 66641.6, Government Code; and Section 29601, Public Resources Code.

HISTORY

1. Renumbering and amendment of former Section 11336 to Section 11324 filed 10–11–89; operative 11–10–89 (Register 89, No. 43). For prior history, see Register 87, No. 30.
2. Amendment of section heading, section and NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11325. Ex Parte Contacts. [Repealed]

NOTE: Authority cited: section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Sections 66637–66638 and 66641.6, Government Code; and Section 29601, Public Resources Code.

HISTORY

1. Renumbering and amendment of former Section 11333 to Section 11325 filed 10–11–89; operative 11–10–89 (Register 89, No. 43). For prior history, see Register 87, No. 30.
2. Repealer filed 12–27–2004; operative 1–26–2005 (Register 2004, No. 53).

§ 11326. Contents of an Executive Director's Recommended Enforcement Decision.

(a) The Executive Director shall prepare a recommended enforcement decision on a proposed Commission cease and desist order, a proposed permit revocation order, or a proposed order setting administrative civil liability.

(b) The Executive Director's recommended enforcement decision shall be in writing and shall include:

(1) a summary of (A) any background to the alleged violation, (B) the allegations made by staff in its violation report and/or complaint, (C) the allegations either admitted or not contested by respondent(s), and (D) all defenses and mitigating factors raised by the respondent(s);

(2) any staff response to the defenses, mitigating factors, or arguments raised by the respondent(s), and any rebuttal evidence submitted by the staff to matters raised in the statement of defense form, with references to supporting documents;

(3) a summary and analysis of all disputed issues;

(4) a recommended enforcement decision on a proposed order setting administrative civil liability shall identify all violations for which administrative civil penalties are proposed and include:

(A) the total amount of proposed administrative civil penalties; and

(B) a statement of the applicable factors set forth in Government Code Section 66641.9 that the Executive Director considered, consistent with the Administrative Civil Penalty Policy in Appendix J of these regulations, in determining the total amount of the proposed administrative civil penalties;

(5) a statement of whether the Executive Director has issued a cease and desist order and its expiration date;

(6) a recommendation on what action the Commission should take; and

(7) the proposed text of any cease and desist order, permit revocation order, order setting administrative civil liability, or stipulated order that the Executive Director recommends that the Commission issue or any settlement agreement that the Executive Director recommends that the Commission approve.

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Sections 66638, 66641.5(e), 66641.6 and 66641.9, Government Code; and Sections 29601, 29610 and 29611, Public Resources Code.

HISTORY

1. Renumbering and amendment of former Section 11335 to Section 11326 filed 10–11–89; operative 11–10–89 (Register 89, No. 43). For prior history, see Register 87, No. 30.
2. Amendment of section and NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11327. Enforcement Hearing Procedure.

Enforcement hearings shall proceed in the following manner:

(a) the Chair or enforcement committee chair shall announce the matter, ask all respondents or their attorneys present to identify themselves for the record, and announce any imposition of time limits for presentations to be made by the staff, the respondent(s), and the public at the hearing;

(b) the Chair or enforcement committee chair may impose time limits based on the circumstances of the alleged violation(s), the number of other items contained on the meeting agenda, the number of persons who intend to speak, and such other factors as the Chair believes relevant;

(c) the staff shall summarize the violation report and/or complaint for administrative civil liability and recommended enforcement decision with particular attention to limiting its presentation to issues of controversy;

(d) each respondent shall summarize its position(s) on the matter(s) relevant to the alleged violation or proposed order with particular attention to those issue(s) where an actual controversy exists between the staff and the respondent party or parties;

(e) members of the public may speak concerning the matter;

(f) presentations made by the staff, a respondent, and the public shall be limited to responding to (1) evidence already made part of the enforcement record and (2) the policy implications of such evidence; the enforcement committee or the Commission shall not allow oral testimony unless the committee or Commission believes that such testimony is essential to resolve any factual issues that remain unresolved after reviewing the existing written record and whose resolution is essential to determining whether a violation has occurred or to determining what remedy is appropriate. If the committee or Commission allows oral testimony, such testimony shall be taken under oath, and all representatives of the staff and all respondents shall be given a right to examine or cross-examine all witnesses who are allowed to testify;

(g) cross-examination of any witness whose declaration under penalty of perjury has become part of the enforcement record shall be permitted only if the party who wishes to cross-examine has identified in writing pursuant either to Section 11322(b) or Section 11322(d) the person to be cross-examined, the area or areas of information into which the cross-examination will delve, and the information sought to be uncovered. Following cross-examination of a witness whose declaration under penalty of perjury has become part of the enforcement record, a representative of the opposing party shall be entitled to examine the witness on the area or areas of information addressed during cross-examination. Neither cross-examination nor direct examination shall be allowed of any person who has not submitted a declaration under penalty of perjury which has become part of the enforcement record and who has not been identified in writing pursuant to either Section 11322(b) or Section 11322(d), including any member of the public who has commented on an enforcement matter or submitted information related to an alleged violation.

(h) enforcement committee members or Commissioners may ask questions at any time during the hearing or deliberations.

(i) the enforcement committee or Commission shall close the public hearing after the staff, all respondents, and the public have completed their presentations and committee members or Commissioners have completed their questioning;

(j) the enforcement committee or Commission shall rule on any objections to the admissibility of evidence or the acceptance of late evidence and identify any evidence submitted but rejected because it was not filed in a timely manner or in violation of Section 11328.

(k) the enforcement committee or Commission shall deliberate and vote on an enforcement matter; and

(*l*) if a hearing officer has been appointed for an enforcement matter, the hearing officer shall render a written decision that follows the format of an enforcement committee recommended enforcement decision in accordance with Section 11330 within 14 days of the closing of the enforcement hearing.

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Sections 66638, 66641.5(e) and 66641.6, Government Code; and Section 29601, Public Resources Code.

HISTORY

1. Renumbering and amendment of former Section 11328 to Section 11327 filed 10–11–89; operative 11–10–89 (Register 89, No. 43). For prior history, see Register 87, No. 30.
2. Amendment of section and NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11328. Acceptance of Late Evidence.

The introduction of surprise testimony and exhibits at enforcement hearings shall be discouraged. All documents and declarations under penalty of perjury shall be submitted with the violation report and/or complaint or the completed statement of defense form, except to the extent otherwise provided by Section 11322(d) or the Executive Director has extended the time for such submittal pursuant to Section 11322(f), or the Commission or enforcement committee admits the testimony into the record pursuant to Section 11327(f) and this section. To this end, the Commission or the enforcement committee shall not accept into the record or consider any statement of defense form or any written evidence not filed in a timely manner unless the Commission or enforcement committee finds that (1) the person seeking to introduce the evidence made all reasonable efforts to obtain and submit the evidence in a timely manner but was unable to do so and would be substantially prejudiced if the evidence were not admitted and (2) no other party would suffer substantial prejudice by its admission.

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Sections 66638, 66641.5(e) and 66641.6, Government Code; and Section 29601, Public Resources Code.

HISTORY

1. New section filed 10–11–89; operative 11–10–89 (Register 89, No. 43).
2. Amendment of section and NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11329. Admissibility of Evidence.

(a) Any relevant evidence shall be admitted if it is the sort of evidence on which responsible persons are accustomed to rely in the conduct of serious affairs, regardless of the existence of any common law or statutory rule that might make improper the admission of such evidence over objection in civil actions.

(b) Hearsay evidence, including but not limited information provided by the public to the Commission or staff or in public comments, may be admitted and used for the purpose of supplementing or explaining other evidence but shall not be sufficient in itself to support a finding unless it would be admissible over objection in a civil action or unless it is in the form of a declaration under penalty of perjury and the declarant is subject to cross-examination as provided in Sections 11322 and 11327.

(c) The rules of privilege shall be effective to the extent that they are otherwise required by statute to be recognized at the hearing, and irrelevant or unduly repetitious evidence shall be excluded.

(d) The Chair or the enforcement committee chair shall have the final authority to determine whether any evidence whose admissibility is challenged by objection shall be admitted into evidence and become part of the record.

(e) In determining whether to admit testimony or exhibits into the record over objection, the Chair or the enforcement committee chair shall consult with the Deputy Attorney General advising the Commission or enforcement committee at the hearing.

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Sections 66638, 66641.5(e) and 66641.6, Government Code; Section 29601, Public Resources Code; and Section 351, Evidence Code.

HISTORY

1. Renumbering and amendment of former section 11339 to section 11329 filed 10–11–89; operative 11–10–89 (Register 89, No. 43). For prior history, see Register 87, No. 30.
2. Amendment of portions of subsection (a) to create new subsections (b) and (c) and relettering of former subsections (b) and (c) filed 9–3–92; operative 10–5–92 (Register 92, No. 36).
3. Amendment of subsections (b), (d) and (e) and amendment of NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11330. Adoption of an Enforcement Committee Recommended Enforcement Decision.

(a) After the enforcement committee has closed the enforcement hearing and completed its deliberations, it shall adopt a recommended enforcement decision, which shall include all of the following:

(1) a summary of (A) any background to the alleged violations, (B) the allegations made by staff in its violation report and/or complaint, (C) the allegations either admitted or not contested by respondent(s), (D) the defenses and mitigating factors raised by the respondent(s), and (E) the staff's response to the defenses, mitigating factors, or arguments raised by the respondent(s);

(2) a statement of any rulings by the enforcement committee;

(3) a recommended enforcement decision on a proposed order setting administrative civil liability shall identify the violations for which penalties are proposed and include:

(A) the total amount of proposed administrative civil penalties; and

(B) a statement of the applicable factors set forth in Government Code Section 66641.9 that the enforcement committee considered, consistent with the Administrative Civil Penalty Policy in Appendix J of these regulations, in determining the total amount of the proposed administrative civil penalties;

(4) a statement of whether the Executive Director has issued a cease and desist order and its expiration date;

(5) any further written report on or explanation of the enforcement proceedings as the enforcement committee believes is appropriate;

(6) a recommendation on what action the Commission should take; and

(7) the proposed text of any cease and desist order, permit revocation order, order setting administrative civil liability, or stipulated order that the enforcement committee recommends that the Commission issue or any settlement agreement that the enforcement committee recommends that the Commission approve.

(b) The enforcement committee can adopt with or without change the Executive Director's recommended enforcement decision. The chair of the enforcement committee shall direct Commission counsel to prepare the enforcement committee recommended enforcement decision, provided that: (1) Commission counsel shall submit the enforcement committee recommended enforcement decision to the respondent(s) by email for review not less than three days before the Executive Director mails the recommended decision to the Commission and respondent(s) in accordance with Section 11331; and (2) if the respondent(s) provides written comments on or objections to the recommended decision within two days of receipt thereof, the Executive Director may modify the recommended decision based on such comments or objections, if he or she determines that such modifications are appropriate, and shall include the respondent's comments or objections when mailing the recommended decision to the Commission and respondent(s) in accordance with Section 11331.

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Sections 66638, 66641.5(e), 66641.6 and 66641.9, Government Code; and Sections 29601, 29610 and 29611, Public Resources Code.

HISTORY

1. Renumbering and amendment of former Section 11330 to Section 11321 and 11322, and new Section 11330 filed 10–11–89; operative 11–10–89 (Register 89, No. 43). For prior history, see Register 87, No. 30.
2. Amendment of section heading, section and NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11331. Referral of the Recommended Enforcement Decision to the Commission.

At least ten (10) days prior to the Commission's consideration of a recommended enforcement decision referred to it either directly by the Executive Director or by the enforcement committee, the staff shall mail by first class mail or send by email, and shall also make available on the Commission's website, the recommended enforcement decision to all respondents, to all Commissioners, and to the Deputy Attorney General advising the Commission.

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Sections 66638, 66641.5(e) and 66641.6, Government Code; and Section 29601, Public Resources Codes.

HISTORY

1. Renumbering and amendment of former Section 11331 to Section 11320, and new Section 11331 filed 10–11–89; operative 11–10–89 (Register 89, No. 43). For prior history, see Register 87, No. 30.
2. Amendment of section and NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11332. Commission Action on Recommended Enforcement Decision.

(a) Except as provided in subsection (c), when the Commission acts on a recommended enforcement decision, the Commission shall allow representatives of the staff, each respondent, and members of the public an opportunity to present their respective arguments or comments on the recommendation, subject to such reasonable time limits as the Chair may impose and subject to a prohibition against the introduction of any new evidence unless the Commission proceeds either to remand the matter or hold a de novo evidentiary hearing.

(b) Thereafter, the Commission shall do one of the following:

(1) adopt the recommended enforcement decision without any change in any proposed cease and desist order, permit revocation order, or order setting administrative civil liability;

(2) either (A) dismiss the entire matter by voting not to issue any proposed cease and desist order, proposed permit revocation order, or proposed order setting administrative civil liability or (B) if the recommended enforcement decision includes one or more of a proposed cease and desist order, a proposed permit revocation order, and a proposed order setting administrative civil liability, adopt the recommended enforcement decision with regard to one or more proposed orders and dismiss the other proposed order(s) recommended in the recommended enforcement decision by voting not to issue them;

(3) remand the matter to the enforcement committee or the staff for further action as the Commission directs; or

(4) reject the recommended enforcement decision and decide to consider the entire matter de novo. In this event, the Commission shall continue the public hearing to the next available Commission meeting, when it shall proceed in accordance with the same procedural requirements as the Commission must follow under these regulations pursuant to Section 11327. As part of this de novo proceeding, the Commission can accept additional evidence only in compliance with Sections 11327 and 11328 or if the Commission provides the staff, all respondents, and the public a reasonable opportunity to review and respond to the additional evidence prior to the Commission's de novo review.

(c) If the respondent(s) agrees in writing to accept the recommended enforcement decision, and the Executive Director also agrees to accept the recommended decision, the Executive Director shall calendar the recommended enforcement decision as a consent item on a Commission meeting agenda. At the Commission meeting, after allowing public comment on the consent item the Commission shall determine by a majority of those commissioners present and voting whether to adopt the recommended enforcement decision on consent without any change and without any further proceedings. If a majority of those commissioners present and voting do not determine to adopt the recommended decision on consent, the Commission shall proceed to act on the matter in accordance with subsections (a) and (b).

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Sections 66638,66641.5(e), 66641.6 and 66641.9, Government Code; and Sections 29601, 29610 and 29611, Public Resources Code.

HISTORY

1. New section filed 5–18–87; operative 6–17–87 (Register 87, No. 30).
2. Repealer and new section filed 10–11–89; operative 11–10–89 (Register 89, No. 43).
3. Amendment of section and NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11333. Commission Hearing Procedures on Direct Referral of an Enforcement Matter by the Executive Director.

The Executive Director shall determine whether to refer an enforcement matter to the Commission or to the enforcement committee. When the Executive Director refers an enforcement matter directly to the Commission, the Commission shall follow the procedures set out in Sections 11327 through 11329 and in Section 11334.

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Sections 66638, 66641.5(e) and 66641.6, Government Code; and Section 29601, Public Resources Code.

HISTORY

1. Renumbering and amendment of former Section 11333 to Section 11325, and new Section 11333 filed 10–11–89; operative 11–10–89 (Register 89, No. 30). For prior history, see Register 87, No. 30.
2. Amendment of section and NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11334. Voting on a Proposed Commission Cease and Desist Order, a Proposed Commission Permit Revocation Order, or a Proposed Commission Order Setting Administrative Civil Liability.

(a) The Commission shall vote on a recommended enforcement decision, a proposed Commission cease and desist order, a proposed permit revocation order, or a proposed order setting administrative civil liability by roll call in alphabetical order except that the Chair shall vote last;

(b) Any member may change his or her vote at any time before the Chair announces the final tally; and

(c) The decision of whether or not to issue an order shall be by majority vote of those present and voting.

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Sections 66638, and 66641.5(e) and 66641.6, Government Code; and Section 29601, Public Resources Code.

HISTORY

1. Repealer of former Section 11334, and renumbering and amendment of former Section 11341 to Section 11334 filed 10–11–89; operative 11–10–89 (Register 89, No. 43). For prior history, see Register 87, No. 30.
2. Amendment of section heading, subsection (a) and NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11335. Staff Report and Recommendation. [Renumbered]

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Sections 66637–66642, Government Code; and Section 29601, Public Resources Code.

HISTORY

1. Renumbering and amendment of former Section 11335 to Section 11326 filed 10–11–89; operative 11–10–89 (Register 89, No. 43). For prior history, see Register 87, No. 30.

§ 11336. Distribution of Staff Report and Recommendation. [Renumbered]

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Sections 66637–66642, Government Code; and Section 29601, Public Resources Code.

HISTORY

1. Renumbering and amendment of former Section 11336 to Section 11324 filed 10–11–89; operative 11–10–89 (Register 89, No. 43). For prior history, see Register 87, No. 30.

§ 11337. Notice of Public Hearing. [Renumbered]

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Sections 66637–66642, Government Code; and Section 29601, Public Resources Code.

HISTORY

1. Renumbering and amendment of former Section 11337 to Section 11323 filed 10–11–89; operative 11–10–89 (Register 89, No. 43). For prior history, see Register 87, No. 30.

§ 11338. Public Hearing Procedure. [Renumbered]

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Sections 66637–66642, Government Code; and Section 29601, Public Resources Code.

HISTORY

1. Renumbering and amendment of former Section 11338 to Section 11327 filed 10–11–89; operative 11–10–89 (Register 89, No. 43). For prior history, see Register 87, No. 30.

§ 11339. Admissibility of Evidence. [Renumbered]

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Sections 11513 and 66637–66642, Government Code; and Section 29601, Public Resources Code.

HISTORY

1. Renumbering and amendment of former Section 11339 to Section 11329 filed 10–11–89; operative 11–10–89 (Register 89, No. 43). For prior history, see Register 87, No. 30.

§ 11340. Contents of Cease and Desist Orders.

(a) Cease and desist orders shall be signed by the Executive Director and shall contain the following:

(1) a statement of whether the Executive Director is issuing the order pursuant to Section 66637 of the Government Code or the Commission is issuing the order pursuant to Section 66638 of the Government Code;

(2) the names of the person or persons who have undertaken or who are threatening to undertake the activity that is the subject of the order;

(3) identification of the property where the activity has been undertaken or may be undertaken;

(4) a description of the activity;

(5) the effective date of the order;

(6) the expiration date, if any, of the order;

(7) any terms, conditions, or other provisions necessary to bring the activity into compliance with the provisions of the McAteer–Petris Act, the Suisun Marsh Preservation Act, or a permit;

(8) written findings that (1) explain the decision to issue the order and (2) provide the factual and legal basis for the issuance of the order;

(9) in the case of an order issued by the Executive Director, notice of the date and place of any public hearing to be held on any cease and desist order proposed to be issued by the Commission relating to the same activity if the Executive Director has scheduled one;

(10) notice that a respondent may file with the superior court a petition for writ of mandate for review of the order pursuant to Section 1094.5 of the Code of Civil Procedure within thirty (30) days after service of a copy of the order; and

(11) such other provisions that the Commission has approved, including provisions relating to:

(A) a disclaimer of any effect of the order upon any duties, rights, or obligations under private agreements or under regulations of other public bodies;

(B) the obligation to conform strictly to the order and the consequences of the failure to do so; and

(C) the fact that the order does not constitute a recognition of property rights.

(b) A cease and desist order can be combined with a permit revocation order and/or an order setting administrative civil liability so long as the combined order contain all the information required under these regulations for each type of order.

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Section 66638, Government Code; and Section 29601, Public Resources Code.

HISTORY

1. Repealer of former Section 11340, and renumbering and amendment of former Section 11343 to Section 11340 filed 10–11–89; operative 11–10–89 (Register 89, No. 43). For prior history, see Register 87, No. 30.
2. Amendment of subsection (b) and NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11341. Modifications of Cease and Desist Orders Issued by the Executive Director.

The Executive Director may modify a cease and desist order that he or she has issued for good cause, but he or she shall not do so in a manner that extends the 90–day expiration period provided for in Section 66637 of the Government Code unless a respondent stipulates in writing to the extension. The Executive Director may, however, issue consecutive cease and desist orders for a persisting violation or a persisting threatened violation.

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Section 66637, Government Code; and Section 29601, Public Resources Code.

HISTORY

1. Renumbering and amendment of former Section 11341 to Section 11334, and renumbering and amendment of former Section 11344(a) to Section 11341 filed 10–11–89; operative 11–10–89 (Register 89, No. 43). For prior history, see Register 87, No. 30.
2. Amendment of section and NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11342. Modification of Cease and Desist Orders Issued by the Commission.

The Executive Director may modify a cease and desist order issued by the Commission for good cause if the modification would not be a material alteration of the order.

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Section 66638, Government Code; and Section 29601, Public Resources Code.

HISTORY

1. Renumbering and amendment of former Section 11342 to Section 11370, and renumbering and amendment of former Section 11344(b) to Section 11342 filed 10–11–89; operative 11–10–89 (Register 89. No. 43). For prior history, see Register 87, No. 30.
2. Amendment of section and NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11343. Appeal from the Modification of a Commission Cease and Desist Order.

(a) A person who has been personally served with a Commission cease and desist order or to whom the Commission has mailed by certified mail a cease and desist order and to whom the order is directed may appeal to the Commission any modification of the order by the Executive Director by filing a written statement that the party is appealing the modification and the reasons for the appeal.

(b) If the appeal is filed within ten days of the personal service or mailing by certified mail of the modification to the order, the appeal shall stay the effect of the modification, but the previously effective order shall remain in effect.

(c) Appeals of modifications of a cease and desist order by the Executive Director cannot be filed more than ten days after the personal service or mailing by certified mail of the modification.

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Section 66638, Government Code; and Section 29601, Public Resources Code.

HISTORY

1. Renumbering and amendment of former Section 11343 to Section 11340, and renumbering and amendment of former Section 11344(c) to Section 11343 filed 10–11–89; operative 11–10–89 (Register 89, No. 43). For prior history, see Register 87, No. 30.
2. Amendment of section and NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11344. Amendments to Cease and Desist Orders. [Renumbered]

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Sections 66637–66642, Government Code; Section 29601, Public Resources Code; and *Bel Mar Estates v. California Coastal Commission* (1981) Cal. App. 3d 936, 940.

HISTORY

1. Renumbering and amendment of former Section 11344 to Sections 11341, 11342, and 11343 filed 10–11–89; operative 11–10–89 (Register 89, No. 43). For prior history, see Register 87, No. 30.

§ 11350. Contents of Permit Revocation Orders.

(a) Commission permit revocation orders shall be signed by the Executive Director and shall contain the following:

(1) the names of the person or persons who have violated a term or condition of a Commission permit or a Commission cease and desist order or who have misstated any information on a permit application or at a public hearing;

(2) an identification of the term or condition of a permit or a cease and desist order that was violated, or the information that was misstated on the permit application;

(3) the effective date of the order;

(4) the work and uses that are no longer authorized and the date by which any corrective actions or termination of uses must occur;

(5) any terms, conditions, or other provisions that the Commission may determine that, if complied with, could avoid revocation of the permit;

(6) written findings that (A) explain the decision to issue the permit revocation order and (B) provide the factual and legal basis for the issuance of the order;

(7) notice that an aggrieved party can file with the superior court a petition for a writ of mandate for review of the order pursuant to Section 1094.5 of the Code of Civil Procedure.

(b) A permit revocation order can be combined with a cease and desist order and/or an order setting administrative civil liability so long as the combined order contains all the information required by these regulations for each types of order.

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Section 66638, Government Code; Section 29601, Public Resources Code; and *Sunset Amusement Company v. Board of Police Commissioners* (1972) 7 Cal.3d 64, 80.

HISTORY

1. New section filed 5–18–87; operative 6–17–87 (Register 87, No. 30).
2. Amendment filed 10–11–89; operative 11–10–89 (Register 89, No. 43).
3. Amendment of subsections (a)(2) and (b) and amendment of NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11351. Modification of Permit Revocation Orders.

The Executive Director may modify a permit revocation order for good cause if the modification would not materially change the order.

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Section 66638, Government Code; and Sections 29600 and 29601, Public Resources Code.

HISTORY

1. New section filed 10–11–89; operative 11–10–89 (Register 89, No. 43).
2. Amendment of section and NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11352. Appeal from Modification of a Permit Revocation Order.

(a) A person to whom the Commission has issued a permit revocation order may appeal to the Commission any modification of the order by the Executive Director by filing within ten (10) days of the date of the personal service or mailing by certified mail of the modification a written statement that the party is appealing the modification and the reasons for the appeal.

(b) If the appeal is filed within ten days of the personal service or mailing by certified mail of the modification to the order, the appeal shall stay the effect of the modification, but the previously effective order shall remain in effect.

(c) Appeals of modifications of a permit revocation order by the Executive Director cannot be filed more than ten days after the personal service or mailing by certified mail of the modification.

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Section 66638, Government Code; and Section 29601, Public Resources Code.

HISTORY

1. New section filed 10–11–89; operative 11–10–89 (Register 89, No. 43).
2. Amendment of subsections (b)–(c) and amendment of NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11360. Preparation and Execution of Commission Cease and Desist Orders, Permit Revocation Orders, and Orders Setting Administrative Civil Liability.

The Executive Director shall prepare and sign a cease and desist order, a permit revocation order, or an order setting administrative civil liability authorized by the Commission no later than the fifth (5th) working day following approval.

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Sections 66638, 66641.5(e) and 66641.6, Government Code; and Sections 29601, 29610 and 29611, Public Resources Code.

HISTORY

1. Renumbering and amendment of Section 11051 to Section 11360 filed 5–18–87; operative 6–17–87 (Register 87, No. 30). For prior history, see Register 73, No. 50.
2. Amendment of section heading, section and NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11361. Issuance.

"Issuance" of a cease and desist order, a permit revocation order, an order setting administrative civil liability, or of any modification of such orders, is complete when the Executive Director executes the original copy of the order or modification and it is stamped "Issued BCDC" with the date.

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Sections 66637, 66638, 66641.5(e) and 66641.6, Government Code; and Sections 29600 and 29601, Public Resources Code.

HISTORY

1. Renumbering and amendment of Section 11050 to Section 11361 filed 5–18–87; operative 6–17–87 (Register 87, No. 30). For prior history, see Register 73, No. 50.
2. Amendment filed 10–11–89; operative 11–10–89 (Register 89, No. 43).
3. Amendment of section and NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11362. Service of Copies.

(a) Persons to Whom the Order or Modification is Issued. The Executive Director shall cause to be personally served or mailed by certified mail an original copy of a cease and desist order, a permit revocation order, and of any modification of such orders to each person to whom the order or modification is being issued and the owner of the property on which any violation addressed by the order occurred no later than the second working day following the date of issuance, except that with the written consent of the party to be served, the Executive Director shall serve any such order or order modification by email. The Executive Director shall cause to be personally served or mail by registered mail an order setting administrative civil liability or modification to such order to each person to whom the order is being issued no later than the second working day following the date of issuance, except that with the written consent of the party to be served, the Executive Director shall serve any such order or modification by email.

(b) Other Interested Persons. The Executive Director shall personally serve on or shall mail by certified mail a copy of a cease and desist order or a permit revocation order authorized by the Commission and of any modification of such an order to each person who appeared at the hearing and submitted a written request for a copy no later than the second working day following the date of issuance, except that with the written consent of the party to be served, the Executive Director shall serve any such order or order modification by email. The Executive Director shall cause to be personally served or mail by registered mail an order setting administrative civil liability or modification to such order to each person who appeared at the hearing and submitted a written request for a copy, except that with the consent of the party to be served, the Executive Director shall serve any such order or order modification by email. In addition, the Executive Director shall post on the Commission's website a copy of a cease and desist order, permit revocation order, or an order setting administrative civil liability, or any modification of such orders no later than the second working day following issuance.

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Sections 66637, 66638, 66641.5(e) and 66641.6, Government Code; and Sections 29600 and 29601, Public Resources Code.

HISTORY

1. Renumbering and amendment of Section 11052 to Section 11362 filed 5–18–87; operative 6–17–87 (Register 87, No. 30). For prior history, see Register 73, No. 50.
2. Amendment filed 10–11–89; operative 11–10–89 (Register 89, No. 43).
3. Amendment of section and NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11370. Enforcement Record.

The record of an enforcement proceeding shall consist of

(a) the violation report, including all documents referred to in the report;

(b) any complaint for administrative civil liability;

(c) all timely filed statement of defense form(s), including all documents submitted therewith;

(d) all untimely filed statement of defense forms that have nevertheless been admitted into evidence;

(e) the Executive Director's recommended enforcement decision, including all documents and any other evidence referred to or included in the recommendation,

(f) minutes or a verbatim transcript of all enforcement committee and Commission enforcement hearings and deliberations, provided, that if any oral testimony or any cross–examination and direct examination of a person whose declaration under penalty of perjury has become part of the enforcement record is allowed at the enforcement hearing, a verbatim transcript of such testimony shall also be included;

(g) all evidence submitted but rejected because it was not filed in a timely manner or violated Section 11328, with a notation that it was rejected and is included in the record only so that a reviewing court will know what evidence was rejected;

(h) any enforcement committee's or hearing officer's recommended enforcement decision,

(i) any order that the Commission issues,

(j) such other permit or other Commission files as have explicitly been made a part of the record,

(k) the McAteer–Petris Act, if relevant to any of the issues raised in the proceeding,

(*l*) the San Francisco Bay Plan, if relevant to any of the issues raised in the proceeding,

(m) the Suisun Marsh Preservation Act, if relevant to any of the issues raised in the proceeding,

(n) the Suisun Marsh Protection Plan, if relevant to any of the issues raised in the proceeding,

(o) the Suisun Marsh Local Protection Program, if relevant to any of the issues raised in the proceeding, and

(p) the Commission's regulations.

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Sections 66638, 66640, 66641.5(e), 66641.6 and 66641.7, Government Code; and Sections 29600 and 29601, Public Resources Code.

HISTORY

1. Renumbering and amendment of former Section 11342 to Section 11370 filed 10–11–89; operative 11–10–89 (Register 89, No. 43).
2. Amendment of section and NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11380. Content of Complaint for Administrative Civil Liability.

The complaint shall follow the format and contain the information set out in Appendix H to these regulations. The complaint shall identify the violations for which administrative civil penalties are proposed and include:

(a) a list or table of all alleged violations for which staff is proposing a penalty;

(b) the total amount of proposed administrative civil penalties; and

(c) a statement of the applicable factors set forth in Government Code Section 66641.9 that the Executive Director considered, consistent with the Administrative Civil Penalty Policy in Appendix J of these regulations, in determining the total amount of the proposed administrative civil penalties;

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Sections 66641.5(e), 66641.6 and 66641.9, Government Code; and Sections 29610 and 29611, Public Resources Code.

HISTORY

1. New section filed 10–11–89; operative 11–10–89 (Register 89, No. 43).
2. Amendment of section heading, section and NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11381. Commission Hearing on Complaint for Administrative Civil Liability.

(a) The Commission shall comply with the requirements of Cal. Govt. Code Section 66641.6(b) by either: (1) hearing the matter itself within 60 days of the service of the complaint; or (2) by having the enforcement committee hold a hearing within 60 days of the service of the complaint. With the written consent of the respondent(s) to whom a complaint is issued, the Executive Director shall for good cause extend the 60–day time limit for a hearing on the complaint under Government Code Section 66641.6(b).

(b) The Executive Director shall determine whether to refer a complaint for administrative civil liability to the Commission or to the enforcement committee.

(c) When the Executive Director determines whether to refer a complaint to the Commission or to the enforcement committee, he or she shall consider the following factors:

(1) the time that it would take the Commission or enforcement committee to complete consideration of the complaint,

(2) whether the Executive Director has issued a cease and desist order for the violation or violations alleged in the complaint, and whether the Executive has proposed that any order setting administrative civil liability be combined with a Commission cease and desist order and/or a permit revocation order,

(3) the relative workloads of the Commission and the enforcement committee at the time,

(4) whether the complaint involves any policy issues that should be determined by the Commission initially,

(5) whether the Commission or the enforcement committee has already heard any enforcement matter that is related to the complaint, and

(6) any request by the Commission that it hear the matter directly.

NOTE: Authority cited: Section 66632(f), Government Code. Reference: Sections 66641.5(e) and 66641.6, Government Code.

HISTORY

1. New section filed 10–11–89; operative 11–10–89 (Register 89, No. 43).
2. Amendment of section heading, section and NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11382. Further Procedures for Commission Review of Complaints for Administrative Civil Liability.

The Commission shall follow the procedures established by Sections 11321 through 11334 of these regulations when it considers a recommended enforcement decision from either the staff or the enforcement committee relative to the possible imposition of administrative civil liability.

NOTE: Authority cited: Section 66632(f), Government Code. Reference: Sections 66641.5(e), 66641.6 and 66641.9, Government Code.

HISTORY

1. New section filed 10–11–89; operative 11–10–89 (Register 89, No. 43).
2. Amendment of section heading, section and NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11383. Contents of a Commission Order Setting Administrative Civil Liability.

(a) A Commission order setting administrative civil liability shall be signed by the Executive Director and shall contain the following:

(1) the name(s) of the person(s) required to pay the civil penalties;

(2) the amount of the civil penalties and findings that address the applicable factors set forth in Government Code Section 66641.9 that the Commission considered in determining the amount of the civil penalties;

(3) the date by which the civil penalties must be paid in full, or, if the penalties are to be paid in installments, the amount of each installment and the date by which each installment must be paid;

(4) written findings that (1) explain the decision to issue the order setting administrative civil liability and (2) provide the factual and legal basis for the issuance of the order, and

(5) notice that a person to whom the Commission issues an order setting administrative civil liability may file with the superior court a petition for writ of mandate for review of the order pursuant to Section 1094.5 of the Code of Civil Procedure within thirty (30) days after service of a copy of the order.

(b) An order setting administrative civil liability can be combined with a cease and desist order or a permit revocation order so long as the combined order contains all the information required under these regulations for each type of order.

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Sections 66641.5(e), 66641.6 and 66641.9, Government Code; and Sections 29610 and 29611, Public Resources Code.

HISTORY

1. New section filed 10–11–89; operative 11–10–89 (Register 89, No. 43).
2. Amendment of section heading, section and NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11384. Modification of a Commission Order Setting Administrative Civil Liability.

The Executive Director may modify an order setting administrative civil liability for good cause if the modification would not alter the total amount of the civil penalties or otherwise materially change the order.

NOTE: Authority cited: Section 66632(f), Government Code. Reference: Sections 66641.5(e), 66641.6 and 66641.9, Government Code.

HISTORY

1. New section filed 10–11–89; operative 11–10–89 (Register 89, No. 43).
2. Amendment of section heading, section and NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11385. Appeal from Modification of an Order Setting Administrative Civil Liability.

(a) A person to whom the Commission has issued an order setting administrative civil liability may appeal to the Commission any modification of the order by the Executive Director by filing within ten (10) days of the date of personal service or mailing by registered mail of the modification a written statement that the party is appealing the modification and the reasons for the appeal.

(b) If the appeal is filed within ten days of the personal service or mailing by registered mail of the modification to the order, the appeal shall stay the effect of the modification, but the previously effective order shall remain in effect.

(c) Appeals of modifications of an order setting administrative civil liability by the Executive Director cannot be filed more than ten days after the personal service or mailing by registered mail of the modification.

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Sections 66641.5(e), 66641.6 and 66641.9, Government Code.

HISTORY

1. New section filed 10–11–89; operative 11–10–89 (Register 89, No. 43).
2. Amendment of section heading, section and NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

Article 3. Standardized Fines

§ 11386. Applicability of Article.

(a) This Article shall apply to an enforcement action if the Executive Director determines:

(1) that an alleged violation is one of the types identified in Section 11390;

(2) that the alleged violation has not resulted in significant harm to the Bay's resources or to existing or future public access; and

(3) that the alleged violation can be corrected in a manner consistent with the Commission's laws and policies.

(b) For purposes of this Article, "significant harm to the Bay's resources or to existing or future public access" shall be determined in accordance with Section 11310(f).

(c) If an enforcement action involves both an alleged violation that has not resulted in significant harm to the Bay's resources or to existing or future public access and an alleged violation that has resulted in significant harm to such resources or public access or that is otherwise not subject to resolution under this Article, the Executive Director may, depending on the nature and extent of all the violations and on whether the responsible party has taken appropriate action to resolve the violations, commence Commission enforcement proceedings for all the alleged violations by following the procedures established by Sections 11321 through 11334 of these regulations.

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Section 66641.5(e), Government Code; and Section 29610, Public Resources Code.

HISTORY

1. New section filed 2–26–93; operative 3–29–93 (Register 93, No. 9).
2. Amendment filed 6–26–97; operative 7–26–97 (Register 97, No. 26).
3. Amendment of section and NOTE filed 12–9–98; operative 1–8–99 (Register 98, No. 50).
4. Amendment filed 5–22–2003; operative 6–21–2003 (Register 2003, No. 21).
5. New article 3 heading, amendment of section heading and subsections (a)–(a)(10), renumbering of former subsections (b)–(b)(3) to new section

11387, renumbering of former subsection (c) to new section 11388, renumbering of former subsection (d) to new section 11389, renumbering of former subsections (e)–(h) to new section 11390, renumbering of former subsections (i)–(k) to new section 11391, new subsections (b)–(c) and amendment of NOTE filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11387. Notice of Alleged Violation.

If this Article applies to an enforcement action, the Executive Director shall mail a written notice to the person(s) responsible for the alleged violation(s) that contains all of the following information:

(a) the nature of the alleged violation(s) and each and every action that must be taken to correct the alleged violation;

(b) the fact that if the alleged violation(s) are fully corrected within 35 days of the mailing of the notice, the Commission shall not impose any fine; and

(c) the fact that if the alleged violation(s) are not fully corrected within 35 days of mailing of the notice, the person responsible for the alleged violation(s) may be subject to the payment of a fine and may resolve the alleged violation(s) by taking each and every corrective action required by the notice and paying the standardized fine specified in Section 11390(a) or 11390(b) without having to go through a Commission enforcement proceeding pursuant to Sections 11321 through 11334, except as provided in Section 11390(d).

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Section 66641.5(e), Government Code; and Section 29610, Public Resources Code.

HISTORY

1. Renumbering and amendment of former section 11386, subsections (b)–(b)(3) to new section 11387 filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11388. Opportunity to Complete Corrective Action without Imposition of a Standardized Fine.

Except as provided in Section 11390(c), if the person responsible for the alleged violation(s) submits to the Executive Director information demonstrating that the alleged violation(s) have not occurred or that such person has completed each and every corrective action specified in the notice pursuant to Section 11387 within thirty–five (35) days after the mailing of the notice, the Commission shall not impose any standardized fine.

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Section 66641.5(e), Government Code; and Section 29610, Public Resources Code.

HISTORY

1. Renumbering and amendment of former section 11386, subsection (c) to new section 11388 filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11389. Opportunity to Complete Corrective Action with Imposition of a Standardized Fine.

Except as provided in Sections 11390(c) and 11390(d), if the person responsible for the alleged violation(s) fails to submit to the Executive Director information demonstrating that such person has completed each and every corrective action required by the notice pursuant to Section 11387 within thirty–five (35) days after the date of the mailing of the notice, the responsible person may resolve the alleged violation(s) by completing each and every corrective action required by the notice sent pursuant to Section 11387 and by paying a fine in the amount provided in Sections 11390(a) or 11390(b).

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Section 66641.5(e), Government Code; and Section 29610, Public Resources Code.

HISTORY

1. Renumbering and amendment of former section 11386, subsection (d) to new section 11389 filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11390. Violations Subject to a Standardized Fine and Schedule of Standardized Fines.

(a) The following standardized fines shall apply to the following types of alleged violations:

(1) for the failure to return an acknowledged, executed Commission permit before commencing the work authorized by the permit, or, for any permit issued to authorize previously commenced or completed work, for failure to return an acknowledged, executed permit within the time period stated in the permit:

(A) if the fully executed permit is returned between thirty–six (36) and sixty–five (65) days after the date of the mailing of the notice required by Section 11387: TWO THOUSAND DOLLARS ($2,000.00); or

(B) if the fully executed permit is returned more than sixty–five (65) days after the date of the mailing of the notice required by Section 11387: FIVE THOUSAND DOLLARS ($5,000.00) plus FIVE HUNDRED DOLLARS ($500.00) per day from the sixty–fifth (65) day to the date the fully executed permit is received by the staff.

(2) for the failure to submit any document other than an acknowledged, executed Commission permit in the form, manner or time required by a Commission permit:

(A) if a required document is submitted between thirty–six (36) and sixty–five (65) days after the date of the mailing of the notice required by Section 11387: TWO THOUSAND DOLLARS ($2,000.00) per document;

(B) if a required document is submitted between sixty–six (66) and ninety–five (95) days after the date of the mailing of the notice required by Section 11387: FIVE THOUSAND DOLLARS ($5,000.00) per document; or

(C) if a required document is submitted more than ninety–five (95) days after the date of the mailing of the notice required by Section 11387: FIVE THOUSAND DOLLARS ($5,000.00) for each document plus FIVE HUNDRED DOLLARS ($500.00) per day for each document, from the ninety–sixth (96th) day to the date the document is received by the staff.

(3) for the failure to comply with any condition required by a Commission permit not covered by subsections (a)(1) or (a)(2):

(A) if corrected between thirty–six (36) and sixty–five (65) days after the date of the mailing of the notice required by Section 11387: TWO THOUSAND DOLLARS ($2,000.00) for each violation of each separate permit requirement; or

(B) if corrected between sixty–six (66) and ninety–five (95) days after the date of the mailing of the notice required by Section 11387: FIVE THOUSAND DOLLARS ($5,000.00) for each violation of each separate permit requirement; or

(C) if corrected more than ninety–five (95) days after the date of the mailing of the notice required by Section 11387: FIVE THOUSAND DOLLARS ($5,000.00) for each violation of each separate permit requirement, plus FIVE HUNDRED DOLLARS ($500.00) per day for each violation, from the ninety–sixth (96th) day to the date the violation is corrected or the required improvements are provided.

(4) for the failure to obtain a Commission permit or an amendment to a previously issued Commission permit prior to undertaking any activity that can be authorized by an administrative permit or an amendment to previously issued Commission permit:

(A) if either a complete and properly executed application accompanied by a check or money order for the applicable application fee, as determined pursuant to Appendix M, Section (b) of the Commission's regulations, is submitted between thirty–six (36) and sixty–five (65) days and a permit or permit amendment is obtained within one hundred and fifty–five (155) days after the date of the mailing of the notice required by Section 11387 or the unauthorized activity is completely corrected between thirty–six (36) and sixty–five (65) days after the date of the mailing of the notice required by Section 11387: TWO THOUSAND DOLLARS ($2,000.00);

(B) if either a complete and properly executed application accompanied by a check or money order for the applicable application fee, as determined pursuant to Appendix M, Section (b) of the Commission's regulations, is submitted between sixty–six (66) and ninety–five (95) days and a permit or permit amendment is obtained within one hundred and eighty–five (185) days after the date of the mailing of the notice required by Section 11387 or the unauthorized activity is completely corrected between sixty–six (66) and ninety–five (95) days after the date of the mail-

ing of the notice required by Section 11387: FIVE THOUSAND DOLLARS ($5,000.00);

(C) if a complete and properly executed application accompanied by a check or money order for the applicable application fee, as determined pursuant to Appendix M, Section (b) of the Commission's regulations, is submitted more than ninety–five (95) days after the date of the mailing of the notice required by Section 11387 or the unauthorized activity is completely corrected within the same time limits: FIVE THOUSAND DOLLARS ($5,000.00) plus FIVE HUNDRED DOLLARS ($500.00) per day from the ninety–sixth (96th) day to the date the fully complete and properly executed application accompanied by a check or money order for the applicable application fee is submitted or the activity is completely corrected.

(5) for the failure to obtain a Commission permit prior to undertaking any activity that can be authorized by a regionwide permit or an abbreviated regionwide permit:

(A) if either a complete notice of intent to proceed under a regionwide permit or abbreviated regionwide permit is submitted between thirty–six (36) and sixty–five (65) days and the Executive Director approves the notice of intent to proceed within one hundred and fifty–five (155) days after the date of the mailing of the notice required by Section 11387 or the unauthorized activity is completely corrected between thirty–six (36) and sixty–five (65) days after the date of the mailing of the notice required by Section 11387: TWO THOUSAND DOLLARS ($2,000.00);

(B) if either a complete notice of intent to proceed under a regionwide permit or an abbreviated regionwide permit is submitted between sixty–six (66) and ninety–five (95) days and the Executive Director approves the notice of intent to proceed within one hundred and eighty–five (185) days after the date of the mailing of the notice required by Section 11387 or the unauthorized activity is completely corrected between sixty–six (66) and ninety–five (95) days after the date of the mailing of the notice required by Section 11387: FOUR THOUSAND DOLLARS ($4,000.00);

(C) if a complete notice of intent to proceed under a regionwide permit or an abbreviated regionwide permit is submitted more than ninety–five (95) days after the date of the mailing of the notice required by Section 11387 or the unauthorized activity is completely corrected within the same time limits: FOUR THOUSAND DOLLARS ($4,000.00) plus FIVE HUNDRED DOLLARS ($500.00) per day from the ninety–sixth (96th) day to the date the complete notice of intent to proceed is submitted or the unauthorized activity is completely corrected.

(6) for the placement of fill, the extraction of materials or a change in use that could not be authorized under the Commission's laws and policies:

(A) if the violation is corrected and the area restored to its prior status between thirty–six (36) and sixty–five (65) days after the mailing of the notice required by Section 11387: THREE THOUSAND DOLLARS ($3,000.00);

(B) if the violation is corrected and the area restored to its prior status between sixty–six (66) and ninety–five (95) days after the mailing of the notice required by Section 11387: EIGHT THOUSAND DOLLARS ($8,000.00);

(C) if the violation is corrected and the area returned to its prior status more than ninety–five (95) days after the mailing of the notice required by Section 11387: EIGHT THOUSAND DOLLARS ($8,000.00) plus FIVE HUNDRED DOLLARS ($500.00) per day to the date the violation is completely corrected.

(b) A person responsible for any alleged violation must pay double the amount listed in subsection (a) to resolve the alleged violation if that person has previously paid or has been assessed but has failed to pay any standardized fine pursuant to subsection (a) and Section 11391 within the five years prior to resolution of the alleged violation.

(c) If a violation resolved pursuant to Section 11388 is repeated by the same person within five years of the resolution of the prior violation, Section 11388 and subsections (a) and (b) shall not apply. Instead, the person responsible for the subsequent violation may resolve the subsequent alleged violation by paying TWO HUNDRED DOLLARS ($200.00) per day for each day the subsequent alleged violation occurs or persists after the date of the mailing of the notice required by Section 11387.

(d) If the person responsible for the alleged violation does not complete all the required corrective actions within 125 days of the notice mailed pursuant to Section 11387 or does not pay the amount of standardized fines assessed in accordance with this section when payment is due under Section 11391(c) or (d), the Executive Director may commence Commission enforcement proceedings in accordance with Sections 11321 through 11334. If the Executive Director determines that the person responsible for the violation has not made a good–faith effort to correct an alleged violation, the Executive Director may terminate the opportunity for resolution of the violation using the standardized fine process by mailing a notice stating that the process is no longer available. After mailing such notice, the Executive Director shall commence Commission enforcement proceedings in accordance with Sections 11321 through 11334 to resolve the violation.

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Section 66641.5(e), Government Code; and Section 29610, Public Resources Code.

HISTORY

1. Renumbering and amendment of former section 11386, subsections (e)–(h) to new section 11390 filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

§ 11391. Notice of Liability for Standardized Fines and Opportunity to Appeal or to Resolve Violation through Commission Enforcement Proceedings.

(a) After the violation has been completely resolved, the Commission staff shall notify the person responsible for the violation by first class mail or email of the amount of standardized fines assessed in accordance with Section 11390. The notice shall state that if any person subject to standardized fines believes that the amount of standardized fines is inappropriate or was not properly determined in accordance Section 11390, that person can appeal the amount of the fines to the Executive Director and the Chair by submitting to the Executive Director within 21 days of the date of the notice a written statement that the person is appealing and the reasons for the appeal. The Commission staff shall submit to the Executive Director a response to the appeal within 14 days after receipt thereof. The Executive Director and the Chair can reduce the amount of the standardized fines to an amount that they believe is appropriate and can establish a schedule for the payment of the standardized fines in installments.

(b) If any person subject to the standardized fines listed in Sections 11390(a), (b), or (c) believes that the 35–day time limit for resolution without a standardized fine established pursuant to Sections 11387 and 11388 is not feasible, that person may appeal the time limit to the Executive Director and the Chair by submitting to the Executive Director within 35–days of the notice mailed pursuant to Section 11387 a written statement that the person is appealing the 35–day time limit, the reasons for the appeal, and a proposed alternative date to complete the required corrective action. The Executive Director and the Chair can modify the 35–day time limit and the time periods for accrual of standardized fines set forth in Section 11390(a) for the violation as they believe appropriate.

(c) If any person subject to standardized fines does not appeal the amount of such fines within 21 days of receiving notice from Commission staff under subsection (a), the full amount of such fines shall be due and payable by cashier's check thirty (30) days after the date of the notice provided under subsection (a).

(d) If any person subject to standardized fines appeals the amount of such fines within 21 days of receiving notice from Commission staff under subsection (a), any fines the Executive Director and Chair determine to be appropriate shall be due and payable by cashier's check by the date or dates specified in their decision on the appeal.

(e) Any person receiving a notice under Section 11387 may waive the opportunity to resolve the violation under this Article by submitting a let-

ter to the Executive Director indicating such a waiver and requesting that the violation be resolved through Commission enforcement proceedings in accordance with Sections 11321 through 11334 if that person believes such proceedings are necessary to fairly determine liability for the violation, the appropriate remedy, or the appropriate fine or administrative civil penalty amount. A waiver of the opportunity to resolve a violation under this Article and request that the violation be resolved through Commission enforcement proceedings may be submitted at any time after receipt of a notice under Section 11387 but no later than: (1) twenty one (21) days after the date of the notice provided by Commission staff under subsection (a) of amount of standardized fines assessed, if the person receiving such notice elects not to appeal the amount of such fines to the Executive Director and Chair; or (2) fourteen (14) days after the date of the decision of the Executive Director and Chair on any appeal of the amount of standardized fines. If a letter waiving the opportunity to resolve a violation under this Article and requesting that the violation be resolved through Commission enforcement proceedings is submitted after the Commission staff has provided notice under subsection (a) of the amount of standardized fines assessed or after the decision of the Executive Director and Chair on any appeal of the amount of standardized fines, no such fines shall be due pursuant to that notice or that decision, and the appropriate amount of fines or administrative civil penalties shall be determined through Commission enforcement proceedings.

(f) If a person subject to standardized fines fails to pay such fines when due and payable under subsection (c) or (d), as applicable, and if such person has not submitted a letter waiving the opportunity to resolve a violation under this Article and requesting that the violation be resolved through Commission enforcement proceedings under subsection (e), the Executive Director shall commence Commission enforcement proceedings in accordance with Sections 11321 through 11334 to resolve the violation. In those proceedings, the person subject to such fines may not contest his or her liability for the violation or that the violation occurred, and the Commission shall determine only whether the amount of standardized fines was properly calculated in accordance with Section 11390.

NOTE: Authority cited: Section 66632(f), Government Code; and Section 29201(e), Public Resources Code. Reference: Section 66641.5(e), Government Code; and Section 29610, Public Resources Code.

HISTORY

1. Renumbering and amendment of former section 11386, subsections (i)–(k) to new section 11391 filed 6–7–2022; operative 10–1–2022 (Register 2022, No. 23).

Chapter 14. Marsh Development Permits Issued by Local Governments and Appeals Therefrom

Subchapter 1. Marsh Development Permits Issued by Local Governments

Article 1. Application

§ 11400. Application of Chapter.

This Chapter shall govern the issuance of a marsh development permit or any other local permit that incorporates the provisions of a marsh development permit, hereinafter referred to as "a marsh development authorization," by local governments pursuant to California Public Resources Code Section 29502(a) and appeals from marsh development authorizations issued by local governments.

NOTE: Authority cited: Sections 29201(e) and 29521, Public Resources Code. Reference: Section 29502, Public Resources Code.

HISTORY

1. Renumbering and amendment of Section 11225 to Section 11400 filed 5–18–87; operative 6–17–87 (Register 87, No. 30). For prior history, see Register 86, No. 39.

Article 2. Marsh Development Permits Issued by Local Governments

§ 11410. Order of Permits.

If a Suisun Marsh development requires both a marsh development permit from the Commission and a marsh development authorization from a local government because part of the development site is located within either the primary management area of the Suisun Marsh or within tidelands, submerged lands, or other public trust lands within the secondary management area and if another part of the development site is located within the secondary management area of the Suisun Marsh, the person or entity who proposes the development shall first obtain the marsh development authorization from the appropriate local government for that part of the site or development that is within the secondary management area before requesting a marsh development permit from the Commission for that part of the site or development that is within the primary management area.

NOTE: Authority cited: Sections 29201(e) and 29521, Public Resources Code. Reference: Sections 29300 and 29502, Public Resources Code.

HISTORY

1. New section filed 5–18–87; operative 6–17–87 (Register 87, No. 30).
2. Change without regulatory effect amending section filed 12–31–2020 pursuant to section 100, title 1, California Code of Regulations (Register 2021, No. 1). (OAL review extended 60 calendar days pursuant to Executive Order N–40–20.)

§ 11411. Application.

(a) The person or entity applying for a marsh development authorization from local government for a development within the secondary management area shall submit to the local government and the local government shall require the person or entity to provide the following:

(1) an application that provides detailed information about the development and that includes a site plan that shows the property lines of the site and the location and extent of existing and proposed work and uses information that clearly distinguishes existing improvements from proposed improvements, and existing shoreline public access areas from proposed shoreline public access areas, the location of any existing levees and water transporting and water control structures, and information that identifies all building elevations, the approximate distance from the development to the nearest marsh, the location of any managed wetland and any tidal area in the vicinity, and the name and location of the nearest public road;

(2) a statement that describes all environmental impacts that may arise from the proposed development with supporting facts and information;

(3) a statement that the person signing the application is either the applicant or has the authority to bind legally the applicant;

(4) sufficient evidence that shows the applicant either owns the land, has a lease of sufficient duration to allow a reasonable return on any investment, or has an enforceable option on the land on which the development will occur or other similar authority to use the property; and

(5) a statement under penalty of perjury by the person signing the application that all the information submitted is complete and accurate.

(b) The local government may either incorporate the request for this information into its existing applications forms or may request this information separately.

NOTE: Authority cited: Sections 29201(e) and 29521, Public Resources Code. Reference: Section 29502, Public Resources Code.

HISTORY

1. Renumbering and amendment of Section 11227 to Section 11411 filed 5–18–87; operative 6–17–87 (Register 87, No. 30). For prior history, see Register 86, No. 39.

§ 11412. Notice to the Commission of Pending Applications.

(a) Within five (5) working days of the filing of an application with the local government for a marsh development authorization, the local government shall provide in writing to the Commission the following information:

RED Exhibit B

BCDC Enforcement Violation Report Form

Submitted by: BCDC

Submitted time: Apr 12, 2023, 11:15:34 AM

ER#

ER2023.019.00

Permittee or Respondent

Southern Pacific Railroad

Priority

Yes

Status

B. Active Case

Enforcement Staff Assigned

MT

Vicinity of the Alleged Violation

Bay

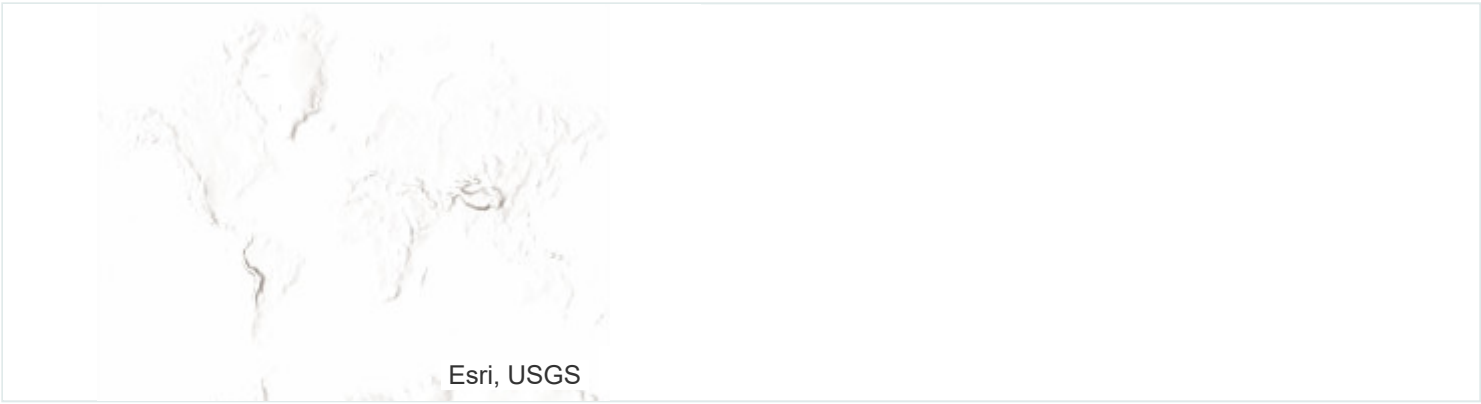
Address of the Alleged Violation

mudflats NNE of Rodeo Creek outlet

RED Exhibit B

Location of the Alleged Violation

Lat: 38.039409 Lon: -122.266427



County

Contra Costa

Description of the Alleged Violation

Multiple encampments, refuse, hazardous waste in the form of tires

Date Report Submitted

Apr 12, 2023

Staff Notes

4/12/23, MT: Site visit conducted 3/15/23 to inspect site and collect evidence. Per Contra Costa County parcel map, parcels belong to Southern Pacific RR.

Date ER Case Opened

Apr 12, 2023

Date Assigned

Apr 12, 2023

When did you first observe the Alleged Violation?

Mar 15, 2023

RED Exhibit B

Suspected Duration or Frequency of Violation

Constant

BCDC Staff Completing Form

Trujillo

RED Exhibit B

BCDC Enforcement Violation Report Form

Submitted by: BCDC

Submitted time: Apr 12, 2023, 11:15:34 AM

ER#

ER2023.019.00

Permittee or Respondent

Union Pacific Railroad Company

BCDC Permit #

N/A

Priority

Yes

Status

E. Resolution Imminent

Enforcement Staff Assigned

MT

Vicinity of the Alleged Violation

Bay

Address of the Alleged Violation

mudflats NNE of Rodeo Creek outlet

RED Exhibit B

Location of the Alleged Violation

Lat: 38.039409 Lon: -122.266427

County

Contra Costa

Description of the Alleged Violation

Encampment, refuse, hazardous waste in the form of tires

Date Report Submitted

Apr 12, 2023

Staff Notes

10/11/24, MT: UPP paralegal called and asked for supporting evidence to VR/C. 9/19/24, MT: VR & C sent to Public Affairs and Legal staff this date. Stmt of Defense due 10/24/24. 9/10/24, MT: No further update from PY, formal enforcement proceeding initiated. 8/20/24, MT: PY responds to 8/15 e-mail stating: "I am working with our teams to schedule clean-up of this area. I should have that scheduled soon and I will update you as soon as I receive confirmation."8/15/24, MT: E-mailed Peggy Y. to follow up on the status of the clean-up effort at the site. She did not reach out after our last phone conversation on June 27 to provide any update. 6/27/24, MT: Called Peggy Y. and she committed to checking with her team and following up with me on the status of the clean-up effort the week of 7/1/24. 3/11/24, MT: Emailed site visit photos to Peggy Y. 3/1/24, MT: Met with Peggy Ygbuhay by MS Teams and explained the nature of the violation and the initial report of the violation. She acknowledged and showed in a screen-share of her system that the property does belong to UPR. She asked for photographs of the violation and she gave consent to correspond via e-mail. I pledged to follow up with her next week by e-mail with photos and correspondence. For the purposes of this enforcement action, this date will be considered the date of UPR's initial contact response. 4/12/23, MT: Site visit conducted 3/15/23 to inspect site and collect evidence. Per Contra Costa County parcel map, parcels belong to Southern Pacific RR.

Date ER Case Opened

Apr 12, 2023

RED Exhibit B

Date Assigned

Apr 12, 2023

Total Civil Penalty Owed

60,000

When did you first observe the Alleged Violation?

Mar 15, 2023

Suspected Duration or Frequency of Violation

Constant

Responsible Party's Name (Person and/or Organization)

Peggy Ygbuhay, Sr. Director, Public Affairs and Adrian Guerrero Assistant Vice President, Public Affairs - West

Responsible Party's Address

Peggy Y: 915 L St, Suite 1180 Sacramento, CA 95814; Adrian G: 9451 Atkinson St. Roseville, CA 95747

Responsible Party's Email

Peggy Y: pygbuhay@up.com; Adrian: aguerre@up.com

Responsible Party's Phone Number

Peggy Y: 916-789-5957; Adrian G: 916-789-6360

BCDC Staff Completing Form

Trujillo

A - OFF'L MAP OF AM'D MAP NO.2 BLKS A,B & 36E TN. OF RODEO 1-OM-1

B- MAP OF RODEO D-91

1967-1- 50L.S.M.14 11-29-67

2- 43P.M.1 2-3-76

RED Exhibit B

1" = 100'

U.P.R.R.

CREEK

SAN PABLO AVE

SAN PABLO AVE.

FIRST ST.

COUNTY FLOOD CONTROL CHANNEL

JOHN ST.

RODEO

RAILROAD

VAQUEROS AVE.

PARKER AVE.

FIRST

186 181 182 183 184 185 37E 36E 35E 5W 6W

NOTE: THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE INFORMATION DELINEATED HEREON. ASSESSOR'S PARCELS MAY NOT COMPLY WITH LOCAL LOT SPLIT OR BUILDING SITE ORDINANCES.

181	11 10/13/04
182	12 12/10/04
183	
184	
185	
186	

1958 HR.

ASSESSOR'S MAP

BOOK 357 PAGE 18

CONTRA COSTA COUNTY, CALIF.

RED Exhibit B

RED Exhibit B

Send Message to Peggy Ygbuhay

Please complete all fields denoted with an asterisk (*) in order to send a message to Peggy Ygbuhay.

Subject*
Notice of Violation

Message*
Dear Ms. Ygbuhay:

Please e-mail me directly at your earliest opportunity to schedule a teleconference to discuss BCDC Enforcement Case ER2023.019.00. At Crossing: 751702T PRIVATE CROSSING, RODEO, CA; Latitude: 38.03865555 Longitude: -122.26826165, there are what is estimated to be tons of hazardous material in the San Francisco Bay and an illegal encampment on UPP property. This material and encampment constitute violations of the McAteer-Petris Act, Section 66632. An enforcement case has opened and we require that the owner of the property immediately remove these items from the Commission's jurisdiction. I look forward to discussing this matter with you in further detail.

Name*
MATTHEW TRUJILLO

Company Name
San Francisco Bay Conservation & Development Commission (BCDC)

Your email*
MATTHEW.TRUJILLO@BCDC.CA.GOV

Your phone number*
4153523633

RED Exhibit B

TOP STORY 45m ago

Rain and 'strong wind potential' enter SF Bay Area weather forecast

LOCAL

Nearly extinct salmon spawn in the Bay Area for the first time in 18 years

By **Amanda Bartlett**, *Assistant Local Editor*
Updated Jan 9, 2022 3:09 p.m.

A coho salmon swims underwater.
Arctic-Images/Getty Images

At first, barely visible beneath the rippling waters of Montezuma Creek in Forest Knolls, the bright red tail of a coho salmon suddenly emerged, splashing along the surface as it swam upstream.

Watch More

SFGATE

The recent sighting by Salmon Protection and Watershed Network (SPAWN) biologist Ayano Hayes was a milestone for the Bay Area, marking the first time the endangered fish has been spotted in the small tributary of the San Geronimo Valley in Marin County since 2004.

"This is extremely exciting and is the result of big storms that have let coho salmon maneuver through culverts under roads that are a barrier to migration under lower flows," said Hayes in a statement.

The biologist also discovered salmon in Arroyo Creek, Woodacre Creek and Larsen Creek, where they had not been seen since 2006.

The species has experienced a "serious decline" since the mid-20th century, according to the California Department of Fish and Wildlife, due to threats such as loss of habitat, overexploitation (which occurs when more fish are harvested beyond the species' capacity to repopulate), interaction with hatchery-raised fish and climatic factors such as lack of precipitation. In recent years,

the coho salmon that typically spawned in creeks between the Golden Gate and Monterey Bay were blocked by sand bars because of the drought. They faced extinction over most of their range.

"It may already be too late," Stafford Lehr, chief of fisheries for the California Department of Fish and Wildlife, told the Chronicle in 2014. "The Central Coast coho could be gone south of the Golden Gate."

Spawning season typically happens in December and January, and though thousands of coho salmon once made their way to the Bay Area, only "a couple hundred" now return each year, according to SPAWN.

Even those numbers are encouraging, however.

"Endangered coho salmon are on the brink of extinction, yet one of the largest populations left in California occur within 35 minutes of the Golden Gate Bridge," wrote SPAWN in a statement.

The organization attributes this year's success in part to the removal of a dam on the former San Geronimo Valley golf course in 2021, allowing salmon to more easily migrate into the upper watershed; Chinook salmon were recently documented in Woodacre Creek for the first time ever.

Preston Brown, SPAWN's Director of Conservation, also noted the concentration of rainfall in recent months, which "has to be just right to allow fish to jump into and swim through artificial culverts that concentrate flow and increase velocity."

And though recovery is slow, biologists are optimistic.

"We can bring back the salmon of Marin from the brink of extinction if we care enough to protect and restore habitat," said Todd Steiner, the founder and executive director of SPAWN. "We have the know-how and the state and federal agencies have offered the resources. It boils down to our local elected officials having the courage to enact the regulations that will protect the habitat the fish need to survive for our children and grandchildren."

Jan 9, 2022 | Updated Jan 9, 2022 3:09 p.m.

Amanda Bartlett
ASSISTANT LOCAL EDITOR

Amanda Bartlett is an award-winning assistant local editor for SFGATE covering culture, history, science and breaking news. Prior to joining the newsroom in 2019, she worked for the Roxie Theater, Noise Pop and Frameline Film Festival. Outside of writing, she has presented repertory movies with Cinema SF and the California Film Institute, and appeared on the Midnight Mass and Western Neighborhoods Project podcasts. She lives in Oakland with her rabbit, Cheeto. Send her an email at amanda.bartlett@sfgate.com.

NOAA FISHERIES

Coho Salmon (Protected)

Coho Salmon (Protected)

Oncorhynchus kisutch

Protected Status

ESA ENDANGERED

Central California Coast ESU

ESA THREATENED

Lower Columbia River ESU
Oregon coast ESU
Southern Oregon & Northern California coasts ESU

Quick Facts

WEIGHT	Average 8 pounds but can weigh as much as 35 pounds
LENGTH	2 feet
LIFESPAN	2 to 5 years
THREATS	Climate change, Commercial and recreational fishing, Habitat degradation, Habitat impediments (dams), Habitat loss

REGION West Coast

About the Species

Coho salmon. Credit: NOAA Fisheries

Coho salmon are an anadromous fish, which means they can live in both fresh and saltwater. Coho salmon have a relatively complex life history that includes spawning and juvenile rearing in rivers for at least one summer followed by migrating to saltwater to feed, grow, and mature before returning to freshwater to spawn. They are vulnerable to many stressors and threats including blocked access to spawning grounds and habitat degradation caused by dams and culverts. One evolutionary significant unit of coho salmon is listed as endangered and three ESUs are listed as threatened under the Endangered Species Act.

The Central California Coast Coho ESU is one of NOAA Fisheries' Species in the Spotlight.

NOAA Fisheries is committed to conserving and protecting coho salmon. Our scientists and partners use a variety of innovative techniques to study, learn more about, and protect this species.

Learn more about protected coho salmon >

Scientific Classification

RED Exhibit B

Kingdom	Animalia
Phylum	Chordata
Class	Osteichthyes
Order	Salmoniformes
Family	Salmonidae
Genus	*Oncorhynchus*
Species	*kisutch*

Last updated by NOAA Fisheries on 09/12/2024

In the Spotlight

Central California Coast Coho

The Central California Coast evolutionarily significant unit (called an "ESU") of coho salmon is one of NOAA Fisheries' Species in the Spotlight. This initiative is an agency-wide effort launched in 2015 to spotlight and save the most highly at-risk marine species.

Central California Coast coho salmon are one of the 28 salmonids federally listed by NOAA Fisheries on the West Coast of the United States. Like other salmon, they breed and hatch young in rivers. After more than a year (sometimes two) rearing in freshwater, juveniles migrate to the North Pacific, where they live and grow for one-and-a-half years, then return to the rivers of their birth to spawn and die. Once abundant, these fish supported native, recreational, and commercial fisheries.

Central California Coast coho were first listed as threatened under the Endangered Species Act in 1996, and then reclassified as endangered in 2005. This unique run of coho salmon, at the southern extent of the species' range, has teetered on the brink of extinction.

Where Central California Coast Coho Live

The Central California Coast coho salmon ESU represents the southern extent of the species' larger range.

Population Status

By the late 1990s, Central California Coast coho salmon were on the verge of extinction. Data demonstrated that the species was declining throughout its range, except in two places: the Russian River in Sonoma County, and Scott Creek, in Santa Cruz County. Conservation hatchery programs have supported the species in these two areas, and we have recently observed some increases in abundance.

Habitat

Coho salmon spend approximately the first half of their life cycle rearing and feeding in streams and small freshwater tributaries. Spawning habitat is comprised of small streams with stable gravel substrates. These fish need cold, clean freshwater streams to lay their eggs, along with side channels and floodplains where young fish can find food and hide from

This ESU of coho salmon originates from rivers south of Punta Gorda, California to and including Aptos Creek, as well as such coho salmon originating from tributaries to San Francisco Bay.

predators. The remainder of their life cycle is spent foraging in estuarine and marine waters of the Pacific Ocean.

Critical habitat was designated for the Central California Coast coho salmon in 1999. View the critical habitat maps or GIS data for these coho.

Threats

While there is no single factor responsible for Central California Coast coho salmon decline, both human activities and natural events have degraded their habitats. Agriculture and legacy logging practices have straightened rivers and streams, deforested the river banks, and extracted water for farming, watering lawns, and other uses.

A critical emerging challenge to Central California Coast coho salmon survival and recovery is the increased frequency of severe weather patterns resulting from climate change. California now routinely experiences above-average temperatures and well below average temperatures. Unprecedented wildfires throughout the species' range have become a significant habitat concern. Fires of this magnitude cause substantial damage to riparian habitat and instream wood shelter, as well as increased landslides and sediment input to streams. The impact of droughts, fires, and flooding on Central California Coast coho salmon habitat will remain for many generations to come. Restoration and additional monitoring of habitat and species response to these events is necessary to repair and re-evaluate how climate-driven processes influence Central California Coast coho salmon's survival and recovery.

Recovery: Species in the Spotlight Priority Actions

The Species in the Spotlight 2021–2025 Priority Action Plan builds on the 2016–2020 Priority Action Plan and the Recovery Plan for the Evolutionarily Significant Unit of Central California Coast Coho Salmon.

It details the focused efforts that are needed over the next 5 years. In our 2021–2025 action plan, we prioritized the following activities:

- Restoration at a watershed scale
- Improving instream flow to support freshwater rearing
- Continuing and expanding conservation captive broodstock programs to increase species and spatial diversity and support population recovery
- Partnering and outreach to advance recovery

This remote side incubator is filled with salmon eggs that are bathed in cool, well-oxygenated water from the stream.

- Monitoring and Research of a dynamic and changing landscape

These actions are working to save Central California Coast coho salmon from extinction and are paving a path forward to recovery.

In our first five years of the Species in the Spotlight initiative, we made the following progress toward stabilizing the species and halting their decline:

- Enhanced more than 200 miles of streams.
- Added more than 6,000 pieces of large woody debris to improve instream habitat complexity.
- Increased returns: In 2017–2018; Russian River run was at its highest in two decades, and in 2018–2019 spawning season, 85 percent returning adults were at least age 3.
- In the Southern Coho Salmon Captive Broodstock program, we have experimented with varying the life stage that is released.
- Completed NOAA Fisheries first Safe Harbor Agreement.
- Formed new partnerships to expand conservation hatchery rearing programs which support species stability and expand species distribution throughout their historic range.
- Improved fish passage and water quality by removing excess fine sediment. This restored access to more than ten miles of stream and reduced the threat of salmonid fish kills associated with anoxic sediment flooding the lagoon after the estuary naturally breaches in the winter months. The project is also is expected to reduce the risk of flooding to the nearby town.

2017 Species in the Spotlight Hero Award

In 2017, we recognized Dr. Brian Dietterick, the director of the California Polytechnic State University Swanton Pacific Ranch and a watershed hydrologist by training.

The Ranch is located in the Scott Creek watershed of Santa Cruz County, California. It is a CalPoly educational facility and home to the southern-most extant population of coho salmon.

Over the last decade, Brian, staff, and students have strengthened and diversified recovery efforts for Central California Coast coho salmon.

Learn more about Brian and his team's work >

2019 Partner in the Spotlight Award

In 2019, we recognized the Russian River Coho Salmon Hatchery Team for its critical role in Central California Coast coho salmon recovery. The joint U.S. Army Corps of Engineers/California Department of Fish and Wildlife Coho Salmon Hatchery Team has been rearing endangered Central California Coast coho salmon since 2001. In 2018, 17 years after the first Russian River rescue, the team formed a new partnership with The Nature Conservancy, the Conservation Fund, and the Mendocino Redwood Company. Together, they will capture, rear, and re-release Mendocino Coast coho salmon from the Garcia and Navarro Rivers.

Learn more about the Russian River Coho Salmon Hatchery Team's work >

2021 Partner in the Spotlight Award

Credit: San Mateo Resource Conservation District

In 1939, visionary farmers in San Mateo County, California formed the first conservation district in California and one of the first in the nation: the San Mateo Resource Conservation District. Today, the RCD provides comprehensive, integrated services addressing wildlife, water, climate, and agriculture. In the last decade, they have focused their restoration efforts on conserving salmonids and their habitat, especially endangered Central California Coast (CCC) coho salmon.

Learn more about the San Mateo Resource Conservation District's work >

2023 Partner in the Spotlight Award

Trout Unlimited's North Coast Coho Project Team. Team members include: Anna Halligan, Elise Ferrarese, Daisy Schadlich, Kate Robbins and Nicole Herrera. Credit: Trout Unlimited.

Trout Unlimited's North Coast Coho Project (NCCP), started in 1998, is a public-private partnership of a large spatial scale working cooperatively to restore CCC coho salmon habitat. NCCP assesses watershed conditions, develops and implements projects to reduce sediment delivery to streams, installs large wood to provide cover and diversify instream habitat, and removes fish passage barriers. Since 2008, the NCCP has leveraged nearly $25 million for habitat restoration for over 75 individual projects. The NCCP team has been instrumental in moving habitat restoration forward, and their ability to form diverse partnerships has been key in CCC coho salmon recovery efforts.

Learn more about the North Coast Coho Project >

Last updated by NOAA Fisheries on 09/12/2024

Management Overview

We listed the Central California coast ESU of coho salmon as endangered and the Lower Columbia River ESU, Oregon coast ESU, Southern Oregon & Northern California coasts ESU as threatened under the Endangered Species Act.

Learn more about the regulatory history of coho salmon >

Recovery Planning and Implementation

Species Recovery Contact

Central California Coast Coho Salmon ESU

- Erin Seghesio, Recovery Coordinator

Southern Oregon & Northern California Coasts Coho Salmon ESU

- Julie Weeder, Recovery Coordinator

Key Actions and Documents

Actions & Documents | Incidental Take

Enhancement of Survival Permits Authorizing Shasta River Template Safe Harbor Agreement and Associated Site Plans

NOAA Fisheries seeks public comment on proposed permit actions, Template Safe Harbor Agreement, and Site Plans for multiple landowners in the Shasta Valley, Siskiyou County, California. Recovery of Southern Oregon/Northern California Coast (SONCC)…

- Federal Register notice published October 15, 2019
- All documents for review.
- 2021 Implementation Report

Notice
, West Coast
PUBLISHED
October 15, 2019

Initiation of 5-Year Reviews for 28 ESA Listed Species of Salmon and Steelhead

NOAA announced 5-year reviews of 28 species listed under the Endangered Species Act. The listed species comprise 17 evolutionarily significant units of Pacific salmon (Oncorhynchus spp.) and 11 distinct population segments of steelhead (Oncorhynchus…

- Notice, Extension of Public Comment Period (85 FR 16619, 3/24/2020)
- Notice of Availability (84 FR 53117, 10/4/2019)

Notice
, West Coast
ISSUED
November 4, 2019

Elochoman Type-N Coho Hatchery Program

NOAA Fisheries is making available for public review and comment an hatchery and genetics management plan, or HGMP (PDF, 78 pages), submitted by the Washington Dept. of Fish and Wildlife for NOAA Fisheries ESA Section 4(d) Rule limit 5 determination for…

- Notice of Availability (84 FR 53104, October 4, 2019)
- Elochoman Type-N Coho Hatchery Plan (HGMP) (PDF, 78 pages)

Notice
, West Coast
PUBLISHED
October 4, 2019

Designation of Critical Habitat for Lower Columbia River Coho Salmon and Puget Sound Steelhead (2016)

NOAA Fisheries issued a final rule to designate critical habitat for lower Columbia River coho salmon (Oncorhynchus kisutch) and Puget Sound steelhead (O. mykiss) pursuant to the Endangered Species Act (ESA). The specific areas designated for lower…

- Final Rule (81 FR 9251; February 24, 2016)
- Proposed Rule (78 FR 2725; January 14, 2013)
- Advanced Notice of Proposed Rulemaking (76 FR 1392; January 10, 2011)
- Critical Habitat - Questions & Answers
- Maps and GIS data
- Critical Habitat Analytical Review Team (CHART) Report
- Final Economic Analysis
- Final ESA 4(b)(2) Report
- References for Final Rule to Designate Critical Habitat

Final Rule
, West Coast
EFFECTIVE
March 25, 2016

Last updated by NOAA Fisheries on 09/12/2024

Science Overview

NOAA Fisheries conducts various research activities on the biology, behavior, and ecology of coho salmon. The results of this research are used to inform management decisions for this species.

Dive Deeper Into Our Research

Coho Salmon in Alaska

Our work to forecast salmon harvests, assess the impact of commercial fisheries on salmon, and evaluate how salmon populations respond to environmental changes enable us to estimate abundance and trends for coho salmon in Alaska.

Juveniles of the five Pacific salmon species. Credit: NOAA Fisheries/Alaska Fisheries Science Center

Salmon research in Alaska >

Coho Salmon Research in the Pacific Northwest

Our research on Pacific salmon covers several topics including bycatch, salmon harvest forecasts, ecotoxicology, genetics, marine survival, and responses to climate change.

More on coho salmon research in the Pacific Northwest >

Last updated by NOAA Fisheries on 09/12/2024

Documents

DOCUMENT

Cook Inlet Small Entity Compliance Guide

The Small Entity Compliance Guide (select "View Document" below) contains a summary of regulations…

Alaska

DOCUMENT

Recovering Threatened and Endangered Species Report to Congress (FY 2021-2022)

This Report to Congress summarizes efforts to recover all transnational and domestic species under…

National

DOCUMENT

2023 5-Year Review: Summary & Evaluation of Central California Coast Coho Salmon

Five-year reviews describe whether recovery is on track in the context of the recovery plan,…

West Coast

DOCUMENT

2022 5-Year Review: Summary & Evaluation of Oregon Coast Coho Salmon

Five-year reviews describe whether recovery is on track in the context of the recovery plan,…

West Coast

More Documents >

Data & Maps

MAP

Salmon and Steelhead Recovery Domains

West Coast

MAP

Species and Habitat App

West Coast

MAP

Critical Habitat - Maps and GIS Data (West Coast Region)

West Coast

DATA

2006: Genetic Stock Composition Analysis Of Chum Salmon Bycatch Samples From The 2006 Bering Sea Groundfish Fisheries

Alaska Fisheries Science Center Salmon Bycatch Report

Alaska

More Data >

More Maps >

Research

2022 Summary of Ocean Ecosystem Indicators

Long-term monitoring of ocean conditions and their effect on juvenile Pacific salmon survival off Oregon and Washington.

West Coast

Salmon Habitat Restoration Priorities in the South Fork Eel River

The South Fork Eel River Salmonid Habitat Restoration Priorities (SHaRP) Action Plan identifies priority restoration actions to recover SONCC coho salmon, NC steelhead, and CC Chinook salmon in the South Fork Eel River watershed.

West Coast

Local Physical Indicators

Regional physical conditions experienced by juvenile salmon entering the northern California Current.

West Coast

Tyee Lake

Tyee dam is part of Alaska's Four Dam Pool built by the State in the 1980's to power Wrangle and Petersburg.

Alaska

More Research >

Outreach & Education

EDUCATIONAL MATERIALS

¡Cuento con usted! edición salmón (en español)

Aprenda a administrar el salmón responsablemente.

West Coast

EDUCATIONAL MATERIALS

I'm Counting on You! Salmon Brochure About Issues Affecting Salmon and How You Can Help

Learn about the threats facing salmon and what you can do to help.

West Coast

EDUCATIONAL MATERIALS

Protectores de Salmónidos (en español)

A través de los cómics, los juegos de palabras, y los laberintos, los niños aprenden sobre la…

West Coast

EDUCATIONAL MATERIALS

An Incredible Journey – Curriculum About Issues Affecting Salmon and How to Become a Salmon Steward

This curriculum includes 10 hands-on lesson plans that explore the salmon life cycle; the cultural,…

West Coast

More Outreach Materials >
More Educational Materials >

Last updated by NOAA Fisheries on 09/12/2024

ECOTOXICOLOGY

A ubiquitous tire rubber–derived chemical induces acute mortality in coho salmon

Zhenyu Tian[1,2], Haoqi Zhao[3], Katherine T. Peter[1,2], Melissa Gonzalez[1,2], Jill Wetzel[4], Christopher Wu[1,2], Ximin Hu[3], Jasmine Prat[4], Emma Mudrock[4], Rachel Hettinger[1,2], Allan E. Cortina[1,2], Rajshree Ghosh Biswas[5], Flávio Vinicius Crizóstomo Kock[5], Ronald Soong[5], Amy Jenne[5], Bowen Du[6], Fan Hou[3], Huan He[3], Rachel Lundeen[1,2], Alicia Gilbreath[7], Rebecca Sutton[7], Nathaniel L. Scholz[8], Jay W. Davis[9], Michael C. Dodd[3], Andre Simpson[5], Jenifer K. McIntyre[4], Edward P. Kolodziej[1,2,3]*

In U.S. Pacific Northwest coho salmon (*Oncorhynchus kisutch*), stormwater exposure annually causes unexplained acute mortality when adult salmon migrate to urban creeks to reproduce. By investigating this phenomenon, we identified a highly toxic quinone transformation product of *N*-(1,3-dimethylbutyl)-*N*′-phenyl-p-phenylenediamine (6PPD), a globally ubiquitous tire rubber antioxidant. Retrospective analysis of representative roadway runoff and stormwater-affected creeks of the U.S. West Coast indicated widespread occurrence of 6PPD-quinone (<0.3 to 19 micrograms per liter) at toxic concentrations (median lethal concentration of 0.8 ± 0.16 micrograms per liter). These results reveal unanticipated risks of 6PPD antioxidants to an aquatic species and imply toxicological relevance for dissipated tire rubber residues.

Humans discharge tens of thousands of chemicals and related transformation products to water (*1*), most of which remain unidentified and lack rigorous toxicity information (*2*). Efforts to identify and mitigate high-risk chemical toxicants are typically reactionary, occur long after their use becomes habitual (*3*), and are frequently stymied by mixture complexity. Societal management of inadvertent, yet widespread, chemical pollution is therefore costly, challenging, and often ineffective.

The pervasive biological degradation of contaminated waters near urban areas ("urban stream syndrome") (*4*) is exemplified by an acute mortality phenomenon that has affected Pacific Northwest coho salmon (*Oncorhynchus kisutch*) for decades (*5*–*9*). "Urban runoff mortality syndrome" (URMS) occurs annually among adult coho salmon returning to spawn in freshwaters where concurrent stormwater exposure causes rapid mortality. In the most urbanized watersheds with extensive impervious surfaces, 40 to 90% of returning salmon may die before spawning (*9*). This mortality threatens salmonid species conservation across ~40% of the Puget Sound land area despite costly societal investments in physical habitat restoration that may have inadvertently created ecological traps through episodic toxic water pollution (*9*). Although URMS has been linked to degraded water quality, urbanization, and high traffic intensity (*9*), one or more causal toxicants have remained unidentified. Spurred by these compelling observations and mindful of the many other insidious sublethal stormwater impacts, we have worked to characterize URMS water quality (*10*, *11*).

Previously, we reported that URMS-associated waters had similar chemical compositions relative to roadway runoff and tire tread wear particle (TWP) leachates, providing an opening clue in our toxicant search (*10*). In this work, we applied hybrid toxicity identification evaluation and effect-directed analysis to screen TWP leachate for its potential to induce mortality (a phenotypic anchor) in juvenile coho salmon as an experimental proxy for adult coho (*6*). Using structural identification by means of ultrahigh-performance liquid chromatography–high-resolution tandem mass spectrometry (UPLC-HRMS/MS) and nuclear magnetic resonance (NMR), we discovered that an antioxidant-derived chemical was the primary causal toxicant. Retrospective analysis of runoff and receiving waters indicated that detected environmental concentrations of this toxicant often exceeded acute mortality thresholds for coho during URMS events in the field and across the U.S. West Coast.

Aqueous TWP leachate stock (1000 mg/liter) was generated from an equal-weight mix of tread particles (0.2 ± 0.3 mm^2 average surface area) (fig. S1) from nine used and new tires (table S1). TWP leachate (250 mg/liter positive controls) was acutely and rapidly (~2 to 6 hours) lethal to juvenile coho (24 hours exposures, 98.5% mortality, n = 135 fish from 27 exposures) (data file S1), even after heating (80°C, 72 hours; 100% mortality, n = 10 fish from two exposures), indicating stability during handling. Behavioral symptomology (circling, surface gaping, and equilibrium loss) (fig. S2 and movie S1) of TWP leachate exposures mirrored laboratory and field observations of symptomatic coho (*5*, *6*). No mortality occurred in negative controls, including solvent- and process-matched method blanks subjected to identical separations (0 of 80 fish, 16 exposures) or exposure water blanks (0 of 45 fish, nine exposures).

Mixture complexity [measured here as number of UPLC-HRMS electrospray ionization (ESI+) chemical features] was a substantial barrier to causal toxicant identification because 250 mg/liter TWP leachate typically contained more than 2000 ESI+ detections. Our fractionation studies, optimized over 2-plus years through iterative exploration of toxicant chemical properties, focused on reducing these detection numbers to attain a simple, yet toxic, fraction amenable to individual compound identifications. Throughout this fractionation procedure, observed toxicity remained confined to one narrow fraction, which is consistent with a single compound or a small, structurally related family of causal toxicants. In initial studies, TWP leachate toxicity was unaffected by silica sand filtration, cation and anion exchange, and ethylenediaminetetraacetic acid (EDTA) (114 μM) addition (*12*), indicating that toxicant(s) were not particle-associated, strongly ionic, or metals, respectively, and validating prior studies that eliminated candidate pollutants (*13*, *14*) as primary causal toxicants.

Mixture complexity was reduced by using cation exchange, two polarity-based separations (XAD-2 resin and silica gel), and reverse-phase high-performance liquid chromatography (HPLC) on a semipreparative C18 column (250 by 4.2 mm ID, 5 μm particle size). After C18-HPLC generated 10 fractions, only C18-F6 (10 to 11 min) was toxic; it contained ~225 ESI+ and ~70 ESI– features (Fig. 1). Having removed ~90% of features, we began to prioritize and identify candidate toxicants by abundance (peak area), followed by fish exposures with commercial standards at fivefold higher concentrations (mixtures at 1 to 25 μg/liter) than those estimated in C18-F6. We identified 11 plasticizers, antioxidants, emulsifiers, and various transformation products, including some well-known environmental contaminants [such as tris(2-butoxyethyl) phosphate] and some that are rarely reported [such as di(propylene glycol) dibenzoate and 2-(1-phenylethyl)phenol] (table S2). We also detected several bioactive, structurally related phenolic antioxidants and their transformation products (2,6-di-*t*-

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butyl-4-hydroxy-4-methyl-2,5-cyclohexadienone, 3,5-di-*t*-butyl-4-hydroxybenzaldehyde, and 7,9-di-*tert*-butyl-1-oxaspiro[4,5]deca-6,9-diene-2,8-dione) (*15*). However, over many rounds of identification and subsequent exposure to juvenile coho, none of these identified chemical exposures reproduced URMS symptoms or induced mortality. Because these identifications used exhaustive environmental scientific literature searches (*10*, *16*, *17*), we suspected a previously unreported toxicant.

To sharpen our search, we used multidimensional semipreparative HPLC using two additional structurally distinct column phases [pentafluorophenyl (PFP) and phenyl]. Parallel fractionations (same column dimensions, mobile phase, and gradient as for C18-HPLC) (*18*) of the toxic silica gel fraction generated toxic fractions of PFP-F6 (10 to 11 min; ~204 ESI+, 60 ESI– features) and phenyl-F4 (8 to 9 min; ~237 ESI+, 75 ESI– features); all other fractions were nontoxic. Across these separations (C18, PFP, phenyl), only four ESI+ and three ESI– HRMS features co-occurred in all three toxic fractions (fig. S3). Of these, one unknown compound [mass/charge ratio (*m*/*z*) 299.1752, $C_{18}H_{22}N_2O_2$, RT 11.0 min on analytical UPLC-HRMS] dominated the detected peak area (10-fold higher intensity in both ESI+ and ESI–). To further resolve candidate toxicants for synthetic efforts, we converted the three-dimensional chromatography workflow from parallel to serial through sequential C18, PFP, and phenyl columns (C18-F6 to PFP-F6 to phenyl-F4; with solvent removal by means of centrifugal evaporation and toxicity confirmation between separations). The purified final fraction was chemically simple (four ESI+, three ESI– detections), highly lethal (100% mortality in 4 hours; n = 15 coho, three exposures), and was again dominated by $C_{18}H_{22}N_2O_2$. Drying this fraction yielded a pink-magenta precipitate (Fig. 1).

Published characterizations of crumb rubber (*16*) and receiving waters (*10*, *17*) did not mention $C_{18}H_{22}N_2O_2$. UPLC-HRMS/MS spectra indicated C_4H_{10} and C_6H_{12} alkyl losses (M-58 and M-84 fragments) (Fig. 2B), but MS^3 and MS^4 fragmentation yielded no additional structural insights (fig. S4). Additionally, in silico fragmentation (MetFrag, CSI:FingerID) of $C_{18}H_{22}N_2O_2$ compounds in PubChem and ChemSpider (15,624 and 17,105 structures, respectively) failed to match observed fragments. Thus, to the best of our knowledge, $C_{18}H_{22}N_2O_2$ was not described in environmental literature or databases and posed a "true unknown" identification problem (*19*). We then assumed a transformation product; industrial manufacturing (such as high heat or pressure, or catalysis) and diverse reactions in environmental systems generate many undocumented transformation products, most of which lack commercial standards.

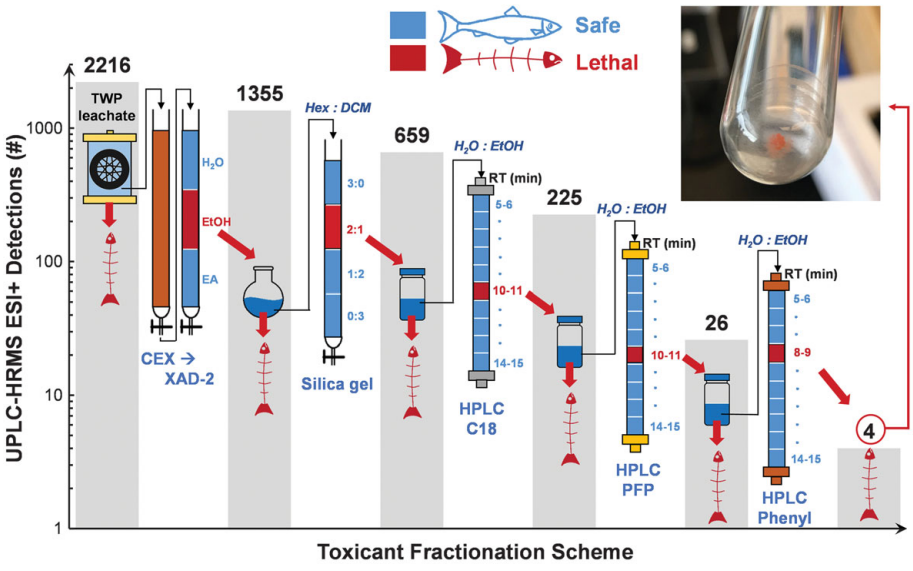

Fig. 1. Tire rubber leachate fractionation scheme. As a metric of mixture complexity and separation efficiency, the numbers above gray bars represent distinct chemical features detected in solid-phase extracted fish exposure water (1 liter) and subsequent fractions by means of UPLC-HRMS. Blue indicates nonlethal fractions; red indicates lethal fractions. All fractionation steps and exposures were replicated at least twice; positive and negative controls were included throughout fractionations. (**Inset**) Purified product (~700 μg from 30 liter of TWP leachate) in the final lethal fraction. TWP, tire tread wear particles; CEX, cation exchange; EA, ethyl acetate; EtOH, ethanol; H_2O, water; Hex, hexane; DCM, dichloromethane; RT, retention time.

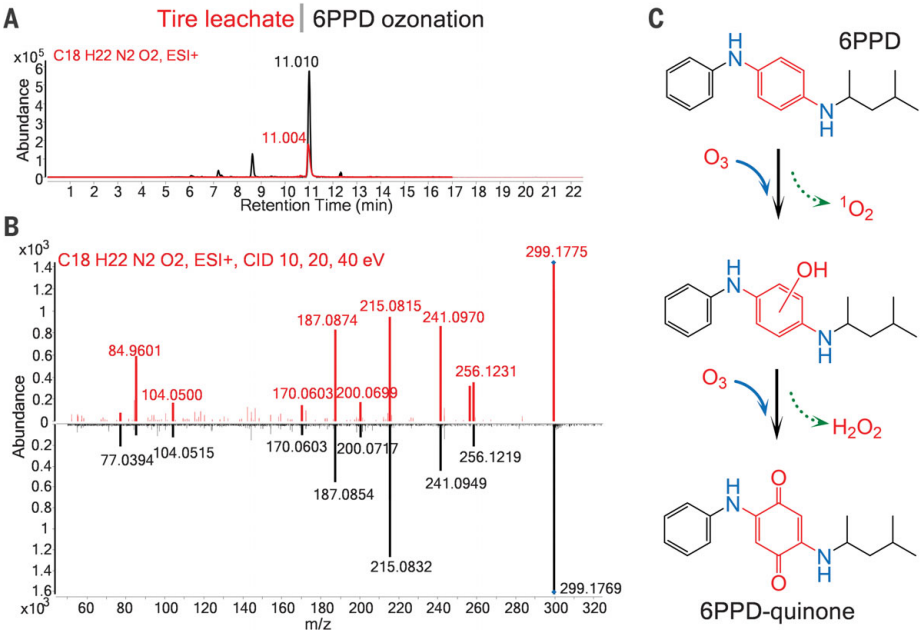

Fig. 2. 6PPD-quinone identification and a proposed formation pathway. (**A**) Extracted ion chromatograms of 6PPD-quinone from UPLC-HRMS (ESI+); red data indicate the final fraction from TWP leachate, and black data indicate the purified 6PPD ozonation mixture. (**B**) Observed MS/MS fragmentation (integrated from 10, 20, and 40 eV) of 6PPD-quinone in the final toxic fraction from TWP leachate (red spectra) and 6PPD ozonation (black spectra). (**C**) One proposed reaction pathway from 6PPD to 6PPD-quinone (alternate proposed formation pathways are provided in fig. S13). Red highlights indicate key changes in the diphenylamine structure during ozonation.

Erratum 18 February 2022. See last page.

Our breakthrough came by assuming that abiotic environmental transformations commonly modify active functional groups by preferentially altering the numbers of hydrogen and oxygen atoms relative to carbon and nitrogen. By searching a recent U.S. Environmental Protection Agency (EPA) crumb rubber report (*16*) for related formulas ($C_{18}H_{0-x}N_{2-4}O_{0-y}$), several characteristics of the $C_{18}H_{24}N_2$ anti-ozonant "6PPD" [*N*-(1,3-dimethylbutyl)-*N*′-phenyl-p-phenylenediamine] matched necessary attributes. First, 6PPD is globally ubiquitous (0.4 to 2% by mass) in passenger and commercial vehicle tire formulations (*20*), indicating sufficient production to explain mortality observations within large and geographically distinct receiving water volumes. 6PPD was present in TWP leachate but was completely removed during fractionation through cation exchange. 6PPD crystals are purple, similar to the pink-magenta precipitate obtained after fractionation. Most compellingly, neutral losses in 6PPD gas chromatography (GC)–MS spectra matched the $C_{18}H_{22}N_2O_2$ GC-HRMS spectra (fig. S5), and the predicted logK_{ow} of 6PPD (5.6) (K_{ow}, *n*-octanol-water partition coefficient) was close to that for $C_{18}H_{22}N_2O_2$ (5 to 5.5) (*11*). Last, literature detailing the industrial chemistry of 6PPD reactions with ozone [7 days, 500 parts per billion volume (ppbv)] described a $C_{18}H_{22}N_2O_2$ product (*21*), leading us to hypothesize that 6PPD was the likely protoxicant (Fig. 2C).

We tested this hypothesis with gas-phase ozonation (500 ppbv O_3) of industrial grade 6PPD (96% purity) (*21*). A $C_{18}H_{22}N_2O_2$ product formed; UPLC-HRMS analysis demonstrated exact matches of retention time (11.0 min) and MS/MS spectra between this synthetic $C_{18}H_{22}N_2O_2$ and the TWP leachate fractionation-derived $C_{18}H_{22}N_2O_2$ (Fig. 2, A and B). When purified, the ozone-synthesized $C_{18}H_{22}N_2O_2$ formed a reddish-purple precipitate. One-dimensional ^{1}H NMR structural analysis confirmed identical TWP leachate–derived and ozone-synthesized $C_{18}H_{22}N_2O_2$ structures (figs. S6 to S7). Two-dimensional NMR spectra and related simulations revealed isolated tertiary carbons and carbonyl groups (figs. S8 to S12), clearly indicating a quinone structure for $C_{18}H_{22}N_2O_2$ rather than the dinitrone structure reported in the past 40 years of literature describing 6PPD ozonation products (*21*). Therefore, the $C_{18}H_{22}N_2O_2$ candidate toxicant was unequivocally "6PPD-quinone" {2-anilino-5-[(4-methylpentan-2-yl)amino]cyclohexa-2,5-diene-1,4-dione}. Consistent with environmental 6PPD ozonation, reported 6PPD ozonation products $C_{18}H_{22}N_2O$ (formula-matched) and 4-nitrosodiphenylamine ($C_{12}H_{10}N_2O$, standard-confirmed) (*21*) also were detected in ozonation mixtures and nontoxic TWP leachate fractions.

Exposures to ozone-synthesized and tire leachate–derived 6PPD-quinone (~20 μg/liter nominal concentrations) both induced rapid (<5 hours, with initial symptoms evident within 90 min) mortality (n = 15 fish, three exposures) (fig. S2 and movie S2), which matched the 2 to 6 hours mortality observed for positive controls. Behavioral symptomology in response to synthetic 6PPD-quinone exposures matched that from field observations, roadway runoff, bulk TWP leachate, and final toxic TWP fraction exposures, confirming the phenotypic anchor (*5*–*9*). Using synthetic 6PPD-quinone (purity ~98%), we performed controlled dosing experiments (10 concentrations, n = 160 fish in two independent exposures). 6PPD-quinone was highly toxic [median lethal concentration (LC_{50}) 0.79 ± 0.16 μg/liter] to juvenile coho salmon (Fig. 3B). Estimates of LC_{50} through controlled exposures closely matched estimates derived from bulk roadway runoff and TWP leachate exposures (LC_{50} 0.82 ± 0.27 μg/liter), indicating the primary contribution of 6PPD-quinone to observed mixture toxicity (Fig. 3A). Direct comparisons with 6PPD were performed (LC_{50} 250 ± 60 μg/liter through nominal concentrations) (fig. S14), but confident assessment of 6PPD toxicity was precluded by its poor solubility, high instability, and formation of products during exposure.

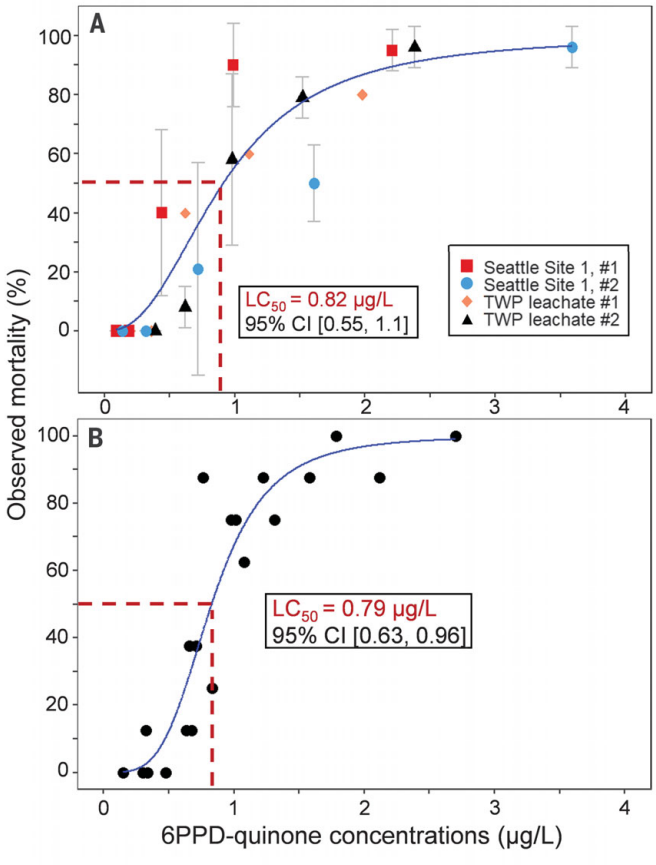

Fig. 3. Dose-response curves. (**A**) Dose-response curve for 24-hour juvenile coho exposures to roadway runoff and TWP leachate (n = 365 fish). Error bars represent three replicates of eight fish (except TWP leachate 2, n = 5 fish; Seattle site 1, duplicate of n = 10 fish). 6PPD-quinone concentrations were from retrospective quantification. (**B**) Dose-response curves for 24-hour juvenile coho exposures to ozone-synthesized 6PPD-quinone (10 concentrations, two replicates, n = 160 fish). Curves were fitted to a four-parameter logistic model. CI, confidence interval.

To assess environmental relevance, we used UPLC-HRMS to retrospectively quantify 6PPD-quinone in archived extracts from roadway runoff and receiving water sampling (fig. S15 and table S4) (*10*). In Seattle-region roadway runoff (n = 16 of 16 samples), 0.8 to 19 μg/liter 6PPD-quinone was detected (Fig. 4A). During seven storm events in three Seattle-region watersheds highly affected by URMS, 6PPD-quinone occurred at <0.3 to 3.2 μg/liter (n = 6 of 7 discrete storm events; n = 6 of 21 samples when including samples collected across the full hydrograph). These samples included three storms with documented URMS mortality in adult coho salmon; 6PPD-quinone was not detected in pre- and poststorm samples, but concentrations were near or above LC_{50} values during storms. We also detected 6PPD-quinone in Los Angeles region roadway runoff (n = 2 of 2 samples, 4.1 to 6.1 μg/liter) and San Francisco region creeks affected by urban runoff (n = 4 of 10 samples, 1.0 to 3.5 μg/liter).

These data implicate 6PPD-quinone as the primary causal toxicant for decades of stormwater-linked coho salmon acute mortality observations. Although minor contributions from other constituents in these complex mixtures are possible, 6PPD-quinone was both necessary (consistently present in and absent from toxic and nontoxic fractions, respectively) and, when purified or synthesized as a pure chemical exposure, sufficient to produce URMS at environmental concentrations. Over the product

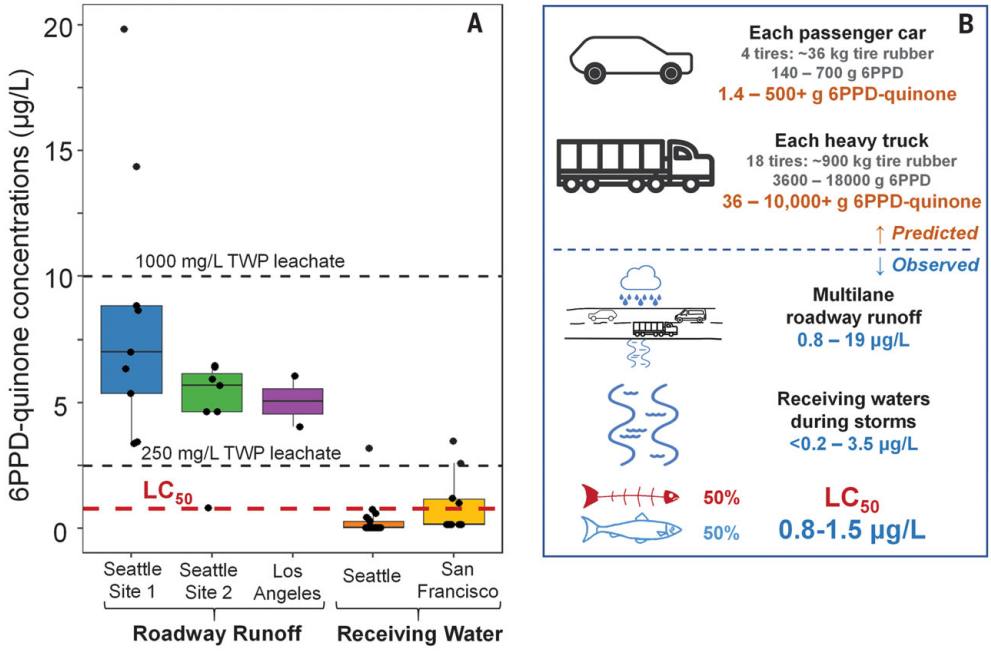

Fig. 4. Environmental relevance of 6PPD-quinone. (**A**) Using retrospective UPLC-HRMS analysis of archived sample extracts, 6PPD-quinone was quantified in roadway runoff and runoff-affected receiving waters. Each symbol corresponds to duplicate or triplicate samples, and boxes indicate first and third quartiles. For comparison, the 0.8 µg/liter LC_{50} value for juvenile coho salmon and detected 6PPD-quinone levels in 250 and 1000 mg/liter TWP leachate are included. (**B**) Predicted ranges of potential 6PPD-quinone mass formation in passenger cars (for example, four tires, ~36 kg tire rubber mass) and heavy trucks (for example, 18 tires, ~900 kg of tire rubber) (represented in orange) and measured 6PPD-quinone concentrations in affected environmental compartments (represented in blue, with experimental data italicized). Predicted ranges reflect calculations applying 0.4 to 2% 6PPD per total vehicle tire rubber mass followed by various yield scenarios (1 to 75% ultimate yields) for 6PPD reaction with ground-level ozone to form 6PPD-quinone.

life cycle, antioxidants [such as PPDs, TMQs (2,2,4-trimethyl-1,2-dihydroquinoline), and phenolics] are designed to diffuse to tire rubber surfaces, rapidly scavenge ground-level atmospheric ozone and other reactive oxidant species, and form protective films to prevent ozone-mediated oxidation of structurally important rubber elastomers (*21*, *22*). Accordingly, all 6PPD added to tire rubbers is designed to react, intentionally forming 6PPD-quinone and related transformation products that are subsequently transported through the environment. This anti-ozonant application of 6PPD inadvertently, yet drastically, increases roadway runoff toxicity and environmental risk by forming the more toxic and mobile 6PPD-quinone transformation product. On the basis of the ubiquitous use and substantial mass fraction (0.4 to 2%) of 6PPD in tire rubbers and the representative detections across the U.S. West Coast (table S4), which include many detections near or above LC_{50} values, we believe that 6PPD-quinone may be present broadly in peri-urban stormwater and roadway run-off at toxicologically relevant concentrations for sensitive species, such as coho salmon.

Globally, ~3.1 billion tires are produced annually for our more than 1.4 billion vehicles, resulting in an average 0.81 kg per capita annual emission of tire rubber particles (*23*). TWPs are one of the most substantial microplastics sources to freshwaters (*24*); 2 to 45% of total tire particle loads enter receiving waters (*25*, *26*), and freshwater sediment contains up to 5800 mg/kg TWP (*23*, *24*, *27*). Supporting recent concerns about microplastics (*24*, *28*), 6PPD-quinone provides a compelling mechanistic link between environmental microplastic pollution and associated chemical toxicity risk. Although numerous uncertainties exist regarding the occurrence, fate, and transport of 6PPD-quinone, these data indicate that aqueous and sediment environmental TWP residues can be toxicologically relevant and that existing TWP loading, leaching, and toxicity assessments in environmental systems are clearly incomplete (*25*). Tire rubber disposal also represents a major global materials problem and potential potent source of 6PPD-quinone and other tire-derived transformation products. In particular, scrap tires repurposed as crumb rubber in artificial turf fields (17) suggest both human and ecological exposures to these chemicals. Accordingly, the human health effects of such exposures merit evaluation.

Environmental discharge of 6PPD-quinone is particularly relevant for the many receiving waters proximate to busy roadways (Fig. 4B). It is unlikely that coho salmon are uniquely sensitive, and the toxicology of 6PPD transformation products in other aquatic species should be assessed. For example, used tires were more toxic to rainbow trout (75% lower 96 hours LC_{50}) relative to new tires (*29*), an observation that is consistent with adverse outcomes mediated by transformation products. If management of 6PPD-quinone discharges is needed to protect coho salmon or other aquatic organisms, adaptive regulatory and treatment strategies (*17*, *30*, *31*) along with source control and "green chemistry" substitutions [identifying demonstrably nontoxic and environmentally benign replacement antioxidants (*22*, *32*)] can be considered. More broadly, we recommend more careful toxicological assessment for transformation products of all high-production-volume commercial chemicals subject to pervasive environmental discharge.

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SUPPLEMENTARY MATERIALS

science.sciencemag.org/content/371/6525/185/suppl/DC1
Materials and Methods
Supplementary Text
Figs. S1 to S15
Tables S1 to S5
References (*33*–*47*)
Movies S1 and S2
Data File S1

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Post date 18 February 2022

Erratum

Erratum for the Report "A ubiquitous tire rubber–derived chemical induces acute mortality in coho salmon," by Z. Tian, H. Zhao, K T. Peter, M. Gonzalez, J. Wetzel, C. Wu, X. Hu, J. Prat, E. Mudrock, R. Hettinger, A. E. Cortina, R. G. Biswas, F. V. C. Kock, R. Soong, A. Jenne, B. Du, F. Hou, H. He, R. Lundeen, A. Gilbreath, R. Sutton, N. L. Scholz, J. W. Davis, M. C. Dodd, A. Simpson, J. K. Mcintyre, E. P. Kolodziej

After publication of the Report "A ubiquitous tire rubber–derived chemical induces acute mortality in coho salmon," which revealed 6PPD-quinone to be the primary causal toxicant toward coho salmon, a commercial standard of this molecule became available, and the authors developed and published an isotopic analytical method for more accurate quantification of extracts, environmental samples, and fish exposures (*1*). The authors found a ~15-fold increase in peak areas using the commercial standard, indicating that the previous standards overestimated both the reported median lethal concentration (LC_{50}) and the environmental concentrations of 6PPD-quinone in the study by a factor of 8.3. Using new exposures with the commercial standard and the isotopic method for quantification, LC_{50} values to juvenile coho salmon were subsequently revised to a lower value of 95 ng/L. Although the absolute concentrations in Figs. 3 and 4 of the Report shift lower when using the updated calibration, the relative relationship between environmental concentrations and LC_{50} presented in Fig. 4A are not changed, and the conclusions and implications of the paper are otherwise not affected.

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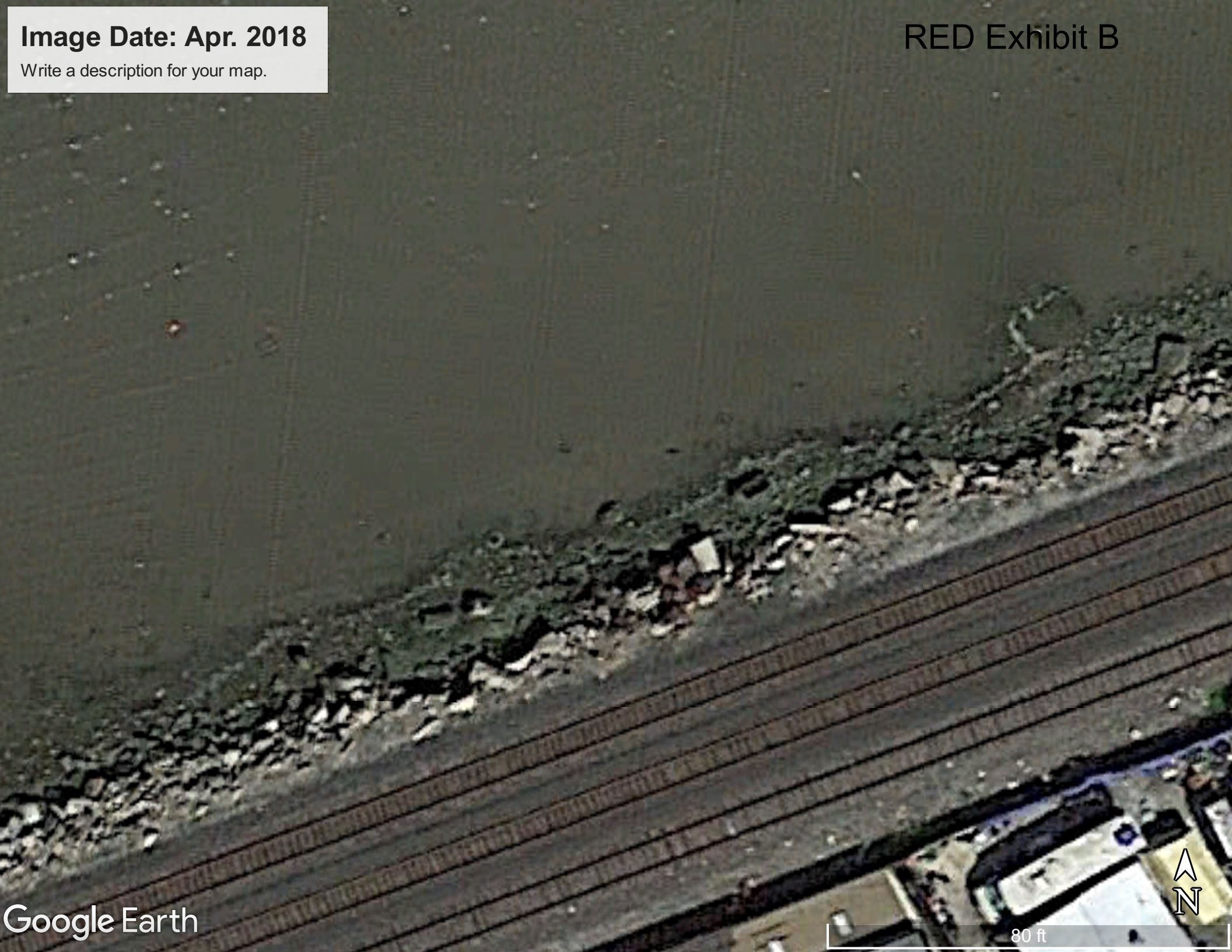
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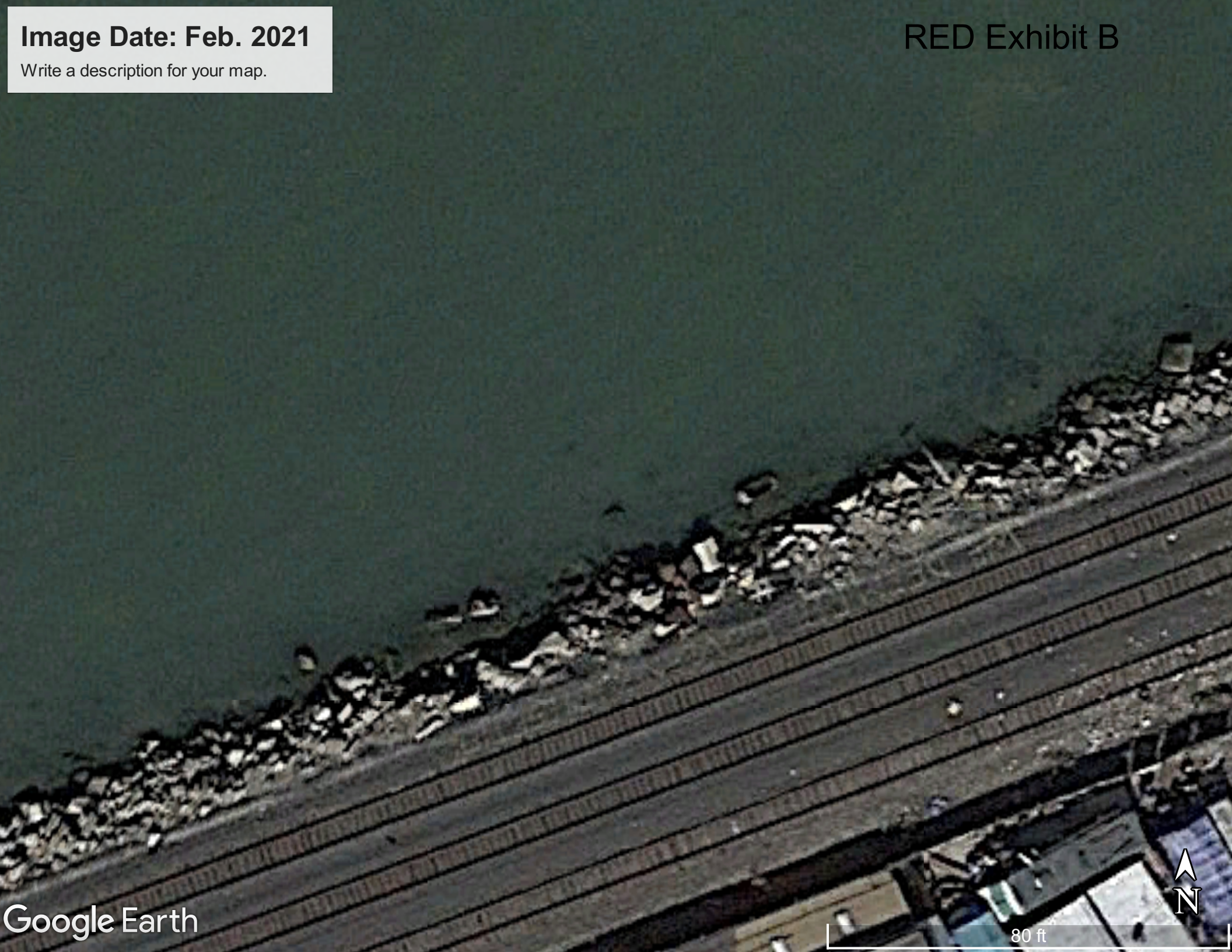
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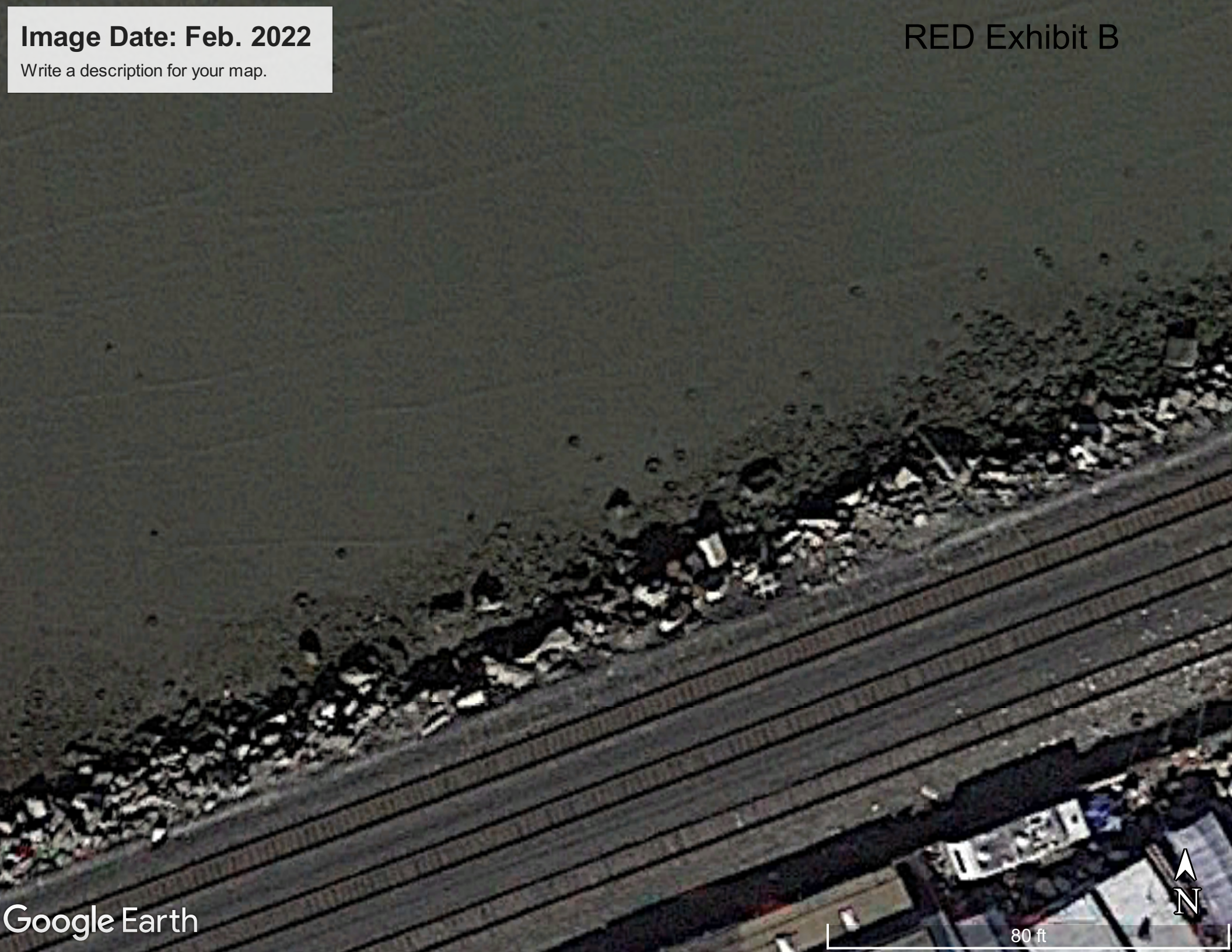
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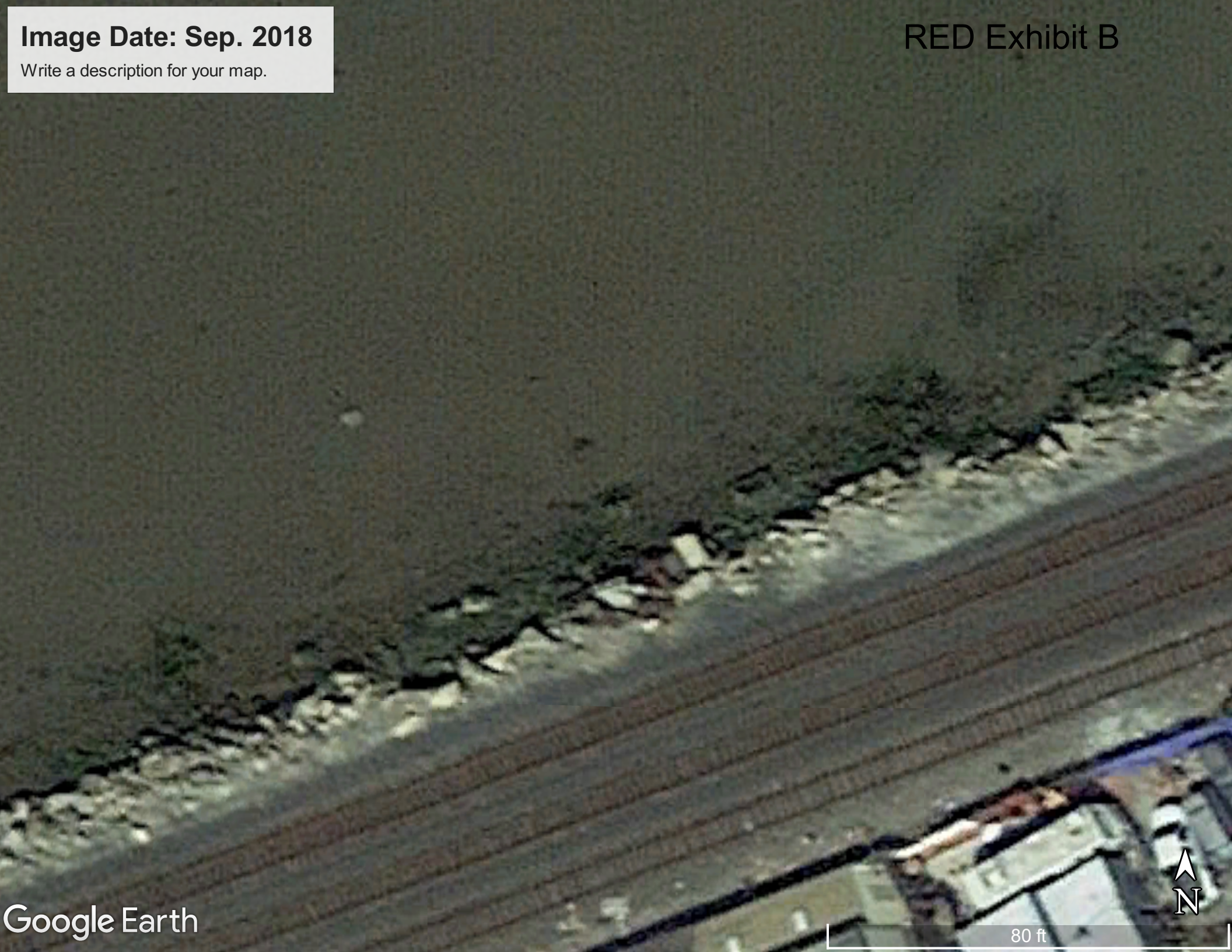
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