

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION**

In the Matter of:

ORDER R3-2021-0104

**CITY OF GREENFIELD
WASTEWATER TREATMENT PLANT
MONTEREY COUNTY**

**SETTLEMENT AGREEMENT AND
STIPULATION FOR ENTRY OF
ADMINISTRATIVE CIVIL LIABILITY
ORDER**

SECTION I: INTRODUCTION

1. This Settlement Agreement and Stipulation for Entry of Administrative Civil Liability Order (Stipulated Order or Order) is entered into by and between the California Regional Water Quality Control Board, Central Coast Region (Central Coast Water Board), Prosecution Team (Prosecution Team), and the City of Greenfield (Discharger)(collectively known as the Parties) and is presented to the Central Coast Water Board, or its delegee, for adoption as an order by settlement, pursuant to California Water Code section 13323 and Government Code section 11415.60.

SECTION II: RECITALS

1. The Central Coast Water Board regulates the City of Greenfield Wastewater Treatment Plant (WWTP) via *Waste Discharge Requirements Order No. R3-2002-0062 for City of Greenfield Wastewater Treatment Plant* (WDR Order) as issued on May 31, 2002.
2. WDR Order Prohibition A.1. states, "Discharge of treated wastewater to areas other than disposal areas shown in Attachment "B" [of the WDR Order] is prohibited."
3. Attachment "B" of the WDR Order indicates that all authorized disposal areas are on the southwestern side of the levee.
4. On May 8, 2018, the Discharger discharged approximately 3,000,000 gallons of municipal wastewater treated to an advanced primary effluent level due to an overflow from its WWTP disposal area to the floodplain and buffer area adjacent to the Salinas River before reaching groundwaters of the state.
5. The overflow breached the levee that separates the disposal area from the western bank of the Salinas River's floodplain and buffer area and flowed to dry areas of the floodplain and buffer area.
6. The Discharger reported that the overflow's extent ended approximately 1,300 feet beyond the boundary of the WWTP and approximately 575 feet from the

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flowing section of the river and percolated into the soil by the end of the morning on May 8, 2018.

7. In the Discharger's first quarter of 2018 self-monitoring report, the Discharger reported that the depth to groundwater, measured on March 12, 2018, in the Discharger's WWTP onsite wells ranged from 18 to 23 feet. According to the City's June 29, 2018 Effluent Disposal Study and Compliance Work Plan, the estimated percolation rate at the WWTP is one to two feet per day, meaning it would take 9 to 18 days to reach groundwater at 18 feet below ground surface. Since the overflow occurred closer to the Salinas River, where the depth to first encountered groundwater is shallower, the time for the pollutants in the overflow to reach groundwater was less than 9 to 18 days.
8. The Discharger's overflow of treated wastewater discharged to unauthorized areas on the eastern side of the levee. The Discharger is alleged to have violated WDR Order Prohibition A.1. by discharging advanced primary-treated municipal wastewater to areas other than those designated in Attachment "B" of the WDR Order.
9. The Prosecution Team alleges that in May 2018, the Discharger violated Water Code section 13350, subdivision (a) by discharging approximately 3,000,000 gallons of municipal wastewater treated to an advanced primary-treated effluent level to groundwater in violation of the WDR Order.
10. Pursuant to Water Code section 13350, subdivision (a), a discharger that, in violation of waste discharge requirements, discharges waste or causes or permits waste to be deposited where it is discharged into waters of the state is subject to administrative civil liability pursuant to Water Code section 13350, subdivision (e), in an amount not to exceed either \$5,000 per day of violation or \$10 per gallon of waste discharged.
11. The Parties have engaged in confidential settlement negotiations and agree to settle the alleged violation without administrative or civil litigation and to present this Stipulated Order to the Central Coast Water Board, or its delegee, for adoption as an Order by settlement, pursuant to Water Code section 13323 and Government Code section 11415.60.
12. To resolve the alleged violation listed in Section II, paragraph 9, by consent, the Parties have agreed to the imposition of an administrative civil liability of one hundred seventy-two thousand one hundred and fifteen dollars (\$172,115) against the Discharger. The administrative civil liability amount is the liability amount the Prosecution Team calculated using Steps 1 through 10 of the State Water Resources Control Board's (State Water Board) 2017 Water Quality Enforcement Policy Penalty Calculation Methodology, as shown in Attachment A, incorporated herein by reference. The Discharger was offered the option of putting a portion of the administrative civil liability towards a Supplemental

Environmental Project and/or Enhanced Compliance Action, but ultimately decided to pay the administrative civil liability in full to the Waste Discharge Permit Fund.

13. The Prosecution Team has determined that the resolution of the alleged violation is fair and reasonable and fulfills all of its enforcement objectives, that no further action is warranted concerning the violation except as provided in this Stipulated Order, and that this Stipulated Order is in the public's best interest.

SECTION III: STIPULATIONS

The Parties incorporate the foregoing Recitals and stipulate to the following:

1. **Jurisdiction:** The Parties agree that the Central Coast Water Board has subject matter jurisdiction over the matters alleged in this action and personal jurisdiction of the Parties to this Stipulation.
2. **Administrative Civil Liability:** The Discharger hereby agrees to the imposition of an administrative civil liability in the amount of **one hundred seventy-two thousand one hundred and fifteen dollars (\$172,115)** by the Central Coast Water Board to resolve the violation specifically alleged herein. No later than 30 days after the Central Coast Water Board, or its delegee, signs this Order, the Discharger shall submit a check for **one hundred seventy-two thousand one hundred and fifteen dollars (\$172,115)** made payable to the "Waste Discharge Permit Fund," reference Order number R3-2021-0104, and mail it to:

State Water Resources Control Board Accounting Office
Attn: ACL Payment
P.O. Box 1888
Sacramento, CA 95812-1888

The Discharger shall provide a copy of the check via email to the State Water Board, Office of Enforcement (Kailyn.Ellison@waterboards.ca.gov) and the Central Coast Water Board (Thea.Tryon@waterboards.ca.gov).

3. **Compliance with Applicable Laws and Regulatory Changes:** The Discharger understands that payment of an administrative civil liability in accordance with the terms of this Stipulated Order and/or compliance with the terms of this Stipulated Order is not a substitute for compliance with applicable laws, and that additional violations of the type alleged may subject it to further enforcement, including additional administrative civil liabilities. Nothing in this Stipulated Order shall excuse the Discharger from meeting any more stringent requirements which may be imposed hereafter by changes in applicable and legally binding legislation or regulations.

4. **Party Contacts for Communications Related to Stipulated Order:**

For the Central Coast Water Board:

Thea Tryon
Assistant Executive Officer
Central Coast Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401
Thea.Tryon@waterboards.ca.gov
(805) 542-4776

For the Discharger:

Paul Wood
City Manager
P.O. Box 127
Greenfield, CA 93927
(831) 674-5591

5. **Attorneys' Fees and Costs:** Except as otherwise provided herein, each Party shall bear all attorneys' fees and costs arising from the Party's own counsel in connection with the matters set forth herein.
6. **Matters Addressed by This Stipulated Order:** Upon the Central Coast Water Board's or its delegee's adoption, this Stipulated Order represents a final and binding resolution and settlement of the violation alleged above and in Attachment A, as of the effective date of this Stipulated Order. The provisions of this paragraph are expressly conditioned on the full payment of the administrative civil liability by the deadline specified in section III, paragraph 2.
7. **Public Notice:** The Discharger understands that this Stipulated Order will be noticed for a 30-day public review and comment period prior to consideration by the Central Coast Water Board, or its delegee. If significant new information is received that reasonably affects the propriety of presenting this Stipulated Order to the Central Coast Water Board, or its delegee, for adoption, the Assistant Executive Officer may unilaterally declare this Stipulated Order void and decide not to present it to the Central Coast Water Board, or its delegee. The Discharger agrees that it may not rescind or otherwise withdraw its approval of this proposed Stipulated Order.
8. **Addressing Objections Raised During Public Comment Period:** The Parties agree that the procedure contemplated for the Central Coast Water Board's or its delegee's adoption of the Stipulated Order, and public review of this Stipulated Order is lawful and adequate. The Parties understand that the Central Coast Water Board, or its delegee, have the authority to require a public hearing

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on this Stipulated Order. In the event procedural objections are raised or the Central Coast Water Board requires a public hearing prior to the Stipulated Order becoming effective, the Parties agree to meet and confer concerning any such objections, and may agree to revise or adjust the procedure and/or this Stipulated Order as necessary or advisable under the circumstances.

9. **No Waiver of Right to Enforce:** The failure of the Prosecution Team or Central Coast Water Board to enforce any provision of this Stipulated Order shall in no way be deemed a waiver of such provision, or in any way affect the validity of this Stipulated Order. The failure of the Prosecution Team or Central Coast Water Board to enforce any such provision shall not preclude it from later enforcing the same or any other provision of this Stipulated Order. No oral advice, guidance, suggestions, or comments by employees or officials of any Party regarding matters covered under this Stipulated Order shall be construed to relieve any Party regarding matters covered in this Stipulated Order. The Central Coast Water Board reserves all rights to take additional enforcement actions, including without limitation, the issuance of administrative civil liability complaints or orders for violations other than those addressed by this Order.
10. **Effect of Stipulated Order:** Except as expressly provided in this Stipulated Order, nothing in this Stipulated Order is intended nor shall it be construed to preclude the Central Coast Water Board or any state agency, department, board or entity or any local agency from exercising its authority under any law, statute, or regulation.
11. **Interpretation:** This Stipulated Order shall not be construed against the party preparing it but shall be construed as if the Parties jointly prepared it and any uncertainty and ambiguity shall not be interpreted against any one party.
12. **Modification:** This Stipulated Order shall not be modified by any of the Parties by oral representation whether made before or after the execution of this Order. All modifications must be made in writing and approved by the Central Coast Water Board or its delegee.
13. **Integration:** This Stipulated Order constitutes the entire agreement between the Parties and may not be amended or supplemented except as provided for in this Stipulated Order.
14. **If Order Does Not Take Effect:** The Discharger's obligations under this Stipulated Order are contingent upon the entry of the Order of the Central Coast Water Board, or its delegee, as proposed. In the event that this Stipulated Order does not take effect because it is not approved by the Central Coast Water Board, or its delegee, or is vacated in whole or in part by the State Water Board or a court, the Parties acknowledge that the Prosecution Team may proceed to a contested evidentiary hearing before the Central Coast Water Board to determine whether to assess an administrative civil liability for the underlying

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alleged violation, or may continue to pursue settlement. The Parties agree that all oral and written statements and agreements made during the course of settlement discussions will not be admissible as evidence in any subsequent administrative or judicial proceeding or hearing and will be fully protected by California Evidence Code sections 1152 and 1154; California Government Code section 11415.60; Rule 408, Federal Rules of Evidence; and any other applicable privilege under federal and/or state law. The Parties also agree to waive any and all objections related to their efforts to settle this matter, including, but not limited to:

- a. Objections related to prejudice or bias of any of the Central Coast Water Board members or their advisors and any other objections to the extent that they are premised in whole or in part on the fact that the Central Coast Water Board members or their advisors were exposed to some of the material facts and the Parties settlement positions, and therefore may have formed impressions or conclusions, prior to conducting any contested evidentiary hearing in this matter; or
 - b. Laches or delay or other equitable defenses based on the time period that the Order or decision by settlement may be subject to administrative or judicial review.
15. **Waiver of Hearing:** The Discharger has been informed of the rights provided by Water Code section 13323, subdivision (b), and, if the settlement is adopted by the Central Coast Water Board, hereby waives its right to a hearing before the Central Coast Water Board prior to the Stipulated Order's adoption. However, should the settlement not be adopted, and should the matter proceed to the Central Coast Water Board or State Water Board for hearing, the Discharger does not waive the right to a hearing before an order is imposed.
16. **Waiver of Right to Petition:** Except in the instance where the settlement is not adopted by the Central Coast Water Board, the Discharger hereby waives the right to petition the Central Coast Water Board's adoption of the Stipulated Order as written for review by the State Water Board, and further waives the right, if any, to appeal the same to a California Superior Court and/or any California appellate level court.
17. **Covenant Not to Sue:** The Discharger covenants not to sue or pursue any administrative or civil claim(s) against any state agency or the state of California, their officers, board members, employees, representatives, agents, or attorneys arising out of or relating to any matter expressly addressed by this Stipulation and Order.
18. **Authority to Bind:** Each person executing this Stipulated Order in a representative capacity represents and warrants that they are authorized to

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execute this Order on behalf of and to bind the entity on whose behalf the Order is executed.

19. **Necessity for Written Approvals:** All approvals and decisions of the Central Coast Water Board under the terms of this Stipulated Order shall be communicated to the Discharger in writing. No oral advice, guidance, suggestions, or comments by employees or officials of the Central Coast Water Board regarding submissions or notices shall be construed to relieve the Discharger of its obligation to obtain any final written approval required by this Stipulated Order.
20. **No Third-Party Beneficiaries:** This Stipulated Order is not intended to confer any rights or obligation on any third party or parties, and no third party or parties shall have any right of action under this Stipulated Order for any cause whatsoever.
21. **Severability:** This Stipulated Order is severable; should any provision be found invalid, the remainder shall remain in full force and effect.
22. **Effective Date:** This Stipulated Order shall be effective and binding on the Parties upon the date the Central Coast Water Board, or its delegee, enters the Order incorporating the terms of this Stipulated Order.
23. **Counterpart Signatures:** This Order may be executed and delivered in any number of counterparts, each of which when executed and delivered shall be deemed to be an original, but such counterparts shall together constitute one document. Further, this Stipulated Order may be executed by facsimile or electronic signature, and any such facsimile or electronic signature by any Party hereto shall be deemed to be an original signature and shall be binding on such Party to the same extent as if such facsimile or electronic signature were an original signature.

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IT IS SO STIPULATED.

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION, PROSECUTION TEAM**



Digitally signed by Thea S.
Tryon
Date: 2021.10.26 09:49:30
-07'00'

By:

Thea S. Tryon
Assistant Executive Officer
Central Coast Water Board

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IT IS SO STIPULATED.

CITY OF GREENFIELD

Date: 10/22/2021

By: Paul Wood
Paul Wood
City Manager

ORDER OF THE CENTRAL COAST WATER BOARD:

1. This Order fully incorporates the foregoing Sections I through III by this reference as if set forth fully herein.
2. In accepting this Stipulated Order, the Central Coast Water Board has considered, where applicable, each of the factors prescribed in Water Code section 13327 and has applied the Penalty Calculation Methodology set forth in the State Water Board's 2017 Water Quality Enforcement Policy. The Central Coast Water Board's consideration of these factors and application of the Penalty Calculation Methodology is based upon information obtained by the Prosecution Team in investigating the allegations set forth in the Stipulated Order, or otherwise provided to the Central Coast Water Board.
3. This is an action to enforce the laws and regulations administered by the Central Coast Water Board. The Central Coast Water Board finds that issuance of this Stipulated Order is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, section 21000 et seq.) in accordance with section 15321, subdivision (a)(2), title 14, of the California Code of Regulations.
4. The Executive Officer of the Central Coast Water Board is authorized to refer this matter directly to the Attorney General for enforcement if the Discharger fails to perform any of its obligations under this Order.

IT IS HEREBY ORDERED pursuant to Water Code section 13323 and Government Code section 11415.60, on behalf of the California Regional Water Quality Control Board, Central Coast Region.

Matthew T. Keeling
Executive Officer
California Regional Water Quality Control Board
Central Coast Region

Attachment A: Factor Consideration and Penalty Calculation Methodology

Attachment A, Appendix A-1: Summary Tables of City of Greenfield's Wastewater Treatment Plant May 8, 2018 Overflow and Effluent Sampling compared to Water Quality Control Plan for the Central Coast Basin, 2017 Edition (Basin Plan) Water Quality Objectives for Groundwater

ATTACHMENT A

FACTOR CONSIDERATION AND PENALTY CALCULATION METHODOLOGY FOR SETTLEMENT AGREEMENT AND STIPULATION FOR ENTRY OF ADMINISTRATIVE CIVIL LIABILITY ORDER NO. R3-2021-0104

CITY OF GREENFIELD WASTEWATER TREATMENT PLANT MONTEREY COUNTY

This document provides details on the proposed administrative civil liability penalty methodology related to the City of Greenfield's (Discharger) unauthorized discharge of treated effluent to groundwaters of the state in May 2018. The California Regional Water Quality Control Board, Central Coast Region (Central Coast Water Board) Prosecution Team derived the proposed administrative civil liability following the State Water Resources Control Board's (State Water Board) 2017 Water Quality Enforcement Policy (Enforcement Policy).¹ The proposed administrative civil liability takes into account such factors as the Discharger's culpability, cooperation in returning to compliance, ability to pay the proposed liability, and other factors as justice may require.

Application of the State Water Board's Enforcement Policy

On April 4, 2017, the State Water Board adopted Resolution No. 2017-0020 amending the Enforcement Policy. The Office of Administrative Law approved the 2017 Enforcement Policy and it became effective on October 5, 2017. The Enforcement Policy establishes a methodology for assessing administrative civil liability. Use of the methodology addresses the factors in California Water Code (Water Code) sections 13327 and 13385, which require the Central Coast Water Board to consider several factors when determining the amount of civil liability to impose, including "...the nature, circumstance, extent, and gravity of the violation or violations, whether the discharge is susceptible to cleanup or abatement, the degree of toxicity of the discharge, and, with respect to the violator, the ability to pay, the effect on ability to continue its business, any voluntary cleanup efforts undertaken, any prior history of violations, the degree of culpability, economic benefit or savings, if any, resulting from the violation, and other matters that justice may require."

¹ The [State Water Board's Enforcement Policy website](#) includes the 2017 Enforcement Policy and Penalty Methodology Spreadsheet.

The Prosecution Team developed the proposed administrative civil liability based on the procedures included in the Enforcement Policy methodology. The penalty methodology calculation procedural steps are discussed and shown in detail below.

Regulatory Basis of Alleged Violation and Proposed Liability

On May 8, 2018, the Discharger discharged approximately 3,000,000 gallons of municipal wastewater treated to an advanced primary² effluent level due to an overflow from its Wastewater Treatment Plant (WWTP) disposal area to the floodplain and buffer area adjacent to the Salinas River before reaching groundwaters of the state. The overflow breached the levee that separates the disposal area from the western bank of the river's floodplain and buffer area and flowed to dry areas of the floodplain and buffer area. The Discharger reported that the overflow's extent ended approximately 1,300 feet beyond the boundary of the WWTP and approximately 575 feet from the flowing section of the river and percolated into the soil by the end of the morning on May 8, 2018. In the Discharger's first quarter of 2018 self-monitoring report, the Discharger reported that the depth to groundwater, measured on March 12, 2018, in the Discharger's WWTP onsite wells ranged from 18 to 23 feet. According to the City's June 29, 2018 Effluent Disposal Study and Compliance Work Plan, the estimated percolation rate at the WWTP is one to two feet per day, meaning it would take 9 to 18 days to reach groundwater at 18 feet below ground surface. Since the overflow occurred closer to the Salinas River, where the depth to groundwater is shallower, the time for the pollutants in the overflow to reach groundwater was less than 9 to 18 days.

² The Discharger refers to its WWTP as secondary treatment. However, "secondary treatment" has two connotations: 1) the presence of a secondary line of treatment units capable of achieving secondary standards, and 2) the actual production of wastewater that achieves secondary treatment standards. The Discharger's WWTP includes oxidation (a.k.a., stabilization) ponds capable of providing a secondary level of treatment, but does not produce effluent with total suspended solids (TSS) and biochemical oxygen demand (BOD₅) concentrations low enough to be characterized as secondary (i.e., 30 milligrams per liter (mg/L) or less for each pollutant). The wastewater discharged during the May 8, 2018 overflow had a BOD₅ concentration of 96 mg/L and a TSS concentration of 1,900 mg/L (TSS was likely high due to sediment from the breached levee berm, erosion, and concentrated solids from the ponds). Routine sampling from the spray irrigation areas from March 13, 2018 through June 19, 2018 (before and after the overflow) indicated BOD₅ concentrations in the range of 53-120 mg/L and TSS concentrations in the range of 38-250 mg/L. This quality of effluent can at best be referred to as advanced primary treated wastewater.

The Central Coast Water Board regulates the City of Greenfield WWTP via *Waste Discharge Requirements Order No. R3-2002-0062 for City of Greenfield Wastewater Treatment Plant* (WDR Order) as issued on May 31, 2002.

WDR Order Prohibition A.1. states, “Discharge of treated wastewater to areas other than disposal areas shown in Attachment “B” [of the WDR Order] is prohibited.”

Attachment “B” of the WDR Order indicates that all authorized disposal areas are on the southwestern side of the levee. The Discharger’s overflow of treated wastewater discharged to areas on the eastern side of the levee. The Discharger is alleged to have violated WDR Order Prohibition A.1. by discharging advanced primary-treated municipal wastewater to areas other than those designated in Attachment “B” of the WDR Order.

The Prosecution Team alleges that in May 2018, the Discharger violated Water Code section 13350, subdivision (a) by discharging approximately 3,000,000 gallons of municipal wastewater treated to an advanced primary-treated effluent level to groundwater in violation of the WDR Order.

Pursuant to Water Code section 13350, subdivision (a), a discharger that, in violation of waste discharge requirements, discharges waste or causes or permits waste to be deposited where it is discharged into waters of the state is subject to administrative civil liability pursuant to Water Code section 13350, subdivision (e), in an amount not to exceed either \$5,000 per day of violation or \$10 per gallon of waste discharged.

Penalty Calculation Methodology Procedural Steps

Step 1. Actual or Potential for Harm for Discharge Violations

This initial step for discharge violations is used to determine the actual harm or potential harm to the waterbody’s beneficial uses caused by the violation using a three-factor scoring system to quantify: (1) the degree of toxicity of the discharge; (2) the actual harm or potential harm to beneficial uses; and (3) the discharge’s susceptibility to cleanup or abatement.

Factor 1: The Degree of Toxicity of the Discharge

Factor 1 Background: The evaluation of the degree of toxicity considers the physical, chemical, biological, and/or thermal characteristics of the discharge, waste, fill, or material involved in the violation or violations, and the risk of damage the discharge could cause to the receptors or beneficial uses. Evaluation of the discharged material's toxicity should account for all the characteristics of the material *prior to discharge*, including, but not limited to, whether it is partially treated, diluted, concentrated, and/or a mixture of different constituents. Toxicity analysis should include assessment of both lethal and sublethal effects such as effects on growth and reproduction. Note that Factor 2 (*Actual Harm or Potential Harm to Beneficial Uses*, below) is focused on impacts or the threat of impacts to beneficial uses in specific receiving waters; whereas Factor 1 is focused on the nature and characteristics, or toxicity of the material discharged in the context of potential impacts to beneficial uses more generally. The Enforcement Policy specifies assigning a score ranging from 0 to 4 based on whether the risk or threat of the discharged material to potential receptors is negligible (0) to significant (4).

Factor 1 Consideration: Based on the physical, chemical, biological, and thermal characteristics of the discharge, the discharged material's risk or threat to potential receptors is **minor (1)**. "Minor" is assigned when the discharged material poses only minor risk or threat to potential receptor (i.e., the chemical and/or physical characteristics of the discharged material are relatively benign and would not likely cause harm to potential receptors).

Advanced primary-treated municipal wastewater is generally characterized as sewage that has received treatment sufficient to reduce settleable and floatable materials, and some biodegradable organic matter and suspended solids, but not to a quality as high as full secondary treatment. The WDR Order authorizes the Discharger to treat municipal wastewater using screening and comminutors at the headworks, two primary clarifiers, and three oxidation (stabilization) ponds, and to dispose of the treated wastewater using two percolation ponds and spray irrigation areas³.

On March 20, 2018 and March 21, 2018, after receiving a complaint from the public about the Discharger's WWTP, Central Coast Water Board program staff met with the

³ Some references in the case files for this matter refer to these areas as "sprayfields." For consistency within this document, "spray irrigation areas" is used and is synonymous with "sprayfields."

Discharger's staff and their consultant. On March 27, 2018, Central Coast Water Board program staff conducted a facility inspection and observed overfilled treatment and percolation ponds exceeding the freeboard limit and flooded spray irrigation areas. Because these conditions indicated a high potential for treated wastewater to breach the pond, facility perimeter berms, and levee, Central Coast Water Board program staff required the Discharger to sample and analyze its treated effluent. The Discharger conducted the sampling on April 20, 2018, approximately 2.5 weeks before the May 8, 2018 WWTP overflow. The Discharger provided this sampling data in Table 1 of its May 14, 2018 Technical Report. The Discharger also reported that the samples were taken from spray irrigation areas numbers 4 and 5⁴, which the Discharger was flooding and using as disposal ponds. Notably, spray irrigation area number 5 was among the disposal areas that contributed to the overflow. Though not a definitive characterization of the overflow, because these are the results of samples taken nearest to but before the date of the overflow, this data is considered reasonably representative of the treated effluent that discharged during the overflow. The Discharger's sampling data is shown in Appendix A-1, Tables A1-1 – A1-4 of this document.

The effluent sampling results reported by the Discharger for March 13, 2018 (before the overflow), and June 19, 2018 (after the overflow) are also shown in Appendix A-1, Table A1-1 of this document. For most of the pollutants common to those two sampling events and that of April 20, 2018, the March and June results reasonably confirm that the April results are representative of the Discharger's typical treated effluent.

The Central Coast Water Board utilized the Water Quality Control Plan for the Central Coast Basin, 2017 Edition (Basin Plan)⁵, to evaluate this case, because that was the current Basin Plan at the time of the May 8, 2018 overflow. The Basin Plan's primary standard for evaluating the discharge's chemical characteristics and the discharged material's risk or threat to potential receptors is by comparing sampling data to Basin Plan water quality objectives and maximum contaminant levels for drinking water pursuant to California Code of Regulations title 22. The Discharger's April 20, 2018

⁴ The narrative and Table 1 in the Discharger's May 14, 2018 Technical Report indicate the sampling was conducted from spray irrigation areas numbers 4 and 5. However, the title of Table 1 indicates spray irrigation areas numbers 5 and 6. The Prosecution Team assumes the latter is a typographical error. Regardless, spray irrigation area number 5 is common to both references and contributed to the overflow, which makes the sampling results relevant to the overflow.

⁵ Water Quality Control Plan for the Central Coast Basin, 2017 Edition ([Basin Plan](#)).

sampling results indicate an exceedance of the Basin Plan's water quality objective for total nitrogen for the Lower Forebay groundwater basin and no exceedances of applicable maximum contaminant levels for the constituents that were sampled. A summary of the April 20, 2018 sampling results compared to Basin Plan water quality objectives and maximum contaminant levels are shown in Appendix A-1, Tables A1-1, A1-2, and A1-3.

Based on the above sampling results, the Discharger's advanced primary-treated municipal wastewater discharge to groundwater posed a minor risk or threat to potential human receptors because the physical, biological, and/or chemical characteristics of the waste material were relatively benign and would not likely cause harm to potential receptors. There are no known drinking water supply wells in close proximity to the area where the discharge occurred. These considerations warrant a corresponding score of **minor (1)**.

Factor 2: Actual Harm or Potential Harm to Beneficial Uses

Factor 2 Background: The evaluation of the actual harm or the potential harm to beneficial uses factor considers the harm to beneficial uses in the affected receiving waterbody that may result from exposure to the pollutants or contaminants in the discharge, consistent with the statutory factors of the nature, circumstances, extent, and gravity of the violation. The Central Coast Water Board may consider actual harm or potential harm to human health, in addition to harm to beneficial uses. Because actual harm is not always quantifiable due to untimely reporting, inadequate monitoring, and/or other practical limitations, potential harm can be used under this factor.

Actual harm as used in this section means harm that is documented and/or observed. Potential harm should be evaluated in the context of the specific characteristics of the waste discharged and the specific beneficial uses of the impacted waters. The Enforcement Policy specifies a score ranging from 0 to 5 based on a determination of whether direct or indirect harm, or potential for harm, from a violation is negligible (0) to major (5).

Factor 2 Consideration: The actual harm or potential harm to beneficial uses from the discharge is **minor (1)**. "Minor" is assigned when there is no actual harm and low threat of harm to beneficial uses, though characteristics of the discharge and applicable beneficial uses may indicate that there is potential short term impact to beneficial uses with no appreciable harm.

The Basin Plan, Chapter 2, *Present and Potential Beneficial Uses*, section 2.1, lists the beneficial uses of groundwaters throughout the Central Coast Basin. Of the listed

beneficial uses,⁶ those potentially harmed by the discharge are municipal and domestic supply (MUN), agricultural supply (AGR), and industrial process supply (PROC).

The Basin Plan, Chapter 3, *Water Quality Objectives*, establishes numeric and narrative water quality objectives for the protection of beneficial uses of surface and groundwaters⁷. Exceeding those objectives is an indicator of potential harm to beneficial uses. On May 8, 2018, the date of the overflow, the Discharger collected samples of the wastewater being discharged from spray irrigation areas numbers 5 and 6. The laboratory analytical data of the Discharger's May 8, 2018 samples are shown in Appendix A-1, Tables A1-1 through A1-4 of this document, and serve as a basis to characterize the discharge, compare analytical results to applicable water quality objectives, and assess potential and actual harm to beneficial uses.

Basin Plan, Chapter 3, *Water Quality Objectives*, lists objectives applying to specific beneficial uses of groundwater (section 3.3.4.2 Objectives for Specific Beneficial Uses and Tables 3-1 Guidelines for Interpretation of Quality of Water for Irrigation and 3-2 Water Quality Objectives for Agricultural Water Use), and to specific groundwater (section 3.3.5 and Table 3-6). The following discussion identifies the water quality objectives applicable to the groundwater underlying the floodplain and buffer area adjacent to the Salinas River that were exceeded by the unauthorized discharge on May 8, 2018, and the related beneficial uses harmed or potentially harmed as a result. The specific groundwater basin impacted by the unauthorized discharge is the Salinas Valley Lower Forebay. The following sections refer to the various water quality objectives that were exceeded for the various beneficial uses.

MUN Beneficial Use

Basin Plan section 3.3.4.2 establishes inorganic chemical water quality objectives for the protection of the MUN beneficial use. The table below shows the sampling and analysis results for the discharge and the water quality objectives exceeded.

⁶ See the Basin Plan for all listed beneficial uses.

⁷ The primary nature of the alleged violation is the unauthorized discharge to groundwater, so this discussion of harm to beneficial uses maintains that focus even though there is a potential for the pollutants in groundwater to have discharged to surface water due to the proximity of the discharge to surface water and potential interconnectivity between groundwater and surface water.

Table 1: May 8, 2018 Overflow Samples Exceeding Basin Plan Section 3.3.4.2 Water Quality Objectives Relating to the Municipal & Domestic Supply (MUN) Beneficial Use

Sample Constituent	Sampling Result (mg/L)	Basin Plan Water Quality Objectives (Maximum Contaminant Level) (mg/L)
Aluminum	22.4	1.0
Chromium (Total)	0.112	0.05
Nickel	0.152	0.1

The water quality objective exceedances demonstrate the discharge’s potential harm to the MUN beneficial use.

AGR Beneficial Use

Basin Plan section 3.3.4.2 and Basin Plan Table 3-1 establish water quality objectives for the protection of the AGR beneficial use. The table below shows the sampling and analysis results for the discharge and the water quality objectives exceeded.

Table 2: May 8, 2018 Overflow Samples Exceeding Basin Plan Section 3.3.4.2 Table 3-1 Water Quality Objectives Relating to the Agricultural Supply (AGR) Beneficial Use

Sample Constituent	Sampling Result (mg/L)	Basin Plan Characterization of Impact to Beneficial Use
pH	9.7	6.5-8.4
Sodium (specific ion toxicity from <i>root absorption</i>)	180	Severe
Chloride (specific ion toxicity from <i>root absorption</i>)	192	Increasing Problems
Boron (specific ion toxicity from <i>root absorption</i>)	0.5	Increasing Problems
Sodium (specific ion toxicity from <i>foliar absorption</i>)	180	Increasing Problems

Sample Constituent	Sampling Result (mg/L)	Basin Plan Characterization of Impact to Beneficial Use
Chloride (specific ion toxicity from <i>foliar absorption</i>)	192	Increasing Problems

The above water quality objective exceedances demonstrate the discharge’s potential harm to the AGR beneficial use based on impacts characterized as contributing to increasing problems to severe impacts related to absorption by crops.

Basin Plan section 3.3.4.2 and Basin Plan Table 3-2 also establish water quality objectives for the protection of the AGR beneficial use. The table below shows the sampling and analysis results for the discharge and the water quality objectives exceeded.

Table 3: May 8, 2018 Overflow Samples Exceeding Basin Plan Section 3.3.4.2 Table 3-2 Water Quality Objectives Relating to the Agricultural Supply (AGR) Beneficial Use

Sample Constituent	Sampling Result (mg/L)	Basin Plan Maximum Concentration for Irrigation Supply (mg/L)	Basin Plan Maximum Concentration for Livestock Watering (mg/L)
Aluminum	22.4	5.0	5.0
Chromium	0.112	0.10	1.0

The above water quality objective exceedances demonstrate the discharge’s potential harm to the AGR beneficial use.

Salinas Valley Groundwater Basin and Lower Forebay Groundwater Sub-Basin Water Quality Objectives

Basin Plan section 3.3.5 and Basin Plan Table 3-6 establish water quality objectives for specific groundwaters. The May 8, 2018 overflow impacted the section of the Salinas Valley and Lower Forebay groundwater basins. The Basin Plan establishes water quality objectives for total dissolved solids, sodium, chloride, boron, total nitrogen, and sulfate. The table below shows the sampling and analysis results for the discharge and the water quality objectives exceeded.

**Table 4: May 8, 2018 Overflow Samples Exceeding Basin Plan Section 3.3.5
 Table 3-6 Water Quality Objectives Relating to the Salinas Valley Groundwater
 Basin and the Lower Forebay Sub-Basin**

Sample Constituent	Sampling Result (mg/L)	Basin Plan Water Quality Objective (mg/L)
Total Dissolved Solids	1,010	1,500
Sodium	180	150
Chloride	192	250
Boron	0.5	0.5
Sulfate	214	850
Total Nitrogen	29	8

The above Basin Plan water quality objectives are intended to serve as a water quality baseline for evaluating water quality management in the basin. The exceedances of sodium and total nitrogen demonstrate the discharge’s potential harm to the baseline water quality of the Salinas Valley Lower Forebay groundwater basin and therefore to beneficial uses in general. The Prosecution Team considered the low levels of nitrate as N detected in the May 8, 2018 sample, which did not exceed the groundwater protection limit for nitrate as N of 8 mg/L as stated in the WDR Order. However, even though the nitrate as N is not exceeded, there was elevated levels of total nitrogen in the sample. Total nitrogen is the sum of total kjeldahl nitrogen, nitrate, and nitrite. Total kjeldahl nitrogen is made up of ammonia and organic nitrogen. If the total kjeldahl nitrogen is greater than 5 mg/L then the wastewater is not fully nitrified. Therefore, the wastewater discharged on May 8, 2018 was not nitrified and upon discharge to the floodplain and buffer area would likely convert to nitrate and therefore total nitrogen is a more accurate indicator of the impacts to groundwater.

Conclusion

These factor considerations indicate an overall low threat of harm or potential harm to beneficial uses, with the above water quality objective exceedances indicating potential short term impact to beneficial uses with no appreciable harm, and warrant a factor score of **Minor (1)**.

Factor 3: Susceptibility to Cleanup or Abatement

Factor 3 Background: The Enforcement Policy specifies assigning a score of 0 for this factor if the discharger cleans up 50 percent or more of the discharge within a reasonable amount of time. A score of 1 is assigned for this factor if less than 50

percent of the discharge is susceptible to cleanup or abatement, or if 50 percent or more of the discharge is susceptible to cleanup or abatement, but the discharger failed to clean up 50 percent or more of the discharge within a reasonable time. Natural attenuation of discharged pollutants in the environment is not considered cleanup or abatement for purposes of evaluating this factor.

Factor 3 Consideration: Less than 50 percent of the discharge was susceptible to cleanup or abatement due to its percolation into the soil and into groundwater, so the applicable factor is **(1)**.

Step 1 Final Score – Actual or Potential for Harm for Discharge Violations

The sum of the above scores is **3**. This value is used in Step 2 as the “Potential for Harm” score.

Step 2. Assessments for Discharge Violations

Step 2 Background

Per Gallon Assessments for Discharge Violations Background

The Enforcement Policy specifies that where there is a discharge, the Water Boards shall determine an initial liability amount on a per gallon basis using the Potential for Harm score from Step 1 and determine the extent of Deviation from Requirement as either minor, moderate, or major. The Deviation from Requirement reflects the extent the alleged violation deviated from the specific requirement at issue. The Potential for Harm score in Step 1 and the Deviation from Requirement determination in Step 2 are used to determine a Per Gallon Factor from Table 1 of the Enforcement Policy. The per gallon assessment is then determined by multiplying the Per Gallon Factor by the number of gallons subject to penalty and the maximum per gallon penalty amount allowed under the Water Code.

Per Day Assessments for Discharge Violations Background

The Enforcement Policy also specifies that where there is a discharge, the Water Boards shall determine an initial liability factor per day based on the same parameters discussed above. Table 2 of the Enforcement Policy is used to determine a Per Day Factor for the alleged violation. The per day assessment is then determined by multiplying the Per Day Factor by the maximum per day amount allowed under the Water Code and the number of days the violation occurred.

Step 2 Consideration: Either per gallon or per day amounts may be assessed under Water Code section 13350, but not both. The Prosecution Team has elected to assess a per gallon assessment, as a per day assessment would result in an inappropriately low administrative civil liability. As determined in Step 1, the Potential for Harm factor for this violation is **(3)**. The Prosecution Team determined that the Deviation from Requirement is **major**. “Major” is assigned when the requirement has been rendered ineffective (e.g., the requirement was rendered ineffective in its essential functions).

Water Code section 13350 prohibits the discharge of any waste to waters of the state in violation of waste discharge requirements. The unpermitted discharge of municipal wastewater treated to an advanced primary-treated effluent level to groundwater in violation of the WDR Order render the requirement to be ineffective in its essential function and thus represents a major Deviation from Requirements.

The Prosecution Team determined that the Per Gallon Factor from Table 1 of the Enforcement Policy is **0.04**.

Water Code section 13350, subdivision (e)(2) provides that liability of up to \$10 per gallon shall apply to volumes of waste discharged. The unauthorized discharge volume subject to per gallon liability is 3,000,000 gallons.

High Volume Discharges

In accordance with the Enforcement Policy, the Water Boards shall apply the above Per Gallon Factor to the maximum per gallon penalty amount of \$10 per gallon. However, because the volume of certain discharges can be very high, the Water Boards may elect to use a value between \$2.00 per gallon and \$10.00 per gallon with the above factor to determine the per gallon amount for discharges that are between 100,000 gallons and 2,000,000 gallons for each discharge event, whether it occurs on one or more days. For discharges in excess of 2,000,000 gallons, or for discharges of recycled water that has been treated for reuse, the Water Boards may elect to use a maximum of \$1.00 per gallon with the above factor to determine the per gallon amount. These provisions are advisory and intended to provide a basis for achieving consistency and substantial justice in setting appropriate civil liabilities. Where electing to use a maximum of \$1.00 per gallon or \$2.00 per gallon would result in an inappropriately small civil liability based on the severity of impacts to beneficial uses, the discharger’s degree of culpability, and/or other considerations, a higher amount, up to the statutory maximum, should be used.

In this instance, the Prosecution Team determined that an assessment of \$1.00 per gallon is appropriate and will not result in an inappropriately small administrative civil liability for this violation.

Therefore, the per gallon initial liability amount is as follows:

Initial Liability Amount:

$$\$1.00/\text{gallon} \times 3,000,000 \text{ gallons} \times 0.04 \text{ per gallon factor} = \$120,000$$

Step 3. Per Day Assessment for Non-Discharge Violations

This step does not apply to the violation because it is a discharge violation.

Step 4. Adjustment Factors

The Enforcement Policy specifies that Water Boards must consider the following three additional factors, related to the violator's conduct, for potential modification of the initial liability amount determined in Steps 1 through 3: the violator's degree of culpability, the violator's prior history of violations, and the violator's voluntary efforts to cleanup or cooperate with regulatory authorities after the violation.

Degree of Culpability Factor Background: The degree of culpability factor addresses the discharger's degree of culpability regarding the violation. Higher liabilities should result from intentional or negligent violations than for accidental, non-negligent violations. A first step is to identify any performance standards (or, in their absence, prevailing industry practices) in the context of the violation. The test for discharger negligence is consideration of what a reasonable and prudent person would have done or not done under similar circumstances.

Adjustment should result in a multiplier between 0.75 and 1.5. A neutral assessment of 1.0 should be used when a discharger is determined to have acted as a reasonable and prudent person would have.

Degree of Culpability Factor Consideration: The culpability factor for the violation is **1.3**. Considerations supporting that factor are discussed below.

The Central Coast Water Board adopted the WDR Order on May 31, 2002. The Discharger therefore has a longstanding awareness of the WDR Order's explicit requirements that the Discharger only use the designated spray irrigation areas for spray irrigation and not as ponds and that the Discharger apply treated wastewater to

land in a manner that prevents runoff from the WWTP or discharge to adjacent properties or drainageways. The Discharger's negligence in properly operating its WWTP and the spray irrigation areas resulted in the discharge of 3,000,000 gallons of advanced primary-treated wastewater to an area not permitted by the WDR Order and to groundwater. The discharge resulted in a large-scale failure in the levee separating the designated spray irrigation areas from the Salinas River. It would have been reasonable and prudent for the Discharger to implement effective solutions to comply with the WDR Order.

In response to the Central Coast Water Board's May 22, 2018 Notice of Violation and Technical Reporting Order, the Discharger submitted its *Effluent Disposal Study and Compliance Work Plan in Response to Notice of Violation, June 29, 2018* (Effluent Disposal Study), prepared on behalf of the Discharger by its engineering consultant. In its evaluation of the causes of disposal system failures that resulted in the May 8, 2018 overflow, the Discharger indicated that a substantial decline in effluent quality from the primary and secondary treatment units had occurred before the overflow. That effluent, characterized by increased solids and organic concentrations, overloaded the spray irrigation areas and formed a thin layer of solids that substantially reduced percolation capacity. In addition, the continual inundation of the fields due to the Discharger's unauthorized conversion of the spray irrigation areas to flood irrigation/ponds prevented the periodic rotation/resting, drying, and disking/scarifying/ripping of the fields necessary to maintain adequate percolation. These conditions combined to cause a rapid loss of percolation capacity that resulted in the May 8, 2018 overflow. The Discharger was negligent in its failure to maintain the performance of the WWTP's treatment units to maintain effluent quality sufficient to allow adequate percolation. Furthermore, the Discharger was highly culpable in its unauthorized conversion of the spray irrigation areas to flood irrigation/ponds and is similarly culpable because of the long standing WDR Order requirement to prevent ponding in the spray irrigation areas.

Some of the factors cited by the Discharger as likely contributing to the above conditions were:

- Ineffective influent screening of rags and debris that impacted downstream primary treatment facilities and the aeration/oxidation ponds (secondary treatment);
- Inefficient primary treatment components such as the influent mechanical rake and primary clarifiers resulting in the organic overloading of the oxidation (treatment) ponds;

- Substantially reduced ability for percolation (disposal) pond number 4 to percolate wastewater due to the Discharger's decision to use percolation pond number 4 to store and dry sludge that was removed from oxidation (treatment) pond number 2 during installation of aeration in the oxidation pond around 2016⁸.
- Reduced percolation in pond number 4 because of the deposited sludge from treatment pond number 2 and the Discharger's failure to dry and disk the bottom of pond number 4 to maintain the design percolation rate.
- Discharger kept percolation pond number 5 in continual service and therefore did not dry and disk the pond as necessary to maintain the design percolation rate.
- The poor-quality effluent, characterized by high concentrations of solids and organic matter, caused rapid loss of percolation capacity in the top layers of soil in the spray irrigation areas. The resulting ponding of wastewater prevented the Discharger from rotating, resting, drying, and disking the ground surface to maintain the required percolation capacity.

The Discharger's effluent disposal study noted that after the May 8, 2018 overflow and coincidental emptying of some of the flooded spray areas, disking the spray irrigation areas immediately restored their percolation capacity. This demonstrates the importance of these maintenance practices and the culpability of the Discharger for failing to conduct them as needed.

The Prosecution Team acknowledges that the Discharger's Effluent Disposal Study notes that water conservation, some increase in population, and a significant population of migrant workers in the area also contributed to an overall increase in the strength of the WWTP influent beyond the design parameters of the WWTP. The Prosecution Team also considered that such circumstances and trends are observable through self-monitoring that provides a basis to anticipate required facility changes and to plan and act accordingly.

⁸ The Prosecution Team acknowledges that the Discharger notified Central Coast Water Board WDR staff of its intention to do this as a short-term, temporary measure. Central Coast Water Board staff advised the Discharger that it would not recommend enforcement action as long as the Discharger adhered to its temporary schedule (removing the sludge by Summer 2017) and the action did not result in other violations of the WDR Order. The sludge was still present in pond number 4 as of June 29, 2018, and therefore at the time of the May 8, 2018 overflow, so the Discharger did not adhere to the temporary schedule, and the altered use of the percolation pond did result in violations of the WDR Order.

It is reasonable to assume the Discharger had adequate information to understand that:

- The WWTP required upgrades and improvements to meet the needs of its service community and to achieve compliance with its existing WDR Order;
- The WWTP required proper operation and maintenance of its treatment units to maximize the quality of its treated effluent and thereby protect the percolation capacity of disposal ponds and spray irrigation areas (disposal beds) to comply with the WDR Order;
- The WWTP required proper operation and maintenance of its disposal ponds and spray irrigation areas (disposal beds) to maximize the percolation capacity of the disposal areas to comply with the WDR Order.

The above demonstrates the Discharger's negligence in properly operating and maintaining its treatment and disposal facilities. The longstanding failure of the Discharger to maintain the treatment capacity of the primary treatment units and secondary treatment ponds led to the production of poor-quality effluent with high solids. The solids accumulated on and clogged the ground surface of the designated disposal ponds, which reduced the pond percolation capacity and caused an increase in disposal pond water levels. The solids also accumulated and clogged the ground surface at the designated spray irrigation areas (which the Discharger had converted into disposal beds by flood irrigating the areas to reduce drift). The Discharger responded to this progressive loss of disposal pond volume and percolation capacity by adding more berms to create smaller disposal beds. However, due to the same poor-quality effluent with high solids and flood irrigation practices that prevented field rotation, rest, and disking, the ground surface of the former spray irrigation areas (current disposal beds) suffered a similar clogging and loss of percolation capacity. Collectively, these conditions resulted in the backup and inundation of the WWTP with stored wastewater to levels that caused the levee breach and overflow on May 8, 2018. The above considerations warrant a score of **1.3** for Culpability.

History of Violations Factor Background: Where a discharger has no prior history of such violations, this factor should be neutral, or 1.0. Where the discharger has any prior violations within the last five years, the Water Boards should use a multiplier of 1.1. Where the discharger has a history of similar or numerous dissimilar violations, the Water Boards should consider adopting a multiplier above 1.1.

History of Violations Factor Consideration: The Discharger has no recent history of violations for which the Central Coast Water Board has taken formal enforcement action, therefore, a score of **1.0** is appropriate.

Cleanup and Cooperation Factor Background: The cleanup and cooperation factor addresses the extent to which the discharger voluntarily cleaned up and/or cooperated with regulatory authorities in returning to compliance and correcting environmental damage after the violation. Adjustment should result in a multiplier between 0.75 to 1.5, using the lower multiplier where there is exceptional cleanup and cooperation compared to what can reasonably be expected, and a higher multiplier where there is not. A reasonable and prudent response to a discharge violation or timely response to a Water Board order should receive a neutral adjustment of 1.0 as it is assumed a reasonable amount of cooperation is the warranted baseline. Adjustments below or above 1.0 should be applied where the discharger's response to a violation or order is above and beyond, or falls below, the normally expected response, respectively.

Cleanup and Cooperation Factor Consideration: The discharged wastewater percolated into the soil and groundwater by the next day without cleanup or spill recovery. The Discharger temporarily repaired the levee on the day of the discharge by compacting soils at the base of the levee with the assistance of Monterey Bay Builders, Inc. The City of Greenfield's Public Works Department completed filling in the broken levee the week of May 10, 2018. The Discharger reported that diking the spray irrigation areas after the overflow immediately restored their percolation capacity. The Discharger cooperated reasonably and is therefore assessed a multiplier of **1.0**.

Step 5. Determination of Total Base Liability Amount

The Total Base Liability amount for the violation is calculated by multiplying the Initial Liability Amount by the adjustment factors for the alleged violation [(Initial Liability) x (Culpability) x (History of Violations) x (Cleanup and Cooperation)]. The applicable Total Base Liability amount for the violation is \$ 156,000 as calculated below:

Total Base Liability:

$$\$120,000 \times 1.3 \times 1.0 \times 1.0 = \$156,000$$

Step 6. Ability to Pay and Continue in Business

The Discharger's ability to pay an administrative civil liability is determined by its income (revenues minus expenses) and net worth (assets minus liabilities). The Combined Total Base Liability amount may, but is not required to be adjusted to address the Discharger's ability to pay or to continue in business if the Central Coast Water Board has sufficient financial information necessary to assess the Discharger's ability to pay

the Combined Total Base Liability amount or to assess the effect of the Combined Total Base Liability Amount on the Discharger's ability to continue in business.

The Prosecution Team retained financial experts from Industrial Economics, Incorporated to analyze the Discharger's ability to pay. Based on financial information provided by the Discharger and publicly available information, the Discharger has the ability to pay the proposed administrative civil liability. The Discharger had prudent financial management in recent years and will be able to pay the proposed administrative civil liability from its working capital and unrestricted net position. Therefore, no adjustments are warranted under this factor.

Step 7. Economic Benefit

The total economic benefit of noncompliance was determined to be approximately \$30,578.

Pursuant to the Enforcement Policy, the economic benefit, savings or monetary gain derived from the acts that constitute a violation, must be determined for each violation.

The Enforcement Policy provides that the economic benefit of noncompliance should be calculated using the United States Environmental Protection Agency's (U.S. EPA's) Economic Benefit Model (BEN)⁹ penalty and financial modeling program unless it is demonstrated that an alternative method of calculating the economic benefit is more appropriate. For this case, BEN was determined to be the appropriate method. Economic benefit was calculated using BEN Version 2021.0.0 (April 2021). Using standard economic principals such as time-value of money and tax deductibility of compliance costs, BEN calculates a discharger's economic benefit derived from delaying or avoiding compliance with environmental statutes. As calculated below, the Economic Benefit is \$30,578.

The Discharger failed to maintain effective percolation to groundwater in its percolation ponds and spray irrigation fields due to inadequate primary treatment and failure to dispose of biosolids/sludge that resulted in the clogging of those ponds and fields, the accumulation of wastewater, the breach of the levee, and the discharge of wastewater to groundwater. According to the Discharger's 2020 annual report, the Discharger removed 6,745.69 tons of biosolids from percolation pond 4 in October 2018 at a cost of

⁹ At the time this document was prepared, U.S. EPA Economic Benefit Model, or BEN, was available for download at [U.S. EPA's Penalty and Financial Models webpage](#).

\$798,621. According to the Discharger's 2013-2017 annual reports, the last time that it removed biosolids was 2013. The Discharger delayed \$638,896 in the costs of regularly disposing of biosolids in 2014, 2015, 2016, and 2017 that may have prevented the overflow of wastewater on May 8, 2018. For the delayed costs described above, the noncompliance date is assumed to be October 31st of 2014, 2015, 2016, and 2017.

The Discharger's 2020 annual report also indicates that it completed improvements and repairs to three primary clarifiers in 2018 and 2019 at a total cost of \$382,265. The Discharger delayed these costs that may have prevented the overflow of wastewater on May 8, 2018. The noncompliance date is assumed to be October 31, 2017.

Based on information provided by the Discharger, the BEN model was used to determine the economic benefit of the delayed expenditures described above to be approximately \$30,578. The output from BEN detailing the compliance actions, assumptions, and benefit of non-compliance is available upon request.

Step 8. Other Factors as Justice May Require

The Water Boards may exercise their discretion to include some of the costs of investigation and enforcement in a total administrative civil liability. Including some staff investigation and enforcement costs is valid from an economic standpoint as it requires those who commit water quality violations to pay a greater percentage of the full costs of their violations. However, this important consideration must be balanced against the potential of discouraging a discharger from exercising its right to be heard and other important due process considerations.

The Prosecution Team conservatively estimates at least 119 hours of staff time during several periods of differing salaries¹⁰ to investigate this case and prepare this analysis and supporting information. The Prosecution Team finds that it is appropriate to increase the Total Base Liability amount by \$16,115 in consideration of these investigation and enforcement costs. Increasing the Total Base Liability Amount in this manner serves to create a more appropriate deterrent against future violations.

¹⁰ From November 27, 2018 through June 30, 2020, enforcement staff's base salary was \$139 per hour. From July 1, 2020 to June 30, 2021, enforcement staff's base salary was \$132 per hour due to Covid related furloughs for state employees.

Step 9. Maximum and Minimum Liability Amounts

Maximum Liability:

The maximum administrative liability amount per gallon pursuant to Water Code section 13350 is \$10 per gallon discharged. The maximum liability amount is **\$30,000,000** as calculated below.

Maximum Liability Amount:

$$3,000,000 \text{ gallons} \times \$10/\text{gallon} = \$30,000,000$$

Minimum Liability:

The Enforcement Policy (page 21) states that the Total Base Liability Amount should be at least 10 percent higher than the economic benefit amount, “so that liabilities are not construed as the cost of doing business and the assessed liability provides meaningful deterrent to future violations.”

The minimum liability associated with economic benefit for the violation is approximately **\$33,635.80 (\$30,578 + 10% [or \$3,057.80])**.

The Final Liability Amount is within the maximum and minimum liability amounts for the violation.

Step 10. Final Liability Amount

Based on the foregoing analysis, and consistent with the Enforcement Policy, the Final Liability Amount for the violation is **\$156,000 [total base liability] + \$16,115 [staff costs] = \$172,115**.

Appendix: A-1. Summary Tables of City of Greenfield’s Wastewater Treatment Plant May 8, 2018 Overflow and Effluent Sampling compared to Water Quality Control Plan for the Central Coast Basin, 2017 Edition (Basin Plan) Water Quality Objectives for Groundwater

ATTACHMENT A, APPENDIX A-1

Summary Tables of City of Greenfield’s Wastewater Treatment Plant May 8, 2018 Overflow and Effluent Sampling compared to Water Quality Control Plan for the Central Coast Basin, 2017 Edition (Basin Plan)¹ Water Quality Objectives for Groundwater

Table A1-1

City of Greenfield Sampling compared to Basin Plan Water Quality Objectives for Specific Groundwaters (Section 3.3.5)

Bold, italicized entries indicate sample values that exceeded the water quality objective (WQO) and the WQOs that were exceeded.

Pollutant Name, Units	Sprayfield Areas #5 and #6 – 5/8/18 Overflow Sampling Relating to Factor 2	Sprayfield Area #4 – 4/20/18 Sampling Pre-Overflow, Relating to Factor 1	Sprayfield Area #5 – 4/20/18 Sampling Pre-Overflow, Relating to Factor 1	Effluent to Sprayfield Area – 3/13/18 Sampling Pre-Overflow, Relating to Factor 1	Effluent to Sprayfield Area – 6/19/18 Sampling Post-Overflow, Relating to Factor 1	Basin Plan WQO for Specific Groundwaters – Salinas Valley Lower Forebay (Table 3-6)
pH, pH units	9.7	8.3	8.0	7.7	7.9	No Applicable Objective
BOD ₅ , mg/L	96	58	53	99	120 ^[1]	No Applicable Objective
Total Suspended Solids, mg/L	1,900	47	38	162	250 ^[1]	No Applicable Objective
Settleable Solids, mL/L	1.5	0.1	0.4	Not Detected	0.7 ^[1]	No Applicable Objective
Total Dissolved Solids, mg/L	<i>1,010</i>	966	1,040	931	966 ^[1]	<i>1500</i>
Sodium, mg/L	180	142	156	151	160 ^[1]	150

¹ Water Quality Control Plan for the Central Coast Basin, 2017 Edition ([Basin Plan](#)).

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Pollutant Name, Units	Sprayfield Areas #5 and #6 – 5/8/18 Overflow Sampling Relating to Factor 2	Sprayfield Area #4 – 4/20/18 Sampling Pre-Overflow, Relating to Factor 1	Sprayfield Area #5 – 4/20/18 Sampling Pre-Overflow, Relating to Factor 1	Effluent to Sprayfield Area – 3/13/18 Sampling Pre-Overflow, Relating to Factor 1	Effluent to Sprayfield Area – 6/19/18 Sampling Post-Overflow, Relating to Factor 1	Basin Plan WQO for Specific Groundwaters – Salinas Valley Lower Forebay (Table 3-6)
Chloride, mg/L	192	144	146	136	159 ^[1]	250
Boron, mg/L	0.50	0.46	0.47	0.42	0.5 ^[1]	0.5
Sulfate, mg/L	214	185	188	188	150 ^[1]	850
Nitrite (as N), mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	No Applicable Objective
Nitrate (as N), mg/L	Not Detected	0.7 ^[2]	Not Detected	Not Detected	0.1	No Applicable Objective
Ammonia-N, mg/L	2.7	43.8	43.8	Not Analyzed	Not Analyzed	No Applicable Objective
Total Kjeldahl Nitrogen (as N), mg/L	28.8	49.6	58.9	62.0	61.5	No Applicable Objective
Total Nitrogen (as N), mg/L	29.0	50.3	58.9	62.0	61.7	8 ^[3]
Aluminum, Total, µg/L ^[4]	22,400	339	924	Not Analyzed	Not Analyzed	No Applicable Objective
Antimony, µg/L ^[4]	1	Not Detected	Not Detected	Not Analyzed	Not Analyzed	No Applicable Objective
Arsenic, Total, µg/L ^[4]	5	Not Detected	Not Detected	Not Analyzed	Not Analyzed	No Applicable Objective
Barium, Total, µg/L ^[4]	234	44	56	Not Analyzed	Not Analyzed	No Applicable Objective
Beryllium, Total, µg/L ^[4]	1	Not Detected	Not Detected	Not Analyzed	Not Analyzed	No Applicable Objective
Cadmium Total, µg/L ^[4]	1	Not Detected	Not Detected	Not Analyzed	Not Analyzed	No Applicable Objective

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Pollutant Name, Units	Sprayfield Areas #5 and #6 – 5/8/18 Overflow Sampling Relating to Factor 2	Sprayfield Area #4 – 4/20/18 Sampling Pre-Overflow, Relating to Factor 1	Sprayfield Area #5 – 4/20/18 Sampling Pre-Overflow, Relating to Factor 1	Effluent to Sprayfield Area – 3/13/18 Sampling Pre-Overflow, Relating to Factor 1	Effluent to Sprayfield Area – 6/19/18 Sampling Post-Overflow, Relating to Factor 1	Basin Plan WQO for Specific Groundwaters – Salinas Valley Lower Forebay (Table 3-6)
Chromium Total, µg/L ^[4]	112	7	11	Not Analyzed	Not Analyzed	No Applicable Objective
Copper, Total, µg/L ^[4]	55	Not Detected	Not Detected	Not Analyzed	Not Analyzed	No Applicable Objective
Cyanide, µg/L ^[4]	11.0	7.2	4.4	Not Analyzed	Not Analyzed	No Applicable Objective
Fluoride, mg/L ^[4]	Not Detected	Not Detected	Not Detected	Not Analyzed	Not Analyzed	No Applicable Objective
Lead, Total, µg/L ^[4]	12	Not Detected	Not Detected	Not Analyzed	Not Analyzed	No Applicable Objective
Mercury (EPA 245), µg/L ^[4]	0.63	Not Detected	0.27	Not Analyzed	Not Analyzed	No Applicable Objective
Nickel, Total, ug/L ^[4]	152	8	12	Not Analyzed	Not Analyzed	No Applicable Objective
Selenium, Total, µg/L ^[4]	Not Detected	Not Detected	Not Detected	Not Analyzed	Not Analyzed	No Applicable Objective
Thallium, Total, µg/L ^[4]	Not Detected	Not Detected	Not Detected	Not Analyzed	Not Analyzed	No Applicable Objective
Zinc, Total, µg/L ^[4]	184	503	140	Not Analyzed	Not Analyzed	No Applicable Objective
Temperature, degrees C, as reported (conversion to degrees F shown in parentheses)	17.5 (63.5)	17.9 (64.2)	17.6 (63.7)	Not Analyzed	Not Analyzed	No Applicable Objective
Coliform, Total (and	3,360	>241,960	>241,960	Not Analyzed	Not Analyzed	No Applicable Objective

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Pollutant Name, Units	Sprayfield Areas #5 and #6 – 5/8/18 Overflow Sampling Relating to Factor 2	Sprayfield Area #4 – 4/20/18 Sampling Pre-Overflow, Relating to Factor 1	Sprayfield Area #5 – 4/20/18 Sampling Pre-Overflow, Relating to Factor 1	Effluent to Sprayfield Area – 3/13/18 Sampling Pre-Overflow, Relating to Factor 1	Effluent to Sprayfield Area – 6/19/18 Sampling Post-Overflow, Relating to Factor 1	Basin Plan WQO for Specific Groundwaters – Salinas Valley Lower Forebay (Table 3-6)
Fecal), MPN/100 mL						
Coliform, Fecal, MPN/100 mL	<10	<100	521	Not Analyzed	Not Analyzed	No Applicable Objective
Coliform, E Coli, MPN/100 mL	Not Analyzed	100	2,010	Not Analyzed	Not Analyzed	No Applicable Objective

- [1] The City of Greenfield’s June 19, 2018 effluent sampling results reported in the summary table of its 2nd Quarter 2018 self-monitoring report differ from the accompanying results indicated in the laboratory analysis reports for the same samples. The Prosecution Team is using the values from the laboratory report for these pollutants because it is the original source of the data.
- [2] The City of Greenfield’s report indicates “0.07”, but this is likely a typo. Total nitrogen is the sum of total inorganic nitrogen (nitrate + nitrite + ammonium + ammonia) and organic nitrogen. Total kjeldahl nitrogen is the sum of ammonia nitrogen and organic nitrogen. Based on the other inorganic and organic nitrogen values, for the City of Greenfield’s April 20, 2018 total nitrogen calculation to equal 50.3 mg/L, the nitrate must be 0.7 mg/L.
- [3] The *Waste Discharge Requirements Order No. R3-2002-0062 for City of Greenfield Wastewater Treatment Plant* (WDR Order) requires that the discharge shall not cause nitrate concentrations in groundwater downgradient of the disposal area to exceed 8 mg/L (as N). However, the Central Coast Water Board currently applies the “N” water quality objectives in Basin Plan section 3.3.5, Table 3-6 to be total nitrogen (as N). Total nitrogen is the sum of total inorganic nitrogen (nitrate + nitrite + ammonium + ammonia) and organic nitrogen. Due to nitrification, the biological process that converts ammonia to nitrite and nitrite to nitrate, using nitrate (as N) as the indicator for potential impacts to groundwater is not comprehensive. Because ammonia typically converts to nitrate after disposal to land, total nitrogen is a more accurate indicator of the potential impacts of the City of Greenfield’s overflow to groundwater.
- [4] WDR Order requires monitoring and reporting of these pollutants annually each September. The Prosecution Team’s review of the City of Greenfield’s 3rd quarter 2017 self-monitoring report (which includes the month of September), 4th quarter 2017 self-monitoring report, and annual 2017 self-monitoring report indicates that the City of Greenfield failed to monitor and report for these pollutants.

Table A1-2

City of Greenfield Sampling compared to Basin Plan Objectives for Specific Beneficial Uses – Inorganic Chemicals Related to the Municipal and Domestic Supply (MUN) Beneficial Use (Section 3.3.4.2)

Bold, italicized entries indicate sample values that exceed the WQO and the WQOs that were exceeded.

Pollutant Name	Sprayfield Areas #5 and #6 – 5/8/18 Overflow Sampling (mg/L) Relating to Factor 2	Sprayfield Area #4 – 4/20/18 Sampling (mg/L) Pre-Overflow, Relating to Factor 1	Sprayfield Area #5 – 4/20/18 Sampling (mg/L) Pre-Overflow, Relating to Factor 1	Basin Plan WQOs (Maximum Contaminant Levels (MCLs)) for primary drinking water standards (Section 3.3.4.2) (mg/L)
Aluminum	22.4	0.339	0.924	1.0
Antimony	0.001	Not Detected	Not Detected	0.006
Arsenic	0.005	Not Detected	Not Detected	0.010
Barium	0.234	0.044	0.056	1.0
Beryllium	0.001	Not Detected	Not Detected	0.004
Cadmium	0.001	Not Detected	Not Detected	0.005
Chromium	0.112	0.007	0.011	0.05
Cyanide	0.011	0.0072	0.0044	0.15
Fluoride	Not Detected	Not Detected	Not Detected	2.0
Mercury	0.00063	Not Detected	0.00027	0.002
Nickel	0.152	0.008	0.012	0.1
Nitrate (as N)	Not Detected	0.7	Not Detected	10
Nitrate + Nitrite (sum as N)	Not Detected	0.7	Not Detected	10
Nitrite (as N)	Not Detected	Not Detected	Not Detected	1.0
Perchlorate	Not Analyzed	Not Analyzed	Not Analyzed	0.006
Selenium	Not Detected	Not Detected	Not Detected	0.05
Thallium	Not Detected	Not Detected	Not Detected	0.002

Table A1-3

City of Greenfield Sampling compared to Basin Plan Objectives for Specific Beneficial Uses – Related to the Agricultural Supply (AGR) Beneficial Use for Irrigation (Section 3.3.4.2)

Bold, italicized entries indicate sample values that exceed the WQO.

Pollutant Name	Sprayfield Areas #5 and #6 – 5/8/18 Overflow Sampling (mg/L)	Basin Plan WQO Exceeded (Table 3-1) (mg/L)	Basin Plan Characterization of Exceedance (Table 3-1)
Specific Ion Toxicity from root absorption			
Sodium	180	> 9.0	Severe ^[1]
Chloride	192	142 - 355	Increasing Problems
Boron	0.50	0.5 – 2.0	Increasing Problems
Specific Ion Toxicity from foliar absorption			
Sodium	180	> 69	Increasing Problems
Chloride	192	> 106	Increasing Problems
NH4 – N (Ammonium Ion as Nitrogen)	Total Ammonia = 2.7	Not Exceeded	
NO3 – N (Nitrate as Nitrogen)	Not Detected	Not Exceeded	
HCO3 (Bicarbonate)	Not Analyzed	Not Known to be Exceeded	
pH, pH units	9.7	6.5 – 8.4	Increasing Problems

[1] Evaluate by adjusted sodium absorption ratio (don't have sufficient data).

Table A1-4

City of Greenfield Sampling compared to Basin Plan Objectives for Specific Beneficial Uses –Related to the Agricultural Supply (AGR) Beneficial Use for Agricultural Water Use (Section 3.3.4.2)

Bold, italicized entries indicate sample values that exceed the WQO and the WQOs that were exceeded. Note that footnotes correspond to those within Basin Plan Table 3-2.

Pollutant Name	Sprayfield Areas #5 and #6 – 5/8/18 Overflow Sampling (mg/L) Relating to Factor 2	Sprayfield Area #4 – 4/20/18 Sampling (mg/L) Pre-Overflow, Relating to Factor 1	Sprayfield Area #5 – 4/20/18 Sampling (mg/L) Pre-Overflow, Relating to Factor 1	Basin Plan Maximum Concentration for Irrigation Supply (Table 3-2) (mg/L)	Basin Plan Maximum Concentration for Livestock Watering (Table 3-2) (mg/L)
Aluminum	22.4	0.339	0.924	5.0	5.0
Arsenic	0.005	Not Detected	Not Detected	0.1	0.2
Beryllium	0.001	Not Detected	Not Detected	0.1	No value
Boron	0.50	0.46	0.47	0.75	5.0
Cadmium	0.001	Not Detected	Not Detected	0.01	0.05
Chromium	0.112	0.007	0.011	0.10	1.0
Cobalt	Not Analyzed	Not Analyzed	Not Analyzed	0.05	1.0
Copper	0.055	Not Detected	Not Detected	0.2	0.5
Fluoride	Not Detected	Not Detected	Not Detected	1.0	2.0
Iron	Not Analyzed	Not Analyzed	Not Analyzed	5.0	No value
Lead	0.012	Not Detected	Not Detected	5.0	0.1 ²
Lithium	Not Analyzed	Not Analyzed	Not Analyzed	2.5 ³	No value
Manganese	Not Analyzed	Not Analyzed	Not Analyzed	0.2	No value
Mercury	0.00063	Not Detected	0.00027	No value	0.01
Molybdenum	Not Analyzed	Not Analyzed	Not Analyzed	0.01	0.5

² Basin Plan Table 3-2 footnote: Lead is accumulative and problems may begin at threshold value (0.05 mg/L).

³ Recommended maximum concentration for irrigating citrus is 0.075 mg/L.

Settlement Agreement and Stipulation for Entry of Administrative Civil Liability
 Order R3-2021-0104
 City of Greenfield
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Pollutant Name	Sprayfield Areas #5 and #6 – 5/8/18 Overflow Sampling (mg/L) Relating to Factor 2	Sprayfield Area #4 – 4/20/18 Sampling (mg/L) Pre-Overflow, Relating to Factor 1	Sprayfield Area #5 – 4/20/18 Sampling (mg/L) Pre-Overflow, Relating to Factor 1	Basin Plan Maximum Concentration for Irrigation Supply (Table 3-2) (mg/L)	Basin Plan Maximum Concentration for Livestock Watering (Table 3-2) (mg/L)
Nickel	0.152	0.008	0.012	0.2	No value
Nitrate + Nitrite	Not Detected	0.7	Not Detected	No value	100
Nitrite	Not Detected	Not Detected	Not Detected	No value	10
Selenium	Not Detected	Not Detected	Not Detected	0.02	0.05
Vanadium	Not Analyzed	Not Analyzed	Not Analyzed	0.1	0.10
Zinc	0.184	0.503	0.140	2.0	25