

General Waste Discharge Requirements for Commercial Lily Bulb Operations in the Smith River Plain

Summary of Revisions and Response to Comments on the Draft Order and Draft Environmental Impact Report

Comments from, and responses to, comment letters received on the Draft Environmental Impact Report (DEIR) and Draft Lily Bulb Order between January 30, 2026 – March 30, 2026 are located in the sections below. Additionally, the Board Chair admitted four late comments submitted by April 1, 2026. Section I is a Summary of Revisions made to the Draft Lily Bulb Order. Section II includes comments and responses related to the Draft Lily Bulb Order. Section III includes comments and responses related to the associated DEIR.

On January 30, 2026, the North Coast Water Board published the Draft Lily Bulb Order and DEIR and began a 45-day public comment period. On February 18, 2026, North Coast Water Board staff conducted a public workshop in Crescent City. At the public workshop, staff discussed the Draft Order and DEIR and the Board accepted oral comments from the public. At this workshop, the North Coast Water Board directed staff to extend the public comment period from 45 days to 60 days.

To better understand and evaluate comments received on the Draft Lily Bulb Order, staff engaged directly with certain commenters during the revision process. This included meetings with growers and consultation with the Tolowa Dee-ni' Nation pursuant to AB 52.

The revisions to the Draft Lily Bulb Order reflect staff's consideration of oral comments made at the February 2026 public workshop, written comments submitted during the comment period, late comments admitted by the Chair, and outreach and consultation efforts summarized above.

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Section I: Summary of Revisions

This section summarizes **substantive revisions** staff made to the Draft Lily Bulb Order as released on January 30, 2026. All revisions below have been incorporated into the Proposed Lily Bulb Order as released on July 24, 2026 and considered by the North Coast Water Board for adoption on August 6, 2026. Page numbers referenced **in this section only** refer to page numbers in the Draft Lily Bulb Order. All other page numbers referenced in this Summary of Revisions and Response to Comments document reference the Proposed Lily Bulb Order unless otherwise noted.

1. Streamside Area Requirements

Location of revision in Draft Order: (p. 68)

Expands the period when the Vegetated Buffer Area of the Streamside Area needs to meet the 90% vegetated ground cover requirement from November 1-April 30 to October 1- June 15. This period more closely aligns with the 'storm season' identified by the Surface Water Monitoring Program as the purpose of the Vegetated Buffer Area is for pollutant filtering and bank stabilization necessary to meet the Temperature Policy.

2. Surface Water Monitoring

Location of revision in Draft: (pp. 9–10 of MRP)

Ties the surface water monitoring schedule to pesticide application timing based on SWAMP Report results and Pesticide Use Reports. Three Major Storm sampling events occur, one each in Winter (Feb–Mar), Spring (Apr–Jun), and Fall (Oct–Dec), each analyzing the constituent(s) most likely to be discharging in that window. This results in the same total number of events per year (3) but about 25% fewer constituent analyses per year.

3. Surface Water Adaptive Management

Location of revision in Draft: (pp. 9–10 of MRP)

Adaptive Management requirements are more closely directed at the fields and application activities most likely responsible for a detected exceedance. When a Water Quality Benchmark exceedance occurs at a monitoring station, the Order requires the identification of the field(s) most likely to have contributed to the exceedance based on their most recent pesticide application history and the constituent-specific monitoring calendar.

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For example, copper is typically applied between February and August. An exceedance of a copper Benchmark during the Fall Event (October–December) would implicate fields that were harvested earlier that year (i.e., fields on which copper had been applied during the prior growing season) rather than fields newly planted in the fall, on which copper has not yet been applied. Similarly, a diuron or ethoprop exceedance during the Winter Event (February–March) would implicate fields planted the prior fall, when those products were applied, rather than fields that have been fallow or in rotation.

4. Fields in Adaptive Management upon Enrollment

Location of revision in Draft: (p.66 of Order)

Staff re-evaluated fields that are subject to Tier 1 Adaptive Management upon enrollment based on the pesticide application timing revisions to surface water monitoring and adaptive management triggers. This re-evaluation was based on pesticide application cycles for each parameter rather than Water Year cycles. This resulted in additional fields being subject to Tier 1 Adaptive Management in Tillas Slough for copper and imidacloprid. The list of fields subject to Tier 1 Adaptive Management upon enrollment are shown in Figure 2 of Appendix II and Table II.2 in the Order. If the field gets reconfigured, then the entire field is included if any portion of that field was identified for Adaptive Management.

5. Surface Water Monitoring Stations

Location of revision in Draft: pp. 6–8 and 11 of MRP; p. 69 of Order

Consolidates the Unnamed Creek, Morrison Creek, and Mello Creek stations to a single station where Morrison Creek enters the Morrison backwater (see Figure A.1 in Attachment A: Monitoring and Reporting Program), and removes the Ritmer Creek station since growers indicate that lily bulbs will no longer be farmed in its tributary area. Monitoring at this station will be required if lily bulbs are farmed in this tributary area in the future. Drainage-area delineations, the BLM default-value table, and the Annual Active Ingredient Application Amount Performance Standards are recalibrated to the new station footprint. The remaining stations focus monitoring downstream where lily bulbs are actively farmed and where beneficial uses may be present.

6. Major Storm Event Sampling Window

Location of revision in Draft: p. 9 of MRP; p. 87 of Order; Attachment D, Section 1

Adds precipitation boundary condition so that samples are collected before more than three inches of rain has fallen in 24 hours. The Draft only set a lower precipitation boundary (one inch in 24 hours to begin a Major Storm). The new upper boundary

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condition of no more than three inches of rain within 24 hours focuses sampling on the rising limb of the hydrograph and avoids inundated, diluted conditions.

7. Surface Water Quality Benchmarks

Location of revision in Draft: p.31 of Order

Water Quality Benchmarks for Surface Water (Table I.3) has been updated to include Benchmarks for the Estuarine Habitat Beneficial Use and shall apply whenever saline conditions (≥ 1 ppt) are present.

8. Groundwater Monitoring Program

Location of revision in Draft: pp. 14–17 of MRP

Consolidates the two groundwater monitoring programs into a single Groundwater Monitoring section with shared parameters, sampling frequency, and analytical methods. Specific provisions related to notification of well users for Drinking Water Wells exceeding a Benchmark are retained. The Draft had duplication between the two sets of groundwater monitoring requirements and inconsistent frequencies, actions, and trigger levels. The revision increases parity between the two programs and removes redundancy without losing water quality protection.

9. Groundwater Monitoring Frequency

Location of revision in Draft: pp. 14–17 of MRP

Sampling frequency better scales to monitoring results across both Groundwater Trend wells and Drinking Water Supply Wells, using a 5 mg/L nitrate (and chronic pesticide value) interim action level. All required wells are sampled annually in October for the first three years; thereafter, wells below 5 mg/L of nitrate (or below the chronic pesticide value) move to once every three years. Wells above this interim action level remain on annual sampling. An increasing trend over three years, or an exceedance of a Water Quality Benchmark triggers Adaptive Management. Pesticides are sampled where the Enrollee has applied them on enrolled parcels in the previous five years. This revision shortens the reduced Drinking Water Well sampling interval from five years to three years and provides a more direct water quality-driven reduced monitoring trigger for Groundwater Trend Monitoring.

10. Groundwater Adaptive Management

Location of revision in Draft: pp. 22–27 and 31 of MRP; pp. 71–75 of Order

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Scales Statewide Precedents to smaller, individual scale. Replaces aggregate, large-scale framework that requires a critical mass of growers for statistics-based approach with individual, water quality-based triggers appropriate to three growers and a single crop. Revises INMP reporting so growers only report nitrogen applied, and eliminates the Applied/Removed ratio, Applied-minus-Removed difference, crop removal coefficients, and township-scale Groundwater Protection Formulas, Values, and Targets in favor of more direct, individual adaptive management. Adaptive Management is triggered by groundwater monitoring results (see Revision 9). Certified INMPs are required for decreasing trend in groundwater quality and a Groundwater Protection Plan (renamed from the Water Quality Management Plan for Groundwater) is required when a Water Quality Benchmark is exceeded. Groundwater Protection Plan must propose an individual Groundwater Protection Target developed by a Qualified Professional that is quantitatively demonstrated to attenuate the trend or meet Water Quality Benchmarks within the time schedule allowed by the Order. Allowed time schedule in Groundwater Protection Plan is reduced from 20 years to 10 years.

11. Reporting Requirements

Location of revision in Draft: pp. 4–5 and 22–27 of MRP

Removes reporting requirements scaled to Statewide Precedents that are infeasible for the scale of three growers. Reporting is limited to only what is needed to verify compliance with this Order's requirements. This revision focuses limited resources on monitoring, adaptive management, and direct actions that will improve water quality. Removes requirement for the Water Quality Monitoring Workplan submittal, as surface water monitoring stations, Quality Assurance and Control, and sampling procedures/methodologies are now specified by the Order rather than proposed by the Coalition. Workplan elements that remain meaningful (e.g., representative well selection for Groundwater Trend Monitoring) are embedded directly in the relevant monitoring section and may be submitted by the individual enrollee. The MRP retains the provision for the Coalition and/or Enrollees to propose alternate monitoring stations, methodologies, procedures, and sampling frequencies. These provisions have been consolidated into Section V of the MRP: Modifications to the Monitoring and Reporting Program.

12. Coalition Requirements

Location of revision in Draft: Attachment C

Scales the Coalition requirements to a three-grower program. Retains fee collection and remittance to the State Board as the core function, narrows the Minimum Qualifications

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to those meaningful at this scale (administrative capacity, fee accounting, GeoTracker data management, and capability to develop required technical and monitoring materials), and replaces the Request-for-Proposal competitive selection with a streamlined application and approval process. The Draft's ten Minimum Qualifications and RFP-based selection were modeled on large regional Coalitions serving hundreds to thousands of growers across a substantial area and were not scaled to lily bulb agriculture in the Smith River Plain.

13. Quality Assurance and Quality Control Requirements

Location of revision in Draft: pp.4-5 of MRP and Attachment D

As part of revisions to Reporting and Coalition requirements, (Revisions 11 and 12), the requirement for the Coalition or Enrollees to submit a Quality Assurance Project Plan as part of their Workplan submission has been replaced by Quality Assurance requirements that the Order specifies. These are located in Attachment D: Methodologies and Procedures.

14. Findings (Public Participation, Antidegradation, SWAMP Data, Synergistic Pesticide Toxicity, and Statewide Precedents)

Location of revision in Draft: throughout Section I: Findings

Refines the Antidegradation analysis to incorporate current data and respond to comments; updates the 2025 SWAMP Report findings to reflect revised pH data and resulting changes to BLM-predicted toxicity-unit summaries and exceedance counts; expands Public Participation findings; includes findings related to staff's work to evaluate synergistic pesticide toxicity with respect to Water Quality Benchmarks; updates the Statewide Precedential Order findings consistent with Revision 10; updates the supporting findings and data that underpin the monitoring, reporting, and Adaptive Management framework; revises cost of compliance findings for consistency with all Order revisions.

15. Typographical Revisions, Terminology and Definitions

Location of revision in Draft: throughout Order and MRP; definitions on pp. 82–94 of Order

Minor clarity and consistency edits throughout, including corrected internal cross-references, refined definitions, and consistency in Beneficial Use terminology with the North Coast Basin Plan (e.g., consistent use of "Native American Culture" for the CUL beneficial use).

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Section II: Response to Comments on the Draft Lily Bulb Order

This section is organized into comment themes and summaries of comments. Each response to a comment (RTC) will address common issues raised by multiple commenters. Responses may also be individual, where the comment cannot be grouped into a general theme.

Index 1 includes all comments received by the North Coast Water Board on the Draft Order. These comments are organized by Comment Number as indicated below, in Table 1, and referenced in the comment themes. Index 1 is cross-referenced back to comment themes. Grammar, formatting, and terminology used by the commenter, as copied by North Coast Water Board staff into Index 1 of this Response to Comments document were not altered or corrected.

Table 1: List of Commenters by Comment Number

Comment Number(s)	Commenter(s)
AW-1 – AW-60	Alicia Williams
Baker-1	Kimberly Baker (Klamath Forest Alliance)
CDFW-1 – CDFW-20	California Department of Fish and Wildlife
CT-1 – CT-11	California Trout (CalTrout)
Johanson-1	Cinda Johansen
CCR-1 – CCR-8	Crescent Coastal Research (Craig Strong)
Crockett-1 – Crockett-12	Crockett United Lily Growers
DNRCD-1 – DNRCD-9	Del Norte Resource Conservation District
Powell-1 – Powell-2	E. Sandy Powell
Harms-1	Easter Lily Research Foundation (Ezekiel Harms, President)
Free-1 – Free-6	Dan Free (NOAA-NMFS)
Butler-1	Edith Butler
Holland-1 – Holland-2	Ellinor Holland
ELF-1 – ELF-44	Environmental Law Foundation et al.
Dremann-1	Eric Dremann
Pace-1 – Pace-12	Felice Pace
Galea-1 – Galea-2	Garrett Galea
Montagne-1	Greta Montagne
HFMA-1 – HFMA-17	Humboldt Fishermen's Marketing Association et al.
O'Brien-1	Jess O'Brien
Hostler-1 – Hostler-12	Joseph Hostler
Tays-1	Kimberly Tays
Wilson-1 – Wilson-4	Laurie Wilson
Sargent-1 – Sargent-4	Margaret Ann Sargent & Vincent Quattlebaum
Reeder-1	Marie Reeder

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Comment Number(s)	Commenter(s)
Wade-1 – Wade-7	Michael Wade
Brockington-1	Nancy Brockington
Scott-1 – Scott-2	Rhonda Scott
St.Clair-3 – St.Clair-6	Ethan St.Clair
Miller-1 – Miller-8	Rob Miller (Dahlstrom & Watt)
Dettmar-1 – Dettmar-17	Tara Dettmar
Jordan-1	Tobias Jordan
TDN-1 – TDN-24	Tolowa Dee-ni' Nation
Shade-1 – Shade-2	Trisha Shade
TU-N-1 – TU-N-10	Trout Unlimited National (Matt Clifford, CA Director)
TU-1 – TU-7	Trout Unlimited, California Council
Kharazi-1 – Kharazi-12	Tyler Kharazi
Westbrook-1 – Westbrook-18	Will Westbrook (Palmer Westbrook, Inc.)

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Comment Number(s)	Commenter(s)
Form Letter-1 (135 signatories)	Nancy Ihara, Sally Cinnamon, J. O'Brien, James Feichtl, Gary Bailey, Barbara Cole, Sara Buckley, Laurie Christomos, Jessica Jones, JL Angell, Mike Carpentier, Cris Clausing, Cate Classen, Jennifer Faer, Carolina Arenas Grosso, Dustin Davidson, Nancy Nichols, Andrea Pellicani, Mark Hayden, Amanda Sears, Allison Seibel, Deborah Filipelli, PhD, Sharon Paltin, MD, Nicole Fish, Lorraine Van Briggie, Jamie Taylor, Kiley Hudson, Diana Ashley, Carolyn Carry, Laura Lee Cundiff, Jess O'Brien, Rhonda Scott, Amber Ryno, David Rhodes, Tamara Wolski, Rachel Bradley, Wm. Baumgartner, John Mertes, Cari Torres, Scott Douglas Laxier, Alexandra Elliott, Joseph Alvarado, Tracy Fleming, Nancy Brockington, Julia Hawkins, PhD, Marie Garabedian, R. Reichert, Ellen Koivisto, Alan Bartl, Joyce Frohn, J. Barry Gurdin, Michele Cusumano, Mary Ann Madej, Ph.D., Brita Romans, Matt Richardson, Justin Truong, Mary Davison, Robert H. Retallick, RN, Denise Padgette, Amanda O'Connell, James Warfel, Amanda Cooper, Seleste Hill, Paul Lufkin, Cinda Johansen, Harold Watson, Robert Reed, AJ Cho, Brezlyn Stork, Te Maia Wiki, Wendy Smith, Les Roberts, Stephen Wilkerson, Angie Coriani, Andrea Carcovich, Chris Evans, Sita Ryce, Thomas Force, John Walton, Gisele Albertine, Katherine Patterson, Meryl Pinque, Katya Abbott, Ann Dorsey, Paul Glassner, Estrella Quiroga, Rena Kay, Darien MacSweeney, Jessica Zern, Ryan Kenneth, Sara Artemisia, Shawna Hyatt, Jewell Batway, Chriz Mitch, Kelli Stanley, Kimberly Leeds, Raphael Ponce, Robert Hughes, Joy Savoie, Derek Volkart, Pixie McNab, Davin Peterson, Diane Marks, James R. (Randy) Monroe, Nicolas Dunn, Michele Villeneuve, Alex WeissHaus, Caephren McKenna, Silvia Bertano, Keiko Barrett, Madeline Lawder, Sharon Paltin, Lea Jovanovski, Ellen McCann, Margaret Lohr, Roger Schmidt, Derek Gendvil, Sharon Hollis, Allison Seibel, Thomas Welte, Dogan Ozkan, Philip Simon, James Jungwirth and Kari Rein, Brandon Bunch, Sonja Taylor, Kern Aughinbaugh, Chrissy Thomure, Andrea Carcovich, Kyle Buchanan, Dogan Ozkan, Ruth Motherwell, Christopher Lish, B. Evans, Timothy Howard, Rebecca Canright, AJ Cho
Form Letter-2 (4 signatories)	Michele Dieterich, Austin Koontz, Sarah Fowler, Jeanette LeTourneaux

Comments and Responses

Comments and Responses are numbered for ease of reference. In this document, where a response to a comment refers to another response, it will use the shorthand, RTC #.

Background

RTC #1: Salmonid Biological and Economic Significance

Comment Numbers: ELF-7, ELF-8, ELF-9, CDFW-1, CDFW-2, CDFW-3, CDFW-7, HFMA-1, HFMA-2, TU-N-1, TU-2, Kharazi-6, Reeder-1

Commenters expressed detailed information on the Smith River's biological and economic significance. CDFW described it as "irreplaceable" with 38+ fish species, confirmed Coho at high risk of extinction below depensation threshold, and warned of "ecological trap" risk. ELF provided Coho escapement at 2,365 vs. 6,800 recovery goal. HFMA emphasized fishery closures affect coastal communities beyond the Basin. TU National cited the Governor's Salmon Strategy. Reeder emphasized the tourism-dependent economy.

Response: Thank you for these comments. The Proposed Lily Bulb Order includes findings on the ecological significance of the tributaries in the Smith River Plain. Additional information supplied in the comments above are admitted into the Administrative Record through their inclusion in Index 1 to this document.

RTC #2: General Support for Regulatory Action

Comment Numbers: ELF-1, ELF-38, CT-1, CT-9, CDFW-4, EPIC-1, EPIC-15, CCR-8, HFMA-4, TU-N-2, TU-N-7, TDN-4, TDN-24, Dettmar-1, Hostler-2, Hostler-12, Johansen-1, Baker-1

Commenters broadly supported the Board establishing regulatory requirements while calling for significant strengthening. ELF stated the Board "should not delay adoption" but should adopt with revisions. CDFW "supports the North Coast Water Board's efforts." CalTrout urged "regulations as soon as possible." The Tolowa Dee-ni' Nation committed to continued consultation.

Response: Staff acknowledge these comments and recommend that the North Coast Water Board adopt the Proposed Lily Bulb Order.

RTC #3: Voluntary Management Practice Activities

Comment Numbers: Crockett-2, Crockett-5, Crockett-1, DNRCD-2, DNRCD-4, Westbrook -17

Commenters documented nine specific adaptive management activities over 10 years and cited Morrison Creek improvement after moving fields away. DNRCD characterized

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pesticide residuals as “de minimis” and stated this does not justify regulations to “eliminate” the industry. DNRCD’s stated that their own water quality objectives align with the Order’s management practices. Westbrook urged thoroughness in developing the Order over rush.

Response: Staff appreciate the RCD’s initiative in developing novel management practices to address the unique conditions in the Smith River Plain. The results of copper modeling support the use of amendments to raise soil pH and increase the amount dissolved organic carbon reaching nearby surface waters to bind to dissolved copper ions and reduce their bioavailability. This interaction is reflected in the Biotic Ligand Model (BLM) algorithms and can result in raising the BLM thresholds to a level where toxicity is reduced to safe levels. Even modest adjustments to soil amendment practices can have a significant effect on copper bioavailability and a corresponding increase in the BLM-derived threshold. Because the copper concentrations that can cause chronic toxicity are so low in the Smith River Plain relative to waterbodies in other agricultural areas, raising the threshold where chronic toxicity is predicted by the BLM even a small amount can be the difference in exceeding the benchmark versus staying below it. A relatively small increase in pH and DOC can provide enough buffering and neutralization to raise the BLM copper thresholds above levels historically measured in Smith River Plain sampling.

The levels of dissolved copper detected at tributary locations downstream of lily bulb agriculture have the potential to cause chronic toxicity due to the low water hardness, pH, and dissolved organic carbon, which makes organisms more sensitive to the low level effects of copper. Even extremely low levels of dissolved copper when present in the local water chemistry related conditions of the Smith River Plain can pose a risk of chronic toxicity that is not considered *de minimis*.

Similarly, even though concentrations of synthetic pesticides are measured in parts per billion, they can still pose a risk of chronic toxicity to aquatic life. The proposed Order sets Water Quality Benchmarks to protect against the risk of chronic toxicity and are based on ecotoxicity data to protect the most sensitive aquatic species. The Water Quality Benchmarks used in the Order are a way to establish the water quality level that is protective of beneficial uses in the Smith River Plain.

While most of the pesticide detections in the SWAMP study were below Water Quality Benchmarks, during storm events and sometimes during baseflow conditions, pesticide concentrations occasionally exceeded the Water Quality Benchmarks. Addressing the timing and location of the recorded exceedances is a way to prioritize management practices and bring storm related spikes in pesticide concentration down below the benchmarks and reduce the risk of toxicity to an acceptable level.

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The Proposed Order does not intend to ‘eliminate’ the lily bulb growing industry. The Proposed Order sets up a regulatory program and places requirements on lily bulb operations to address the water quality problems documented in the 2025 SWAMP Report and in the monitoring and reporting program. It sets up an adaptive management process that requires additional or enhanced management practices to be implemented iteratively until water quality monitoring shows that pesticides and copper below the permit thresholds. It allows for reduced monitoring and maintaining existing management practices where monitoring shows water quality benchmarks are being met during storm events and baseline conditions. It sets up a clear path to compliance through iterative adaptive management.

Staff recognizes that the water quality sampling results from Morrison Creek show a history of fewer water quality exceedances when compared to other tributaries in the Smith River Plain. The Order’s Adaptive Management Program is structured to ramp up requirements if water quality monitoring results exceed Water Quality Benchmarks. In areas where Water Quality Benchmark exceedances are fewer or absent, cost of compliance with the Order’s requirements should be lower.

Staff also recognizes and appreciates the proactive efforts of United Lily to alter lily bulb field runoff away from Morrison Creek. Hydrologically disconnecting drainage ditches from sensitive natural resources is one the most effective ways to address contributions to water quality exceedances identified in the 2025 SWAMP Report.

Scope of Order

RTC #4: Spray Drift and Health Protection

Comment Numbers: Kharazi-7, Pace-8, Hostler-6, Sargent-2, Form Letter-1

Commenters requested buffer zones between lily bulb fields and residences and/or schools. Hostler recommended 200-300 foot buffers. These requests address protection of human health from pesticide exposure via aerial spray drift.

Response: The commenters’ requests for buffers between fields and residences or schools address protection of human health from pesticide exposure via aerial spray drift during application. The regulation of pesticide application practices is within the statutory authority of the Department of Pesticide Regulation (DPR) and county agricultural commissioners under the Food and Agricultural Code, not the North Coast Water Board. The North Coast Water Board has been coordinating with DPR and the Del Norte County Agricultural Commissioner to relay these concerns. See RTC #40 regarding coordination between the North Coast Water Board and DPR under the 2019 Management Agency Agreement (MAA). See also RTC #8 regarding community health concerns raised during development of the Order, including coordination between the North Coast Water Board and other CalEPA Boards, Divisions, and Offices.

RTC #5. ESA/CESA Take Liability and Listed Species Protections

Comment Numbers: CT-7, CT-8, CT-11, CCR-1, CCR-2, CCR-8, HFMA-9, AW-19, ELF-39, TDN-8, Dettmar-6, Dettmar-7, Kharazi-5, Free-6, Holland-2, Tays-1, TU-5, Westbrook-18

Commenters expressed that the Draft Order must prevent take of ESA/CESA-listed species. CalTrout raised vicarious take liability under *Strahan v. Coxe*. CCR and Dettmar characterized the Order as a “permit to violate the ESA.” ELF noted no specific tidewater goby protections. Westbrook argued beneficial uses have continued for 80+ years.

Response: *Strahan v. Coxe* (1st Cir. 1997) 127 F.3d 155, concerned a state agency’s third-party take liability under the Endangered Species Act (ESA) when issuing licenses and permits authorizing gillnet and lobster pot fishing which entangled endangered Northern Right whales. The First Circuit Court of Appeals concluded that “a governmental third party pursuant to whose authority an actor directly exacts a taking of an endangered species may be deemed to have violated the provisions of the ESA.” (*Strahan*, 127 F.3d at 163.) In *Strahan*, the Court found the necessary causal link between the licensing scheme and the taking, given that it was not possible for a licensed commercial fishing operation to use its gillnets or lobster pots in a manner permitted without risk of violating the ESA by exacting a taking; that is, the state had licensed commercial fishing in specifically the manner likely to result in a take. (*Id.*, at 163-164.)

In contrast to the facts in *Strahan*, the Draft Order does not cause a taking. The Draft Order regulates waste discharges associated with agricultural operations; it does not permit Enrollees to conduct activities in a manner that would result in the take of listed species. Finding 30 of the Draft Order expressly states that the Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited or becomes prohibited in the future under either the California or Federal Endangered Species Acts. It further directs Enrollees to obtain any necessary take authorization and ensure all requirements of the applicable Endangered Species Acts are met.

The Proposed Order establishes waste discharge requirements, monitoring, and other protective measures intended to minimize pollutant discharges and protect water quality and aquatic life beneficial uses. As stated in Finding 1 of the Draft Order, the purpose of this action is to provide a water quality regulatory structure to minimize discharges of waste and to prevent adverse impacts to water resources from agricultural activities associated with lily bulbs and other similar bulb crops. The Proposed Order implements applicable water quality control plans and takes into consideration the beneficial uses to be protected, including aquatic life and tribal beneficial uses; water quality objectives reasonably required for that purpose;

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other waste discharges; the need to prevent nuisance; and the provisions of Water Code section 13241. In particular, the Water Quality Benchmarks within the Proposed Order were determined by reviewing all available pesticide water quality values, including U.S. EPA aquatic life benchmarks, and, exercising best professional judgment consistent with scientific evidence, selecting the most protective values for relevant beneficial uses, including the most sensitive Cold Freshwater Habitat and Native American Culture uses.

Any causal connection is further attenuated here given that the North Coast Water Board regulates these discharges and places necessary restrictions on the discharge of waste; it does not authorize or provide entitlements to the underlying land use activity.

Finally, North Coast Water Board staff, in developing appropriate waste discharge requirements for the Board's consideration, have closely coordinated with state and federal wildlife agencies.

In short, the Proposed Order would not cause "take" but instead establishes a necessary regulatory structure to prevent or lessen existing harms, including harms to protected species.

RTC #6. Tribal Cultural Significance

Comment Numbers: TDN-1, Dettmar-2, Dettmar-3, Dettmar-13, Hostler-1, Hostler-11, Hostler-12, Scott-1, Scott-2, Powell-2, Kharazi-6

Commenters addressed the cultural significance of the Smith River and its salmon to the Tolowa Dee-ni' Nation. The Tolowa Dee-ni' Nation established sovereignty and aboriginal territory. Dettmar articulated salmon as "central to ceremony, spiritual practice, oral tradition, and Tribal identity." Hostler described the First Salmon Ceremony direct-contact exposure. Scott documented the historical context of indigenous rights.

Response: Staff acknowledges the cultural significance of the Smith River to the Tolowa Dee-Ni' Nation. The North Coast Water Board has been in consultation with the Tolowa Dee-ni' Nation regarding the project since 2024. As described in the Order's findings, in April 2024 staff contacted six Tribes identified by the Native American Heritage Commission as having current or historic lands in or near the Project Area, and identified two additional Tribes that could be affected. The Tolowa Dee-ni' Nation requested formal consultation under AB 52 in May 2024, and the North Coast Water Board and the Tolowa Dee-ni' Nation initiated formal consultation in mid-2024. Consultation has continued throughout development of the Order and the DEIR.

Significantly, the Tolowa Dee-ni' Nation had an active and direct role in developing Tribal Cultural Resource analysis in the DEIR. Through a subcontract with

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Montrose Environmental, the Tolowa Dee-ni' Nation contributed to the tribal cultural resources baseline, the definition of tribal cultural resources used in the DEIR (including the Tribal Cultural Landscape concept that extends the analysis beyond archaeological resources to the living plant and animal species and viewsheds that sustain cultural practice), and the associated mitigation measures. The Tolowa Dee-ni' Nation's own Tribal Cultural Resources submittal is included as Attachment F to the DEIR. The North Coast Water Board defers to the Tolowa Dee-ni' Nation's expertise regarding the identification and significance of its tribal cultural resources and the cultural practices that depend on the health of the Smith River Plain, consistent with the purpose of AB 52 consultation.

RTC #7. Tribal Beneficial Use Protections in the Draft Order

Comment Numbers: ELF-2, Kharazi-9, Pace-10, TDN-24, Form Letter-2. St.Clair-6

Commenters requested specific enforceable protections for Tribal beneficial uses. ELF argued the Draft Order fails to give adequate weight to Tribal beneficial uses, environmental justice concerns, and the extraordinary ecological value of the Smith River estuary. St.Clair asserted that the state is failing its obligation to protect Native American Culture (NAC) beneficial uses. The Tolowa Dee-ni' Nation committed to continued government-to-government consultation.

Response: Staff acknowledges the importance of protecting Tribal beneficial uses designated in the North Coast Basin Plan, including Native American Culture (CUL), Tribal Subsistence Fishing (TSUB), and other uses. The Proposed Order's Receiving Water Limitations, Water Quality Benchmarks, and management practice requirements are designed to protect all designated beneficial uses, including CUL. The North Coast Water Board is committed to continuing government-to-government consultation with the Tolowa Dee-ni' Nation and other tribes. See RTC #6 for more detail on the North Coast Water Board's consultation pursuant to AB 52 with the Tolowa Dee-ni' Nation.

RTC #8: Community Health Impacts from Agricultural Activities

Comment Numbers: AW-41, AW-42, AW-54, AW-55, AW-56, Wade-1, Wade-2, Wade-3, Wade-4, Wade-5, Wade-6, Wade-7, Hostler-3, Shade-1, Montagne-1

Commenters expressed concerns about community health impacts from pesticide application practices. Wade described a cancer epidemic near Rowdy Creek, named Telone II and Chlorothalonil as carcinogens near Smith River School, demanded a cancer cluster investigation, a 1-mile no-spray buffer, and mandatory well testing. Hostler described childhood exposure at Smith River Elementary. Williams documented the August 2024 spray drift incident.

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Response: During the course of 10 public meetings on development of the Lily Bulb Order that were held in Del Norte County between July 2024-October 2025, staff heard many community concerns that extended beyond the regulatory authority of the North Coast Water Board. Accordingly, staff referred those concerns—such as pesticide application practices and air quality—to the appropriate CalEPA Boards, Divisions, and Offices, including the Office of Environmental Health Hazard Assessment and the California Department of Pesticide Regulation. In parallel, staff has coordinated with NOAA Fisheries, the CA Department of Fish and Wildlife, the CA Coastal Commission, and the US Fish and Wildlife Service through a natural resource agency workgroup to address technical questions related to Order development.

Under the 2019 Management Agency Agreement (MAA) starting in August 2025, CDPR and the North Coast Water Board conducted a series of staff-to-staff meetings on available data and the Draft Lily Bulb Order. CDPR conducted a review of available data, including pesticide use reporting (PUR) data, surface water and groundwater monitoring data (including from the SWAMP studies) and toxicity studies completed (to date) for the Smith River.

CDPR's preliminary review concluded that additional data were needed for them to adequately evaluate the potential impacts to aquatic life such as fish from copper concentrations detected in surface water. As a result, CDPR announced the initiation of a Fish Toxicity Study in the Smith River Plain to fill this data gap. Results of this study will help identify if current copper concentrations are associated with impacts to fish populations in the Smith River watershed. CDPR is contracting researchers from California State Polytechnic University, Humboldt to conduct the study which will span two years beginning this year.

RTC #9: Enforcement Provisions

Comment Numbers: CCR-4, CCR-5, CCR-6, AW-46, AW-47, AW-48, Dettmar-14, Pace-5, Pace-9, TU-4, Kharazi-10, Hostler-9, Wilson-4

Commenters expressed that enforcement provisions are inadequate and vague. CCR characterized the Order as a "Pollution Permit." CCR and Dettmar requested automatic permit revocation on a third exceedance. Williams argued enforcement must be specific. Wilson proposed that violation fines fund toxin testing for Smith River residents.

Response: Proposed Order Findings #131(e) and Findings #190 through 193 discuss potential enforcement for noncompliance, consistent with the State Water Board's Water Quality Enforcement Policy (Enforcement Policy). Enforcement for noncompliance is discretionary and would follow the enforcement prioritization protocols and progressive enforcement principles set forth in the Enforcement Policy. Enforcement decisions are made on a case-by-case basis and take into

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account the significance of the violation and the appropriate action to ensure the most efficient and effective use of available resources. The Water Code, Enforcement Policy, and Policy on Supplemental Environmental Projects govern where funds recovered pursuant to any administrative civil liability action may be directed.

RTC #10: Economic Analysis

Comment Numbers: HFMA-8, AW-43, AW-44, AW-45, Wilson-1, Reeder-1, TDN-6, Kharazi-1, Jordan-1, Westbrook-1, Westbrook-2, Westbrook-3, Westbrook-4, Westbrook-5, Westbrook-6, Westbrook-7, Westbrook-8, DNRCD-1, DNRCD-3, Crockett-5, Crockett-6, Miller-1, Miller-6

Some commenters argued the Draft Order's cost burden will result in the industry's demise. Others argued the economic reasoning doesn't account for fishery losses. The Tolowa Dee-ni' Nation noted only three growers benefit from ongoing exceedances. Williams asserted that grants cover most BMP costs at zero cost to growers.

Response: Staff acknowledges the range of perspectives on the economic implications of the Proposed Order and has considered the costs of compliance alongside the economic value of the beneficial uses the Order is designed to protect.

Regarding the assertion that the Order's cost burden will result in the industry's demise: The North Coast Water Board is required to consider economic factors when adopting waste discharge requirements (Water Code §§ 13241, 13263). The Proposed Order's Findings include a cost analysis reflecting estimated costs for monitoring, reporting, and management practice implementation (see Findings, Cost Considerations). The North Coast Water Board does not find that the anticipated costs of compliance with this Order alone would be large enough to necessarily cause any existing lily bulb operator to cease or otherwise abandon operations. The Proposed Order provides compliance flexibility through multiple Tier 1 management practice options, a coalition pathway that allows cost-sharing for monitoring and reporting, and a phased adaptive management structure that scales requirements to documented water quality conditions rather than imposing maximum requirements on all enrollees at the outset. The Proposed Order was also revised to simplify nutrient management reporting and to reduce the total number of laboratory analyses through constituent-specific monitoring, further reducing compliance costs.

Staff also notes that the commenters' characterization of cumulative cost pressures, including taxes, labor, insurance, shipping, and other regulatory requirements, reflects costs that are not attributable to this Order. Water Code

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section 13241 requires the Board to consider economic factors in adopting waste discharge requirements; it does not require the Board to ensure that all cumulative business costs from all sources remain below any particular threshold.

Regarding the argument that the economic analysis does not account for fishery losses, staff agrees that an assessment of economic considerations under Water Code sections 13241 and 13263 must consider the economic value of the beneficial uses being protected, not solely the costs borne by the regulated industry. The Smith River supports commercial, recreational, and Tribal fisheries with substantial economic and cultural value. Commercial fishery closures since 2022 due to conservation concerns for Chinook and coho salmon have had documented economic impacts on coastal fishing communities throughout the region. The Proposed Order's Findings were revised to reflect refined economic considerations, including the costs of compliance for the regulated industry and the economic and cultural value of the beneficial uses that continued water quality degradation places at risk.

Regarding the availability of grants and cost-share programs: staff acknowledges that federal and state cost-share programs, including those administered by USDA Natural Resources Conservation Service, the California Department of Food and Agriculture, and the State Water Board, have been and remain available to support implementation of certain management practices on lily bulb operations. The availability of public funding to offset compliance costs is relevant to the Board's economic analysis under Water Code section 13241 and further supports the finding that the costs of compliance are not unreasonable.

RTC #11: Copper Persistence in Soils

Comment Numbers: AW-16

Williams argued the five-year lookback period is insufficient because copper persists in soils indefinitely. Recommended extending to 20 years.

Response: The Proposed Lily Bulb Order applies to current activities covered under the Order. The commenter proposes requiring enrollment of fields no longer cultivating lily bulbs, which falls outside the scope of the North Coast Water Board's Water Code section 13263 authority.

RTC #12: Site-Specific Individual WDRs

Comment Numbers: AW-17

Williams recommended site-specific individual WDRs for fields draining to Delilah Creek, Tillas Slough, and Rowdy Creek.

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Response: The North Coast Water Board considered whether site-specific individual WDRs are warranted. Water Code section 13263 authorizes general waste discharge requirements for a category of discharges where the discharges are produced by the same or similar operations. The three remaining lily bulb operations meet these criteria. The North Coast Water Board also considered the efficient use of available staff resources in selecting a permitting approach. General waste discharge requirements provide a consistent regulatory framework for similar operations and are generally less resource-intensive to develop, implement, oversee, and renew than multiple individual permits. The Draft Order's adaptive management framework addresses site-specific water quality conditions by placing fields with documented exceedances into Tier 1 Adaptive Management upon enrollment.

RTC #13: Board Notification of Non-Enrollee Landowners and Operators

Comment Numbers: AW-18

Williams argued the Board, not the enrollee, should directly notify non-enrollee landowners and operators of their potential liability.

Response: The Draft Order requires enrollees to notify non-enrollee landowners and operators. The North Coast Water Board also conducts its own outreach as part of the enrollment process and will make the adopted Order publicly available.

RTC #14: Request for Board to Compel Agency Action

Comment Numbers: AW-38, TU-7

Williams argued NOAA, CDFW, and USFWS have failed to take action and the Board should request they do so. TU CA Council similarly urged agencies to exercise their authority.

Response: The North Coast Water Board does not have authority to direct other state or federal agencies to take enforcement action under their independent statutory mandates. The North Coast Water Board will continue to coordinate with these agencies through existing interagency mechanisms and will share monitoring data and compliance information, and evaluate opportunities for coordinated regulatory and enforcement responses where appropriate and consistent with each agency's authorities. In appropriate circumstances, this coordination may include consideration of joint enforcement actions.

RTC #15: Cannabis Order as Regulatory Model

Comment Numbers: TDN-16, TDN-17, TDN-18, TDN-19, TDN-23, Dettmar-5,
Dettmar-17

The Tolowa Dee-ni' Nation and Dettmar expressed that the Draft Order should be aligned with the Cannabis Order, providing a stronger model through clear discharge prohibitions, tiered compliance, mandatory monitoring, and explicit enforcement. The Tolowa Dee-ni' Nation recommended specific structural changes including receiving water limitation language, parcel-level risk tiering, mandatory corrective action triggers, and removal of coalition participation.

Response: The Proposed Order is tailored to the unique characteristics of commercial lily bulb production, its physical setting in the Smith River Plain, and the agricultural regulatory framework established by the State Water Board's precedential East San Joaquin Order (Order WQ 2018-0002-DWQ), which governs waste discharge requirements for irrigated agricultural lands. The Cannabis Order regulates a different activity in a different setting and under a different regulatory program; its parcel-level risk tiering is built around factors such as slope, site disturbance, and proximity to watercourses that are meaningful for cultivation on steep, forested terrain but do not translate to the flat, hydrologically-connected agricultural plain at issue here.

The Proposed Order does tier its requirements by risk, but it does so using monitoring data rather than physical proxies. Fields are placed into Adaptive Management because they have demonstrated, through receiving water monitoring, that they are not meeting Receiving Water Limitations—and the revised framework ties that designation to each field's pesticide application history. Staff considers this the most effective basis for assessing actual risk to water quality, because it identifies the growers whose fields the data implicate rather than inferring risk from slope or distance to a water body. This approach is especially appropriate in the Smith River Plain, where the low-gradient, highly interconnected hydrology means that nearly all production areas are connected to surface waters; proximity- or slope-based tiering would not meaningfully distinguish higher- from lower-risk fields in that setting, whereas monitoring-based tiering does.

The recommendation regarding Coalition participation is addressed in the Response to Comments on Coalition Requirements (see RTC #68).

RTC #16: Comments Outside Scope of Order

Comment Numbers: Sargent-3, Sargent-4

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Sargent raised issues outside the scope of this proceeding regarding Crescent City's wastewater treatment plant and a proposal to transform the closed landfill into a water management utility.

Response: These comments have been forwarded to the appropriate North Coast Water Board staff that regulate the City's publicly-owned treatment works and landfill.

Findings

RTC #17: Antidegradation Analysis

Comment Numbers: ELF-5, ELF-31, CDFW-8, HFMA-10, EPIC-14

Commenters expressed that the antidegradation analysis is legally insufficient. ELF and EPIC argued the BPTC finding is unsupported, given past performance data. CDFW challenged Finding No. 117 ("limited and reversible" degradation). EPIC and ELF argued that the findings fail to adequately analyze the social and environmental costs of continued degradation. HFMA argued the Order will not comply with the Antidegradation Policy.

Response: Findings 112 through 123 of the Draft Order discuss the state and federal Antidegradation Policies and how the Draft Order complies with these provisions. In particular, these Findings follow direction from the State Water Board (ESJ, Order WQ 2018-0002) in applying the Antidegradation Policies to address nonpoint sources discharges regulated under a general order.

As a preliminary matter, North Coast Water Board staff completed a general baseline water quality assessment based on readily available data and concluded that at least some surface water and groundwaters in the Smith River Plain are considered high-quality for one or more constituents of concern per the Antidegradation Policy. High quality waters are those that have a baseline water quality better than required by water quality control plans and policies. Baseline water quality is generally the best quality of water since 1968, the year of the adoption of the Antidegradation Policy.

The Draft Order Findings include extensive discussion of existing water quality data. While complete water quality data dating back to 1968 are not available, the Board relied on the best available information, including historical land use, pollutant sources, and existing water quality data, to conduct a general baseline water quality assessment. Historical records indicate that commercial lily bulb cultivation and associated copper use occurred prior to adoption of the Antidegradation Policy; however, available information does not allow the Board to conclusively characterize dissolved copper concentrations in all affected waters since 1968. Based on the best available information, however, staff concludes that

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at least some affected surface waters and groundwaters qualify as high-quality waters under the Antidegradation Policy with respect to dissolved copper. While there have been some more recent exceedances in surface water for synthetic pesticides, these compounds were not historically used in agriculture prior to 1968. Thus, surface and ground water are high-quality with respect to these constituents. For nutrients, including nitrates, available water quality data similarly demonstrate that portions of the surface and ground water in the Smith River Plain are high quality with respect to these constituents.

While commenters fault the sufficiency of the Board's baseline analysis, the State Water Board has confirmed that a "general review and analysis of readily available data is sufficient," that the Board "need not generate new data or take extraordinary steps to search for existing data," "there will always be substantial data gaps," and the Board "should not delay the implementation of a regulatory program in order to conduct a comprehensive baseline assessment and analysis – especially where . . . the general order imposes essentially the same iterative approach for management practices and other requirements regardless of whether or not the receiving water is high quality." (ESJ, Order WQ 2018-0002, p. 76-78.) Accordingly, although historical water quality conditions cannot be fully reconstructed for every constituent in every affected waterbody, staff concludes that the best available information provides a sufficient basis for a general baseline water quality assessment and supports the antidegradation findings in the Draft Order.

Next, staff concluded that, while the provisions of the Draft Order are anticipated to reduce discharge pollutant loadings and prevent degradation, there may be some degradation of high-quality waters, particularly during the period of time enrollees are working to achieve compliance with receiving water limitations. Given the baseline quality assessed, recent trending decreases in concentrations, and anticipated implementation of the measures required under the Order, staff anticipates that any water quality degradation will be limited, and particularly in the case of dissolved copper's historical loadings, water quality is likely to improve from baseline conditions.

The conclusion that any degradation will be limited rests on the specific, enforceable controls the Order imposes at the outset of, and throughout, enrollment. The Order establishes Receiving Water Limitations that prohibit discharges from causing or contributing to exceedances of applicable water quality objectives, and it requires each Enrollee to implement management practices designed to minimize the discharge of waste to surface water and groundwater. The Streamside Area requirements, consisting of a Riparian Vegetation Area and a Vegetated Buffer, further reduce the delivery of sediment, pesticides, copper, and nutrients to surface water. The Order's Adaptive Management framework is triggered by monitoring results and, as revised, directs additional and more

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advanced controls at the specific fields determined to be a likely source of the exceedance based on pesticide application history. Fields in tributary watersheds with documented exceedances are placed into Tier 1 Adaptive Management upon enrollment, so that the highest-risk fields begin implementing and escalating controls immediately. For groundwater, the Order requires management practices that minimize the application of nitrogen relative to crop need, thereby reducing the potential for nitrate to leach to groundwater, and requires an individual Groundwater Protection Target developed by a qualified professional, where a Water Quality Benchmark is exceeded. The surface water and groundwater monitoring programs provide the feedback necessary to verify that these controls are achieving their purpose and to compel further action if they are not. Together, these provisions ensure that any degradation of high quality waters is confined to the limited and temporary period during which Enrollees implement and refine management practices toward attainment, is held within the bounds of the applicable water quality objectives, and is reduced over time as controls take effect, consistent with best practicable treatment or control (BPTC).

Given this potential for degradation, the Board is then required to determine whether any change in water quality (1) will be consistent with maximum benefit to the people of the state, (2) will not unreasonably affect present or probably future beneficial uses of such water, and (3) will not result in water quality less than prescribed in water quality control plans or policies. Further, the Board must find that any activities that result in discharges to high quality waters are required to use the BPTC to avoid pollution or nuisance and maintain the highest water quality consistent with the maximum benefit to the people of the state.

The Proposed Order appropriately finds that the discharges will be controlled by BPTC. While the Board generally cannot dictate the manner of compliance with water quality orders and no single set of practices is appropriate for every field, the Order relies on a combination of practices, some of which have been voluntarily implemented since implementation of the 2021 Management Plan but also additional measures, such as requiring implementation of management practices; Receiving Water Limitations and Streamside Area setbacks; iterative and advancing implementation of measures; and monitoring and reporting to track compliance and inform implementation. While commenters note that some past management measures have not proved effective, the Proposed Order builds on past practices and lessons learned. Shy of prohibiting discharges from lily bulb operations, commenters do not point to alternative protective measures. Further, as the State Water Board acknowledged in the ESJ Order, what constitutes best practicable treatment or control will evolve over time as the Board's understanding of the discharges and technology advances. Board staff considered alternative methods of regulation, such as immediate compliance with Receiving Water Limitations and specific discharge prohibitions but concluded that such measures

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could effectively preclude continued operation of lily bulb farming because growers would be required to immediately eliminate discharges before they had an opportunity to implement measures necessary to achieve compliance with Receiving Water Limitations.

The Proposed Order concludes that any limited degradation following implementation is to the maximum benefit of the people considering various factors, such as the social, economic, and environmental costs at issue. The Draft Order generally recognized the relative significance of the commercial lily bulb industry in the Smith River Plain and costs of alternative regulation, as well as social and environmental costs, including impacts on aquatic life, tribal uses, and recreational uses. Based on input received during the written comment period, the public workshop, and ongoing tribal consultation, Board staff has expanded upon its maximum benefit determination, as well as other components of its Antidegradation Findings, in the Proposed Order. Staff continues to conclude the Proposed Order complies with the Antidegradation Policy.

RTC #18: NPS Policy Key Elements

Comment Numbers: ELF-3, ELF-4, ELF-20

ELF expressed that the Draft Order must comply with all five Key Elements, citing *Monterey Coastkeeper v. SWRCB* (2018). ELF argues that the Order fails to demonstrate that the time schedule is as short as practicable, as required by Key Element 3.

Response: Findings 109 through 111 of the Draft Order discuss the Nonpoint Source Policy and compliance therewith. In *Environmental Law Foundation v. State Water Resources Control Board*, the Third Appellate District clarified that the NPS Policy includes Key Element language, which the above findings include, as well as additional advisory and nonbinding commentary below each Key Element. (*Environmental Law Foundation v. State Water Resources Control Board* (2023) 89 Cal.App. 5th 451, 476-477.) Key Element 3 states the following: “Where a RWQCB determines it is necessary to allow time to achieve water quality requirements, the NPS control implementation program shall include a specific time schedule, and corresponding quantifiable milestones designed to measure progress toward reaching the specified requirements.” The nonbinding, advisory commentary below Key Element 3 recognizes that while there are instances where it will take time to achieve water quality requirements, “the time schedule may not be longer than that which is reasonably necessary to achieve an NPS implementation program’s water quality objectives.” The Draft Order notes that, given existing water quality conditions and the time needed to develop and implement actions to address discharges, additional time may be necessary to achieve receiving water limitations; accordingly, it includes a time schedule and

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specific quantifiable milestones for implementing required management practices and meeting limitations as soon as practicable.

The Adaptive Management Program's timeline reflects the time reasonably necessary to identify, install, and verify the effectiveness of management practices given the specific characteristics of commercial lily bulb production. Lily bulbs are grown on a multi-year rotational cycle, such that the associated pesticides are not applied every year. The response of a given field to a newly installed or modified management practice can be meaningfully evaluated only when that field cycles back into production and is sampled during the seasonal window in which the constituent of concern is expected to be discharged. This rotational cycle is an inherent feature of the crop and lengthens the minimum interval over which the effectiveness of a practice can be observed.

The Adaptive Management Program is also necessarily iterative. Management practices that require field-scale installation require time to construct and test across a monitoring cycle before their effectiveness can be confirmed. A time schedule that did not accommodate at least one full install-and-verify cycle, accounting for the rotational nature of the crop, would not allow the program to determine whether required practices are working before escalating to more stringent measures.

For fields required to implement Tier 1 Adaptive Management at enrollment, Enrollees have one growing cycle to demonstrate compliance with Receiving Water Limitations before they are required to develop and implement a Certified Water Quality Management Plan (WQMP). Developing and implementing a Certified WQMP is a robust, relatively expensive requirement. If implementation of the Certified WQMP is not successful at meeting Receiving Water Limitations by the end of the time schedule (no more than two growing seasons at Tier 2), the Enrollee would then be in violation of the Order and may be subject to discretionary enforcement.

The Order's time schedule is no longer than reasonably necessary to achieve the program's water quality objectives. The schedule requires implementation of management practices and attainment of receiving water limitations as soon as practicable, escalates the required level of control where monitoring demonstrates that practices are not achieving water quality requirements, and includes quantifiable milestones to measure progress at each step. Consistent with this principle, the Proposed Order has been modified to reduce the time schedule allowed for an enrollee's Groundwater Protection Plan to attain Water Quality Benchmarks from twenty years to ten years, reflecting the North Coast Water Board's determination that a shorter schedule is practicable for this program.

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RTC #19: AB 2108 / Water Code § 13149.2

Comment Numbers: ELF-6, ELF-35, ELF-36, ELF-37, AW-7,

Commenters expressed that the § 13149.2 analysis is cursory and insufficient. ELF argued it fails to summarize impacts to tribal and low-income communities and fails to identify the Board's full powers including basin plan prohibition authority. ELF also argued the findings failed to address the state and regional board racial equity resolutions. Williams argued "may impact" should be changed to "has impacted."

Response: Water Code section 13149.2 requires "concise, programmatic" findings on potential environmental justice, tribal impact, and racial equity considerations related to issuance of a regional or statewide waste discharge requirements. These findings are based on readily available information identified by staff or raised during public review and must include a concise summary of anticipated water quality impacts in disadvantaged or tribal communities as a result of the permitted activity and any environmental justice concerns within the scope of the Board's authority with regard to those impacts, as well as identification of measures available and within the scope of the Board's authority to address the impacts.

The Regional Water Board does not interpret Water Code section 13149.2 to require within the necessary findings a complete recitation of the Board's water quality authorities, including the possibility of adoption of a basin plan prohibition, or varying permitting options. Identifying "measures available" is reasonably interpreted to mean identifying how the order addresses impacts, not the unlimited potential permitting iterations available. Further, Water Code section 13149.2 does not require an explanation for order measures. Antidegradation Findings, found in Section I.G.4 of the Proposed Order adequately address alternative permitting options considered and not pursued and sufficiently detail the rationale for proposed requirements.

The Proposed Order Findings, while following Water Code section 13149.2's direction to include concise, programmatic findings, have been revised to slightly expand upon anticipated water quality impacts and environmental justice concerns based on readily available information and information raised during the public review process, including the Board workshop and written comment period, and expand upon the list of measures included within the Order that are intended to address these impacts.

Finally, commenters note that the Draft Order's Findings fail to discuss applicable racial equity resolutions. The Proposed Order Findings (see Findings #31-33) have been revised to include a brief discussion of these resolutions and application to this permitting action. The requirements within the Order are consistent with the commitments in those resolutions.

RTC #20: AB 52 Consultation Process

Comment Numbers: AW-13, AW-14, AW-15, Shade-2

Two commenters raised concerns about the integrity of the AB 52 tribal consultation process, alleging potential conflict of interest between a grower and a member of the Tolowa Dee-Ni' Nation. Williams recommended involving tribes from outside the immediate area and that the three responding tribes be listed explicitly.

Response: As described in the Proposed Order Finding #28-29, in April 2024 staff contacted six Tribes identified by the Native American Heritage Commission as having current or historic lands in or near the Project Area, and identified and notified two additional Tribes that could be affected. The Tribes contacted were Cher-Ae Heights Indian Community of the Trinidad Rancheria, Elk Valley Rancheria, Karuk Tribe, Shasta Nation, Yurok Tribe, Tolowa Dee-Ni' Nation, Melochundum Band of Tolowa Indians, and Resighini Rancheria Coastal Indian Community. Of the eight Tribes notified, three responded. One updated contact information, a separate Tribe deferred to the Tolowa Dee-Ni' Nation. The Tolowa Dee-Ni' Nation requested formal consultation, initiated in mid-2024. The North Coast Water Board cannot control the internal governance decisions of a sovereign tribal nation. The Order has been revised to specify which Tribes responded to the AB52 notice.

RTC #21: Omissions from Findings

Comment Numbers: ELF-10, ELF-11, ELF-41

ELF expressed that the Draft Order's background section omits: (1) the 2018 NMFS/CDFW Copper Monitoring Report; (2) prior permit efforts dating to 2011; and (3) the 2018 ELF/PCFFA petition. ELF incorporated the 2018 Petition and exhibits by reference.

Response: The Draft Order did include information on Order development starting in 2011 (see Finding #8). The Proposed Order was modified to include background information on the 2018 NMFS/CDFW Copper Monitoring Report (see Finding #58 in the Proposed Order) and the 2018 Petition referenced by ELF (see Finding #11 in the Proposed Order).

RTC #22: 2021 Management Plan Effectiveness

Comment Numbers: ELF-12, ELF-13, ELF-14, CDFW-5, TDN-7, CCR-2, Dettmar-6, TU-N-3

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Commenters expressed differing views on effectiveness of the Smith River Plain Water Quality Management Plan (Management Plan). ELF asserted that the Board's conclusion that concentrations decreased is unsupported. CDFW attributed reductions to both management practices and a decline in cultivation acreage. The Tolowa Dee-ni' Nation noted the 2026 diuron listing came five years after the voluntary strategy. CCR and Dettmar characterized the listings as proof the Management Plan failed.

Response: The 2026 diuron listing is based on data collected before the 2021 Management Plan was implemented. Section 303(d) listings are made under the State Water Board Listing Policy (Resolution 2004-0063), based on lines of evidence within a defined data window assessed against water quality standards. The 2026 Delilah Creek diuron listing came through the 2024 California Integrated Report cycle, whose data assembly window predated the 2021 Management Plan for most weighted evidence. The principal exceedance (Delilah Creek at 57.7 µg/L in March 2015, documented in the 2018 SWAMP Report¹) preceded Management Plan implementation by approximately six years. Accordingly, the listing reflects historical water quality conditions that prompted development of both the Plan and the Lily Bulb Order, rather than the effectiveness of the Management Plan itself.

The Tolowa Dee-ni' Nation correctly observes that listing decisions can lag actual conditions. Staff agrees that Section 303(d) listing decisions may reflect historical conditions because they rely on data collected over defined assessment periods. However, that timing does not diminish the need for regulatory action based on the best available current information. This Order, which moves from voluntary stewardship to enforceable requirements, is the direct response.

ELF asserts that the Board's conclusion that discharges have declined is unsupported. Contrary to this assertion, the staff found that multiple independent data sources support the conclusion that pollutant discharges have declined over time. CDPR Pesticide Use Reports show average annual copper applications dropping from 14,126 lbs/yr (2012–2017) to 5,842 lbs/yr (2018–2021), with copper sulfate specifically falling from 22,387 lbs (2013) to 29 lbs (2016) (Finding #47 of the Proposed Order). Receiving water data show peak diuron concentrations at Delilah Creek dropping from 57.7 µg/L (2013–2015) to 5.9 µg/L (2021–2024), and the acute toxicity observed in the March 2015 Delilah Creek sample has not recurred (2025 SWAMP Report). Although differences in sampling design, analytical methods, and applicable criteria between the two monitoring periods limit a precise quantitative trend analysis, the qualitative direction of change is well-supported.

¹ State Water Resources Control Board, *Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List* (Listing Policy), Resolution No. 2004-0063, adopted September 30, 2004; approved by the Office of Administrative Law February 22, 2005; as subsequently amended. Available at https://www.waterboards.ca.gov/water_issues/programs/tmdl/303d_listing.html

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Staff agree with CDFW that both improved management practices and reductions in cultivated acreage likely contributed to these improvements. Rotational cultivated acreage declined from approximately 1,500–1,600 acres to approximately 1,000 acres, with annual planted acreage falling from approximately 375 to 160 acres (Finding 2 of the Proposed Order). The 2025 SWAMP Report helps distinguish the effects of improved management practices from reductions in cultivated acreage by normalizing pesticide application rates to tributary area. This normalization provides the analytical basis for the Order's Adaptive Management triggers because it provides a more consistent basis for evaluating changes in pesticide application intensity while accounting for changes in cultivated acreage. Accordingly, compliance under this Order is evaluated based on whether receiving waters attain the applicable Receiving Water Limitations, as measured through the Water Quality Benchmarks established for the Adaptive Management Program, rather than quantifying the extent to which changes in cultivated acreage, implementation of management practices, or other environmental factors contributed to observed water quality conditions.

Regarding the 2026 303(d) listing of diuron, a 303(d) listing means a water body has not attained water quality standards based on accumulated historical data. It does not establish that loading is unchanged or that interventions have failed. This Order is the regulatory step that follows from impairment findings consistent with the State Nonpoint Source Implementation and Enforcement Policies: enforceable Receiving Water Limitations, mandatory monitoring, and an Adaptive Management Program with measurable milestones to achieve standards within a defined schedule.

RTC #23: Public Engagement and Outreach Process

Comment Numbers: AW-1, AW-2, AW-3, AW-4, AW-5, AW-6, AW-8, AW-9, AW-10, AW-11, AW-12

Williams expressed extensive concerns about outreach, arguing WC 189.7(a) requirements were not satisfied. Specific concerns include: TrueNorth failed to distribute flyers and suppressed public comment; Board staff aided suppression; WC 189.7(D) SEP list solicitation requirements were not met; TrueNorth should not be contracted for future outreach.

Response: Water Code section 189.7 requires the Regional Board to engage in equitable, culturally relevant community outreach to promote meaningful civil engagement from potentially impacted communities of proposed discharges of waste that may have disproportionate impacts on water quality in disadvantaged communities or tribal communities and ensure that outreach and engagement continue throughout the waste discharge planning, policy, and permitting processes. As detailed in Draft Order Findings 11 through 16, Regional Board staff

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has conducted extensive outreach for the Proposed Order, including two Board workshops; seven staff-led Technical Advisory Group meetings, whose members include tribal representatives, local stakeholders, members of the public, and community organizations; a community meeting in Smith River; a presentation at the Del Norte County Board of Supervisors' regular meeting; and a CEQA scoping meeting. Staff also broadly circulated the Draft Order and Draft EIR for written comment. Finally, staff has been engaged in tribal consultation pursuant to AB 52. Water Code section 189.7(a)(2)(A)-(D), and (b) are contingent upon a budget appropriation by the legislature to hire environmental justice and tribal community coordinator positions. Consistent with Water Code section 189.7, the above demonstrates that the public had ample opportunity to participate in the decision-making processes surrounding the Draft Order and that staff sought and facilitated involvement from the affected public and took into consideration their concerns.

RTC#24: Additional Beneficial Uses — WET, GWR, WQE, FLD

Comment Numbers: HFMA-3, HFMA-16

HFMA argued that additional beneficial uses should be included: Wetland Habitat (WET), Groundwater Recharge (GWR), Water Quality Enhancement (WQE), and Flood Peak Attenuation/Flood Water Storage (FLD). HFMA cited a 2014 letter from CDFW to the North Coast Water Board Executive Officer.

Response: "Beneficial uses" (BUs) of waters of the state are protected against water quality degradation. An essential part of the Water Quality Control Plan for the North Coast Region (Basin Plan) is the designation and protection of beneficial uses. Table 2-1 of the Basin Plan identifies beneficial uses for each hydrologic area in the Region, as well as for specific waterbodies, and the beneficial uses of a specifically identified waterbody generally apply to its tributaries. The Smith River Plain and its tributaries, including those located within the lily bulb growing area, are identified in Table 2-1 as the Smith River Plain Hydrologic Subarea 103.11. The existing and potential beneficial uses of the subarea are identified in Table I.2 of the Proposed Order, entitled Existing and Potential Beneficial Uses in the Smith River Plain.

Staff considered each of the cited beneficial uses in developing the Draft Order. The three beneficial uses Wetland Habitat (WET), Water Quality Enhancement (WQE), and Flood Peak Attenuation/Flood Water Storage (FLD) are designated for freshwater and saline wetlands in the North Coast Region. They are wetland-specific and are not designated at the hydrologic subarea scale; the Basin Plan does not apply them to all tributaries and connected surface waters within Hydrologic Subarea 103.11. Where wetlands exist or have the potential to exist within the area regulated by this Order, however, these beneficial uses apply and are protected.

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The North Coast Water Board agrees that riparian and wetland habitats are vital ecological components critical to the function of the Smith River Plain ecosystem. The Order protects these uses through Streamside Area requirements that require a minimum buffer width between unfarmed wetlands and farming activities (Section II.E of the Order), implementation of management practices to meet Receiving Water Limitations, and Adaptive Management where implemented practices are not sufficient to meet Receiving Water Limitations of this Order. Consistent with the approach taken throughout the Order, requirements are framed around protection of the most sensitive beneficial uses supported by the receiving waters, which is protective of wetland-related uses where those uses are present.

Groundwater Recharge (GWR). GWR is a beneficial use of surface waters that protects the use of water for natural or artificial recharge of groundwater for purposes of future extraction, maintenance of water quality, or halting saltwater intrusion into freshwater aquifers. GWR is not designated for surface waters in the Smith River Plain Hydrologic Subarea. The Smith River Plain is a coastal marine terrace characterized by a high water table, substantial annual rainfall, and low-gradient coastal streams. For a large portion of the year, shallow groundwater discharges to these streams rather than the streams recharging the underlying aquifer; the streams are predominantly gaining rather than losing. Groundwater quality in the Smith River Plain is independently protected under this Order through application of water quality standards for the Municipal and Domestic Supply (MUN) beneficial use, which protects groundwater for drinking water purposes using drinking-water-based Water Quality Benchmarks for pesticides.

RTC #25: Porter-Cologne Reasonableness Standard

Comment Numbers: CAFB-1

The California Farm Bureau argued that the Regional Board must comply with Porter-Cologne's reasonableness standard when adopting waste discharge requirements. The commenter cited Water Code sections 13000, 13241, 13050(h), 13263, and 13267(b)(1), as well as *City of Burbank v. State Water Resources Control Board* (2005) 35 Cal.4th 613, to establish that the Board must evaluate whether regulatory requirements will reasonably protect beneficial uses considering all demands on the state's waters, including both environmental and agricultural values, "beneficial and detrimental, economic and social, tangible and intangible."

Response: The North Coast Water Board has appropriately taken into account the reasonableness standard in the development of the Order, in accordance with Water Code sections 13000, 13241, and 13263. "Section 13241 does not specify how a water board must go about considering the specified factors. Nor does it require that board to make specific findings on the factors." (*City of Arcadia v. State Water Resources Control Board* (2010) 191 Cal.App.4th 156, 177.) The

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North Coast Water Board has summarized its consideration of reasonableness in the Proposed Order Findings, Section I.H: Cost Considerations. These Findings as well as Findings in Section I.G.4 were revised in the Proposed Order to reflect that it has also taken into consideration economic impacts raised in the comments. Regarding whether economics were considered during the adoption of the water quality objectives upon which the receiving water limits are based, it is generally “presumed that official duty has been regularly performed.” (Evid. Code, § 664; see *City of Sacramento v. State Water Resources Control Bd.* (1992) 2 Cal.App.4th 960, 976.)

RTC #26: Economic Considerations Required Under Porter-Cologne

Comment Numbers: CAFB-4

The California Farm Bureau argued that the Draft Order’s “cost considerations” sections are inconsistent with the Water Code, which requires the Board to evaluate “economic considerations” when adopting waste discharge requirements (Water Code §§ 13263(a), 13241(d)). The commenter distinguished “economic considerations” (encompassing the production, distribution, and consumption of goods and services) from “cost considerations” (limited to direct regulatory costs). The commenter argued that neither the Draft Order nor DEIR contains analysis of the Order’s impact on the production, distribution, and consumption of goods and services, and cited *EPIC v. CDFG, AGUA v. CVRWQCB, City of Gardena, and City of Burbank*.

Response: The North Coast Water Board has appropriately taken into account economic considerations in the development of the Order, in accordance with Water Code sections 13263 and 13241. However, “Section 13241 does not specify how a water board must go about considering the specified factors. Nor does it require that board to make specific findings on the factors.” (*City of Arcadia v. State Water Resources Control Board* (2010) 191 Cal.App.4th 156, 177.) Neither Water Code section 13241 nor section 13263 prescribes a particular methodology for evaluating economic considerations or requires a regional water board to prepare a comprehensive economic impact analysis.

Staff appropriately included estimates based on available information within the confines of various uncertainties and assumptions. The North Coast Water Board does not find that the anticipated increased costs due to compliance with this Order alone would be large enough to necessarily cause any existing lily bulb operation to go out of business, render it economically unviable, or otherwise choose to abandon their operations. Regarding the distinction between “cost considerations” and “economic considerations,” the commenter has not identified cited authority requiring a full economic impact assessment. The Proposed Order has been revised to reflect additional environmental and industry economic considerations in Section I.G.4 of the Findings (see Findings #138-144).

Requirements and Prohibitions

RTC #27: Enforcement Provisions

Comment Numbers: AW-37

Williams expressed that the Draft Order should state that lily grower practices have created an ongoing public nuisance and list enforcement consequences.

Response: The Proposed Order regulates discharges of waste from commercial lily bulb operations pursuant to the North Coast Water Board's authority under the Porter-Cologne Water Quality Control Act. The Order's Findings describe the water quality conditions in the Smith River Plain and the basis for regulatory action. Whether a condition of pollution or nuisance exists is a factual and legal determination that the Regional Water Board may make at any time under Water Code sections 13263 and 13304, independent of the findings in this Order. Regarding enforcement consequences, the Proposed Order's adaptive management program includes progressive escalation of requirements, and the Order specifies that noncompliance is subject to enforcement under Water Code sections 13261, 13268, 13300, 13301, 13304, and 13350 including administrative civil liability, cease and desist orders, and cleanup and abatement orders. The North Coast Water Board does not find it necessary to include a separate public nuisance finding in the Order at this time.

RTC #28: Inspection, Entry, and Compliance Verification Schedule

Comment Numbers: AW-26, AW-58

Williams expressed that the Draft Order must: (1) cite legal authority for inspection; (2) specify no advance notice required; (3) list consequences for denial; and (4) replace “periodic” with a specific annual inspection schedule.

Response: Finding #126 and Order Provision I.5 detail the Board’s inspection authority pursuant to Water Code section 13267. Staff does not believe revisions to these provisions, including more detailed inspection procedures, are necessary. While staff believe the commitment for “periodic” inspections is appropriate and promotes necessary regulatory flexibility, as further noted in Finding 34, the Order does not limit the Board’s authority to inspect. Finally, enforcement provisions are sufficiently detailed in Findings #190-193 of the Proposed Order.

Streamside Area

RTC #29: North Coast Water Board Authority

Comment Numbers: CAFB-5

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The California Farm Bureau argued that the Draft Order's prescriptive vegetated setback requirements exceed the North Coast Water Board's legal authority under Porter-Cologne. The commenter argued that a fundamental limitation to the Board's authority is that an activity must result in a "discharge of waste" to be regulated, and that vegetated buffers are not discharges of waste. The commenter further argued that riparian habitat and setbacks are not water quality objectives, that the Board cannot regulate riparian habitat under the guise of water quality protection, and that regulating land use is not within the Board's purview.

Response: The Proposed Order does not require vegetated setbacks for the purpose of regulating land use or riparian habitat.; rather, it requires management practices, including vegetated setbacks, within Streamside Areas to control nonpoint source pollution, consistent with the Board's NPS Policy obligations and the Temperature Implementation Policy. The North Coast Basin Plan was amended in 2004 with the Policy for Implementation of the Water Quality Objective for Temperature. The Temperature Implementation Policy states that the North Coast Water Board shall take action to achieve temperature objectives including restoring and maintaining riparian shade through nonpoint source control programs, permits and waivers, and enforcement actions. Controllable water quality factors include any anthropogenic activity that results in the removal of riparian vegetation that provides shade. The North Coast Water Board, when issuing Waste Discharge Requirements, must consider the water quality conditions that could reasonably be achieved through the coordinated control of all factors that may affect water quality (Wat. Code §§ 13241; 13263). Streamside Area requirements implement the Temperature Implementation Policy by requiring conditions necessary for natural succession of riparian vegetation. Additionally, vegetated setbacks serve a water quality protection function by filtering sediment, reducing pollutant transport, and stabilizing streambanks. The setbacks are not an exercise of land use authority but rather a management practice requirement to protect water quality and beneficial uses.

RTC #30: Dictating Manner of Compliance (Water Code § 13360)

Comment Numbers: CAFB-6

The California Farm Bureau argued that the Draft Order's streamside management area setbacks and vegetative buffer requirements violate Water Code section 13360 by dictating the particular manner of compliance. The commenter cited the statute's prohibition on specifying "the design, location, type of construction, or particular manner in which compliance may be had" and argued the Order specifically states how a discharger will comply rather than simply directing compliance with a time schedule. The commenter cited Tahoe Sierra Preservation Council v. SWRCB (1989) 210

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Cal.App.3d 1421 and Pacific Water Conditioning Assn. v. City Council (1977) 73
Cal.App.3d 546.

Response: See Response to CAFB-5. The Regional Water Board cannot prescribe the particular manner of compliance (Water Code § 13360), but requiring the conditions which allow for the natural succession of riparian vegetation to implement Basin Plan policies is within its regulatory authority. The Proposed Order also includes an Offsite Restoration Alternative in lieu of meeting Streamside Area buffers. Through this alternative, the Order provides Enrollees two distinct options for compliance with the Temperature Policy.

RTC #31: Recommended Setback Widths

Comment Numbers: CDFW-11, CDFW-12, CDFW-19, Free-1

CDFW provided two specific recommendations with respect to the Streamside Area widths: Recommendation 2 (Increase Minimum Streamside Area Width to 100 ft (Perennial) / 50 ft (Intermittent/Ephemeral)), Recommendation 3 (Increase Streamside Area Width to 30 ft on hydrologically-connected undesignated ditches). CDFW acknowledged that Streamside Areas are intended to implement the Temperature Policy of the Basin Plan, and the North Coast Water Board cannot prescribe the particular manner of compliance with its orders. Free recommends minimum 100-foot no-go zones for perennial streams and 50-foot zones for ephemeral streams and ditches that deliver to fish-bearing streams. Free questions why larger buffers are required for wetlands and ponds compared to ephemeral streams and ditches that deliver to higher-order streams.

Response: CDFW correctly identifies that Streamside Area requirements implement the North Coast Basin Plan Policy for Implementation of the Water Quality Objective for Temperature (Temperature Implementation Policy²) and that Water Code section 13360 generally restricts the Board from prescribing the manner of compliance with its orders. The Board's response distinguishes between two regulatory functions: Streamside Area minimum widths, which serve the temperature objective by maintaining riparian shade; and watercourse setbacks beyond the minimum width, which serve as adaptive management options for reducing pesticide and sediment runoff to surface waters.

² North Coast Regional Water Quality Control Board, *Policy for Implementation of the Water Quality Objective for Temperature*, Resolution No. R1-2014-0006, Attachment 1; incorporated as an amendment to the Water Quality Control Plan for the North Coast Region (Basin Plan). Available at https://www.waterboards.ca.gov/northcoast/water_issues/programs/basin_plan/160802/R1-2014-0006_Att_1.pdf.

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Streamside Area minimum widths implement the Temperature Policy. The Temperature Implementation Policy identifies removal of riparian vegetation that provides shade is a controllable water quality factor and directs the Board to incorporate riparian shade protections in permits to achieve the temperature objective. The minimum widths in Table II.1 of the Proposed Order represent the Board's determination of the widths necessary to reasonably establish site-specific potential effective shade in the Smith River Plain. CDFW's recommended widths of 100 feet and 50 feet exceed what site-specific potential effective shade requires and are more consistent with the wider buffer widths the literature associates with reduction of dissolved pollutants in runoff (see Finding #50 of the Proposed Order).

Larger setbacks for controlling pesticide runoff are available through Adaptive Management. Where existing BMPs do not prevent exceedances of Water Quality Benchmarks in surface waters, the Adaptive Management Program (Proposed Order Section II.H) requires Enrollees to expand or supplement management practices on a Field-by-Field basis, and a watercourse setback is one of the available options. CDFW's recommended widths therefore remain available as compliance pathways where receiving water monitoring at the downstream stations documents exceedances attributable in part to runoff from those fields. The Board structured the requirement this way so that the regulatory minimum reflects the shade function the Streamside Area is designed to serve, while leaving the appropriate runoff-control setback width to the site-specific framework of the Adaptive Management Program.

Undesignated channels and agricultural drainage structures are documented conveyance pathways for storm-driven transport of synthetic pesticides and dissolved copper from lily bulb fields (2025 SWAMP Report Section 6). The Order addresses them primarily through Adaptive Management Program responses to receiving water exceedances. CDFW's recommended 30-foot setback for hydrologically-connected undesignated channels is among the available options when adaptive management is triggered. The Proposed Order reserves that width determination to the site-specific framework rather than imposing an order-wide minimum.

RTC #32: Winterization Period

Comment Numbers: Free-1

The commenter argues the 90% cover requirement for vegetated buffers is not scientifically defensible because allowing activities within buffers will mobilize sequestered contaminants. The commenter argues the winterization period should reflect Northern California precipitation patterns, noting that precipitation and runoff typically begin in October and extend into June, consistent with other permits that restrict sediment-generating activities during that window.

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Response: The Vegetated Buffer Area implements the bank stabilization and pollutant filtering functions that support implementation of the Temperature Implementation Policy of the Basin Plan. By maintaining ground cover through the storm season, the Vegetated Buffer stabilizes streambanks against erosion and filters sediment and sediment-bound pollutants from runoff before it reaches receiving waters, consistent with the Policy's objectives for protecting riparian function to meet temperature objectives.

The Proposed Order was revised to extend the 90% ground cover requirement for the Vegetated Buffer Area to the period of October 1 through June 15. This change aligns the ground cover requirement with the revised surface water monitoring program, which samples during a Fall storm-event window (October through December) and a Spring window (April through June). The Draft Order's original winterization window of November 1 through May 1 was narrower than the period during which the Proposed Order identifies that storm-driven runoff and monitoring occur. Extending the ground cover requirement to October 1 through June 15 ensures that vegetated buffers are established and providing sediment and pollutant filtration throughout the full storm season, including the early-season and late-season storms captured by the revised monitoring program.

RTC #33: Buffer Bypass via Access Roads and Ditches

Comment Numbers: Pace-11, Pace-12

Commenter documented a specific mechanism by which agricultural runoff bypasses vegetated buffer strips via access roads into ditches. Commenter referenced a complaint submitted to the Water Board which documented these discharge pathways. Pace proposed requiring runoff detention ponds at access road discharge points.

Response: Staff acknowledges that agricultural runoff can bypass vegetated buffer strips through access roads and channelized flow paths before reaching receiving waters. This is a recognized challenge in the design and implementation of filter strips in low-gradient, high-precipitation environments such as the Smith River Plain. North Coast Water Board staff have worked directly with growers to improve filter strip design and structural integrity to reduce the occurrence of channelized bypass during storm events.

The Proposed Order addresses this concern through multiple provisions. The Adaptive Management Program is designed to escalate management practice requirements when monitoring demonstrates that existing practices, including filter strips, are not achieving Water Quality Benchmarks.

Regarding the specific recommendation to require detention ponds at access road discharge points: Water Code section 13360 prohibits the North Coast Water Board from prescribing the particular manner of compliance. The North Coast

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Water Board cannot mandate a specific structural practice such as a detention pond. Additionally, the same hydrologic conditions that cause filter strips to be overwhelmed during large storm events (e.g., prolonged saturation, high-intensity precipitation, and low-gradient drainage) would similarly challenge a single detention facility unless it were designed to accommodate very large volumes, which may not be feasible on individual field margins. The Proposed Order's performance-based approach allows enrollees to select and implement the combination of management practices best suited to their field configurations and drainage patterns, with the adaptive management program providing the feedback mechanism to evaluate effectiveness and require adjustments where necessary.

North Coast Water Board staff followed up with the commenter regarding the referenced complaint. Staff acknowledge the broader concern that drainage infrastructure can create preferential flow paths that reduce the effectiveness of vegetated buffers, and this concern informed the development of the Proposed Order's management practice and Streamside Area requirements.

RTC #34: Riparian Vegetation Area Restoration Alternative

Comment Numbers: CDFW-13, CDFW-20, Free-2

CDFW does not support the Riparian Vegetation Area Restoration Alternative because the riparian component is fundamental. If retained, CDFW recommended requiring enrollees to first demonstrate WQ attainment (Recommendation 4). Free states that allowing mitigation for the riparian vegetation requirement is inconsistent with the purpose of riparian vegetation, which is to reduce sediment, pesticide, and nutrient delivery to fish-bearing streams.

Response: The Riparian Vegetation Area Restoration Alternative was added to the Project as a CEQA mitigation measure to lessen the significant and unavoidable impact to Agriculture and Forestry Resources caused by the potential loss of farmland to Streamside Area setbacks. The Streamside Area setbacks in the Proposed Order implement the Temperature Policy (see RTC #31: Recommended Setback Widths). The commenters are correct that the water quality benefits of riparian vegetation are realized where sediment, pesticides, and nutrients are delivered to fish-bearing streams; however, the Proposed Order includes Watercourse Setbacks as a Tier 1 compliance option that requires setback widths more consistently supported in the literature for providing pollutant-filtering functions.

The Riparian Vegetation Area Restoration Alternative is primarily focused on the shade component from riparian vegetation and may only be selected for that portion of the Riparian Vegetation Area that are not currently meeting Streamside

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Area setback widths. Enrollees must still meet Vegetated Buffer widths and comply with all other Order requirements, including monitoring and adaptive management.

RTC #35: Temperature, Shade, and Interim Measures

Comment Numbers: AW-40, AW-49

Williams expressed that large wood should be installed for interim shade and permission for restoration work on grower lands should be an enrollment condition.

Response: The Proposed Lily Bulb Order imposes riparian protection zones but pursuant to Water Code section 13360 does not specify the exact manner of compliance, only that the Enrollee must allow for the natural succession of native riparian vegetation. The Proposed Lily Bulb Order includes an Riparian Vegetation Area Restoration Alternative.

RTC #36: Setback/Filter Strip Effectiveness

Comment Numbers: ELF-15, ELF-16, ELF-17, ELF-23, CT-2, HFMA-7, TU-N-4, Dettmar-8. St.Clair-5

Nine commenters argued that vegetated setbacks and filter strips will not effectively control pesticide discharge under Smith River Plain conditions. All cited the Hurst et al. (2024) study. ELF argued the Draft Order proposes 50-foot setbacks smaller than the 80-foot setbacks shown to fail. CalTrout, HFMA, and TU National emphasized the unique estuarine floodplain challenge. St.Clair asserted that the data confirms that water-soluble toxins bypass vegetative filters and flow directly into streams.

Response: Staff acknowledge the Hurst et al. (2024) findings. The Proposed Order does not rely on Streamside Area setbacks as the sole management practice to achieve water quality objectives. The Streamside Area requirements serve a dual purpose: (1) implementing the Temperature Implementation Policy; and (2) providing baseline pollutant filtration. Setbacks are one component of the overall regulatory framework, which also includes Receiving Water Limitations and an Adaptive Management Program. The Tier 1 Adaptive Management program provides three compliance options, one of which is a Watercourse Setback Alternative that requires 100 ft setbacks on streams and a 30 ft setback on hydrologically-connected ditches. If this particular option to control discharges is not successful, the Order requires Enrollees to procure the assistance of a Qualified Professional under Tier 2 Adaptive Management.

Pesticide Management Requirements

RTC #37: Pesticide Application Reduction

Comment Numbers: CDFW-10, CT-6, CT-10, AW-25, AW-53, Hostler-8, Powell-1

Commenters expressed that pesticide application reduction should be mandatory for all enrollees. CDFW recommended requiring attainment of active ingredient performance standards for all enrollees (Recommendation 1). CalTrout argued management practices must supplement application reductions. Williams argued the Order should incentivize phase-out of copper, imidacloprid, diuron, and ethoprop.

Response: Water Code section 13360 prohibits the North Coast Water Board from prescribing the particular manner of compliance. Furthermore, the North Coast Water Board cannot limit the application of pesticides, which is an authority granted to the California Department of Pesticide Regulation. See RTC# 40 for information on the MAA between the North Coast Water Board and DPR.

RTC #38: Zero Discharge Limit

Comment Numbers: CT-4, CT-5, CT-9, TDN-2, TDN-5, TU-N-8, TU-N-9, TU-N-10, HFMA-11, HFMA-12, HFMA-17, Dettmar-1, Dettmar-4, Dettmar-12, Kharazi-11, Pace-1, Pace-6, Hostler-4, AW-57, Butler-1, Dremann-1, Obrien-1, Brockington-1, Ihara-1, Jordan-1, Shade-1, Hostler-5, Hostler-7, St.Clair-3, Form-Letter-1

Commenters expressed that the Draft Order's receiving water benchmarks should be replaced with a zero-discharge standard. CalTrout proposed zero-discharge for all TMDL-listed pesticides monitored at edge of field. The Tolowa Dee-ni' Nation argued zero-discharge is "legally justified and required" under Porter-Cologne. HFMA urged cease and desist orders, citing the 245-T precedent and "affirmative duty to act." St.Clair pointed out the 'moral fallacy of allowable poison' and asserted that the Board not treat the Smith River as a drainage ditch. Multiple individual commenters and Form Letter-1 (123 signatories) requested no further pesticide discharge.

Response:

North Coast Water Board staff considered and declined to propose a zero-discharge standard for the reasons discussed below. (See also response to RTC # 17.)

The State Water Board's Antidegradation Policy (Resolution No. 68-16) establishes the legal framework for evaluating whether degradation may be authorized. Resolution No. 68-16 provides that whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality will be maintained until it has been demonstrated that any change will be consistent with maximum benefit to the

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people of the state, will not unreasonably affect present and anticipated beneficial uses of such water, and will not result in water quality less than that prescribed in the relevant water quality control plan. The North Coast Water Board may decline to authorize any degradation from baseline levels; however, if any interim degradation is authorized during the compliance period, it must be justified and found to be consistent with maximum benefit to the public (see Findings Section G, Antidegradation Analysis). Resolution No. 68-16 does not require the North Coast Water Board to adopt a zero-discharge standard in every circumstance. Rather, the Board must determine whether the regulatory approach it adopts satisfies these requirements.

Staff determined that a zero-discharge standard is not warranted because the Proposed Order's regulatory approach reflects several legal, technical, and practical considerations. First, the North Coast Water Board is required to consider economic factors when issuing waste discharge requirements (Water Code §§ 13241, 13263). A zero-discharge standard for copper, a metal that has been applied to lily bulb fields for decades and has accumulated in soils throughout the production area, would be economically infeasible as there is no feasible management practice that would eliminate all copper discharge from fields. Staff considered the economic consequences of such a prohibition alongside the environmental and cultural values of the beneficial uses being protected.

With respect to copper, the historical record documents a significant reduction in copper application rates, from an average of 14,126 pounds per year between 2012–2017 to an average of 5,842 pounds per year between 2018–2021, along with a phase-out of copper sulfate in favor of copper hydroxide. (Finding #47 in the Order). The Proposed Order's adaptive management framework and Receiving Water Limitations are designed to continue this trajectory and are expected to improve baseline water quality with respect to copper over the time schedule set in the Proposed Order. A zero-discharge standard is not necessary to achieve this improvement and would foreclose the adaptive management approach that allows the North Coast Water Board to tie regulatory requirements to monitoring results.

With respect to synthetic pesticides (diuron, imidacloprid, and ethoprop), staff reviewed all available pesticide water quality values — including U.S. EPA aquatic life benchmarks, California Toxics Rule criteria, and other applicable standards — and, exercising best professional judgment consistent with scientific evidence, selected the most protective values for the relevant beneficial uses as the Water Quality Benchmarks for this Order. These benchmarks are set at concentrations designed to protect the most sensitive beneficial uses, including cold freshwater habitat and the spawning, migration, and rearing of salmonids. Enrollees must comply with Receiving Water Limitations based on these benchmarks and the Biotic Ligand Model-derived benchmarks for dissolved copper.

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The Proposed Order's compliance schedule is as short as practicable, considering the unique three-to-five-year cropping rotation cycle and the time necessary to design, install, and evaluate the effectiveness of advancing management practices. This is consistent with the Nonpoint Source Policy's commentary that time schedules be as short as practicable while acknowledging that immediate attainment of receiving water limitations may not be feasible where management practice effectiveness must be evaluated iteratively through monitoring.

Taken together, these considerations support the staff's determination that a zero-discharge standard is not warranted. Instead, the Proposed Order establishes protective receiving water limitations, requires implementation of management practices to reduce pollutant loading, and includes an adaptive management framework that allows the Board to evaluate monitoring results and require additional measures, as appropriate, to achieve and maintain Receiving Water Limitations. This approach is consistent with the Antidegradation Policy, the Nonpoint Source Policy, and the Board's obligations under Porter-Cologne.

Regarding the request for cease and desist orders: The North Coast Water Board retains authority to issue cease and desist orders under Water Code section 13301 and cleanup and abatement orders under section 13304 if an enrollee's discharge creates or threatens to create a condition of pollution or nuisance, or if an enrollee violates the requirements of this Order. The adoption of this Order does not limit the North Coast Water Board's independent enforcement authority. The Proposed Order's adaptive management framework includes progressive escalation of requirements and enforcement consequences that are designed to achieve compliance within the shortest practicable timeframe while providing enrollees with a defined pathway to demonstrate compliance through implementation of management practices.

RTC #39: Pesticide Alternatives

Comment Numbers: AW-30, AW-31, AW-53, DNRCD-5, Crockett-11

Williams cited Easter Lily Foundation studies identifying nine alternative pest management products and listed additional alternatives. DNRCD and Crockett referenced biochar work with USDA/NRCS, with Crockett requesting a one-year implementation delay.

Response: Staff acknowledge previous and ongoing efforts by the lily bulb industry to develop and test alternate pest management and management practice methods. The Proposed Order retains the time schedule in the Draft. The North Coast Water Board adopted the voluntary Smith River Plain Water Quality

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Management Plan (2021 Management Plan³) in 2021 to meet “water quality standards through the control of waste discharges associated with lily bulb operations in the Smith River Plain.” While the 2021 Management Plan was voluntary, the information was intended to eventually inform the development of an Order. It is staff’s position that the intent to develop an Order was clear in the 2021 Management Plan, and a delay in implementation will not support water quality goals.

RTC #40: CDPR and North Coast Water Board Collaboration

Comment Numbers: AW-22, AW-23, AW-29, AW-32

Commenter argued the Board has failed to utilize its MAA with CDPR.

Response: The California Department of Pesticide Regulation (CDPR) has collaborated with the North Coast Water Board on water quality issues related to Smith River Plain agriculture and assisted with the development and implementation of the 2021 Smith River Plain Water Quality Management Plan as a member of the Stewardship Team.

Since 2024, CDPR has been providing technical support, as part of the Technical Advisory Group (TAG), to the North Coast Water Board as part of Lily Bulb Order development.

Under the 2019 Management Agency Agreement (MAA) starting in August 2025, CDPR and the North Coast Water Board conducted a series of staff-to-staff meetings on available data and the Draft Lily Bulb Order. CDPR conducted a review of available data, including pesticide use reporting (PUR) data, surface water and groundwater monitoring data (including from the SWAMP studies) and toxicity studies completed (to date) for the Smith River.

CDPR’s preliminary review concluded that additional data were needed for them to adequately evaluate the potential impacts to aquatic life such as fish from copper concentrations detected in surface water. As a result, CDPR announced the initiation of a Fish Toxicity Study in the Smith River Plain to fill this data gap. Results of this study will help identify if current copper concentrations are associated with impacts to fish populations in the Smith River watershed. CDPR is contracting researchers from California State Polytechnic University, Humboldt to conduct the study which will span two years beginning this year.

³ 2021 Management Plan

https://www.waterboards.ca.gov/northcoast/water_issues/programs/agricultural_land/lily/pdf/2021/smithmgmtplan.pdf

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The study represents a collaboration between the Water Boards and CDPR on continued work across both departments to protect the environment and engage with local communities and Tribes.

RTC #41: Weather-Based Pesticide Application Prohibition

Comment Numbers: Kharazi-8, Pace-7, Hostler-3, Wilson-3, Sargent-2, Ihara-1, TU-6, Form Letter-1, Form Letter-2

Multiple commenters expressed that pesticide application during wet weather, rainy, or foggy conditions should be prohibited. Hostler testified to personal exposure on windy days. Wilson argued wet-weather spraying causes double toxicity. TU California recommended designating unrestricted copper products as restricted use in Del Norte County.

Response: The regulation of pesticide application, including the timing, method, rate, and conditions under which pesticides may be applied, is within the exclusive statutory authority of the California Department of Pesticide Regulation (DPR) and county agricultural commissioners (CACs), not the North Coast Water Board. The Draft Order addresses the commenters' underlying concern through its Receiving Water Limitations, Adaptive Management Program, and management practice requirements. These provisions regulate the outcome rather than prescribing the specific agricultural practices enrollees must follow. The personal exposure testimony is noted and has been referred to the Del Norte County Agricultural Commissioner. Community health concerns are addressed in RTC #8: Community Health Impacts from Agricultural Activities.

RTC #42: Pesticide Labels

Comment Numbers: AW-24, AW-49, Free-1

Williams cited the ethoprop (Mocap) pesticide label requiring "do not apply within 800 feet of brackish water habitats" and argued this must be the required setback. Free argues the streamside management zones are inconsistent with pesticide labels for protection of aquatic habitat.

Response: The regulation of pesticide label compliance is within the jurisdiction of DPR and the Del Norte County Agricultural Commissioner under the Food and Agricultural Code, not the North Coast Water Board under Porter-Cologne. Label compliance is a legal obligation of the applicator independent of this Order and is enforced by DPR/CAC. See RTC #31 for response on Streamside Area setback widths.

Adaptive Management

RTC #43: Shorten Adaptive Management Timeline

Comment Numbers: ELF-20, CT-3, CCR-4, TU-N-6, Dettmar-11, Kharazi-12, Free-4

Commenters argued that the Adaptive Management program's timeline is unreasonably long. ELF calculated that under the Draft Order's structure, a violation could not occur for approximately ten years, and argued the Board fails to show this schedule is "as short as practicable" as required by NPS Policy Key Element 3. ELF noted the Draft Order omits the NPS Policy language that time schedules "may not be longer than that which is reasonably necessary to achieve an NPS implementation program's water quality objectives." CalTrout stated the adaptive management process allows continued exceedances for at least 7 years, possibly much longer, before a violation. CCR characterized the enforcement structure as "ongoing permission to contaminate" and a "Pollution Permit." Free argues the adaptive management plan is inadequate to protect state and federally listed coho salmon given the species' strict 3-year life history. Trout Unlimited (National) also noted the Board "could choose to grant a waiver" even after a violation occurs. Dettmar characterized the progressive enforcement as allowing "years of additional harm before any meaningful consequence." Kharazi stated voluntary compliance has failed for forty years and the Board has a legal obligation to act now.

Response: See Response to RTC #18: NPS Policy Key Elements for a detailed discussion of the Order's Adaptive Management time schedule and its consistency with NPS Policy Key Element 3.

RTC #44: Watershed-Wide Approach to Adaptive Management

Comment Numbers: CDFW-14, TDN-3, TU-N-5

CDFW recommended a watershed-wide approach to adaptive management (Recommendation 5), arguing that the Draft Order's field-specific approach may prolong water quality degradation as individual fields rotate through the 3-5 year crop production cycle before more advanced controls take effect. CDFW stated that current practices have already proven insufficient and that fields within a tributary watershed experience similar environmental constraints necessitating more advanced controls across the entire watershed, not field by field. CDFW warned that under the staggered field-specific system, multiple salmonid cohorts could be exposed to toxic conditions before advanced controls are implemented throughout the watershed. The Tolowa Dee-ni' Nation raised a related concern: the Draft Order allows exceedances before encouraging adaptive management for only discrete fields and only for certain pesticides or compounds, rather than requiring watershed-level action for all pollutants. Trout Unlimited (National) noted the 3-year lily bulb crop rotation cycle complicates field-level adaptive management.

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Response:

Staff considered these comments and revised the Proposed Order to strengthen the field-specific Adaptive Management framework in several respects to address concerns regarding crop rotation, attribution of exceedances, and timely implementation of advanced controls. However, staff do not recommend the watershed-wide approach proposed in CDFW Recommendation 5 because the available monitoring and pesticide application data support targeting Adaptive Management to the fields most likely contributing to an exceedance, rather than requiring advanced controls across an entire tributary watershed.

Imposing more advanced controls across an entire tributary watershed would require fields not in production at the relevant time and fields on which the constituent of concern was not applied to install and bear the cost of advanced practices that the monitoring data do not implicate. For a three-grower program with limited resources, that approach would diffuse effort across non-contributing fields without a corresponding water quality benefit, rather than concentrating controls where the data show the discharge is originating. Accordingly, rather than applying Adaptive Management watershed-wide, the Proposed Order was revised to improve the identification of contributing fields and ensure that Adaptive Management is applied more precisely and effectively.

The Proposed Order was modified to tie Adaptive Management even more directly to the fields whose pesticide application history makes them the likely source of a given exceedance, rather than to all fields tributary to a monitoring station. As revised, when a Water Quality Benchmark exceedance occurs, the Order identifies the contributing fields based on their recent application history and the constituent-specific monitoring calendar (see Table A.2 in Attachment A: MRP). For example, an exceedance of a copper Benchmark during the Fall event implicates fields harvested earlier that year—on which copper was applied during the prior growing season—rather than fields newly planted that fall, on which copper has not yet been applied. This refinement directs Adaptive Management at the fields and applications that the SWAMP data and application timing actually associate with the discharge.

Staff evaluated the history of pesticide applications using CDPR's Pesticide Use Report (PUR) data for the time period covered by the 2025 SWAMP Report. Synthesizing the water quality data, PUR data, and rainfall patterns, staff were able to more closely detect the relationship between the pattern of annual pesticide applications, Major Storm Events, and exceedances of applicable water quality criteria. Using this information, staff recommend the field-specific adaptive management framework, as revised.

The revised framework also addresses the concern that crop rotation allows fields to escape Adaptive Management or delays advanced controls. Because the

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monitoring calendar attributes an exceedance based on when a field was planted and treated rather than its crop status at the moment of sampling, a field that applied the constituent of concern and subsequently rotated out of production remains subject to Adaptive Management for that application. In addition, the Proposed Order requires that if any portion of a field in Adaptive Management is reconfigured, the entire resulting field is included in Adaptive Management, so that rotation and field reconfiguration cannot be used to shed an Adaptive Management obligation. The Proposed Order further retains the provision that all fields associated with water quality exceedances in the 2025 SWAMP Report are entered into Tier 1 Adaptive Management upon enrollment.

Adaptive Management escalates to more stringent controls where monitoring demonstrates that practices are not achieving water quality requirements. To account for site-specific conditions, an enrollee may also implement edge-of-field monitoring to demonstrate attainment of water quality objectives and compliance with Receiving Water Limitations (see RTC #54: Edge-of-Field Sampling).

Regarding the Tolowa Dee-ni' Nation's concern that Adaptive Management is triggered only for certain compounds, the constituent-specific monitoring program covers the pesticides and copper identified in the SWAMP data as the constituents of concern for the Smith River Plain, and an exceedance of any monitored Water Quality Benchmark triggers Adaptive Management for the implicated fields. For more on sampling constituents, see RTC #55.

RTC #45: Adaptive Management upon Enrollment

Comment Numbers: ELF-21, Westbrook-10

Two commenters raised opposing concerns about initial tier placement. ELF argued that Tillas Slough and Lower Rowdy Creek are improperly excluded from the advanced schedule despite documented exceedances: Tillas Slough experienced two acute and four chronic exceedances between 2021 and 2024, and Lower Rowdy Creek had a chronic exceedance during the same period. Westbrook argued the opposite: that placing nearly all production areas directly into Tier 1 adaptive management upon enrollment “effectively penalizes local agricultural producers” who are already following Board-recommended practices.

Response: The revisions to the Proposed Order respond to both concerns by tying initial Tier 1 placement to the specific fields whose pesticide application history makes them the likely source of a documented exceedance, rather than to entire tributary areas.

In response to ELF, the Proposed Order was modified to include fields in the Tillas Slough drainage in Tier 1 Adaptive Management upon enrollment. Under the revised framework, which selects fields based on pesticide application timing, the

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Tillas Slough exceedances are now associated with the specific fields whose application history corresponds to the constituents and timing of those exceedances, and those fields are required to enter Tier 1 Adaptive Management upon enrollment. Pesticide performance standards for Tillas Slough as a Tier 1 option has also been added (see Table II.3 in Section II.H of the Order). An updated map showing all fields required to enter Tier 1 Adaptive Management upon enrollment is provided in Figure 2 in Appendix II of the Order with a list of fields provided in Table II.2 in the Proposed Order.

With respect to Lower Rowdy Creek, no fields in that drainage are required to enter Tier 1 Adaptive Management upon enrollment. The threshold for requiring Adaptive Management upon enrollment is two chronic Water Quality Benchmark exceedances within a crop cycle; the single chronic exceedance documented in Lower Rowdy Creek does not meet that threshold. Lower Rowdy Creek remains in the monitoring program, and an exceedance there will trigger Adaptive Management under the Order's standard provisions in the same manner as any other monitored location.

In response to Westbrook, the revised approach does not place "nearly all production areas" into Tier 1 Adaptive Management. By selecting fields based on documented exceedances and the corresponding pesticide application history rather than enrolling entire tributary areas, the Proposed Order limits initial Tier 1 placement to the fields the monitoring data actually implicate. A producer's fields are placed into Tier 1 upon enrollment only where a Water Quality Benchmark exceedance meeting the threshold has been documented and that producer's application history associates its fields with the exceedance.

RTC #46: Enrollment Prerequisites and Immediate WQMP Certification

Comment Numbers: ELF-26, AW-28, AW-50

Two commenters argued that enrollees should demonstrate compliance readiness before or upon enrollment. ELF proposed requiring all growers to adopt a certified WQMP immediately upon enrollment, then treat post-WQMP exceedances as permit violations. Williams argued fields draining to Delilah, Tillas, and Rowdy must implement increased-tier BMPs before enrollment and that enrollment should be denied without proof of improved practices.

Response: The Proposed Order was modified to designate fields for Adaptive Management in a manner that more closely ties to each field's history of pesticide application. As revised, all fields in tributary watersheds with documented Water Quality Benchmark exceedances are entered into Tier 1 Adaptive Management upon enrollment, and the fields subject to Adaptive Management are identified based on their recent application history and the constituent-specific monitoring

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calendar rather than uniformly across the watershed. The highest-risk fields therefore begin implementing and escalating management practices immediately upon coming under coverage, which accomplishes the protective objective the commenters identify.

The Proposed Order does not, however, require management actions as a precondition to enrollment, because the enrollment mechanism itself is what makes a discharger subject to the Order's enforceable requirements. Until a discharger is enrolled, the North Coast Water Board has limited options through which to compel the specific actions the commenters propose; conditioning coverage on pre-enrollment performance would leave the discharge unregulated rather than bringing it under the Order's monitoring, reporting, and Adaptive Management requirements, which is contrary to the purpose of a general order. Denying enrollment would not stop the discharge, it would only remove the regulatory framework designed to control it.

Requiring enrollees to adopt particular increased-tier management practices before enrollment would also conflict with Water Code section 13360(a), which provides that waste discharge requirements may not specify the manner of compliance. The Water Board may identify the water quality conditions to be achieved and require Adaptive Management to achieve them, but it may not dictate that an enrollee install a specific practice as a precondition to coverage. The tiered Adaptive Management structure is the appropriate and legally supported mechanism for directing those actions, and it operates from the moment of enrollment rather than before it.

Finally, the recommendation that all enrollees adopt a certified Water Quality Management Plan immediately upon enrollment regardless of monitoring results is not proportionate to the documented conditions and is not supported by the data for fields without exceedances. The Order instead requires the equivalent planning and management-practice obligations where monitoring data demonstrate they are warranted, consistent with the iterative process contemplated by the Nonpoint Source Policy (see RTC #18: NPS Policy Key Elements).

RTC #47: Adaptive Management Triggers

Comment Numbers: AW-39

Williams argued that exceedance benchmarks should be changed from two to one, making any single exceedance an immediate trigger for the next tier of adaptive management.

Response: The Proposed Order establishes Water Quality Benchmarks for acute and chronic exposures. A single exceedance of an acute Water Quality Benchmark within a monitoring period triggers adaptive management, which is consistent with

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this recommendation. The Proposed Order establishes chronic Water Quality Benchmarks at lower concentrations to protect beneficial uses from longer exposures. Two exceedances of a chronic Water Quality Benchmark trigger adaptive management. Water Quality Benchmarks for synthetic parameters were determined by reviewing all available pesticide water quality values and selecting the most protective values.

The Proposed Order was modified to include revisions to the way fields are designated for Adaptive Management. Rather than placing all current cultivated fields tributary to a monitoring station into Adaptive Management when a Water Quality Benchmark exceedance occurs, the Proposed Order now identifies the specific fields whose pesticide application history makes them the likely source of the exceedance, based on each field's recent applications and the constituent-specific monitoring calendar. When a Benchmark exceedance triggers Adaptive Management, the requirement attaches to the fields the data and application timing actually implicate. For example, a copper exceedance during the Fall event implicates fields harvested earlier that year, on which copper was applied during the prior growing season, rather than fields newly planted that fall on which copper has not yet been applied.

This refinement addresses the underlying concern reflected in the comment that Adaptive Management respond meaningfully to documented exceedances.

RTC #48: Tier 1 Management Practice Options

Comment Numbers: ELF-22, ELF-23, ELF-24, ELF-25, AW-51, AW-52

Commenters expressed that Tier 1 options lack evidence of effectiveness and may not satisfy the NPS Policy Key Element 2 “high likelihood” standard. ELF argued none of the three options is supported by evidence. Williams argued Option 1 (Grower-Prepared Plan) should be eliminated given 14 years of demonstrated bad faith, any WQMP must be certified by a professional in regenerative agriculture, and the timeline is inconsistent with Government Code section 11340 et seq.

Response: The three Tier 1 options are supported in the record. Watercourse Setback widths fall within the effective buffer width range summarized in Finding #50. The Active Ingredient Application Performance Standard rests on the strong correlations the 2025 SWAMP Report documents between normalized application rates and receiving water outcomes. The Treat and Control option draws from practices tested under the 2021 Management Plan and from the Hurst et al. (2024) field study (see Finding #59 in the Order). NonPoint Source Policy Key Element 2 does not require certainty for any single option at any single Field — it requires a program designed with a high likelihood of attainment over its time schedule. Tier 1 options satisfy that standard because each option is reasonably supported by the

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information in the 2025 SWAMP Report. All Enrollees continue receiving water monitoring under Attachment A Section III in the Proposed Order, and Fields that do not attain compliance escalate to Tier 2.

ELF-24 comment about pro-rating among growers is addressed by the Field-by-Field structure of the program. Fields in a tributary area planted to lily bulbs (or recently harvested depending on the constituent and timing of the exceedance) in the sample year enter adaptive management upon a downstream exceedance, and each Enrollee is responsible for compliance on their own Fields. An Enrollee may use Edge-of-Field Sampling to demonstrate Field-level compliance independently. ELF-25 correctly observes that 2021 Management Plan practices have not eliminated exceedances at Lower Delilah Creek and Tillas Slough but the magnitude of those exceedances has decreased substantially since the 2013–2015 baseline, and the Order's response to persistent exceedances is precisely what Non Point Source Policy Key Element 2 contemplates: an enforceable, iterative program with escalating requirements where initial practices prove insufficient.

Option 1 (Grower-Prepared WQMP) requires Executive Officer approval and is not properly characterized as bad faith. Grower-Prepared WQMPs under Draft Order Table II.3 Option 1 are submitted to the Executive Officer for review and approval before they function as a compliance pathway. The "14 years of bad faith" framing does not align with the documented record of grower engagement: initial stakeholder meetings in 2011, co-development of the 2021 Management Plan, continuous Plan implementation since 2021 with annual self-reporting and Board inspections (Draft Order Finding 48), and participation in TAG meetings during 2024–2025 (Draft Order Finding 11). Existing plans and resources from Del Norte Resource Conservation District, Natural Resources Conservation Service, and similar sources are available for Enrollees to draw on in preparing a WQMP.

Staff decline to recommend the restriction of WQMP certification to regenerative agriculture professionals. The Order specifies the outcomes a WQMP must achieve and provides multiple certification pathways. "Qualified Professional" is defined in Draft Order Appendix I. Limiting certification to a single management philosophy would eliminate pathways that staff have found capable of producing protective plans without improving the likelihood of attaining water quality requirements.

This Order is not an emergency regulation under Government Code section 11340 et seq. It is being adopted through the standard public participation, CEQA, and Board adoption procedures applicable to general waste discharge requirements.

Surface Water Monitoring

RTC #49: Monitoring Frequency

Comment Numbers: CDFW-16, ELF-28, ELF-44, TU-3, DNRCD-6, Crockett-8, Miller-4, Miller-5, Westbrook-16, Free-3

Commenters expressed opposing positions on surface water monitoring frequency. CDFW recommended 3 wet + 2 dry events. ELF argued for dry-season and first-flush sampling. Grower commenters recommended reducing to 1x/year. Miller proposed a differentiated approach. Free argued the monitoring frequencies in the Draft Order are inadequate to identify potential locations or fields that are discharging pollutants and is therefore inadequate for implementing the proposed adaptive management program. Free recommends that dry-season sampling be conducted.

Response: The Proposed Order was modified to tie sampling to the timing of pesticide application rather than three events at any point during the storm season applied uniformly to all constituents. As revised, three Major Storm sampling events occur each year in Winter (February–March), Spring (April–June), and Fall (October–December). Each event analyzes only the constituent or constituents most likely to be discharging during that window. This retains the same total number of sampling events (three per year) while reducing the number of constituent analyses by approximately 25 percent. The revised seasonal windows also broaden the temporal coverage relative to the Draft Order's November 1–April 30 wet season: the Fall event (October–December) is positioned to capture first-flush conditions at the onset of the rainy season and the Spring event (April–June) captures the May and late-season storm shoulder period. Because copper is applied approximately February through August and imidacloprid approximately April through August, the constituent-specific calendar samples these parameters during the periods of greatest discharge risk rather than during a fixed window that may not coincide with application.

Accordingly, the Proposed Order's Winter Sampling Event begins in February rather than in January to keep field attribution under the Adaptive Management Program reasonable and workable. Copper is applied only sometimes in January but more regularly beginning in February. A copper exceedance detected in January would therefore be ambiguous to attribute: it could implicate current-cultivation fields (if those fields happened to apply copper that January) or fields that were just harvested from the prior growing season. Resolving that ambiguity would require a more complex, field-by-field tracking system to determine whether copper was actually applied in January before an exceedance could be assigned.

The Draft Order's schedule consisted of two Major Storm Event samples plus one additional wet-season sample that was collected between storms. Staff determined, however, that limited monitoring resources should be focused more

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directly on the periods most likely to contain high concentrations of pollutants. The revised schedule replaces the between-storm event with a third Major Storm Event, so that all three annual events are now timed to precipitation-driven runoff. In addition, the definition of a Major Storm Event has been bracketed by both a lower and an upper precipitation boundary to constrain the sampling window to the rising limb of the hydrograph. The Draft Order set only a lower boundary (one inch of rain in 24 hours to initiate a Major Storm Event). The revision adds an upper boundary so that samples are collected before more than three inches of rain has fallen in 24 hours. This timing is significant because the SWAMP Report indicates that constituent concentrations in the tributaries may be highest during the rising limb of the hydrograph, when runoff from fields has mobilized pesticides and copper but has not yet been substantially diluted by continued storm flow. By eliminating the between-storm event and bracketing each Major Storm Event to the rising limb, the revised schedule more closely constrains sampling to the conditions under which exceedances are most likely to be observed.

This revised framework declines to reduce monitoring to a single annual event in certain tributaries for imidacloprid and diuron, as recommended by some of the commenters. A single sampling event would impair the program's ability to detect storm-driven exceedances and to identify the fields most likely responsible for them. The revisions instead reduce the monitoring burden through the constituent-specific design, which lowers analytical cost and effort while preserving the temporal and parameter coverage needed to detect exceedances and trigger adaptive management. The revised monitoring schedule retains the same number of sampling events per year but reduces the number of constituents analyzed at each station per year by 25%.

CDFW, ELF, and Free recommend that the monitoring program include dry-season (summer) sampling, with CDFW recommending two dry-season events in addition to wet-season sampling. The Proposed Order focuses surface water monitoring on the periods and conditions during which the SWAMP Report indicates exceedances are most likely to be detected, rather than distributing sampling across the year without regard to when constituents are mobilized.

The SWAMP Report indicates that constituent concentrations in the tributaries are highest during the rising limb of the hydrograph, when precipitation-driven runoff has mobilized pesticides and copper from fields and is actively discharging to the tributaries, but before continued storm flow substantially dilutes those concentrations. Sampling during these conditions provides the greatest probability of detecting an exceedance and identifying the fields contributing to it. Dry-season conditions, by contrast, generally lack the runoff that transports these constituents from fields to surface water, so dry-season surface water sampling is less likely to capture the discharge events the monitoring program is designed to detect.

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Free's recommendation for edge-of-field monitoring is addressed in the RTC #54. Recommendations regarding the number and placement of monitoring stations are addressed in the RTC #50.

RTC #50: Monitoring Locations

Comment Numbers: DNRCD-7, Crockett-7, Crockett-9, Miller-3, Pace-3, AW-27, Sargent-1, Westbrook-13

Grower commenters argued for fewer locations (reduce to 4 creeks). Environmental commenters argued for expansion. Crockett raised a claim that Unnamed Creek has no hydrogeologic connection to Receiving Waters. Sargent requested continuous testing below Dr. Fine Bridge.

Response: The Proposed Order has been modified to refine monitoring locations based on staff field investigations and updated drainage mapping. The Morrison Creek monitoring station was relocated to its mouth in the Morrison Slough to capture runoff from lily bulb fields downstream of the Morrison and Mello monitoring stations. This refinement combined the Morrison, Mello, and Unnamed Creek drainages into one downstream station where all beneficial uses protected by Water Quality Benchmarks are present. Drainage maps were updated to reflect current field configurations, and all associated performance standards were recalculated based on the updated drainage areas. The Proposed Order retains the option for Mello Creek to be sampled in order to avoid Enrollees co-mingling discharges from their fields into a single sampling station. If the option to sample Mello Creek is not selected, then all fields tributary to the Mello Creek monitoring station would be included in the new Morrison Creek at Morrison Slough monitoring station for purposes of Adaptive Management.

Regarding the request to reduce monitoring to four creeks where production currently occurs: The commenter's proposal would exclude Tillas Slough and Rowdy Creek from the monitoring program. Tillas Slough recorded two acute and eight chronic exceedances of Water Quality Benchmarks between 2021 and 2024, and Rowdy Creek recorded one chronic exceedance during the same period. Removing monitoring locations with documented exceedances would be inconsistent with the purpose of the monitoring program and would eliminate the data needed to track whether water quality conditions in those drainages are improving.

Regarding the request for continuous testing below the Dr. Fine Bridge: The tributary-level monitoring stations in the Proposed Order are located to capture discharge from lily bulb production areas before it integrates with (and dilutes with) other sources in the estuary. The North Coast Water Board retains authority to add monitoring locations if warranted.

RTC #51: Sampling Methods

Comment Numbers: TDN-11, TDN-12, TDN-13, TDN-14, Dettmar-10, Dettmar-16,
Pace-2

Three commenters proposed technical improvements: automated ISCO samplers triggered by flow/conductivity, analysis of both dissolved and sediment-bound phases, and flow-weighted compositing.

Response: Tolowa Dee-ni' Nation staff raised questions about whether the surface water sampling window described in the Draft Order captures first-flush and peak concentration events, and whether automated samplers collecting composite samples triggered by flow or conductivity during the rising limb of the storm hydrograph would improve compliance determinations.

Surface Water Monitoring requirements in the Draft Order are designed to capture first-flush concentrations (See RTC #49) This timing reflects the fate-and-transport pattern described in the 2025 SWAMP Report Section 6.1 which shows that diuron and imidacloprid concentrations peak sharply during early overland flow before diluting as streamflow rises. Under a grab sampling regime, collecting samples on the rising limb following the first inch of precipitation is a reliable approach for capturing concentrations near their peak.

Composite sampling characterizes loads across a storm event while grab sampling during the rising limb characterizes peak concentrations. Compliance with the Lily Bulb Order is determined against Water Quality Benchmarks expressed as concentration thresholds (Draft Order Tables I.3 and A.4). Because composite sampling produces an average concentration across the compositing period, it is most useful for characterizing pollutant load; whereas grab samples are commonly used for determining compliance with concentration-based benchmarks.

Automated sampling has value for characterization but is not necessary for compliance. Flow- or conductivity-triggered automated samplers with time-interval compositing would generate more detailed data on pollutant transport during the rising and recession limbs of storms. That enhancement is most useful for refining the Adaptive Management Program and informing future Order revisions rather than for determining whether a Water Quality Benchmark has been exceeded. Deployment would require capital investment in samplers, sensors, secure enclosures, telemetry, and power, with ongoing maintenance and analytical costs. While composite sampling instrumentation is feasible to install and operate, the information obtained does not align with how compliance is evaluated under the Proposed Order. The MRP allows monitoring enhancements through modifications and Executive Officer revisions (Attachment A Section V).

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Tolowa Dee-ni' Nation staff recommend analyzing both dissolved and sediment-bound phases on the basis that copper-based fungicides may be underestimated by water-column analysis alone.

Compliance is based on the Water Quality Benchmark for copper (Draft Order Table I.3) which reflects the bioavailable fraction that is toxic to aquatic life. The Hurst et al. (2022) and Hurst et al. (2024) studies (Findings 49 and 59) document that copper primarily leaves lily bulb fields bound to sediment particles, but also that the bioavailable Cu^{2+} form in receiving waters with dissolved organic carbon binding plays a buffering role. The Biotic Ligand Model used to derive the Benchmark integrates pH, DOC, hardness, and major ions to predict dissolved-phase bioavailability directly.

The empirical record does not support significant re-mobilization of sediment-bound copper into the dissolved phase. Section 7.2 of the 2025 SWAMP Report documents that dissolved copper concentrations and BLM-predicted bioavailability drop to subtoxic levels at the downstream monitoring stations outside the storm season, notwithstanding continuous sediment-bound copper inputs from earlier storms. If sediment-bound copper were materially re-partitioning into the dissolved phase in receiving waters, dissolved concentrations would persist at potentially toxic levels through baseflow. They do not. Storm-season dissolved copper toxicity tracks pH depression and storm-driven transport, not legacy sediment release.

For these reasons, dissolved-phase copper monitoring as specified in Proposed Order Attachment A: MRP is sufficient to support compliance determinations under the Order.

RTC #52: QA/QC Standards

Comment Numbers: TDN-15

The Tolowa Dee-ni' Nation identified omitted QA/QC elements in Attachment D: field blanks, duplicate samples, calibration records, and detection limits.

Response: The Proposed Order was revised to include Quality Assurance and Quality Control requirements in Attachment D in lieu of requiring the Coalition to submit a Quality Assurance Project Plan (QAPP) as part of a Water Quality Monitoring Workplan.

RTC #53: Biotic Ligand Model and California Toxics Rule

Comment Numbers: CDFW-18

CDFW expressed support for the BLM transition, characterizing it as “more sensitive and biologically relevant.”

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Response: Staff acknowledge CDFW's support for the transition from the hardness-based CTR to the Biotic Ligand Model for copper toxicity assessment.

RTC #54: Edge-of-Field Monitoring

Comment Numbers: ELF-29, CDFW-15, AW-27, Free-3

Commenters expressed that edge-of-field monitoring should be mandatory rather than optional. ELF argued for public disclosure of results, pursuant to the NPS Policy's Key Element 4. CDFW recommended edge-of-field monitoring as an Adaptive Management exemption pathway. Williams argued the Board must perform edge-of-field monitoring independently.

Response: *Environmental Law Foundation v. State Water Board* (2023) 89 Cal. App. 5th 451 addressed anonymization of monitoring data and whether it violates the NPS Policy Key Element 4's directive for sufficient feedback mechanisms. The court noted that nothing in Key Element 4, either within the element language or associated commentary, prohibits the anonymization of data. The court ultimately concluded that despite anonymization of data, there existed sufficient feedback mechanisms to allow the regional board and public to determine whether the program was achieving its ultimate purpose and that Key Element 4 does not require perfect transparency or that the public have access to the same data set as the regional board. The court acknowledged the balance the State Water Board was striking between public transparency and individual grower confidentiality concerns, as well as the discretion afforded under the Nonpoint Source Policy to fashion feedback mechanisms sufficient for determining whether a program is achieving its purpose.

Here, the surface water monitoring required by the MRP is conducted at fixed receiving-water stations on the tributaries (e.g., Delilah Creek, Morrison Creek), not at individual fields. These station results characterize the condition of the receiving water in each tributary watershed and are reported to CEDEN, where they are publicly accessible. They are not anonymized in any manner that obscures whether the program is achieving its purpose; any member of the public can determine whether Water Quality Benchmarks are being met at each station and whether adaptive management is being triggered. Key Element 4's feedback function is therefore satisfied by the receiving-water monitoring framework, independent of edge-of-field monitoring.

Edge-of-field monitoring generates individualized, field-specific data tied to a particular grower's operation. The Order provides for edge-of-field monitoring as an optional pathway through which an enrollee may demonstrate attainment of water quality objectives and compliance with Receiving Water Limitations in order to qualify for an exemption from Adaptive Management requirements. Making edge-

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of-field monitoring mandatory and individually attributable, as the comments request, is therefore unnecessary to satisfy Key Element 4, which is met by the publicly available receiving-water station data. However, it is worth noting that where an Enrollee elects the Edge-of-Field pathway, the results demonstrating attainment are reported to and reviewed by the North Coast Water Board on a by-field basis, which would be subject to public disclosure.

RTC #55: Sampling Constituents

Comment Numbers: ELF-27, TU-1, Kharazi-4, Holland-1, AW-29

Commenters expressed that the Draft Order addresses only four constituents while 17 pesticides have been detected. ELF specifically identified metam sodium, 1,3-dichloropropene, permethrin, chlorothalonil, napropamide, and phorate.

Response: The Proposed Order requires surface water monitoring for dissolved copper, diuron, imidacloprid, and ethoprop. These four constituents were selected based on their known use in lily bulb production, toxicity profiles, prior study results, and input data needs for the Biotic Ligand Model.

The 2013–2015 SWAMP study analyzed surface water samples for a broad suite of pesticides and detected 17 pesticides (including isomers and degradants) at downstream monitoring stations. The results of the 2013-2015 study informed the list of constituents analyzed in the 2021–2024 SWAMP study which were selected based on their known use in lily bulb production, toxicity profiles, and input data needs for the Biotic Ligand Model, in addition to the 2013-2015 study results. The 2021-2024 SWAMP study confirmed that diuron and imidacloprid were frequently detected downstream of lily bulb fields, with exceedances of water quality criteria documented at Lower Delilah Creek and Tillas Slough, and that dissolved copper concentrations predicted toxicity at all downstream stations in approximately 30 percent of samples.

The detection of a pesticide in a single study does not by itself establish that the constituent warrants inclusion in a long-term compliance monitoring program. The four constituents selected for monitoring under the Proposed Order are those with the strongest demonstrated linkage between application on lily bulb fields and repeated exceedances of water quality criteria or predicted toxicity in receiving waters across both SWAMP studies.

Regarding the specific constituents identified by the commenter: 1,3-dichloropropene and metam sodium are soil fumigants applied in the largest quantities by weight of any pesticides used on lily bulbs (Table I.1). These products are applied as pre-plant soil treatments and are regulated as restricted materials by the California Department of Pesticide Regulation. Their application is subject to restricted materials permits issued by the Del Norte County Agricultural

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Commissioner, which include site-specific conditions addressing application methods, buffer zones, and notification requirements. Neither 1,3-dichloropropene nor metam sodium was detected in the 2021–2024 SWAMP surface water study at concentrations exceeding water quality criteria, though their breakdown product methyl isothiocyanate was included in the analyte suite for the 2015 groundwater study. Permethrin exceeded a benchmark in a single sample during the 2013–2015 study that also produced a positive acute toxicity result, but was not detected at levels of concern in the 2021–2024 study. Chlorothalonil, napropamide, and phorate were applied in smaller quantities (Table I.1) and were not detected at concentrations exceeding applicable water quality criteria in either the 2013–2015 or 2021–2024 studies.

The Proposed Order's monitoring program is designed to focus analytical resources on the constituents with the strongest demonstrated link between application on lily bulb fields and exceedances of water quality criteria in receiving waters. The North Coast Water Board retains authority under Water Code section 13267 to require monitoring for additional constituents if future data indicates they pose a risk to water quality or beneficial uses. Additionally, the Proposed Order does not limit the North Coast Water Board's authority to modify the Monitoring and Reporting Program to add constituents if warranted by new information (see MRP Section V, Modifications to the MRP).

RTC #56: Deriving Water Quality Benchmarks

Comment Numbers: Westbrook-9

Commenter characterized the Water Quality Benchmarks as an “educated guess,” citing Order Findings that discussed their derivation: “Water Quality Benchmarks for surface water and groundwater monitoring pesticide parameters were determined by reviewing all available pesticide water quality values, including U.S. EPA aquatic life benchmarks, and, exercising best professional judgment consistent with scientific evidence, selecting the most protective (i.e., lowest) values for relevant beneficial uses”

Response: The characterization of the Water Quality Benchmarks as an “educated guess” is not accurate. The Water Quality Benchmarks in the Proposed Order were developed through a structured scientific and regulatory process using published aquatic life toxicity thresholds, peer-reviewed scientific literature, and best professional judgment to select protective benchmark concentrations for the Smith River Plain.

Best professional judgment is a well-established regulatory framework used when Basin Plans contain narrative water quality objectives but do not establish numeric water quality objectives. In those circumstances, staff evaluate available peer-reviewed scientific information and existing aquatic life benchmarks to develop

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protective numeric indicators. To develop the Benchmarks, staff surveyed a wide range of available screening thresholds, including USEPA Water Quality Benchmarks, USGS Health Based Screening Levels, and thresholds developed by the UC Davis Method for Derivation of Pesticide Water Quality Criteria for the Protection of Aquatic Life.

This approach is consistent with State Water Board Order WQO 2023-0081 , which expressly recognized that Regional Water Boards may translate narrative water quality objectives into numeric receiving water limits using scientific evidence and best professional judgment where numeric objectives have not been established. The Order states, in part:

“When water quality objectives are established in a basin plan in narrative form, it is appropriate for a regional water board to exercise its professional judgment, relying on scientific studies, to establish numeric limits. This is a fundamental regulatory practice of the regional water boards in implementing basin plans and exercising their regulatory authority under the Water Code.”

Accordingly, the Proposed Order follows the same approach approved by the State Water Board. In this Order, the State Water Board found that the Central Coast Water Board properly relied on U.S. EPA aquatic life benchmarks and other scientific literature in establishing numeric receiving water limits.

Consistent with this approach, North Coast Water Board staff chose the most conservative benchmarks available from the available aquatic life benchmarks and other scientific literature to protect the aquatic species of the Smith River Plain, a sensitive resource that exists downgradient of lily bulb operations. The Water Quality Benchmarks are applied to all surface water grab samples, independent of the duration of exposure the benchmarks were based on, to provide an added margin of safety.

Chronic benchmarks are developed from laboratory studies in which aquatic organisms are exposed continuously to a contaminant over periods of several days. By contrast, the MRP requires instantaneous grab samples that represent only a single point in time during a storm event. Because concentrations in streams typically rise and fall throughout a runoff event, a grab sample is unlikely to capture the highest concentration that occurs during the storm and therefore generally underestimates the short-term peak concentration. Nevertheless, the Proposed Order compares that instantaneous measurement to a chronic benchmark that was developed for continuous, multi-day exposure. This conservatively assumes that the concentration measured in the grab sample persists throughout the duration of the chronic exposure period, even though actual concentrations fluctuate over the course of the storm. As a result, using chronic benchmarks as instantaneous

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adaptive management triggers provides a substantial additional margin of safety beyond the conservatism already built into the benchmark values themselves.

Accordingly, the Water Quality Benchmarks are not "educated guesses," but protective benchmark concentrations derived through a structured scientific and regulatory process using the best available scientific information and conservative assumptions to protect aquatic life and beneficial uses.

RTC #57: Biotic Ligand Model Methodology

Comment Numbers: ELF-19

ELF expressed that the Toxicity Unit benchmark for copper is not defined — Attachment D contains no derivation methodology.

Response: The commenter is correct that Attachment D did not previously describe the methodology for calculating the Toxicity Unit (TU). The TU, however, is not an independently derived Water Quality Benchmark requiring its own derivation methodology. Rather, the Biotic Ligand Model (BLM) first generates site-specific Water Quality Benchmarks (the Criterion Maximum Concentration [CMC] and Criterion Continuous Concentration [CCC]) based on the water chemistry at each monitoring location. The TU is then calculated by dividing the measured dissolved copper concentration by the applicable BLM-generated Water Quality Benchmark to determine whether, and by how much, the measured concentration approaches or exceeds that benchmark. The Findings been revised to describe this calculation, explain its relationship to the BLM-generated Water Quality Benchmarks, and clarify its use in evaluating compliance with the Receiving Water Limitations and triggering Adaptive Management. Additional explanation in the response to this comment is also entered into the administrative record.

The BLM is a model that processes water quality data inputs to develop maximum criteria to protect against both the chronic and acute toxic effects of dissolved copper. One set of outputs of the BLM (and the outputs utilized in the adaptive management framework) are instantaneous water quality criteria that consist of a Criterion Maximum Concentration (CMC) and a Criterion Continuous Concentration (CCC). These criteria are compared to the dissolved copper concentration measured in the lab analysis of the instream sample. If the copper concentration is above the CCC, there is predicted risk of chronic copper toxicity, and if the copper concentration is above the CMC, there is a predicted risk of acute copper toxicity.

The CMC is the highest concentration of dissolved copper to which an aquatic community can be exposed briefly without an unacceptable acute effect. It is calculated from LC50 values for sensitive species from an acute toxicity database,

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then scales those values based on the water chemistry inputs into the BLM. Compliance with the CMC is measured as a 1-hour average. The CCC is the highest concentration of dissolved copper to which an aquatic community can be exposed indefinitely without an unacceptable chronic effect. Compliance with the CCC is measured as a 4-day average. The CCC is a calculated value that uses an 'Acute to Chronic Ratio' (ACR) calculated by comparing the ratio of acute to chronic toxicity values derived from toxicity studies.

The toxicity unit (TU) is calculated by dividing the measured dissolved copper concentration by the applicable BLM-derived Water Quality Benchmark (CMC or CCC). The resulting value indicates the relative difference between the measured concentration and the applicable BLM-generated Water Quality Benchmark. A TU of 1.0 indicates that the measured concentration equals the applicable benchmark. Values greater than 1.0 indicate the measured concentration exceeds the benchmark, while values less than 1.0 indicate concentrations below the benchmark. For example, a TU of 2.0 means the measured concentration was two times the benchmark, while a TU of 3.0 indicates it is three times the benchmark. Expressing results as Toxicity Units allows comparisons among monitoring locations and sampling events even though the BLM generates different Water Quality Benchmarks based on the site-specific water chemistry for each sample. This allows meaningful comparisons among monitoring locations and sampling events despite differences in water chemistry.

The Toxicity Unit calculation represents the relative risk of copper toxicity in the waterbody at the time of sample collection. As stated in the Draft Order: "Due to the unique water chemistry of the Smith River Plain, risk of toxicity is predicted to occur at a lower dissolved copper concentration by the BLM compared to the hardness-based CTR at the monitoring stations downstream of lily bulb agriculture".

Use of the BLM-derived Water Quality Benchmark, and the corresponding Toxicity Unit calculation, is appropriate in the Proposed Order because it provides a scientifically valid and more sensitive method for evaluating compliance with the Receiving Water Limitations and triggering Adaptive Management. The factors driving the lower BLM-based benchmark unique to the Smith River Plain include periods of low pH and low dissolved organic carbon concentrations at monitoring sites during winter storm events which increase the bioavailability and toxicity of dissolved copper. These site-specific conditions are not accounted for by the hardness-based California Toxics Rule (CTR) criteria. As a result, the BLM generates lower site-specific benchmarks than the hardness based CTR criteria under the water chemistry conditions present in the Smith River. Consequently, the same measured dissolved copper concentration may exceed the BLM generated benchmark before it would exceed the corresponding hardness based CTR criterion, resulting in Adaptive Management being triggered at a lower dissolved

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copper concentration. The comparison of the BLM-derived benchmarks and the corresponding CTR criteria for individual samples is provided in Appendix A of the 2021-2024 SWAMP study data result tables.

Accordingly, the TU does not require a separate derivation methodology because it is not an independently derived Water Quality Benchmark. Rather, it is a straightforward calculation that compares the measured dissolved copper concentration to the site-specific Water Quality Benchmark generated by the BLM. The Monitoring and Reporting Program has been revised to include additional guidance on the Biotic Ligand Model.

RTC #58: Copper Toxicity Science

Comment Numbers: ELF-40, CDFW-6, CDFW-9, AW-32, AW-33, TDN-8, TDN-9, Dettmar-8, Kharazi-2, Kharazi-3, Galea-1, Galea-2, Powell-1, Holland-1, Montagne-1, St.Clair-4

Commenters expressed detailed concerns about copper toxicity mechanisms. CDFW cited literature showing dissolved copper impairs sensory systems within minutes. Kharazi analogized copper/salmon olfaction to lead/children's nervous systems. Galea raised a unique mechanism: pesticide-driven salmon avoidance and elevated straying rates. ELF noted that DOC and dissolved copper trends do not track each other all season. St.Clair asserts that even 2–5 ppb of dissolved copper destroys the olfactory neurons of Chinook, Coho, Steelhead, and Cutthroat trout.

Response: North Coast Water Board staff share the commenters' concerns about the risk of sublethal effects from low levels of dissolved copper enhanced by the water chemistry of the tributaries in the Smith River Plain. The Biotic Ligand Model (BLM) was developed based on a conceptual model at the fish's gill interface with the environment, not the sensory endpoint at the olfactory rosette. However, the peer-reviewed literature confirms the protectiveness of the BLM-derived criteria of sublethal effects to salmonid olfactory senses from dissolved copper binding to the olfactory rosette.

Meyers and Adams (2010)⁴ and DeForest et al. (2011)⁵ showed that the BLM is protective of sublethal sensory effects because of how closely it tracks DOC binding

⁴ Meyer JS, Adams WJ. 2010. Relationship between biotic ligand model-based water quality criteria and avoidance and olfactory responses. *Environ Toxicol Chem* 29:2096–2103.

⁵ DeForest, D.K., Meyer, J.S., Gensemer, R.W., Chiavelli, D.A., Santore, R.C. and Adams, W.J., 2011. Protectiveness of water quality criteria for copper in Western United States waters relative to predicted olfactory responses in juvenile Pacific salmon.

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to copper, an important determining factor in the bioavailability of copper at the olfactory rosette as well as the gill. The researchers took the neurophysiological and behavioral data from the salmonid olfactory sensory effects studies and compared them to the thresholds generated by the BLM. The Meyer and Adams study demonstrated that the BLM-based chronic criteria were fully protective in 100% of the 16 exposure water-species combination in the copper avoidance and olfaction experiments. The DeForest et al. study likewise showed that the BLM criteria were below the olfactory based thresholds using data from 133 natural stream locations.

The commenters also correctly note that DOC and dissolved copper trends do not track each other during all seasons. The BLM model accounts for DOC levels in its criteria calculation. Even if DOC drops during a spike in copper concentrations, the BLM then accounts for the increased bioavailability of copper and calculates a lower instantaneous criterion.

Commenters also correctly point out one of the sources of copper is the portion accumulated in stream sediments that can release dissolved copper when conditions are conducive. Low pH associated with storm events can introduce hydrogen ions that competitively displace copper ions attached to sediment or complexed with DOC. The free copper is then available in the water column to affect aquatic life. Controlling erosion and detaining sediment before it reaches the stream channel is an important goal and the Proposed Order requires implementation of erosion control practices. Some of these practices include grass filter strips, grass waterways, and riparian setbacks.

RTC #59: Impacts to Salmonids from Copper

Comment Numbers: Crockett-3, Crockett-4

Commenter states that impacts to salmonids from copper applied on lily bulb fields is speculative. Commenter claims that no evidence has been established that indicates detrimental impacts to salmonids in field trials; the evidence provided by the fisheries agencies is based solely on laboratory experiments. Commenter states that the number of salmonid adults returning to the Smith River has almost tripled in the past three years and suggests that it means that lily bulb production is causing detrimental impacts to salmonids.

Response: The dissolved copper Water Quality Benchmarks in the Proposed Order are based on the BLM calculated instantaneous water quality criteria and

Integrated Environmental Assessment and Management, 7(3), pp.336–347. Available at: doi.org.

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are fully protective of salmonid species. The BLM model was developed by academic and private researchers and formally validated by the US EPA using the results of studies from a large ecotoxicological dataset during their criteria setting process (EPA, 2007)⁶. While toxicity testing has not been conducted in the Smith River Plain since the 2013-2017 SWAMP study, those results did show that agricultural chemicals were having a toxic effect in some of the samples, including an acutely toxic event occurring during the March 11-12, 2015 sampling event in Delilah Creek. Another sample from Delilah Creek taken on June 8th, 2017 tested positive for chronic toxicity. Some of the toxicity testing results, including the chronic test results from the initial round of sampling were confounded by matrix interference in the test results.

Comparing sample results for pesticide and dissolved copper concentrations to modeled or lab based water quality benchmarks is accepted methodology for assessing water quality data and the risk to aquatic life. While specific toxicity studies using site ambient surface waters will provide direct feedback on the level of toxicity produced by the chemicals and metals in the water column, it is not commonly feasible to conduct monitoring that includes toxicity testing, due to cost and resource limitations. Water sample analyzed for pesticide and metals concentrations at a lab is much more practical and a valid means for assessing the risk of toxicity due to agricultural chemicals.

Sample results in SWAMP studies conducted by the North Coast Water Board from 2013-2017 and 2021-2024 have shown that aquatic species are at risk of being adversely affected by chemicals and dissolved copper in the water column associated with lily bulb production in the Smith River Plain. Refer to the SWAMP reports⁷ that compare sample results to water quality benchmarks and established criteria.

RTC #60: Cumulative/Synergistic Pesticide Toxicity

Comment Numbers: CCR-3, CCR-7, HFMA-5, Dettmar-9, Dettmar-15, Free-5

⁶ United States Environmental Protection Agency. 2007. Aquatic life ambient freshwater quality criteria - copper. Washington, DC: Office of Water and Office of Science and Technologies, US Environmental Protection Agency. EPA-822-R-07-001.

⁷ Find the SWAMP Reports here:

https://www.waterboards.ca.gov/northcoast/water_issues/programs/agricultural_landslily/

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Commenters expressed that the Draft Order does not address cumulative impacts from combined pesticide exposure. CCR argued there is “absolutely no mention” of this issue. HFMA cited the Basin Plan’s narrative toxicity objective which explicitly covers synergistic effects. Free identified that heavy metals can increase the toxicity of various pesticides (e.g., organochlorides) and vice versa.

Response: The Basin Plan's narrative toxicity objective requires that waters "shall not contain toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life" and specifies that "[t]his objective applies regardless of whether the toxicity is caused by a single substance or the synergistic effect of multiple substances". The narrative pesticide objective similarly addresses "any individual pesticide or combination of pesticides". In response to these comments, staff evaluated the cumulative toxicity of pesticide mixtures in the Smith River Plain and revised the Proposed Order's Findings accordingly.

Cumulative Toxicity Assessment

Staff reviewed the USGS Pesticide Toxicity Index (PTI)⁸ a peer-reviewed tool that assesses the potential acute toxicity of pesticide mixtures by summing toxic units (TUs) for all pesticides detected in a sample using a Concentration Addition (CA) model. Staff calculated the Sensitive PTI — which uses the 5th percentile of compiled toxicity values for the benthic invertebrate taxonomic group — for all 2021–2024 SWAMP monitoring samples where pesticides were detected at Lower Delilah Creek and Tillas Slough, the two downstream stations with meaningful detections⁹. The Sensitive Toxicity Concentrations (STCs) for the three primary pesticides are: diuron (160 µg/L), ethoprop (43.9 µg/L), and imidacloprid (0.65 µg/L). A Sensitive PTI of 1.0 or greater indicates significant risk of acute toxicity to the 5th percentile most sensitive organisms.

The highest cumulative Sensitive PTI in the entire dataset was 0.12 (12% of the 1.0 threshold), recorded at Lower Delilah Creek on March 5, 2023 — the largest storm-driven pesticide pulse documented during the study. No sample at any station approached the 1.0 threshold. The only sample where all three pesticides were co-detected at meaningful concentrations — November 5, 2023 at Lower Delilah Creek (diuron 0.094 µg/L, ethoprop 2.0 µg/L, imidacloprid 0.028 µg/L) — produced a cumulative Sensitive PTI of 0.089, with ethoprop and imidacloprid each

⁸ Nowell, L.H., Norman, J.E., Moran, P.W., Martin, J.D., and Stone, W.W. 2014. *Pesticide Toxicity Index — A tool for assessing potential toxicity of pesticide mixtures to freshwater aquatic organisms*. U.S. Geological Survey.

⁹ Zabinsky, B. 2026. *Review of the USGS Pesticide Toxicity Index Tool for Assessing Potential Toxicity of Pesticide Mixtures to Freshwater Aquatic Organisms*. Internal Technical Memorandum, North Coast Regional Water Quality Control Board. June 30, 2026

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contributing approximately half the total toxic units. This demonstrates the type of cumulative assessment the commenters requested: the PTI captures scenarios where no individual pesticide exceeds its benchmark but the combined mixture poses greater risk than any single compound alone.

Conservatism of the Assessment

The CA model assumes toxicity is strictly additive. For pesticides with the same mode of action, this assumption is accurate; for pesticides with different modes of action, it tends to overestimate combined risk. Diuron (a photosynthesis-inhibiting herbicide), ethoprop (an organophosphate acetylcholinesterase inhibitor), and imidacloprid (a neonicotinoid nicotinic acetylcholine receptor agonist) all have different modes of action. The USGS study found that even for pesticides with different modes of action, the CA model is usually within 2 to 3 times the observed toxicity — meaning it is slightly conservative but broadly applicable. Accordingly, the PTI values reported above are likely to overestimate the actual combined acute risk.

A side-by-side comparison of the freshwater EPA acute benchmarks and the Sensitive PTI using all SWAMP data confirms that the EPA acute benchmarks are structurally more conservative than the PTI for each individual pesticide. The EPA acute benchmarks apply a 2× safety factor (Level of Concern = 0.5) to the lowest available acute toxicity test result, producing thresholds approximately half the STC values used in the PTI. The EPA acute benchmarks produced a higher percent-of-threshold than the cumulative Sensitive PTI in 100% of samples at Lower Delilah Creek and 94% of samples at Tillas Slough. The PTI's cumulative addition feature does not overcome this difference at the concentration levels documented in the Smith River Plain.

Protection Against Chronic Cumulative and Synergistic Effects

The PTI is designed to assess acute toxicity risk only and does not directly assess chronic effects or model true synergistic interactions. However, the Proposed Order's chronic benchmark framework provides substantial implicit protection against chronic cumulative and synergistic effects through multiple compounding layers of conservatism:

- The individual chronic benchmarks are derived using intentionally conservative methods. The imidacloprid chronic benchmark (0.01 µg/L) is based on a NOAEC (No-Observed-Adverse-Effect Concentration) value that is an artifact of the test concentrations chosen — it was simply the next tested concentration below the EC10 (10% Effect Concentration) of 0.03 µg/L. The diuron chronic benchmark (0.83 µg/L) is derived using an Acute-to-Chronic Ratio (ACR) of 210 borrowed from a different taxonomic group, when the median ACR for pesticides is only 10.

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Both methods produce benchmarks well below concentrations demonstrated to cause chronic effects in the tested species.

- These chronic benchmarks are applied to instantaneous grab sample results — including storm-event samples capturing peak or near-peak concentrations on the rising limb of the hydrograph — rather than the multi-day average concentrations the 7–21 day chronic toxicity tests were designed to evaluate. Staff have determined that the use of a chronic benchmark as an instantaneous trigger represents an acceptable margin of safety for potential synergistic interactions.
- The Proposed Order requires two chronic exceedances within a planting cycle to trigger adaptive management, ensuring the system responds to a pattern of elevated concentrations rather than a single result.

At observed concentration levels — where the highest cumulative Sensitive PTI for acute toxicity reached only 12% of the protective threshold — the magnitude of potential synergistic chronic effects is expected to be small relative to the margins of safety embedded in the individual chronic benchmarks.

Copper-Pesticide Interactions

Commenter Free raises the concern that heavy metals such as copper can increase the toxicity of pesticides and vice versa. The Proposed Order addresses copper and pesticides through separate but complementary monitoring and adaptive management frameworks. Dissolved copper is assessed using the Biotic Ligand Model (BLM), which generates site-specific instantaneous water quality criteria accounting for pH, dissolved organic carbon, hardness, and other parameters that influence copper bioavailability. The BLM framework is independent of and additive to the pesticide benchmarks, meaning both copper toxicity risk and pesticide toxicity risk are assessed for each sampling event. While the Proposed Order does not model specific copper-pesticide interactions, the use of conservative benchmarks for both copper (BLM-derived criteria) and pesticides (EPA chronic benchmarks), combined with adaptive management that responds to exceedances of either, provides a protective approach that accounts for the co-occurrence of both stressor categories.

Revisions to the Proposed Order

In response to these comments, the Proposed Order's Findings have been revised to:

Acknowledge the Basin Plan's narrative toxicity and pesticide objectives covering synergistic effects and the combination of pesticides;

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Document staff's evaluation of the USGS Pesticide Toxicity Index as a cumulative assessment tool, including the results of applying the Sensitive PTI to the 2021–2024 SWAMP dataset;

Explain that the CA model's additive framework is conservative for pesticides with different modes of action, providing a safety margin that addresses the concern for synergistic effects;

Explain that the chronic benchmark framework provides substantial implicit protection against chronic cumulative and synergistic effects through compounding conservatism in benchmark derivation, application to instantaneous samples, and the two-exceedance adaptive management trigger; and

Confirm that at observed concentration levels, cumulative acute toxicity risk from the pesticide mixture is well below levels of concern.

RTC #61: Upstream Pollutant Source Attribution

Comment Numbers: Westbrook-11, Westbrook-12, Westbrook-13, Westbrook-14, Westbrook-15

Commenter expressed: copper occurs naturally; synthetic pesticides detected above lily production areas possibly from illegal cannabis; baseline testing should be required; the monitoring program doesn't identify individual sources; and monitoring cost burden was shifted from the North Coast Water Board to Enrollees.

Response: While copper exists in nature, the SWAMP studies showed a clear increase in agriculturally-applied chemicals including dissolved copper in downstream samples compared to upstream. The presence of copper in the environment is considered natural background, which leaves less comparative room for discharges of dissolved copper from agricultural production than if natural background were lower.

Regarding Enrollees bearing the cost of monitoring: The requirement for enrollees to conduct and fund monitoring of their own discharges is standard practice under the Porter-Cologne Water Quality Control Act and is consistent with every general waste discharge requirement and conditional waiver adopted by the North Coast Water Board and other Regional Water Quality Control Boards statewide. Water Code section 13267 authorizes the North Coast Water Board to require any person who has discharged, discharges, or is suspected of having discharged or discharging waste to furnish technical or monitoring program reports, provided the burden bears a reasonable relationship to the need for the report and the benefits to be obtained. Water Code section 13268 provides that failure to furnish such reports may result in administrative civil liability.

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The North Coast Water Board's SWAMP monitoring program, which has provided the scientific basis for this Order, was conducted at public expense to characterize baseline conditions and identify impairments, a function distinct from the ongoing compliance monitoring that is the enrollee's responsibility under the Order.

RTC #62: Monitoring Burden Disproportionate for Small Industry

Comment Numbers: CAFB-2

The California Farm Bureau acknowledged water quality issues in the region but argued that monitoring and reporting requirements, especially for nitrogen and pesticides, are not reasonable given the small scale of the industry (fewer than 750 acres, approximately 160 in production per year). The commenter noted an acreage discrepancy between the Draft Order and DEIR, cited past monitoring data showing no acute toxicity or detections below criteria at many locations, and recommended reducing monitoring to once per year in drainages with no exceedances.

Response: The monitoring and reporting program was developed to capture pollutant concentrations during the periods when discharges are most likely to occur. The monitoring frequency and design documented in the 2018 and 2025 SWAMP studies formed the scientific basis for the Proposed Order's monitoring program.

The Proposed Order was revised to adopt constituent-specific monitoring at each sampling event rather than analyzing all four constituents at every event. Three sampling events occur per year per monitoring station during Major Storm Events in three seasonal windows: Winter (February–March), Spring (April–June), and Fall (October–December). Copper is monitored at all three events. Diuron is monitored at the Winter and Fall events. Imidacloprid is monitored at the Spring and Fall events, and at the Winter event only if fields tributary to the monitoring station are in Adaptive Management. Ethoprop is monitored at the Winter event only. This constituent-specific approach aligns monitoring with pesticide application timing, ensuring each constituent is sampled during the periods most likely to capture discharge, while reducing the total number of laboratory analyses by approximately 25 percent compared to the Draft Order's requirement to analyze all four constituents at every event.

Reducing monitoring to once per year would reduce the statistical power to detect exceedances and track trends and would be inconsistent with NPS Policy Key Element 4 feedback mechanism requirements. However, the Draft Order does provide for adaptive reduction of monitoring frequency as water quality conditions improve.

Regarding the characterization of past monitoring showing no acute toxicity at many streams: While some monitoring locations have not had acute exceedances,

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the 2025 SWAMP Report, as revised in part by the Updates Memo, documented exceedances of Water Quality Benchmarks at every downstream monitoring station, including chronic copper toxicity predicted in 100% of Lower Mello Creek samples (2 of 2), 56% of Lower Delilah Creek samples (10 of 18), and 44% of Tillas Slough samples (4 of 9), as well as 13 chronic imidacloprid exceedances concentrated at Lower Delilah Creek and Tillas Slough.

Regarding the acreage discrepancy between the Draft Order and DEIR, see response to CAFB-9 in Section III: Response to Comments on the Draft EIR.

The commenter's related recommendation to reduce surface water monitoring to once per year in drainages without exceedances, and its contention that monitoring and reporting requirements are unreasonable given the scale of the industry, are further addressed in RTC #49: Monitoring Frequency and on the reasonableness of monitoring requirements under Water Code section 13267 (RTC #25).

Groundwater Requirements

RTC #63: Groundwater Transport

Comment Numbers: ELF-18, HFMA-4, HFMA-15

Two commenters argued that the Draft Order's management practice framework disproportionately focuses on surface runoff while failing to address groundwater transport. ELF noted dry-season detections of imidacloprid and diuron indicating groundwater transport. ELF concluded that only reduction in pesticide use will address groundwater transport. HFMA emphasized that pesticide-loaded water that infiltrates groundwater cannot be removed.

Response: Staff acknowledges that groundwater transport is a documented discharge pathway in the Smith River Plain. The concentrations of imidacloprid and diuron reported for groundwater samples collected by the North Coast Water Board in 2021 were below human health reference levels. However, the detection of these constituents outside the wet season confirms that pesticides applied to lily bulb fields are reaching shallow groundwater, independent of surface runoff during storm events.

The Proposed Order addresses groundwater through a framework that integrates Groundwater Trend Monitoring, Drinking Water Well Sampling and Adaptive Management based on interim action levels and exceedances of Water Quality Benchmarks.

The Groundwater Trend Monitoring establishes whether constituent concentrations in representative monitoring wells are meeting water quality objectives. Because groundwater transport operates on longer timescales than surface runoff, trend

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data collected over multiple monitoring cycles provides a more reliable indicator of whether field-level management practices are effectively reducing pesticide loading to the subsurface than any single sampling event. If trend monitoring indicates increasing concentration (over three years), the Proposed Order includes the revision to increase sampling frequency. An exceedance of a Water Quality Benchmark triggers Adaptive Management which includes a Hydrogeological Determination of Groundwater Impacts and a Groundwater Protection Plan which identify the source of the contamination and specifies corrective management practices to reduce or eliminate the discharge to groundwater.

The Drinking Water Well sampling component includes the same interim action levels and requirements for Adaptive Management in response to Benchmark exceedances. In addition, these requirements also serve a direct public health protection function. If sampling results for a domestic well exceed a Water Quality Benchmark, the Proposed Order requires the enrollee to notify users of the affected well and the North Coast Water Board.

Regarding the comment that only reduction in pesticide use will address groundwater transport: North Coast Water Board staff agrees that surface management practices, such as vegetated setbacks and filter strips, are not designed to intercept subsurface transport. The Proposed Order's adaptive management framework addresses this by including pesticide application reduction as a Tier 1 compliance option and by requiring progressively more stringent management practices (including professionally certified Water Quality Management Plans at Tier 2) when monitoring demonstrates that initial practices are not achieving water quality objectives. The Groundwater Monitoring program provides a monitoring-based feedback mechanism to evaluate whether additional groundwater-focused management practices are required.

Regarding the comment that pesticide-loaded water that infiltrates groundwater cannot be removed: The Proposed Order's approach, consistent with Water Code section 13263 authorities, is preventive rather than remedial. It is designed to reduce pesticide loading to groundwater through source control and to detect any developing contamination trends early enough to intervene before concentrations reach levels of public health concern.

RTC #64: Interim Groundwater Monitoring Trigger

Comment Numbers: TDN-21, TDN-22

Commenter proposed numeric groundwater protection standards with a two-tiered trigger system: an early warning trigger at 8 mg/L and a compliance violation trigger at 10 mg/L. Second recommendation was mandating watershed-scale monitoring with annual cumulative nitrogen loading assessments.

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Response: The Proposed Order was modified to include an interim action level for Groundwater Trend Monitoring that increases frequency if nitrate exceeds 5 mg/L or a chronic value for pesticides. If a trend in concentration of a parameter increases over 3 years, adaptive management is triggered. See Revisions #8-10 with respect to groundwater monitoring, groundwater monitoring interim action levels, and adaptive management.

RTC #65: Domestic Well Sampling

Comment Numbers: Wade-6, AW-35

Wade demanded mandatory independent well testing within one mile of operations. Williams recommended filtration of irrigation well water and bioswales near discharge sites.

Response: The Order's domestic well sampling framework, informed by past sampling and state precedential requirements, focuses on parcels that currently support lily bulb agriculture activities. In April 2025, North Coast Water Board staff sampled 9 private domestic wells within the current and historic lily bulb cultivation area in the Smith River Plain. In April 2025, North Coast Water Board staff sampled 9 private domestic wells within the current and historic lily bulb cultivation area in the Smith River Plain. In October 2025, North Coast Water Board staff sampled two public water supply wells serving the Smith River Community Services District, well samples were analyzed for 94 pesticide residues utilizing a well sampling program offered by the CA Department of Pesticide Regulation. North Coast Water Board staff worked with the lily bulb growers, the Technical Advisory Group for the Lily Bulb Order development, and local community groups to identify volunteers for well sampling. Within the private domestic wells, pesticides were detected at trace levels in 6 of the 9 wells sampled. Of the eight pesticides detected, all but one – used in forestry and highway rights-of-way – had been applied on lily bulbs between 2012 and 2023. The pesticides detected include diuron, imidacloprid, mefenoxam, napropamide, thiamethoxam, ACET, simazine, and tebuthiuron. Four pesticides (diuron, imidacloprid, napropamide, and mefenoxam) were reported as being used on lily bulbs in the most recent Pesticide Use Reports from 2023. Within the public supply wells, two herbicides (prometon and tebuthiuron) were detected at trace levels and are associated with use in highway rights-of-way and not lily bulbs. Three quarters of all pesticide detections (75%) were reported at trace concentrations^{28F} and none exceeded established human health levels.

The Proposed Order requires sampling of all Drinking Water Supply wells on enrolled parcels for nitrate and the four pesticides that were detected and used on lily bulb agriculture, according to the most recent Pesticide Use Reports. The Proposed Order requires wellhead protection management practices but cannot

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dictate method or manner of compliance. Requiring sampling on parcels that do not currently support lily bulb agricultural activities or that are not enrolled is outside the scope of the Proposed Order. The North Coast Water Board retains authority under Water Code section 13267 to require additional monitoring, if warranted.

RTC #66: Groundwater Monitoring Scope

Comment Numbers: Miller-7, Westbrook-16, DNRCD-8, Crockett-10

Grower commenters argued groundwater monitoring requirements are not justified. Miller argued nitrogen management does not apply because no wells exceed 10 mg/L MCL and attributed nitrate to dairy operations. Westbrook requested reduced groundwater monitoring if initial results are clean.

Response: Staff acknowledge that dairy operations are one source of nitrate loading in the Smith River Plain and those discharges are regulated under the North Coast Water Board's Dairy Order. The presence of other nitrate sources does not eliminate the need to characterize and manage nutrient contributions from lily bulb operations. The Proposed Lily Bulb Order's groundwater monitoring and nutrient management requirements are designed to track the contribution of lily bulb operations to groundwater nutrient loading, independent of other sources.

The Proposed Lily Bulb Order was modified with respect to groundwater monitoring and nutrient management. Regarding the request to reduce groundwater monitoring frequency based on results, the Proposed Order was revised to include a reduction of monitoring frequency based on results being less than an interim action level. The Proposed Order was revised to tie nutrient management requirements closer to groundwater monitoring results. These modifications reduce the reporting burden identified by commenters while retaining a commensurate, if not more robust, groundwater protection framework. See Revisions #7-10 for more information on groundwater monitoring.

RTC #67: Nutrient Management and Fertilizer Alternatives

Comment Numbers: AW-20, AW-34, AW-35

Commenter expressed concerns about dairy and beef cattle in the area, and recommended specific alternative practices: poultry litter instead of cow manure, chickens to break up cow droppings, rotating lily bulb fields with marigolds for nematode control, and discontinuing synthetic fertilizers. Commenter cited the SARE factsheet.

Response: Staff thank the commenter for their suggestions. The relationship between nitrate contributions from dairy operations and lily bulb cultivation is addressed through separate regulatory programs. Regarding the specific

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alternative practices recommended, the North Coast Water Board notes that Water Code section 13360 prohibits the Board from specifying the particular manner of compliance. However, some of these practices may be appropriate components of an Enrollee's Irrigation and Nutrient Management Plan.

Coalition Structure

RTC #68: Coalition Model

Comment Numbers: ELF-33, ELF-34, ELF-42, ELF-43, HFMA-6, HFMA-14, TDN-20, AW-21, AW-36, AW-60, Miller-2, DNRCD-9, Crockett-12, Harms-1, TDN-10, Pace-4, Hostler-10, CAFB-3

ELF argued the ESJ Order's precedential value is limited because factual conditions are vastly different, making a coalition "absurd" at this scale. ELF argued monitoring must commence immediately upon adoption with no gap during coalition formation. HFMA argued self-monitoring is a conflict of interest. The Tolowa Dee-ni' Nation recommended removing coalition participation entirely. Williams opposed coalitions based on what they characterize as 15 years of grower non-cooperation. The California Farm Bureau argued that the coalition requirements need to be tailored for the unique circumstances of lily bulb production. Unlike other irrigated agricultural WDRs with coalitions managing hundreds of growers and thousands of acres, the small scale (three growers) does not allow for cost-sharing to form a coalition or support individual compliance. Miller argued the coalition requirement needs modification for the limited number of growers. DNRCD and Crockett offered to have monitoring funded through DNRCD or the Easter Lily Research Foundation.

Response: Staff acknowledges that the small number of growers presents unique challenges for coalition formation and that commenters expressed divergent views on the coalition model. The Proposed Lily Bulb Order has been revised to provide additional flexibility for Coalition structure as well as more clarity around individual enrollment as an alternative to coalition participation. Staff agree that a workable, reasonable, and cost-effective approach is needed given the scale of the industry and has structured the Order to accommodate both individual and coalition compliance pathways.

Regarding the comparison to the Eastern San Joaquin (ESJ) or Statewide Precedential Order: Staff acknowledge that the factual circumstances differ significantly. The ESJ Order's coalition framework was designed for thousands of growers across hundreds of thousands of acres, where coalitions serve an aggregation function that individual enrollment cannot practically replicate. The Proposed Lily Bulb Order's coalition provisions have been scaled accordingly. The requirement for coalitions to prepare and submit detailed workplans for North Coast Water Board approval prior to commencing monitoring was removed,

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eliminating a significant administrative burden and potential delay between Order adoption and the start of monitoring. The reporting structure was simplified and is aligned to a calendar-year cycle with a March 1 reporting deadline. These revisions substantially reduce the administrative overhead that would otherwise fall on a coalition formed by as few as three growers and ensure that the coalition framework is proportional to the scale of the regulated community.

Regarding concerns about self-monitoring and conflicts of interest: The monitoring required under the Proposed Order follows standardized protocols with specified constituents, sampling methods, laboratories, and quality assurance requirements. Monitoring data is submitted to the North Coast Water Board and is subject to review. Water quality monitoring results are compared against Water Quality Benchmarks established by the North Coast Water Board, not by the coalition or its members. The North Coast Water Board also retains independent authority to conduct its own monitoring and inspections under Water Code sections 13267 and 13383. The coalition does not determine compliance; the North Coast Water Board does.

Regarding the recommendation to remove coalition participation entirely: The Proposed Order retains the coalition option because it provides efficiencies even at small scale — a single entity can coordinate monitoring logistics, contract with laboratories, and submit consolidated reports on behalf of all enrollees, rather than requiring each grower to independently retain technical consultants and manage monitoring programs. However, the Order makes clear individual enrollment as an alternative, and enrollees who elect individual compliance are subject to the same monitoring and reporting requirements without the need to participate in or fund a coalition. The North Coast Water Board does not require coalition participation as a condition of enrollment.

Regarding the offers by DNRCD and the Easter Lily Research Foundation to fund or coordinate monitoring: the North Coast Water Board notes that under its revisions to the Proposed Order, either entity could theoretically serve as or support a coalition under the Proposed Order. The independence concerns raised by other commenters regarding grower-affiliated entities conducting monitoring are addressed by the standardized monitoring protocols, QA/QC requirements, and North Coast Water Board oversight described above.

Reporting

RTC#69: Immediate Exceedance Reporting

Comment Numbers: ELF-30

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ELF expressed that exceedances should be reported immediately upon discovery rather than through annual reporting. Williams argued consequences for reporting non-compliance should be specified.

Response: The Proposed Order requires annual reporting of water quality monitoring results, with a reporting deadline of March 1 following the calendar year in which monitoring was conducted. This reporting timeline was designed to align with the Order's three seasonal sampling events (Winter: February–March; Spring: April–June; Fall: October–December). The March 1 deadline allows the full suite of seasonal monitoring data to be compiled, reviewed for quality assurance, and evaluated against Water Quality Benchmarks before adaptive management determinations are made for the next year those fields are planted to lily bulbs.

More rapid reporting of individual results would, in theory, allow management practice adjustments within the same season. However, the practical utility of in-season reporting is limited by the nature of the Smith River Plain's climate and the lily bulb production cycle. Management practice infrastructure such as vegetated buffers, sediment controls, drainage modifications, or certain Tier 1 options (e.g., Watercourse Setbacks) and Tier 2 engineered practices must be constructed during the dry summer months when ground conditions allow. Wet-season construction is neither feasible nor consistent with erosion and sediment control objectives. Accordingly, an exceedance detected during a winter or spring sampling event would not result in a materially different management practice response than one reported at the end of the monitoring year, because the corrective work would occur during the same dry season construction window regardless of when the result was reported.

Note that Drinking Water Supply Well exceedances require notification to the well users within 10 days of learning of the exceedance and a copy of the notice to the North Coast Water Board.

RTC #70: Reporting Noncompliance

Comment Numbers: AW-59

Commenter argued consequences for reporting non-compliance should be specified.

Response: The Findings of the Proposed Order detail potential consequences for non-compliance, including reporting violations. Failure to submit required monitoring reports constitutes a violation of the Order and is subject to enforcement under Water Code sections 13261, 13267, and 13268, which authorize the North Coast Water board to impose administrative civil liability for failure to furnish required technical or monitoring reports.

Section III: Response to Comments on the Draft Environmental Impact Report (DEIR)

This section contains comments from unique comment letters received on the Draft Environmental Impact Report (DEIR) and provides individual responses to those comments. Because the DEIR comments are not summarized and provided verbatim below, there is no corresponding Index to this section (as with the Draft Order comments). Comments are numbered and attributed to commenters and date received in Table 2 below.

Table 2: List of Commenters by Comment Number

Comment Number(s)	Commenter
CAFB-7 – CAFB-21	California Farm Bureau (CAFB)
EPIC-1 – EPIC-22	Environmental Protection Information Center (EPIC)
ELF-31, ELF-32	Environmental Law Foundation et al. (ELF)
CDFW-17	California Department of Fish and Wildlife (CDFW)
CCR-3, CCR-7	Crescent Coastal Research (Craig Strong)
HFMA-13	Humboldt Fishermen's Marketing Association et al. (HFMA)
Dettmar-9, Dettmar-15	Tara Dettmar
St.Clair-1, St.Clair-2	Ethan St.Clair

Comments and Responses

CAFB-7: The commenter alleges that the DEIR constitutes a prejudicial abuse of discretion, that the Regional Board failed to proceed in a manner required by law, and that the DEIR does not comply with CEQA. The commenter argues the Draft Order contains unlawful requirements not supported by substantial evidence that put growers at a competitive disadvantage. The commenter alleges the DEIR is superficial, fails to adequately represent baseline conditions, inadequately analyzes environmental and economic impacts, fails to properly identify and analyze alternatives, fails to adequately address cumulative impacts, and fails to support several conclusions with substantial evidence.

Response: The comment does not specifically identify how Draft Order requirements are unlawful or how they place growers at a competitive disadvantage. Responses to specific comments on the DEIR are addressed below in CAFB-9 through CAFB-19.

CAFB-8: The commenter recites CEQA's statutory framework, objectives, and informational purposes, and alleges the Regional Board failed to comply with CEQA because the DEIR avoids a full environmental analysis through improper conclusions of "speculative" and "less than significant" impacts. The commenter argues the public has been precluded from gaining a full understanding of the environmental consequences of the Draft Order.

Response: This comment by itself does not specifically identify how the conclusions reached by the DEIR are incorrect. Please refer to the following specific responses (CAFB-9 through CAFB-19) for the more detailed concerns presented in these comments.

CAFB-9: The commenter argues the DEIR contains an incomplete and flawed environmental baseline and environmental setting. The commenter identifies an acreage discrepancy between the Draft Order and DEIR, argues the environmental setting omits relevant information including watershed-specific water quality conditions, sediment loads, riparian habitat, and stream temperature conditions, and argues the DEIR fails to convey important features of North Coast agriculture relevant to assessing physical and economic impacts. The commenter cites the ERA Economics Technical Memorandum (prepared for the Central Coast Ag Order 4.0) as applicable to the Lily Bulb Order. The commenter argues the DEIR fails to provide substantial evidence in support of its baseline assumptions and that the DEIR must be revised to include the appropriate project baseline.

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Response: Chapters IV through VIII of the DEIR include information on the regulatory and environmental setting for each CEQA resource analyzed. The DEIR includes descriptions of the Smith River Plain's agricultural characteristics, watershed conditions, water quality monitoring data (including the 2018 and 2025 SWAMP Reports), existing management practices under the 2021 Management Plan, and regulatory context. The evidence, resources, and data relied upon are identified in each chapter.

Regarding the acreage discrepancy, the comment characterizes the difference between the acreage figures in the Draft Lily Bulb Order and the Draft EIR as an internal inconsistency. The figures are not inconsistent; rather, they describe different measures of the lily bulb agricultural footprint, derived from different data sources and used for different purposes, as the Draft EIR explains in its analysis of impacts to Agriculture and Forestry Resources.

Three distinct measures are used. First, the figure of approximately 1,000 acres refers to the total acreage of land currently and recently farmed for lily bulbs in the Smith River Plain as of the 2024–2025 growing season (as reported field acres through the 2021 Management Plan), accounting for the crop's three- to five-year rotation with grass-clover pasture. Because lily bulbs are planted on a given field only once per rotation cycle, this rotational footprint is substantially larger than the area planted in any single year. Both the Draft Order and the Draft EIR use this same figure. Second, the figure of approximately 160 acres refers to the area actually planted to lily bulbs in a given year, which is the subset of the rotational footprint in active lily bulb production at any one time. The Draft EIR uses 2023 planted acreage to illustrate this figure. Both documents are internally consistent on these two points, and the Draft EIR states both figures together to distinguish the rotational footprint from the annually planted area.

The comment's perception of a discrepancy arises from a third set of figures used specifically in the Draft EIR's CEQA impact analysis, which intentionally relies on a larger, more conservative measure of the agricultural footprint than the "planted acres" figure. As the Draft EIR explains, this conservative approach is designed to characterize the maximum potential impact to agricultural resources rather than the actual annual planted area. The impact analysis uses two analytical areas. The Baseline Cultivation Area of approximately 2,113 acres (as mapped parcel acres from the 2021 Management Plan grower reporting) or 2,281 acres (from the Del Norte County Department of Agriculture Pesticide Use Reporting dataset for 2019–2024) represents the maximum mapped footprint of whole parcels reported in lily bulb rotation over the prior five years. These parcel-acreage figures exceed both the 1,000-acre rotational footprint and the 160-acre planted figure because they treat the entirety of each reported parcel as potentially available for cultivation, even though only a portion of a given parcel is actually planted. The Potential Cultivation

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Area of approximately 7,473 acres represents all land within the Project Area zoned by Del Norte County as prime agricultural land (zoning categories AE, A, A-5, and A-20), used as a proxy because Del Norte County does not participate in the Farmland Mapping and Monitoring Program. This figure represents the theoretical universe of agriculturally zoned land that could support lily bulb cultivation under existing zoning, not land currently in lily bulb production.

The different measures therefore reflect deliberate methodological choices rather than conflicting accounts of the same quantity. The Draft EIR uses the conservative parcel-based and zoning-based measures to ensure that the analysis does not underestimate potential impacts to agricultural resources, and it states expressly that the resulting estimates overestimate the direct impact to the approximately 160 acres of lily bulbs actually planted. Staff have reviewed the figures and confirm that the Order and the Draft EIR are consistent, and that the differences among the figures reflect the distinct purposes for which each measure is used. To the extent the comment suggests the differing figures cast doubt on the adequacy of the environmental baseline, the Draft EIR's use of the larger, more conservative cultivation and zoning footprints is protective of the agricultural resource analysis and is consistent with CEQA's direction to analyze the reasonably foreseeable maximum extent of a project's impacts.

The apparent overstatement is also explained by the CEQA environmental baseline. Under CEQA, the environmental baseline is normally the existing physical conditions as they exist at the time the Notice of Preparation is published. (Cal. Code Regs., tit. 14, § 15125(a); see also § 15126.2(a).) For this project, the Draft EIR establishes the baseline as the physical conditions that existed in summer 2024, consistent with the commencement of environmental analysis, with the Notice of Preparation having been published on October 10, 2024. The acreage figures used in the Agriculture and Forestry Resources analysis are anchored to that baseline and to grower- and county-reported data spanning the 2019–2024 period preceding it. The baseline is fixed at a point in time and does not shift as conditions change during the course of environmental review and Order development.

Because the baseline is fixed as of summer 2024 while the rotational footprint of lily bulb cultivation has continued to decline, the acreage in rotation at the time the Order is adopted is expected to be lower than the figures used in the analysis. The Draft EIR acknowledges this directly: it notes that, as of 2025, growers reported that the overall lily bulb rotational footprint has declined, including fields in the Ritmer Creek and Smith River Ranch areas that have reportedly come out of production since they were reported under the 2021 Management Plan. Consistent with the conservative approach described above, the Draft EIR does not adjust its baseline figures downward to reflect these post-baseline reductions, and it does not rely on annual "planted acres" to evaluate agricultural impacts. The result is that the

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approximately 1,000-acre rotational footprint, and the larger parcel-based and zoning-based figures used in the impact analysis, may overstate the acreage actually in lily bulb rotation when the Order takes effect. This further confirms that the analysis does not understate the agricultural baseline or the project's potential impacts to agricultural resources.

Regarding the ERA Economics Technical Memorandum cited by the commenter, see Response to comment CAFB-21 for a discussion of the applicability of the methodologies applied to the scale and scope of lily bulb agriculture on the Smith River Plain. Agricultural Resources baseline and settings are covered in Chapter [V] Agriculture and Forestry Resources. Impacts of the Draft Order are covered in that chapter. The comment does not specifically identify what additional baseline information, if included, would substantially change the DEIR's conclusions.

CAFB-10: The commenter argues the DEIR contains an inadequate assessment of significant impacts and effects on the environment, fails to fully consider significant impacts to the agricultural environment, fails to provide adequate analysis of reviewed impacts, and improperly fails to provide sufficient detail regarding foreseeable and cumulative significant impacts to lily bulb production and pasture lands in Del Norte County. The commenter argues the DEIR's conclusions are not supported by substantial evidence.

Response: Refer to responses to CAFB-9 through CAFB-19 for specific responses to the more detailed concerns presented in these comments.

CAFB-11: The commenter argues the DEIR improperly shifts the burden of proof to the public by concluding that many agricultural impacts are "speculative," citing specific DEIR statements on pages 61, 62, 76, 133, and 135 where the DEIR uses that characterization. The commenter argues the agricultural community provided substantial evidence through oral and written comments to make a "fair argument" that the project may have significant environmental impacts, including economic impacts, impacts to farmland acreage, and impacts from riparian buffer requirements, but the DEIR dismissed these as speculative.

Response: The comment expresses concern that the DEIR's findings that certain factors or impacts are speculative shift the burden of identifying significant environmental impacts from the lead agency to the public in violation of CEQA. The comment cites specific DEIR statements using the word "speculative" on pages [61, 62, 76, 133, 135]. The comment does not identify how the DEIR's findings that certain impacts are speculative would violate CEQA. Rather, CEQA makes clear that a lead agency should not speculate about potential significant impacts (CEQA

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Guidelines § 15145). Section 15187(d) of the CEQA Guidelines discusses the analysis required for regional water quality control boards when adopting a rule or regulation: “The environmental analysis shall take into account a reasonable range of environmental, economic, and technical factors, population and geographic areas, and specific sites. The agency may utilize numerical ranges and averages where specific data is not available, but is not required to, nor should it, engage in speculation or conjecture.”

The DEIR’s conclusions that certain impacts are speculative are consistent with CEQA requirements. The DEIR takes public concerns into account by discussing the possibilities of adverse effects caused by Streamside Management Area requirements and increased costs of compliance, as raised by commenters and the general public. As noted, “CEQA does not require that a lead agency conduct every test or perform all research, study, and experimentation recommended or demanded by commenters.” (CEQA Guidelines § 15204(a).) The comment does not provide substantial evidence that the DEIR would find a new previously undisclosed significant impact or a substantially worse impact based on the concerns raised.

CAFB-12: The commenter argues the DEIR is not based on substantial evidence but rather mere speculation, unsupported conclusions, and uncertainty, citing numerous pages where the DEIR uses terms such as “speculative,” “could be,” “not possible,” “unknown,” and “may be.” The commenter argues the DEIR lacks data on existing watershed conditions and lily bulb production conditions, and that by speculating rather than analyzing actualities, the DEIR draws improper baseline conclusions.

Response: The DEIR uses terms such as “speculative,” “could be,” “not possible,” “unknown,” and “may be” to explain impacts where it is not able to provide specific facts or conclusions regarding a particular impact because sufficient information does not exist and therefore the agency will not provide a speculative conclusion. CEQA makes clear that a lead agency should not speculate about potential significant impacts. (See, e.g., Pub. Res. Code § 21080(e)(2), “Substantial evidence is not argument, speculation, unsubstantiated opinion, or narrative...”; Pub. Res. Code § 21159(a), “The agency shall not be required to engage in speculation or conjecture”; CEQA Guidelines § 15145, “If, after thorough investigation, a Lead Agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact.”) The DEIR’s conclusions that certain impacts are speculative are consistent with CEQA requirements. Please refer to Response to Comment CAFB-11.

CAFB-13: The commenter argues the DEIR fails to properly analyze the full range of significant impacts to agricultural resources. Specific concerns include: (1) the 160-acre

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farmland conversion estimate is too low, particularly due to road systems and turnarounds that would need relocation; (2) the Reduced Setback Alternative analysis is cursory; (3) the DEIR does not analyze substantial economic impacts including production, distribution, consumption, land values, and lease values; (4) the lack of project alternatives is improper; (5) the analysis ignores legislative declarations on agricultural preservation; (6) the analysis is improperly limited to the five Appendix G criteria; and (7) the DEIR includes conclusory statements rather than thorough analysis. The commenter also identifies numerous impact categories not analyzed, including flood and insect vector control from setbacks, land value reductions, reporting burden, economic infeasibility, compliance challenges for smaller farms, multiplier effects on related businesses, and employment reductions.

Response: Regarding the farmland conversion estimate: The DEIR analyzed the potentially significant impacts from implementation of Streamside Management Area requirements (setbacks) and disclosed that the potentially significant impacts are significant and unavoidable. The comment alleges the estimate is low due to road systems and turnarounds that would need relocation, but the Draft Order allows roads and turnarounds to be located in the vegetative buffer portion of the setbacks provided they comply with winter ground cover requirements to prevent and minimize sediment erosion and discharge to surface waters.

Regarding the Reduced Setback Alternative: Alternatives to Streamside Management Area requirements were considered (No Project, Reduced Streamside Area Setback, and Offsite Riparian Restoration). The DEIR includes an alternatives analysis that demonstrates the considered project alternatives would reduce one or more of the significant impacts of the Proposed Project but would not fully achieve Project Objectives.

Regarding economic impacts: The North Coast Water Board considered costs related to potential adverse economic impacts from the Draft Order (see Section I.H of the Findings: Cost Considerations and DEIR Attachment E). With respect to the claims that Order requirements will result in significant economic effects, the North Coast Water Board maintains that these potential effects are speculative. It is not possible to predict which Enrollee will implement which management practices in which locations, and there are several options for individual operations to meet compliance requirements. The specific impacts of any compliance costs would depend on the unique characteristics of individual operations, including their field configurations, proximity to surface waters, soil type, operating costs, and other variable factors. CEQA requires that a lead agency not speculate in conducting its environmental analysis (CEQA Guidelines §§ 15064(d)(3), 15064(f)(5)).

Regarding CEQA legislative declarations on agriculture: The DEIR complies with CEQA by providing a rigorous analysis of the potential environmental impacts of the Proposed Project, including impacts on agricultural resources (see Chapter V,

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Agriculture and Forestry Resources). The comment does not provide substantial evidence that additional analysis would find new previously undisclosed significant impacts.

Regarding Appendix G criteria: The DEIR included analyses of the five significance criteria outlined in Appendix G. The DEIR found significant and unavoidable impacts under two of those criteria due to Streamside Management Area requirements. The comment does not identify any specific additional significance criteria that should have been included.

Regarding conclusory statements: Each of the cited examples from the DEIR relates to findings that it would be speculative to determine precise acreage removed from production as a result of increased regulatory costs or certain management practices. The DEIR provides substantial evidence regarding anticipated costs of a range of management practices and regulatory compliance (see DEIR Attachment E). CEQA directs that lead agencies may not speculate about potential significant impacts. The DEIR's conclusions are supported by substantial evidence.

CAFB-14: The commenter argues the DEIR fails to properly quantify and analyze economic impacts, does not evaluate how growers, the agricultural industry, and linked economy would adjust in response to regulatory costs, and does not prepare any economic analysis compliant with Water Code section 13241. The commenter cites the ERA Economics Technical Memorandum and argues standard methods exist to quantify economic impacts regardless of which management practices individual growers adopt. The commenter identifies numerous missing analyses including impacts on jobs, land values, lease rates, multiplier effects, and cumulative regulatory costs.

Response: CEQA requires consideration of economic or social factors only in relation to physical changes in the environment. (Cal. Code Regs., tit. 14, sections 15064, 15131, 15382.) Where a physical change is caused by economic or social effects of a project, the physical change may be regarded as significant in the same manner as any other physical change resulting from the project; alternatively, economic and social effects of a project may be used to determine the significance of physical changes caused by the project. (Cal. Code Regs., tit. 14, sections 15064, subd. (e), 15131(b).)

North Coast Water Board staff considered costs related to potential adverse economic impacts from the Draft Order and acknowledges the concerns related to regulatory costs and proposed requirements (see Section I.H of the Draft Order: Cost Considerations and DEIR Attachment E). Water Code section 13241 requires the North Coast Water Board to consider certain factors, including economic considerations, in the adoption of water quality objectives. Water Code section

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13263 requires the North Coast Water Board to take into consideration the provisions of section 13241 in adopting waste discharge requirements. The Water Code requirements do not specify the need for detailed financial analyses; rather, estimates based on available information within the confines of various uncertainties and assumptions are sufficient.

The comment expresses concern that the economic analysis is flawed because it does not evaluate how lily bulb operations would adjust in response to increased regulatory costs. The DEIR provides substantial evidence regarding the anticipated costs of a range of management practices as well as anticipated costs for regulatory compliance (DEIR Attachment E). The DEIR cannot, and does not, predict which management practices each operation may choose to implement, nor can the DEIR predict which operations may cease due to increased regulatory costs.

The comment states that there is a well-established approach to quantify economic impacts and cites the ERA Economics Technical Memorandum, which was prepared for the Central Coast Ag Order 4.0. The North Coast Water Board notes that the scale differences between lily bulb agriculture and Central Coast agriculture significantly affect the applicability of the methodologies described in the memorandum. See response to CAFB-21.

The comment contains a list of factors the commenter believes should have been analyzed. The comment does not present substantial evidence that an examination of these additional factors would result in the determination of a new previously undisclosed significant impact or a substantially worse impact than that disclosed in the DEIR. In short, the DEIR provided a reasonable and good faith evaluation of the economic impacts of the Draft Order under CEQA.

CAFB-15

The commenter argues the DEIR should have fully analyzed impacts on Land Use and Planning and Population and Housing rather than relying on the Initial Study's less-than-significant determination. The commenter argues that converting agricultural land via setback requirements eliminates an obstacle to growth, facilitates land use conversion, could lead to community and economic distress, and could disproportionately impact disadvantaged communities. The commenter requests that the DEIR be revised to include these analyses.

Response: Regarding land use and planning: The DEIR noted that the potential for the Draft Order to conflict with existing zoning for agricultural uses is discussed in Chapter V, Agriculture and Forestry Resources. The DEIR finds that Streamside Management Area setbacks would result in conflicts with zoning for agricultural use due to the potential for conversion of agricultural lands, and finds that impacts would be significant and unavoidable. The comment does not specify which plans are in

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conflict or which aspect of the Draft Order would cause conflicts beyond the Streamside Management Area requirements already analyzed.

Regarding growth-inducing impacts: The comment alleges that converting agricultural land via setback requirements eliminates an obstacle to growth, facilitates land use conversion, and could lead to community economic distress. The potential conversion of Important Farmland from Streamside Management Area requirements is limited to strips of land between lily bulb fields and surface waters (the 'no-touch' Riparian Vegetation Area is no more than 25 ft from the waterside edge of vegetation to the Vegetated Buffer). The comment does not make clear how these strips of land would result in conversion of land to a use that would result in economic growth or population changes. The comment does not provide substantial evidence that such analysis would result in identification of new significant impacts beyond those already disclosed.

Regarding socioeconomic impacts on population: The comment alleges setback requirements would cause population reduction due to decreased productive acreage, disproportionately impacting disadvantaged community members. The comment does not provide information on how the strips of land converted under setback requirements would result in impacts to population, housing, or land use patterns.

CAFB-16: The commenter argues the DEIR's mitigation measures are inadequate, citing concerns that some measures are infeasible, exceed the Regional Board's authority under Water Code section 13360, and are uncertain in their triggering. The commenter argues BIO-3 fails to mention farmlands statutorily exempt from regulation under the federal Clean Water Act, and that mitigation costs (cultural resource surveys, biology surveys, wetlands delineation) are not roughly proportional to the likely less-than-significant impacts from management decisions on individual farms. The commenter also argues the DEIR fails to properly identify mitigation measures for the significant and unavoidable farmland conversion impact.

Response: The mitigation measures described in the DEIR would apply to actions and practices implemented to comply with the Draft Order. In most cases, the mitigation measures merely require compliance with existing state law and permitting requirements. Growers are already required to comply with the state and federal Endangered Species Acts; nesting bird protections in the California Fish and Game Code; the California Native Plant Protection Act; the CDFW Lake and Streambed Alteration Program; California Health and Safety Code provisions; and other regulations. Construction of certain management practices involving ground disturbance often requires permits from state and local agencies that include conditions to avoid and minimize impacts. CEQA gives a public agency the authority

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to require feasible changes in any or all activities involved in a project to substantially lessen or avoid significant effects on the environment. (CEQA Guidelines § 15041.) The comment does not provide substantial evidence that the mitigation measures would be infeasible.

Regarding BIO-3 and the Clean Water Act farmland exemption: The comment does not explain the relevance of the federal Clean Water Act exemption to the North Coast Water Board's authority to regulate waste discharges to waters of the State, nor does it provide substantial evidence that the exemption would make any mitigation measures infeasible.

Regarding proportionality: The state and federal governments' interests in protecting water quality, endangered species, cultural resources, and other environmental values are well documented through governing statutes and regulations. Each mitigation measure in the DEIR is designed to further one of these interests. The comment does not present substantial evidence that any specific mitigation measure conflicts with constitutional proportionality requirements. (CEQA Guidelines § 15126.4(a)(4)(A).)

Regarding mitigation for the significant and unavoidable setback impact: The DEIR disclosed that no feasible mitigation measures were identified to reduce the significant impact of farmland conversion from setback requirements. The comment does not identify specific feasible mitigation measures that should have been considered.

CAFB-17: The commenter argues the DEIR fails to provide a legally adequate alternatives analysis. Specific concerns include: (1) the analysis of the Reduced Setback and Offsite Riparian Restoration alternatives was limited to 9.5 pages of conclusory statements; (2) both alternatives only vary one component of the Draft Order (vegetative buffers); (3) there was no analysis of a regulatory tiering structure based on risk to water quality; (4) there was no alternative with different monitoring requirements; and (5) the regulatory scope appears predetermined.

Response: CEQA does not require lead agencies to develop any particular number of alternatives, nor does it require lead agencies to identify alternatives that were not suggested as part of the scoping process. CEQA requires that "an EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation." (CEQA Guidelines § 15126.6(a).) Once an alternative is selected, CEQA requires that the EIR "include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project." (CEQA Guidelines § 15126.6(d).)

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The DEIR describes alternatives to Streamside Management Area requirements in the Alternatives Analysis chapter and provides analysis of each alternative's environmental impacts relative to the Proposed Project. A shortcoming identified for the Reduced Setback and Offsite Riparian Restoration alternatives is a reduction in water quality protections, therefore not fully meeting the Project Objectives. CEQA recognizes that "it is virtually a given that the alternatives to a project will not attain all of the project's objectives." (Watsonville Pilots Assn. v. City of Watsonville (2010) 183 Cal.App.4th 1059, 1087.) The DEIR's analysis acknowledges this and presents the environmental tradeoffs of each alternative.

Regarding the commenter's suggestion of alternative tiering or monitoring structures, see RTC #15 in Section II: Response to Comments on the Draft Order.

CAFB-18: The commenter argues the DEIR's cumulative impacts analysis is cursory and inadequate. Specific concerns include: the DEIR does not analyze the cumulative impact of agricultural land loss statewide, does not analyze impacts related to local groundwater sustainability plans, does not analyze impacts to certain communities, and does not identify all similar projects that could compound cumulative impacts, citing the Vineyard Order, NPDES permits, the Restoration program, and TMDLs.

Response: CEQA does not necessarily require that a cumulative impacts analysis examine cumulative impacts on a statewide basis. The CEQA Guidelines state that "lead agencies should define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used." (CEQA Guidelines § 15130(b)(3).) The DEIR explains that the scope of Draft Order activities would be limited to fewer than 1000 acres of lily bulb production in rotation within the Smith River Plain and describes related projects or activities within the more focused geographic scope within Del Norte County than proposed by the commenter.

Regarding additional programs: CEQA requires a discussion in the EIR of cumulative impacts of a project when the project's incremental effect is cumulatively considerable. (CEQA Guidelines § 15130(a).) An adequate discussion of significant cumulative impacts is guided by standards of practicality and reasonableness and includes either a list of past, present, and future projects producing related or cumulative impacts or a summary of projections contained in a planning document that describes or evaluates conditions contributing to the cumulative effect. (CEQA Guidelines § 15130(b)(1).) Impacts of past projects can often be reflected in the existing environmental setting.

The projects listed by the commenter are outside of the geographic scope considered, concern impacts that do not result in part from implementation of the Draft Order and thus do need not be considered in the cumulative impacts analysis

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(e.g., local groundwater sustainability plans), are unidentified and generalized potential projects (e.g., “applicable National Pollutant Discharge Elimination System (“NPDES”) permits and other permit actions), or do not constitute projects for purposes of the CEQA cumulative impacts discussions (e.g., “implementation of total maximum daily loads”). While the commenter notes that reasonably anticipated future projects should be considered, the comment does not identify any specific future projects that should have been considered as part of the cumulative impact analysis.

CAFB-19: The commenter argues the DEIR should have considered social and economic impacts in its cumulative impacts analysis, citing Citizens Association for Sensible Development of Bishop Area v. Inyo. The commenter lists potential impacts including negative economic consequences, loss of agricultural lands, loss of jobs, changes to landscape and land uses, and disproportionate impacts to certain communities. The commenter argues the DEIR contains no cumulative impacts analysis on social and economic resources.

Response: CEQA Guidelines section 15382 states that an “economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.” CEQA Guidelines section 15131 states that “economic or social effects of a project shall not be treated as significant effects on the environment.” CEQA Guidelines Section 15064(e) provides that economic and social changes resulting from a project shall not be treated as significant effects on the environment, but may be used to determine that a physical change shall be regarded as a significant effect. Section 15064(f)(6) also states that evidence of economic and social impacts that do not contribute to or are not caused by physical changes in the environment is not substantial evidence that the project may have a significant effect on the environment. It would need to be shown, with substantial evidence, that increased compliance costs would result in an adverse physical change in the environment. The comment does not provide substantial evidence that such analysis would produce a physical change beyond the impacts already identified and disclosed in the DEIR.

CAFB-20: The commenter requests that the DEIR be revised and recirculated, citing the purposes of CEQA and alleging numerous violations discussed in the commenter’s preceding comments.

Response: The comment does not address substantive contents of the DEIR that have not been addressed in responses to CAFB-9 through CAFB-19 above. CEQA Guidelines section 15088.5 provides that recirculation of an EIR is required when “significant new information” is added after public notice of availability but prior to

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certification. Significant new information includes: (1) a new significant environmental impact resulting from the project or a new mitigation measure; (2) a substantial increase in the severity of an environmental impact unless mitigation measures are adopted; (3) a feasible project alternative or mitigation measure that would lessen environmental impacts but was not adopted; or (4) the draft EIR was so fundamentally and basically inadequate that meaningful public review and comment were precluded. The North Coast Water Board has reviewed and considered all comments received on the DEIR and determined that recirculation is not warranted.

CAFB-21: The commenter incorporates by reference the ERA Economics Technical Memorandum, prepared for the Central Coast Ag Order 4.0, arguing it is applicable to the Lily Bulb Order. The memorandum proposes a five-step economic impact assessment framework using agricultural economic models and input-output models.

Response: The memorandum argues that the DEIR fails to include any economic impact analysis and proposes a five-step economic impact assessment framework using agricultural economic models and input-output models (e.g., IMPLAN). The North Coast Water Board acknowledges the ERA Economics memorandum and its methodological recommendations. However, the memorandum was prepared for a fundamentally different regulatory program. The Central Coast Ag Order 4.0 covers tens of thousands of growers growing hundreds of crops across hundreds of thousands of acres in one of the most productive agricultural regions in the world. The Lily Bulb Order covers three growers on fewer than 200 acres growing a single ornamental crop. The scale differences are several orders of magnitude and significantly affect the applicability and proportionality of the methodologies described.

Regarding the memorandum's central argument that standard economic methods exist to quantify impacts: The North Coast Water Board does not dispute that economic modeling tools exist. However, the CEQA Guidelines do not require the application of any particular economic modeling methodology. The DEIR provided a reasonable and good faith evaluation of the economic impacts of the Draft Order, including estimated costs for monitoring, reporting, and management practice implementation (DEIR Attachment E). Water Code section 13241 "does not specify how a water board must go about considering the specified factors. Nor does it require that board to make specific findings on the factors." (City of Arcadia v. State Water Resources Control Board (2010) 191 Cal.App.4th 156, 177.)

Regarding the memorandum's argument about disproportionate impacts on disadvantaged communities: The North Coast Water Board has addressed anticipated water quality impacts in disadvantaged and tribal communities in the

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Draft Order's section 13149.2 findings. The three remaining lily bulb operations employ seasonal workers; the North Coast Water Board has considered the employment context in its analysis of economic considerations for the purposes of Antidegradation Findings (see Finding #138 of the Proposed Order).

Regarding cumulative regulatory costs: The North Coast Water Board acknowledges that regulatory costs are cumulative. The Draft Order's cost analysis considers the incremental costs of the Lily Bulb Order requirements. The comment does not present substantial evidence that examination of cumulative regulatory costs from other programs would result in identification of new significant impacts beyond those already disclosed in the DEIR.

EPIC-1: The commenter incorporates by reference the comments on the Draft Order submitted by the Environmental Law Foundation. The commenter argues the Draft EIR is legally insufficient under CEQA because it concludes impacts are less than significant on the basis of regulatory commitments the record shows have not worked, and defers core analytical questions to future adaptive management. The commenter requests the Board revise and recirculate the Draft EIR.

Response: The DEIR appropriately analyzes potential environmental impacts of implementing the Order's requirements measured against existing baseline conditions. Accordingly, it does not analyze the underlying, ongoing land use activities and its associated discharge subject to the regulation, as opposed to physical effects of implementing the Order, including implementation of water quality protection requirements. Moreover, it does not analyze whether the Order is sufficiently protective of water quality, fisheries, or public health. These issues are related to the regional water board's responsibilities under Porter-Cologne, rather than CEQA. The DEIR is not intended as an evaluation of regulatory stringency under Porter-Cologne.

EPIC-2: The commenter argues the DEIR cannot conclude water quality impacts will be less than significant when the record demonstrates persistent exceedances through 2024, including imidacloprid exceedances in 40% of samples and chronic copper exceedances in 100% of Lower Mello Creek samples. The commenter argues that a less-than-significant conclusion premised on the assumption a regulatory framework will function as intended is not supported by substantial evidence where the record shows the framework's antecedents have not worked.

Response: See response to EPIC-1. The DEIR evaluates impacts to CEQA resource categories, using the baseline established in the DEIR of summer 2024. The determination of less-than-significant impacts to water quality were based on

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impacts resulting from Order implementation when compared to baseline, rather than impacts to water quality to what the commenter asserts are insufficient management practices, which are addressed separately in subsequent comments that are referred to responses in Section II: Response to Comments on the Draft Order.

EPIC-3: The commenter argues the DEIR does not adequately address sublethal and chronic biological effects on ESA-listed salmonids, citing NOAA's 2014 Recovery Plan and the 2018 NMFS/CDFW Monitoring Report documenting neurobehavioral toxicant effects at levels below the CTR threshold. The commenter argues CEQA requires analysis of the full range of reasonably foreseeable effects including impaired olfaction, reduced reproduction, prey base impacts, and cumulative consequences of repeated pollutant pulses in estuarine rearing habitat.

Response: See response to EPIC-1. Similarly to the comment made in EPIC-2, the analysis with respect to impacts to Biological Resources compared impacts of implementing the Order itself (e.g., management practices required under the Order) against the baseline conditions dated to summer 2024. Alleged insufficiency of the Order requirements to address protection of beneficial uses are relevant to the North Coast Water Board's responsibilities under Porter-Cologne, rather than CEQA. These are addressed broadly in responses in Section II: Response to Comments on the Draft Order.

EPIC-4: The commenter argues the DEIR does not analyze the environmental consequences of continued exceedances during the approximately ten-year adaptive management compliance period, citing CEQA Guidelines section 15126.2's requirement to disclose and analyze impacts during implementation. The commenter characterizes CEQA as a "look before you leap" law and argues the project proposes to "leap for 10 years before looking."

Response: See response to EPIC-1. This is not a CEQA comment. For a response to the issue of a 10-year adaptive management compliance period, see RTC #43 and RTC #18 in Section II: Response to Comments on the Draft Order.

EPIC-5: The commenter argues the DEIR improperly defers core analysis by invoking programmatic uncertainty while simultaneously relying on those same uncertain future practices to conclude impacts are less than significant. The commenter characterizes this as logical circularity rejected by courts as insufficient to constitute substantial evidence, citing Kings County Farm Bureau v. City of Hanford (1990) and Communities for a Better Environment.

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Response: See Responses to Comments to CAFB-12 and EPIC-1.

EPIC-6: The commenter argues the DEIR's reliance on vegetated setbacks and filter strips as mitigation is fatally vague under *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, lacking specific performance standards as required by CEQA Guidelines section 15126.4(a)(1)(B)-(C). The commenter argues the DEIR does not address soil type, groundwater connectivity, yearly rainfall, slope, roading and ditch impacts, or whether grazing will be allowed within setbacks.

Response: The comment characterizes the vegetated setbacks and filter strips as CEQA mitigation measures that lack performance standards. This mischaracterizes their role in the Proposed Project. The Streamside Area requirements (a Riparian Vegetation Area and a Vegetated Buffer) and the management practices an Enrollee may use to comply with the Order are components of the Proposed Project itself, not mitigation measures adopted under CEQA to reduce the project's impacts. The Draft EIR analyzes the environmental effects of implementing these requirements; it does not rely on them as mitigation. Indeed, the Draft EIR concludes that the Streamside Area setback requirements result in a significant and unavoidable impact to Agricultural Resources for which no feasible mitigation is available, and it accordingly calls for a Statement of Overriding Considerations rather than treating the setbacks as a measure that reduces impacts to less than significant. The mitigation measures the Draft EIR does adopt include those directed at the Biological Resources impacts that could result from constructing and installing management practices, and they include enforceable performance standards such as construction timing restrictions to avoid sensitive life stages, avoidance of sensitive habitats, design standards for runoff control features, invasive species management, and coordination with resource agencies. These measures reduce the relevant impacts to less than significant.

The Streamside Area requirements that the comment addresses are themselves expressed as enforceable, quantitative performance standards within the Order. The Order establishes minimum Streamside Area widths by waterbody type (for example, a 50-foot total Streamside Area on perennial streams, comprising a 25-foot Riparian Vegetation Area and a 25-foot Vegetated Buffer), a requirement that native riparian vegetation be allowed to establish through natural succession within the Riparian Vegetation Area, and a requirement to maintain at least 90 percent ground cover within the Vegetated Buffer during the wet season (November 1 through May 1). These are fully enforceable conditions of waste discharge requirements within the meaning of CEQA Guidelines section 15126.4(a)(1)(B), and they supply the objective standards the comment contends are absent.

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With respect to the specific site factors the comment identifies, the Draft EIR and the Order address them at a level of detail appropriate to a programmatic, regulatory project. The Order's findings discuss the influence of soils, slope, and hydrology on buffer performance. In 2024, Dr. Matthew Hurst, Logan Wolfe, and Preston Selby from California State Polytechnic University, Humboldt released findings from a study which investigated the effectiveness of vegetative barriers in reducing copper and sediment in stormwater runoff from lily bulb fields in the Smith River Plain. The study found that copper primarily leaves fields bound to sediment particles (particulate copper), and that dissolved organic carbon (DOC) in runoff can decrease the bioavailability of copper, with reduced effectiveness in December/January when soils were saturated.¹⁰

The Order separately requires sediment and erosion control practices on appurtenant farm roads, addressing the roading and ditch concerns the comment raises, and the wet-season ground cover standard is calibrated to the region's precipitation pattern. Questions of groundwater connectivity are addressed through the Order's groundwater monitoring and Irrigation and Nitrogen Management Plan requirements, and the treatment of livestock grazing within Streamside Areas is addressed in the Order's Streamside Area requirements.

The Proposed Project does not prescribe which specific management practices an Enrollee must install at a given field, both because Water Code section 13360 generally prohibits the North Coast Water Board from dictating the manner of compliance and because the practices appropriate to a particular operation depend on site-specific conditions that the Enrollee is best positioned to evaluate, in collaboration with a Qualified Professional where required. Site-specific factors such as the precise soil type, slope, and field configuration at each operation are therefore evaluated when individual management practices are designed and, where applicable, when those practices undergo separate regulatory review. A programmatic analysis of reasonably foreseeable management practices is the appropriate level of CEQA review for this type of regulatory program (CEQA Guidelines, § 15168), and CEQA does not require the Draft EIR to conduct a field-by-field analysis of conditions that cannot be known until Enrollees select their compliance approaches.

Sierra Club v. County of Fresno (2018) 6 Cal.5th 502 requires that an EIR contain sufficient detail to allow decisionmakers and the public to understand the nature and

¹⁰ Hurst, Wolfe & Selby, *The Effects of Vegetative Barriers on Copper in Runoff from Lily Bulb Fields* (2024) (final report submitted to the CSU Agricultural Research Institute and the Easter Lily Research Foundation of the Pacific Bulb Growers Association).

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severity of a project's significant impacts. The Draft EIR satisfies that standard. It discloses the significant and unavoidable impact to Agricultural Resources, quantifies the acreage potentially converted, explains the basis for that conclusion, and identifies the performance standards governing the project's requirements. The level of analysis is commensurate with the programmatic nature of the project and the fact that the Order establishes performance standards rather than prescribing site-specific practices. See also RTC #31 and RTC #36 in Section II: Response to Comments on the Draft Order for responses on vegetated filter strips and Order requirements.

EPIC-7: The commenter argues the Hurst et al. (2024) study — the only site-specific study in the record evaluating management practice effectiveness — demonstrates that 80-foot setbacks did not reduce dissolved copper discharge and that filter strips removed essentially no copper during saturated storm conditions. The commenter argues the DEIR cannot conclude 50-foot setbacks will reduce impacts to less than significant when the record demonstrates they will not.

Response: See RTC #36 in in Section II: Response to Comments on the Draft Order and Response to Comment EPIC-1.

EPIC-8: The commenter argues setbacks do not address groundwater transport pathways, citing dry-season detections of imidacloprid and diuron indicating groundwater transport as a significant contamination mechanism. The commenter argues mitigation that only partially mitigates by failing to address a significant discharge mechanism cannot reduce impacts below a significant level, citing *Sierra Club v. County of Fresno*.

Response: See RTC #63 in in Section II: Response to Comments on the Draft Order and Response to Comment EPIC-1.

EPIC-9: The commenter argues the DEIR fails to synthesize multiple stressors into a meaningful cumulative analysis, identifying six categories that must be evaluated: (1) habitat simplification from decades of agricultural conversion; (2) ongoing pesticide and copper loading; (3) groundwater contamination in domestic wells; (4) estuarine impairment limiting juvenile coho rearing capacity; (5) climate-driven shifts in runoff timing; and (6) the compounding vulnerabilities of a federally listed salmonid population far below its recovery target of 6,800 spawners. The commenter also argues roading, ditching, and grazing rotation impacts are not addressed.

Response: See Response to Comment EPIC-1.

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EPIC-10: The commenter argues the DEIR's alternatives analysis is too narrow, focusing on the No Project Alternative and reduced regulatory scope options. The commenter identifies six specific alternatives that should have been evaluated: zero-discharge, wet-weather prohibition, expanded hydrologically-based buffers, immediate certified WQMPs, independent monitoring, and high-risk field restrictions. The commenter notes the scoping record expressly includes public requests to halt lily bulb cultivation and restore estuarine function.

Response: The DEIR's alternatives analysis presents a reasonable range of alternatives that address the identified significant effects, consistent with CEQA Guidelines section 15126.6. CEQA does not require any particular number of alternatives (CEQA Guidelines § 15126.6(a)), nor does it require evaluation of alternatives that were not suggested during the scoping process and that would worsen the project's significant environmental effects.

CEQA Guidelines section 15126.6 governs the scope of the alternatives analysis. Subsection (a) provides that an EIR shall describe "a range of reasonable alternatives to the project ... which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project." Subsections (b) and (f) reinforce this standard: "the alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project." The "rule of reason" governing the range of alternatives "requires the EIR to set forth only those alternatives necessary to permit a reasoned choice" (§ 15126.6(f)), and "an EIR need not consider every conceivable alternative to a project" (§ 15126.6(a)). The "project" subject to CEQA review is the adoption of the Lily Bulb Order. The DEIR identified the significant environmental effects of implementing the Order's requirements, most notably the conversion of Important Farmland to non-agricultural use resulting from Streamside Management Area setback requirements, which was determined to be significant and unavoidable.

The purpose of the alternatives analysis is to identify alternatives to the project that would avoid or reduce this significant effect. The DEIR evaluated three alternatives: a No Project Alternative, a Reduced Streamside Area Setback Alternative, and an Offsite Riparian Restoration Alternative. The Reduced Setback Alternative would lessen the farmland conversion impact by reducing setback widths, and the Offsite Riparian Restoration Alternative would allow mitigation of riparian vegetation requirements at an alternative location within the same sub-watershed. CEQA does not require evaluation of alternatives that would make the project more environmentally impactful in the resource categories where significant effects have been identified.

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The commenter's proposed alternatives reflect a policy preference for a more stringent regulatory program. The adequacy of the Draft Order's regulatory approach is evaluated under the Porter-Cologne Water Quality Control Act (Water Code §§ 13000, 13241, 13263), which provides the legal framework for balancing beneficial use protection, water quality objectives, and economic considerations. The CEQA alternatives analysis serves a different function: it evaluates whether there are feasible ways to reduce the project's own significant environmental effects while still attaining most project objectives. The substantive concerns raised by the commenter regarding the protective adequacy of the Draft Order, including zero-discharge standards, wet-weather restrictions, expanded buffers, and independent monitoring, are addressed in Section II: Response to Comments on the Draft Order.

EPIC-11: The commenter argues the DEIR's cultural resources analysis focuses on archaeological and site-disturbance resources rather than living cultural practices that depend on salmon, clean water, and the estuarine ecosystem. The commenter argues contamination of juvenile rearing habitat threatens Tribal subsistence, ceremony, and cultural continuity in ways that must be disclosed under AB 52 (PRC § 21080.3.1 et seq.). The commenter requests the EIR be revised to analyze impacts to living Tribal cultural practices, address disproportionate burdens on Tribal communities, and evaluate protections in light of treaty rights and ceremonial uses.

Response: The North Coast Water Board has been in consultation with the Tolowa Dee-ni' Nation regarding this project since 2024. As described in the Order's findings, in April 2024 staff contacted six Tribes identified by the Native American Heritage Commission as having current or historic lands in or near the Project Area, and identified two additional Tribes that could be affected. The Tolowa Dee-ni' Nation requested formal consultation under AB 52 in May 2024, and the North Coast Water Board and the Tolowa Dee-ni' Nation initiated formal consultation in mid-2024. Consultation has continued throughout development of the Order and the DEIR.

The premise of the comment, that the DEIR's cultural resources analysis is limited to archaeological and site-disturbance resources, does not reflect the analysis the DEIR actually contains. The DEIR's Tribal Cultural Resources analysis expressly extends beyond archaeological sites to encompass the Tribal Cultural Landscape, including viewsheds and the animal and plant species that contribute to the significance of that landscape, which are identified as tribal cultural resources. The living cultural practices the comment describes, including those that depend on salmon, clean water, and the estuarine ecosystem, are reflected in the Order's findings, which recognize that the Smith River and estuary serve as crucial environmental trust resources for cultural, ceremonial, and subsistence beneficial uses of the Tolowa Dee-ni' Nation, including fishing, eeling, shellfish gathering,

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plant gathering, basketry, food preparation, prayer and ceremony, and medicinal practices. The Order also designates the Tribal Beneficial Use (Native American Culture) as an existing beneficial use and identifies Tribal Cultural Resources, together with Cold Freshwater Habitat, as among the beneficial uses most sensitive to surface water degradation. The protection of these uses is therefore central to the Order rather than peripheral to it.

Significantly, the Tolowa Dee-ni' Nation had an active and direct role in developing the very analysis the comment asks the North Coast Water Board to undertake. Through a subcontract under Montrose Environmental, the Tolowa Dee-ni' Nation contributed to the tribal cultural resources baseline, the definition of tribal cultural resources used in the DEIR (including the Tribal Cultural Landscape concept that extends the analysis beyond archaeological resources to the living plant and animal species and viewsheds that sustain cultural practice), and the associated mitigation measures. The Tolowa Dee-ni' Nation's own Tribal Cultural Resources submittal is included as Attachment F to the DEIR. The North Coast Water Board defers to the Tolowa Dee-ni' Nation's expertise regarding the identification and significance of its tribal cultural resources and the cultural practices that depend on the health of the Smith River Plain, consistent with the purpose of AB 52 consultation. The analysis the comment requests, addressing impacts to living tribal cultural practices and the resources on which they depend, has thus already been incorporated into the environmental analysis, in coordination with the Tolowa Dee-ni' Nation itself.

The Order's central purpose is to improve and protect water quality in the Smith River Plain, including the cold freshwater and estuarine habitats that support the juvenile salmonid rearing the comment identifies as essential to tribal subsistence, ceremony, and cultural continuity. The requirements of the Order, including receiving water limitations, the Adaptive Management Program, and surface water monitoring, are directed at reducing the pesticide and copper discharges that threaten those resources. The Order is therefore protective of, rather than adverse to, the living cultural practices the comment seeks to safeguard.

For these reasons, revision and recirculation of the DEIR is not warranted. The information the comment requests is already contained in the environmental analysis, developed in consultation with and with the participation of the Tolowa Dee-ni' Nation. Recirculation would delay adoption and implementation of the Order, and that delay would prolong the ongoing discharges and the associated degradation of the water quality and ecosystem resources on which the Tolowa Dee-ni' Nation's cultural, ceremonial, and subsistence uses depend. Delaying the protections the Order provides would itself further impact Native American cultural uses, contrary to the outcome the comment seeks.

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EPIC-12: The commenter argues the DEIR does not adequately analyze environmental justice and community health impacts documented in the scoping record, including reports of acute spray drift exposure, chronic symptoms, contaminated soil, school adjacency concerns, and elevated cancer incidence. The commenter argues CEQA requires disclosure and analysis of credible community health concerns without requiring proof of legal causation.

Response: See Response to EPIC-1. For responses on community health impacts, see RTC #4 and RTC #8 in Section II: Response to Comments on the Draft Order.

EPIC-13: The commenter argues the DEIR does not adequately analyze groundwater transport pathways, citing pesticide and nitrate detections in irrigation and domestic wells and dry-season detections suggesting groundwater transport independent of storm-event surface runoff. The commenter identifies five specific analytical gaps: persistence in soils and shallow groundwater, seasonal lag effects, cumulative loading to aquifers, adequacy of surface-buffer strategies where groundwater is the dominant pathway, and risk to domestic wells.

Response: See Response to EPIC-1 and RTC #63 in Section II: Response to Comments on the Draft Order.

EPIC-14: The commenter argues the DEIR's antidegradation analysis is insufficient because: the BPTC finding is unsupported given that management practices have not eliminated exceedances; the Hurst study demonstrates setbacks are ineffective under local conditions; and the DEIR does not adequately analyze social and environmental costs of continued degradation, including the "incalculable" value of ESA-listed species.

Response: This is not a CEQA comment; rather a comment on the Draft Order's Antidegradation analysis. See RTC #17 in Section II: Response to Comments on the Draft Order.

EPIC-15: The commenter provides a summary of 11 requested DEIR revisions spanning substantial evidence for less-than-significant conclusions, compliance period impacts, cumulative impacts, mitigation analysis, enforcement timeline, alternatives, Tribal beneficial uses, environmental justice, groundwater transport, and antidegradation analysis.

Response: See Responses to EPIC-1-14.

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EPIC-16: The commenter argues CEQA Guidelines section 15126.2 requires the EIR to evaluate impacts during the entire project implementation period, not merely after a project is presumed to be successful, and that where a project involves staged compliance with continued interim pollutant loading, the EIR must analyze environmental consequences of that interim period.

Response: The comment correctly states that CEQA Guidelines section 15126.2 requires an EIR to analyze a project's significant environmental effects over the project's implementation, including short-term effects, and not solely the conditions expected after a project is fully implemented. The Draft EIR satisfies this requirement. The comment's underlying premise, however, is that the Proposed Project causes continued pollutant loading that constitutes a project effect requiring separate interim-period analysis. That premise misapprehends how CEQA measures a project's impacts.

Under CEQA, the significant effects of a project are assessed against the environmental baseline, which is the existing physical conditions in the affected area as they exist at the time environmental review commences. (CEQA Guidelines, §§ 15125(a), 15126.2(a).) The baseline for this project is the existing condition of the Smith River Plain, in which Commercial Lily Bulb Operations discharge pesticides, copper, sediment, and nutrients to surface water and groundwater, currently addressed only through the voluntary 2021 Management Plan. The relevant CEQA question is whether the Proposed Project causes a change in those baseline conditions that is adverse to the physical environment.

The Proposed Project does not cause or increase pollutant loading relative to the baseline. It is a regulatory program whose effect is to reduce existing discharges progressively over time through enforceable management practice requirements, receiving water limitations, surface and groundwater monitoring, and the Adaptive Management Program. During the period in which Enrollees implement management practices and proceed through adaptive management, water quality conditions are, at worst, no worse than the existing baseline, and they are expected to improve as controls are implemented and escalated. The continued pollutant loading the comment describes during the compliance period is the continuation of the pre-existing baseline condition, which the Proposed Project works to reduce. It is not a new or increased adverse physical change caused by the Proposed Project. CEQA requires analysis of the changes a project causes relative to baseline; it does not require an agency to treat the incremental, ongoing improvement of a pre-existing condition as a project-caused significant impact, nor does it require an EIR to analyze the environmental consequences of a beneficial project failing to achieve its full benefits instantaneously.

The Draft EIR is consistent with these principles. It does not presume the Proposed Project's success and then analyze only a fully-compliant end state. Rather, it

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analyzes the physical changes the Proposed Project would cause relative to baseline. For water quality, those changes are beneficial, and the Draft EIR and Initial Study accordingly found the Proposed Project's effects on Hydrology and Water Quality to be less than significant. For the resource where the Proposed Project does cause a significant adverse physical change, Agricultural Resources, the Draft EIR analyzes that impact as it arises from implementation of the project's Streamside Area requirements, including during the implementation period, and concludes it is significant and unavoidable. The Draft EIR therefore analyzes impacts across the implementation period as section 15126.2 requires.

To the extent the comment is concerned with the possibility that some high-quality waters may experience limited degradation during the period in which Enrollees work toward compliance, that question is addressed through the antidegradation analysis required by the Porter-Cologne Water Quality Control Act and State Water Board Resolution No. 68-16, which is a separate regulatory analysis from CEQA. As set forth in the Order's findings, the North Coast Water Board has analyzed the potential for limited, temporary degradation during the iterative implementation of management practices and has found that any such limited degradation, despite implementation of the measures required by the Order, is consistent with the maximum benefit to the people of the State and is subject to best practicable treatment or control within a defined time schedule.

EPIC-17: The commenter states that commenters have repeatedly suggested management practices that would actually reduce impacts to less than significant, and incorporates the WDR Comments by reference.

Response: This is not a CEQA comment. However, staff appreciate the submission of management practices for the record while noting that under Water Code section 13360(a), the North Coast Water Board may not specify the manner of compliance with its waste discharge requirements. The Board can identify the water quality conditions that must be achieved, set receiving water limitations and performance standards, and require Enrollees to report on the practices they will use to meet them, but it cannot dictate that an Enrollee install any particular management practice. As the courts have framed it, the Board may identify the 'disease and order it cured, but it may not dictate the cure'. This is why the Order establishes enforceable performance standards and an Adaptive Management framework rather than prescribing specific practices, leaving each Enrollee to select the combination of practices best suited to its site-specific conditions. For a more robust discussion of management practices under the Order, see RTC #29 and RTC #30 and Section II: Response to Comments on the Draft Order.

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EPIC-18: The commenter argues the DEIR does not address cumulative impacts from the rotation of lily bulbs and grazing, estuary and riparian grazing impacts, or the contribution of roading and ditching to conveying sediments and chemicals to impaired waterways.

Response: See Response to EPIC-1 and EPIC-16.

EPIC-19: The commenter argues the DEIR's setbacks are not defined and do not address soil type, groundwater connectivity, yearly rainfall, slope, roading and ditch impacts, or whether grazing will be allowed within setbacks, making it impossible to assess their effectiveness.

Response: See Response to EPIC-6 and also see RTC# 31 in Section II: Response to Comments on the Draft Order.

EPIC-20: The commenter cites specific health complaints documented in the scoping record including acute spray drift exposure symptoms and chronic symptoms reported by residents, and notes the scoping summary records concerns about pesticide exposure, chronic illness, contaminated soil, and school adjacency.

Response: See Response to EPIC-12. For responses on community health impacts, see RTC #4 and RTC #8 in Section II: Response to Comments on the Draft Order.

EPIC-21: The commenter argues Water Code section 13149.2 requires programmatic findings on tribal impact, environmental justice, and racial equity when issuing WDRs, and that the Draft EIR must provide the analytical basis for those findings. The commenter argues the Draft Order's section 13149.2 analysis is cursory and insufficient.

Response: See RTC #19 in Section II: Response to Comments on the Draft Order.

EPIC-22: The commenter argues that lead agencies receiving state or federal funding should include a disparate impact analysis in their CEQA analysis under both Cal. Gov. Code section 11135 and Title VI of the Civil Rights Act of 1964, and should include less discriminatory options in any alternatives analysis.

Response: First, neither existing statutory requirements nor case law integrate California Government Code section 11135 or Title VI of the Civil Rights Act into a lead agency's obligations under CEQA. Second, the commenter misconstrues the

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scope of the environmental analysis under the Draft EIR. The Draft EIR sufficiently evaluates whether the Draft Order may have a significant environmental effect, identifies alternatives, and discloses possible ways to reduce or avoid possible environmental harm, appropriately taking into account environmental baseline conditions. Agricultural activity in the Smith River Plain and associated discharges are ongoing and part of existing environmental conditions. The purpose of the Draft Order is to provide a regulatory structure to minimize discharges of waste and to prevent adverse impacts to water resources—in protection of beneficial uses of those waters, including tribal uses—from agricultural activities. While the Draft EIR acknowledges potential impacts from implementation of Draft Order provisions, the Draft Order is specifically designed to support improvements to existing water quality conditions impacts by discharges from lily bulb operations. Therefore, even though implementation of the Draft Order could result in the impacts described within the Draft EIR, its primary purpose is to address water quality impacts from ongoing agricultural activities, including impacts to connected disadvantaged and tribal community. Finally, the Proposed Order includes findings pursuant to Water Code section 13149.2, which address anticipated water quality impacts, environmental justice concerns, and measures to address water quality impacts.

ELF-32: The commenter argues the DEIR’s alternatives analysis falls short by failing to meaningfully analyze an alternative that would prohibit or phase out lily bulb cultivation in the most sensitive areas of the Smith River Plain, despite scoping comments expressly requesting evaluation of halting lily bulb farming and restoring the estuary.

Response: See Response to EPIC-10. Additionally, the Board’s regulatory authority to impose additional prohibitions would apply to the discharge of waste, not the regulated activity itself.

CDFW-17: The commenter, as a state Trustee Agency, agrees the DEIR’s assessment of the Order as largely beneficial to biological resources but recommends strengthening. The commenter’s only DEIR-specific comment is a refinement of Mitigation Measure BIO-1: rather than advising enrollees to avoid and minimize disturbance, the commenter recommends explicitly restricting new construction to the footprint of existing fields outside Streamside Areas. If construction would encroach into Streamside Areas or extend beyond the footprint of existing fields and appurtenant field roads, the enrollee would have to assess habitat conditions and undertake additional environmental review and permitting, as described in the mitigation measure.

Response: The North Coast Water Board appreciates the California Department of Fish and Wildlife (CDFW) review of the Draft Environmental Impact Report (DEIR) and acknowledges CDFW agreement that the proposed Order is largely beneficial

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to biological resources. The Board values the CDFW role as a state Trustee Agency and its input on strengthening protections for sensitive biological resources.

The Board has carefully considered the CDFW recommendation to explicitly restrict new construction of management practices to the footprint of existing fields outside Streamside Areas, rather than the current framework of advising enrollees to avoid and minimize disturbance.

After thorough review, the Board finds that the existing mitigation framework, as drafted, already achieves the protective outcome CDFW seeks and satisfies the CEQA standard requiring mitigation measures to reduce potentially significant impacts to a “less-than-significant level” (Pub. Resources Code § 21002; CEQA Guidelines §§ 15091, 15126.4). Specifically:

Mitigation Measure BIO-1 establishes a comprehensive, tiered avoidance-first hierarchy requiring Enrollees to:

- Avoid and minimize disturbance of riparian, wetlands, and other sensitive vegetation communities as a first-priority measure;
- Avoid and minimize disturbance to areas containing special-status plant or animal species;
- Where construction in areas that may contain sensitive biological resources “cannot be avoided”, conduct an “assessment of habitat conditions”, including potentially retaining a qualified biologist to perform biological assessments and/or wetland delineations;
- For activities proposed during nesting season, perform surveys for nesting birds and avoid nests/young; and
- Where “adverse effects on sensitive biological resources cannot be avoided”, undertake “additional CEQA review” and develop a “restoration or compensation plan in consultation with CDFW” to mitigate the loss of resources.

Mitigation Measure BIO-2 independently requires that for activities affecting lakes, streams, and associated riparian habitat, enrollees must “notify CDFW pursuant to Fish and Game Code section 1600 et seq”, comply with any Lake and Streambed Alteration Agreement issued, and obtain applicable permits from the Regional Water Quality Control Board and Army Corps of Engineers pursuant to the Clean Water Act.

Taken together, BIO-1 and BIO-2 create an integrated protective framework under which any construction that could affect Streamside Areas or sensitive habitats—whether within or beyond existing field footprints—is subject to mandatory avoidance measures, habitat condition assessments, additional CEQA review, CDFW consultation, and applicable Fish and Game Code section 1600 permitting. An enrollee cannot proceed with construction in such areas without first exhausting

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avoidance alternatives and, where avoidance is infeasible, completing the full suite of assessment, review, and consultation steps prescribed in these measures.

Under CEQA, mitigation measures need not adopt every specific formulation recommended by commenters, provided the measures as adopted will reduce potentially significant impacts to less-than-significant levels (Pub. Resources Code § 21002; CEQA Guidelines § 15126.4). The Board finds that BIO-1 and BIO-2, as currently drafted, meet this standard and no revisions to the mitigation measures are necessary in response to this comment.

North Coast Water Board staff looks forward to continued coordination with CDFW on implementation of the Order and associated biological resource protections.

CCR-3: The commenter argues the DEIR spends considerable time on agricultural land impacts and sediment and temperature considerations but relatively little on pesticides, with no mention of cumulative impacts on endangered species or water quality from the application of a combination of toxic pesticides.

Response: See Response to Comment EPIC-9 for a discussion on cumulative impacts analysis in the DEIR. See RTC #60: Cumulative/Synergistic Pesticide Toxicity in the Response to Comments on the Order for a discussion on synergistic pesticide toxicity and Water Quality Benchmarks.

CCR-7: The commenter requests written acknowledgment in both the Order and EIR that cumulative impacts from the application of a variety of pesticides are more severe than individual pesticides as measured by the proposed monitoring program.

Response: See Response to Comment EPIC-9 for a discussion on cumulative impacts analysis in the DEIR. See RTC #60: Cumulative/Synergistic Pesticide Toxicity in the Response to Comments on the Order for a discussion on synergistic pesticide toxicity and Water Quality Benchmarks.

HFMA-13: The commenter argues the preferred EIR alternative must include all three Project Objectives if “minimize” is removed from Objective #1, and that Objective #2 (“effectively track and quantify achievement of the stated objectives over a specific, defined time schedule”) cannot be met under the described Monitoring and Reporting Program.

Response: See Response to EPIC-4 and EPIC-10. For a response on the timing of the adaptive management requirements of the Order and its relevancy to the Nonpoint Source Policy, see RTC #43 in Section II: Response to Comments on the Draft Order.

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Dettmar-9: The commenter argues the Order and EIR fail to address cumulative impacts from multiple pesticides applied in combination.

Response: See Response to EPIC-9 and RTC #60: Cumulative/Synergistic Pesticide Toxicity in Section II: Response to Comments on the Order for a discussion on synergistic pesticide toxicity and Water Quality Benchmarks.

Dettmar-15: The commenter requests that cumulative pesticide impacts be explicitly acknowledged in both the Order and EIR.

Response: See Response to Comment EPIC-9 for a discussion on cumulative impacts analysis in the DEIR. See RTC #60 in Section II: Response to Comments on the Draft Order for discussion on synergistic pesticide effects.

St.Claire-1: The commenter states that the EIR fails to address the 40-year buildup of toxins in the sediment of our estuary.

Response: See Response to Comment EPIC-9 for a discussion on cumulative impacts analysis in the DEIR. See RTC #60 in Section II: Response to Comments on the Draft Order for discussion on synergistic pesticide effects.

St.Claire-2: The commenter states that the "No Project" alternative is insufficient and demands a Zero-Detection standard and an alternative that mandates the complete elimination of toxic discharges into the Smith River.

Response: See Response to Comment EPIC-10 for a discussion on the "No Project Alternative" in the DEIR. See RTC #38 in Section II: Response to Comments on the Draft Order for discussion on a 'no discharge' standard.

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Part 1: Comments on the Draft Order

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Comment #	Comment Text
AW-1	For clarity the water board should a definition of what it expects staff to adhere to in order to meet the "early as possible" criteria in the permit and policy planning processes. Define the response time that outreach shall begin as "immediately after the meeting or decision is made to begin a new permit or policy." This makes it clear how to prioritize outreach and that it be done immediately from the start of these processes. Getting actual engagement is very difficult. Getting responses and commitments of any stakeholders is also very difficult. As a result, these collaborative community processes are failing.
AW-10	True North is actually a front organization that works directly with Del Norte County and Tolowa governments to roundup and silence potential change agents in our community. True North functions to maintain the status quo of exploitation by the powerful in Del Norte County what the locals call the "Good Old Boys Club". True North profits off of the backs of our disadvantaged and tribal members! This responsibility should stay with waterboard staff in the future.
AW-11	Staff has NOT satisfied outreach requirements in WC 189.7(a). Instead of satisfying water code 189.7(a), waterboard staff pushed this important responsibility onto a dishonest NGO that was recommended by our county supervisor(s). Waterboard staff failed to do the following: WC 189.7 (D) Soliciting community recommendations for future projects to be listed on regional board supplemental environmental project lists. This regional waterboard should NOT contract this vital work out and should instead use their existing staff to ensure satisfactory completion.
AW-12	The public outcry verbal comments on 10/21/2024 were disregarded according to Brenna Sullivan because that was only "an informational meeting". This was not communicated to the public in any way by waterboard staff nor True North, contracted by waterboard staff. This is deceptive and the board and executive staff must change the criteria for public engagement to actually honor public feedback anytime it is received and to direct the public giving oral comments if those comments will not be considered in the development process unless they are submitted in writing or any other information they ought to know regarding their feedback.

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AW-13	The three tribes that replied to the notice should be listed explicitly and whether or not they agreed to participate. Note that as a TAG member I did not see or hear any other tribe involvement besides Tolowa Dee-ni’.
AW-14	The Tolowa administration has marital ties to the lily growers as well as financial interests in the lily bulb industry. It is a well-known fact that Rob Miller of Dahlstrom Watt is married to Kara Miller who is a Tolowa member and served on their Tribal Council for over a decade. During which she forbid water testing below the doctor Fine Bridge. Kara Miller is the CFO for Dahlstrom Watt bulbs and their son Kurt Miller is the Director. Kurt Miller is listed as Chair of the Tolowa Natural Resources Harvesting Committee. These inherent conflicts have kept the poisoning of the people and animals of Smith River going. To say that affected Tribal members needs were actually represented by the administrative staff employed by the Tolowa Nation is not accurate.
AW-15	I strongly urge the waterboard to specify in their future approaches that tribes from outside the immediate area be involved to appropriately advocate for indigenous rights and member voices. As a neighbor and advocate for the actual tribe membership, I experienced retaliation by Tolowa staff. Including lies about my speaking on behalf of the administration when I only ever gave voice to the individual members I know and for those who died from the lily bulb pesticide contamination of their homeland. These political conflicts must be acknowledged by the waterboard so corrective actions can be taken to counter this in future processes.
AW-16	The five year time limit for land used for growing bulbs is insufficient because their copper use began many years beforehand and the accumulated copper in these soils poses a long-term threat to salmonids. This toxic soil ends up in the water from stormwater and winds. Therefore, a lily bulb operation should refer to land used for lilies in the past 20 years, not merely 5 years. These soils are toxic to endangered species and copper does not breakdown, copper is a metal that binds to soil. I learned this from conversation and emails with Chemist Matt Hurst – referenced in this order for his field studies.

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AW-17	There is an abundance of data that this waterboard has acquired to make the determination that there are site-specific conditions which make a commercial lily bulb operation NOT eligible for coverage under the General Order and thus should issue Site-Specific Individual WDRs to protect water quality. This is evident for fields that drain to the following waterways as explained on page 18 of the Draft; 1) Delilah Creek, 2) Tillas Slough, 3) Rowdy Creek.
AW-18	How will this notice requirement be assured by the waterboard? I recommend that this not be the sole responsibility of the enrollee. The non-enrollee owner/operator should be informed by the waterboard who is the actual enforcement authority of this order. Especially considering the landowner and the operator will be held liable for noncompliance as stated in 37) on page 11. This notice requirement must be the waterboards responsibility.
AW-19	It has been determined by NOAA fisheries since Dec 2018 that the lily growers are violating illegal take provision in the ESA (section 9). Therefore, all growers should be required to obtain authorization for this incidental take PRIOR to construction or operation of the project. This authorization should be a requirement that is met by growers prior to enrollment in this WDR.
AW-2	The way to fix this is to allocate money to actually pay for regular people that are directly affected by the permit or policy activity so that they can engage meaningfully on a consistent basis and therefore adequately contribute to the development of these impactful decisions.
AW-20	The composting and use of cow manure from dairy and beef operations in Smith River is contributing to the high levels of nitrates in our waterways which have a polluting effect. Quick incorporation into the soil is very important to reduce nutrient runoff. This WDR should include the data from studies conducted by SARE Sustainable AG Research & Education, factsheet "Cultural Practices for root knot & Root-lesion nematode suppression in veg. crop rotation". The lily grower's fertilizer practices can directly improve water quality and reduce nematicide pesticide use if they start to use poultry litter instead of cow manure. Local dairy Alezander Farm has chickens for eggs and they can provide poultry litter. The lily growers can begin using chickens themselves for this purpose as well as to rotate after using marigolds in crop rotation which also attract nematodes into their roots and release a nematicidal compound as they grow.

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AW-21	I do not support this WDR including Third-party programs that will take even more time to recreate existing compliance mechanisms at the waterboard. The lily growers have demonstrated over the past 15 years that they are not cooperative in taking meaningful action to reduce water pollution. This fact should prohibit any suggestion of a self-governing component such as is being proposed in this section. It is well established that the ongoing delays by the waterboard in developing a proper WDR since 2012 has facilitated continued noncompliance to water quality standards by these growers. Now this section is proposing to allow further delays of no less than 6 months after the enrollment deadline for the benefit of enrollees at the continued cost to the public. This is an emergency order and we face ecosystem collapse because of ongoing, gross preferential treatment of the lily growers! The waterboard must retain all oversight authority in this order.
AW-22	Copper must be banned for use in Del Norte county when there is any possibility for entry into our waterways. The waterboard has failed to utilize its MAA with CDPR or to work effectively with Del Norte county ag commissioner Justin Riggs, to fulfill their mutual agency purposes of protecting the public health and safety and the environment from harm. The waterboard must correct this right away and actually collaborate with CDPR California Dept, of Pesticide regulation in order to properly uphold state law in both agencies of our EPA.

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AW-23	This Section should include the grounds and authorities of the CAC to immediately take the steps to ban copper, as follows: The CAC has the authority (FAC section 14006.6) to require a permit for the agricultural use of a non-restricted pesticide. To implement this provision, the CAC must make a determination that the pesticide cannot be used under local conditions without presenting an "undue hazard." Once made, the determination is permanent unless a sunset provision limiting the effective period is included. CH 9.1 Grounds and time frames for immediate suspension: Whenever the CAC has reason to believe that continuance of a permit endangers the public health, safety, or the environment, the CAC, without prior notice, may immediately suspend the permit. Grounds based upon FAC §14006.5: No permit shall be granted if the commissioner determines that: There are demonstrated serious uncontrollable adverse effects; The use is of less public value or greater detriment to the environment than the benefit received by its use; or There is a reasonable, effective, and practicable alternative material or procedure that is demonstrably less destructive to the environment. [About 3 CCR §6444] If it appears that a substantial loss, damage, or injury is likely to result from the continued application of a specific pesticide within the area, the Director or CAC may cancel all permits for applications of that pesticide within the affected area. It is well known that salmonids are endangered in many watersheds in CA and copper is proven to be a critical contributing factor, therefore banning copper statewide should be done as soon as possible.
AW-24	Buffer set-backs must be protective of all pesticides used and Ethoprop label requirements state "do not apply within 800 feet of Brackish water habitats". This is the standard set-back that must be required throughout the Smith River estuary/wetland area. Anything less is a knowing pesticide label violation and is a crime with penalty of 30 days jail and/or \$1,000 fine [Statute 7 U.S.C.136l(b)(1)(A)], Regulation 40C.F.R. 152-186. Note that brackish water is the same and is protected habitat regardless of location ie. Pacific vs Atlantic.
AW-25	The BMPs implemented so far by lily growers are not adequate and this order should require proof of increased levels of BMPs being implemented on-site as a requirement to be met before enrollment is approved.

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AW-26	Self-reporting in the water code does not prohibit additional monitoring by waterboard staff to ensure implementation and effectiveness. The public have been very strong in expressing the need for this oversight by the waterboard. Please add a specific annual schedule or times per year that staff will conduct inspections and review documents to this section. Eliminate the vague term "periodic".
AW-27	Since this order requires enrollees to use adaptive management to establish individual compliance it is necessary that all enrollees be issued site-specific monitoring and reporting requirements to identify sources of exceedances. Also, this section should include the waterboard to perform edge-of-field monitoring even if the enrollee does not "elect" to do so themselves. We need to be as efficient as possible in identifying sources of exceedances so that we can require effective BMPs be implemented.
AW-28	As already well-established by the waterboard and growers over the years, the fields that are potentially draining to 1)Delilah, 2) Tillas, and 3) Rowdy must require increased Tier BMP implementation before enrollment. These areas do not need further evidence that the current practices are insufficient. Ongoing voluntary Adaptive management by the growers have already identified the need for better BMPs in these surrounding areas. And this fact must be added to this section.
AW-29	CDPR and CAC Riggs are not upholding their responsibilities to protect from pesticide harms. The waterboard is not effectively working with these divisions of our EPA to fulfill the purpose of the MAA created in 2019. This section clearly identifies ongoing death to aquatics from these pesticides: Diuron, Imidacloprid, Permethrin, Copper. Page 18 of the draft lists Ethoprop as well. The necessary steps to ban the use of these pesticides must begin immediately and I have provided the grounds and authority to do so on pages 7 and 8 of my comments. The waterboard has the pertinent data that fulfills the evidence of significant adverse impacts requirement for CDPR and CAC Riggs to meet. Please make this a top priority and please clearly list these facts in this section.
AW-3	Please take steps to implement a standard that stakeholders who do not meet a minimum required level of participation (perhaps 75% of meetings and written comments) be declined participation in future processes.

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AW-30	Multiple alternatives are feasible and are proven to be effective. This fact must be included in this section. Alternatives include: • Cultural Practices for Root-Knot and Root-Lesion Nematode Suppression (SARE) • Nematicidal Amendments and Soil Remediation • Constructed ditches for farm pollution filtration • UC ANR Native Grasses for biofilters • Bioretention Cells providing 10-fold reduction of pollutants (American Chemical Society 2023) • Native Plant Selection for Biofilters and Rain Gardens • Biochar for soil remediation (USFS)
AW-31	Two studies conducted by the Easter Lily Foundation for the benefit of the lily growers were given to me by Chelsea Gronchowski at our Del Norte County Agriculture office, and both show successful alternatives were identified, results were published 2011, and 2020. The results were known to lily growers beforehand. In one study (Giraud et al. 2011), these five were successful performers: Meadowfoam seed meal (MF), Quillaja (QU), DiTera (DT), the fungi Paecilomyces lilacinus (PL), Muscodor albus (MA). In the other study (Westerdahl et al. 2020), these four were successful: DuoGard, EF400, EF300, Cinnamite. The fact that the lily growers did not implement a single alternative following the 2011 study identifying FIVE successful alternatives, and did not implement a single alternative following the 2020 study identifying FOUR more successful alternatives, when the stated overall goal of these studies was reducing pesticide use proves the lily growers have engaged in purposeful and malicious negligence of mitigating a known public nuisance. This is a CRIMINAL act.
AW-32	The toxic Copper build-up in the soil is described in this section and supports the ban on copper use in Del Norte County and statewide as mentioned earlier in my comments.

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AW-33	This section makes the case for immediate implementation of all available alternatives to pesticides. See facts from 2017 studies review paper on elevated CO2 contributing to acidification in fresh-water and the biological consequences: "The pH of a water body indicates the proportions of dissolved inorganic carbon (DIC) specimens and is linked to the 'bicarbonate buffering system'. Acidification of freshwater can be classified as either strong or weak." "These negative impacts to olfaction may not be exclusive to fish, as invertebrates, such as crayfish also displayed reduced feeding responses due to impaired olfaction following exposure to strong acidification. In addition, freshwater mussels have been found to alter gaping behaviour during periods exposure to weak acidification, which could increase their vulnerability to predation." (Hasler et al. 2017, Hydrobiologia)
AW-34	The prevalence of cattle in this area and their distribution of fresh droppings as they graze – which are not incorporated into soil – the fields in rotation after lily bulbs, is likely contributing to the nutrient runoff. Utilizing poultry to follow cattle in the fields, breaks up cow droppings and contributes poultry droppings for a more balanced, natural fertilizer composition in situ. I highly recommend that this draft specifically list the many benefits of poultry in lily bulb cultivation practices. It is important to include this in BMPs section as well. Synthetic fertilizers should be discontinued because they do not incorporate into soil structures as well as naturally derived composts.
AW-35	The prevalence of confined dairies and beef cattle grazing is the main source of nitrates in Smith River. The dairy order needs to be enforced and management of nitrates need to be improved. For this lily bulb order and the dairy order waste water discharge must have plant filtration like bioswales near the discharge sites so that water levels of nitrates and other contaminates can be filtered out before reaching waterways. Effective filtration of irrigation well water needs to be implemented as well, especially at the three wells that tested high for Public Health standards as referenced on page 23 of the draft.
AW-36	Coalitions do not relieve the waterboard from its responsibility to provide effective oversight and to inspect, test, and verify compliance on a clearly defined schedule, and must be listed explicitly in this WDR.

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AW-37	The fact that the lily grower practices have created a large and ongoing public nuisance must be stated in this order. The consequences to the growers if their monitoring results continue to visit these damages to public resources and health, must be clearly listed here or in the enforcement for non-compliance section, or both.
AW-38	This section should also note the fact that our government agencies NOAA, CDFW, USFWS have all failed to take appropriate action in response to this ongoing public nuisance and have continued to fail to uphold the protective laws they are responsible for. The waterboard should also officially request that these agencies finally take action in accordance with the laws in their scope and authority and that this waterboard WDR is not and has not been a valid excuse for them to neglect to take action while so many have suffered and died from pesticide pollution by the lily grower practices.
AW-39	Considering the fact that exceedances have continued for decades and these pesticides have devastated the ecology to such a severe degree, these exceedance benchmarks should NOT be listed two, instead this should be changed to "A single exceedance of..."
AW-4	There are many NGOs/nonprofits that are exploiting problems at the Community level which affect the local people negatively and are not sufficiently contributing to these processes. These groups lie about their actual involvement in these bureaucratic/regulatory processes. These groups enrich themselves with grant money to do work to improve these problems but do not do the work. These groups do not participate by contributing ideas suggestions asking clarifying questions They do not participate in person or when they're on zoom, Instead, they sit back and do not speak! They're lazy, they do not show up consistently, they do not provide written comment consistently. Cal Trout, Smith River Alliance, EPIC, Friends of Del Norte, ELF/Save CA Salmon (petitioned the State Board in 2018 only to do nothing for 6 years while regional staff took no action in-line with the order to develop a WDR permit! Siskiyou Land Conservancy – all talk and long-winded written opinions while taking no official action taken to stop pesticide permit in 25 years.
AW-40	Due to the growers choosing not to plant natives when recommended to for years by multiple experts in this voluntary work with the waterboard, the critical shade needed to cool water temperature needs to be created by laying large tree trunks over waterways to cast their shadow in key locations. This needs to be done urgently as well as planting native trees and shrubs in riparian areas. These are implementable actions that the waterboard must take. Permission for this to occur on lily grower lands must be a requirement of enrollment. Cool water is not optional in order for endangered species to recover.

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AW-41	The degradation of the natural resources and beauty of a natural treasure. This has affected the public's enjoyment and this still adversely affects tourism, which is the last real economy left in our rural area. When the waterboard repeatedly came and confirmed testing showing toxic levels of poisons in our water, 1982 / 2002 / 2013 / 2016-2017 this should have been the catalyst for IMMEDIATE ACTION! Death of COHO from pesticides is documented beginning in 1957 when over 2,000 fish perished in Morrison Creek. In 1982-1983 pesticide contamination in Smith River wells was documented, some of which were fifty times higher than EPA's Public Health Goal. AGAIN, in 2002 scientists detected a dozen wells still contaminated with 1,2-D. The fact that periodic outcry over decades by neighbors about the suffering they have been made to endure because of the lily grower ongoing use of pesticides were repeatedly disregarded by the Westbrooks, Crocketts, and the Millers has deeply damaged trust and community culture here.
AW-42	The result is a stagnant county that has persistent loses in population and great difficulties recruiting and retaining employees to fill vital positions needed for residents of all ages to have access to necessary services. The far-reaching effects of this harm and the disregard towards human, animal and environmental health cannot be quantified. It is catastrophic. I sincerely hope that this situation in Smith River wakes up the North Coast Regional waterboard and staff so that you radically change your focus to be to react immediately when people are suffering as a result of water quality issues. Prioritize safety not those with more political power and resources.

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AW-43	This WDR must consider the costs and burden visited upon the public and the dire situation that has been created through this waterboard's failure to conduct a meaningful development of a WDR in a reasonable amount of time. The costs to enrollees is no where close to the severe costs to public health, resources and the benefits of these to future residents. The most important consideration is that this WDR be given proper oversight by the enforcement authority in order to actually ensure water quality and safety. Water Code 13260 (d)(1)(B), "The total amount of annual fees collected pursuant to this section shall equal that amount necessary to recover costs incurred in connection with the issuance, administration, reviewing, monitoring, and enforcement of waste discharge requirements." The costs for this lily bulb WDR exceed the amount that is determined in the Tier A Agricultural Lands fees schedule. The waterboard could increase the annual fee for however many years it takes to properly recover the actual costs incurred.
AW-44	State waterboard fees may change from year to year. This WDR requires a request to the State board or proper authority to request a fee alignment that is reasonable to recover the actual costs incurred by the waterboard in its development. The current fee amounts are not reasonable to recover costs from monitoring, reporting, management practices that may be needed pursuant to the order requirements.
AW-45	The fact that NRCS provides multiple monetary resource mechanisms must be listed in this section. The fact that the costs for each of these BMPs are ONE-TIME COSTS must be listed in this section. As well as the fact that there are multiple grant sources and organizations that will provide the labor and materials FOR FREE to the growers if the growers give them permission to do this work must be listed in this section. I verified with Smith River Alliance Grant Werschull that they have not been given permission to perform any water quality restoration projects on lily grower property – in over 30 years. The fact that the costs to implement these practices are not a burden on the growers, but are paid for through many government and NGO programs absolutely must be stated in this section. So, the costs range estimate statements at the end of each practice must be corrected to start at Zero. This section should prominently acknowledge that these practices yield an overall cost benefit to growers by reducing the costs of chemical inputs.

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AW-46	This section must explicitly state specifically how the waterboard will appropriately enforce every violation. The fees collected by these WDR from enrollees are to fund enforcement efforts, so any shortfall the waterboard has in enforcement resources is direct evidence for the need to INCREASE fees collected from enrollees. The waterboard should prioritize reduction of litigation costs by focusing on collaboration efforts with enrollees on the front end to guarantee compliance instead of fighting to correct non-compliance through legal mechanisms that enrich lawyers. Enforcement provisions should be evaluated to identify ways to reduce enforcement costs, specifically by creating prevention processes that are reasonable and feasible for staff to accomplish in partnership with potential enrollees.
AW-47	It is well established that the harms caused by the lily bulb crop requires swift and immediate enforcement response for any further non-compliance. It is staggering the amount of devastation and suffering that has been visited upon the public and the neighbors of these growers.
AW-48	Any instance of noncompliance constitutes a violation of the water code. This section should specify the enforcement action that will follow. It is not reasonable for this order to leave this vital section incomplete with vague statements about determining relative significance of violations to prioritize responses. This section must be clear about the violations from this crop and the high significance of any further violations which therefore justifies swift and immediate enforcement and then list the specific action that will be taken.
AW-49	This section must include the pesticide label requirement of Ethoprop for 800 feet away from brackish water habitat. These labels are state law and must be abided by. Prioritization of installation of large wood to cast shade and cool the waters while native trees and bushes are planted and will take time to grow and cast the necessary shade must be stated in this section.
AW-5	Same problem with government workers—who barely utter a word at meetings, share no ideas, no practical solutions and then only some provide written comment. This is outrageous! NOAA, County Dept of Agriculture, NRCS, CDFW, CDPR the villains lurking in the background on Zoom while life at all levels is being annihilated by the products that they promote and profit from when they are supposed to regulate and protect from these harms! Unforgivable.

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AW-50	This section must clearly state that adaptive mgmt. has been voluntarily conducted by lily growers for several years and that it has been determined that existing practices are still not sufficient to protect water quality and beneficial uses, therefore enrollees are required to prove implementation of improved practices prior to enrollment. The waterways with the most exceedances make it clear which fields in proximity must meet this requirement. This is mandatory for waterboard compliance with the law and purpose of this WDR order.
AW-51	This option 1 should be eliminated based on the fact that the growers have clearly demonstrated that their choices over the past 14 years have not been sufficient to mitigate water quality exceedances and their poor judgment in the selection of practices to implement. The growers have been repeatedly informed over these 14 years by multiple experts at multiple government and NGO divisions which management actions were vital. In response, the growers disregarded not only these facts but also the free help that has been available to them. These facts of repeated and ongoing bad-faith by the easter lily growers justify the elimination of Option 1 and demands that any WQ Mgmt Plan be certified and be created by a professional specifically in the alternative and regenerative agriculture field of study. This WDR is an EMERGENCY per Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code. The time that giving this grower developed WQMP option affords is in direct conflict with the purpose of this regulation.
AW-52	This section must define clearly who is considered a qualified professional. It is important to note that restoration and salmonid recovery plans already developed and ready to utilize include these criteria and are available to the growers right now from NOAA fisheries and Smith River Alliance. NRCS of USDA and FSA also has the resources and plans for sustainable and regenerative agriculture practices. These facts make giving the option to the growers to attempt to recreate the wheel instead of utilizing the ample resources and expertise at their disposal completely outrageous, unreasonable and a violation of the law. Option 1 must be eliminated from this WDR.

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AW-53	The pesticides listed here have proven effective alternatives and those should be included in this section instead of presenting these 4 extremely deadly pesticides as being inevitable to grow this crop. Copper, Imidacloprid, Diuron, and Ethoprop are all pesticides that this order should incentivize and direct the phasing out of these extremely toxic/deadly chemicals. This could be done in this section by listing reduced application rates as the benchmark to be achieved and recommend the alternatives that would allow for their reduced use. Can the waterboard please stop pretending that there are no solutions to these deadly chemicals? If we have sufficient surface water provisions they will benefit the groundwater quality too.
AW-54	Self-reporting does not safeguard human health or the environment! 24-hour requirements of reporting already in existence such as Health and Safety Code 105200 for 24-hour pesticide incident reporting medical staff is not adhered to in Del Norte County. This lack of compliance directly contributes to the ongoing hazards because the regulatory entity never gets the info required for them to be aware of and to appropriately respond to safety concerns affecting humans wildlife and our environment.
AW-55	Sutter Coast Hospital staff are grossly incompetent and it took our county Agriculture Commissioner's office employee Chelsea Gronkowski several months to finally get hospital staff to submit the pesticide incident report that should've been reported within 24 hours of the incident on August 15th 2024. The patient told ER staff that she was sprayed with pesticides due to a drift incident from neighboring property on Oceanview Drive in Smith River CA owned by Rob Miller of Dahlstrom Watt Lily bulbs.
AW-56	Required reporting must come from an audit process initiated by the State. State staff should pull data (generate and download reports) from the software that compiles the reasons for patient visits to emergency rooms and medical providers in order to monitor for incidents and identify hazards in the local communities. The Regional Water board staff could conduct similar audits of county level agriculture department staff's surveillance work; whereby state water employees accompany county staff during their surveillance activities on a regular basis. This on-the-ground surveillance and monitoring via audits of the county level databases would actually identify noncompliance or other incidents of violations to this WDR permit and its requirements.

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AW-57	At this point no more adaptive management is sufficient to protect from further harms to human health wildlife and our environment. This order must mandate that implementation of all of these alternatives (proven effective as previously described), be a requirement in order to enroll in the Lily bulb WDR permit. Anything less is negligence of the law. If enrollees will not provide evidence of implemented alternatives, then they must be denied enrollment in the permit until which time evidence is provided and verified by water board staff. These requirements are reasonable so the growers have no valid reason to object to them. Because of the ongoing assault of toxic chemicals in Smith River watershed's vital wetland estuary, our ecosystem is on verge of collapse! The waterboard must stop this NOW. Taking ALL reasonable steps to PREVENT this is mandatory.
AW-58	You must cite explicitly which law gives this right of inspection and entry and also specify that no notice needs to be given to enrollees prior to inspection and entry. Also list what specific consequences enrollees will face if they interfere with or deny inspection and entry by state staff.
AW-59	List the consequences for enrollees who do not comply with reporting requirements.
AW-6	Same problem with the Easter Lily growers! The Westbrook never attended a single meeting, Linda Sutter never spoke a word when she attended three meetings, Rob Miller was the only one to consistently attend meetings and he barely made comments and refused to answer any questions after the meeting. This is not the collaboration that is intended by the technical advisory group and to get all the stakeholders involved together. This is not successful processes to develop permits and policies. Please take steps so that you stop enabling this, the public deserves better.

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AW-60	List the legal basis for a public disclosure exemption by what law(s). Also explicitly list the definition of what constitutes a proprietary or trade secret info/data. List what evidence is required from enrollees to prove the proprietary and trade secrets criteria. Public transparency laws exist so that we can be accurately informed and so we can protect and defend our rights and provide government oversight in our vital role of citizen. Our Freedom of Information Act, State and Federal Constitution Provisions cannot be overruled by this WDR permit. An explanation by enrollee is not sufficient - they must be required to provide evidence that proves the exemption is warranted. Explicitly list the qualifiers that water board staff will use to assess the exemption legitimacy. Describe the records that will be kept by water board staff to document that qualified the exemption legitimacy prior to approval.
AW-7	Correct to "which has impacted..." and delete "may impact". Note a list of proof of disadvantaged and tribal community impacts that have and are occurring is given under comments for page 41 119) Social & environmental costs.
AW-8	This is not correct. TrueNorth did not distribute Flyers to the neighbors most likely affected in Smith River. Instead, Smith River resident Marilyn Gray distributed them herself in person throughout Smith River – no one helped her! I confirmed this with a TrueNorth member - Jonnel Covalt. True North generally only distributes Flyers and info to a limited amount of people that are on their email list and on local bulletin boards once in a while.
AW-9	Specifically regarding this water board process, True North suppressed public comment and misled locals to the purpose and impact on the permit of their oral comments given on October 21 2024. True North purposely buried the list of commenters to silence them. Waterboard employee, Brenna Sullivan aided them in doing so – I have the email correspondence of this. True North has refused to help several locals over the years to pursue social justice including regarding this ongoing pesticide poisoning in Smith River.

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Baker-1	These comments, on behalf of the Klamath Forest Alliance, urge you strengthen the Draft Waste Discharge Requirements governing commercial lily bulb operations on the Smith River Plain to ensure full protection of water quality, beneficial uses, and the extraordinary ecological resources of the Smith River watershed. The record already shows pesticide detections, copper exceedances, and impaired waterways linked to agricultural runoff. The Board has the authority, ability and legal duty to protect this high-quality river and prevent further degradation. It must require strict enforceable limits with zero exceedances of pollution thresholds to protect water quality, fish, wildlife, and the communities that depend on the Smith River.
Brockington-1	Commenter, writing from Arcata, CA, draws on personal experience with a former bulb farm near the Mad River in Arcata, which she recalls as being 'loved' by the community but ultimately affected by too many pesticides. She urges the Board not to allow pesticides in the Smith River, submitting an informal personal comment that does not follow the standard form letter structure.
Butler-1	Commenter, writing from Freshwater, CA, submits a brief personal plea urging the Board to allow no more pesticide discharge from lily bulb fields in the Smith River drainage and to protect nearby residents and all other living creatures in the lily bulb growing district. Does not use the standard form letter structure.
CCR-1	In reviewing your recent General Waste Discharge Requirements Order (the 'Order') for Commercial Lily Bulb Operations and the associated Environmental Impact Report (EIR), I find two significant areas of violation of 1) the Endangered Species Act of 1973 and succeeding amendments / modifications, and 2) your own stated agency objective "to exercise its full power and jurisdiction to protect the quality of the waters in the state from degradation and to attain the highest water quality which is reasonable..", as well as the federal Clean Water Act.
CCR-2	The first violation is the impacts to and degradation of Critical Habitat for Endangered Species. Coho Salmon and the Tidewater Goby both have Critical Habitat designation in the low flow, low lying tributaries to the Smith River estuary, exactly where lily bulb pollutants impact the most, and which have the highest chances of exceeding the benchmark toxics levels. These are specifically Delilah Creek and Tillas Slough. I was shocked to see (paragraph 6, p. 5) that "in 2026, Delilah Creek was added as impaired for diuron, one of the herbicides used in lily bulb cultivation". This is after 4 years of voluntary adaptive management since the Smith River Plain Water Quality Management Plan (2021), and a glaring illustration that the Plan is not working.

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CCR-3	The EIR for this Order spends much time discussing impacts to agricultural lands in the form of removing some acreage from farming due to adaptive management implementation, and also to sediment and water temperature considerations, but relatively little on pesticides, and there is absolutely no mention of cumulative impacts on Endangered Species or water quality from the application of a combination of toxic pesticides. Thus even though exceedance of individual toxins may not be reached, the cocktail of a combination of poisons that fish and wildlife (and people) are exposed to is not addressed at all. Please direct me to any section of the Order or EIR that addresses this if I have missed it.
CCR-4	The second violation is the open ended permission for this hazardous agricultural practice to continue indefinitely and complete reliance on growers implementation of management practices to achieve water quality objectives. Written in the Order (paragraph 158 p. 54-55) is the Progressive Enforcement action of ".....culminating in a complaint for civil liability." Or (paragraph 159) "Enforcement and/or termination of coverage for waste discharges under this Order". This is only after there have been two documented exceedances which violate water quality objectives, which will take from 3 to many more years of impacts to listed species, human health, and other beneficial uses. That is many more years of damage to the Beneficial Uses of this water body for the commercial and sport fishery economy, tribal resources, Endangered Species, tourism, human health, and (what would be) the cleanest wild river in California, if not the whole west coast.
CCR-5	When I asked your staff the meaning of 'discretionary enforcement' at your 18 February Regional WQCB meeting, the only answer for a third exceedance was 'additional management practices', in other words, ongoing permission to contaminate surface waters with toxins. What you have done in developing this Order and EIR is to grant lily growers a permit to continue violating the ESA and California's water quality standards. This Order is more aptly called a Pollution Permit.
CCR-6	Given that your demonstrated plan is to continue with adopting and implementing this Order, Regardless of its flaws, my request is that you revise this draft to: 1) have an endpoint where a third exceedance of benchmark concentration of any pesticide or any form of copper results in revocation of the 'pollution permit'.
CCR-7	2) that you acknowledge in writing both in the Order and EIR that there exists a cumulative impact of application of a variety of pesticides that is more severe than individual pesticides as measured by your proposed monitoring program.

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CCR-8	This request does not alleviate fact that the Order remains in illegal conflict with the ESA and the Clean Water Act, but it will at least allow for some real enforcement potential and lay the ground work for the necessary cessation of this truly criminal agricultural practice.
CDFW-1	The Smith River is one of the most pristine, undammed river systems in California, renowned for its natural beauty, biological diversity, and ecological importance. The watershed is recognized as a salmon stronghold and considered irreplaceable with respect to population resiliency and biodiversity. Although the upper watershed is protected through public land ownership, the estuary and coastal tributaries are subject to ongoing habitat loss and degradation associated with agricultural use. This lower portion of the watershed, known as the Smith River Plain, provides essential freshwater, estuarine, and wetland habitat for a diverse array of species and life history assemblages. At least 38 species of fish have been documented in the Smith River Plain (Parish and Garwood 2015), including those of cultural, recreational, and commercial importance. Virtually every species uses the estuary, tidal sloughs, and coastal tributaries during at least one life history stage.
CDFW-10	Many existing lily bulb fields have already implemented best management practices and conform to the Streamside Area setbacks as proposed in the Order. However, these practices have clearly been insufficient to curtail toxic conditions. Moreover, a recent study by Hurst et al. (2024) found that simple grass filter strips reduced the discharge of particulate copper by only 20 percent, did little to address dissolved copper, and were quickly overwhelmed during the winter storm season. Although sample size was limited, these results suggest that Streamside Area widths, particularly as proposed, are unlikely to result in significant reductions in copper discharge. Given the climate and hydrology of the Smith River Plain, even wider setbacks, such as those presented in Tier 1 Adaptive Management, may be inadequate as a standalone practice. The most reliable approach is to systematically reduce pesticide application rates in tributary watersheds with exceedances, as the North Coast Water Board originally recommended in its 2025 SWAMP Report. Normalized application rates of copper were highly correlated with predicted chronic copper toxicity, and imidacloprid showed a similar trend (NCRWQCB 2025). CDFW therefore recommends requiring attainment of active ingredient performance standards for all enrollees rather than presenting it as one of several options in Tier 1 Adaptive Management (Recommendation 1). The Order already contains innate delays associated with implementation; the baseline requirements should therefore be sufficiently robust to address water quality degradation on a biologically meaningful timescale.

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CDFW-11	Given these regulatory constraints and the hydrology and soil type of the Smith River Plain, CDFW recommends increasing the minimum width of Streamside Areas to 100 feet on perennial streams and 50 feet on intermittent and ephemeral streams, as measured from the top of bank or edge of existing riparian dripline, whichever is greater (Recommendation 2). At least half of this total width should be managed as the Riparian Vegetation Area, as proposed.
CDFW-12	Although a simpler Vegetated Buffer may be appropriate for hydrologically connected ditches, the minimal ten-foot width currently afforded would directly undermine the larger setbacks required for streams. Hydrologically connected ditches should be treated as an extension of the stream system because they collect, concentrate, and expedite agricultural runoff, functioning as conduits for pollutant transport. CDFW recommends increasing the minimum width of Streamside Areas to 30 feet on hydrologically connected undesignated channels (i.e., ditches) (Recommendation 3), as currently proposed in one of several Tier 1 Adaptive Management options.
CDFW-13	Although CDFW understands the purpose of offsite mitigation, it does not support the Riparian Vegetation Area Restoration Alternative because the riparian component is fundamental to improving and protecting water quality and associated fish and wildlife values. A growing body of scientific evidence underscores the importance of riparian shade in lowering stream temperatures (Platts 1979, Bowler et al. 2012, Garner et al. 2017, Fuller et al. 2022), not to mention the myriad benefits associated with pollutant trapping and soil stabilization. Offsite mitigation may be suitable where it provides a net benefit to impacted ecosystems, but in this case, riparian restoration elsewhere in the sub-watershed would have no bearing on the fundamental problem of water quality degradation in core rearing habitat. Allowing offsite mitigation in lieu of meeting the Riparian Vegetation Area minimum widths would subvert the stated goals of the Order. If the North Coast Water Board chooses to retain the Riparian Vegetation Area Restoration Alternative, CDFW recommends requiring enrollees who select this option to first demonstrate attainment of water quality objectives and compliance with receiving water limitations despite reduced riparian setbacks (Recommendation 4).

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CDFW-14	The Adaptive Management Program is integral to improving and protecting water quality in the Smith River Plain. CDFW supports the iterative process as well as the decision to enter all fields in tributary watersheds with documented exceedances into Tier 1 Adaptive Management upon enrollment. However, CDFW is concerned about the field-specific approach for all exceedances thereafter (H.5), which may prolong water quality degradation as individual fields rotate through crop production. Current practices have already proven insufficient and fields within a tributary watershed experience similar environmental constraints that may necessitate more advanced controls. With this staggered system, multiple salmonid cohorts could be exposed to toxic conditions in the three- to five-year crop production cycle before more advanced controls finally take effect throughout the watershed. Instead, CDFW recommends a unilateral approach whereby all fields located within the affected tributary watershed shall be subject to the Adaptive Management Program, regardless of crop status at the time of the exceedance (Recommendation 5).
CDFW-15	To account for site-specific conditions and provide a pathway for exemption from Adaptive Management requirements, the North Coast Water Board could allow an enrollee to instead implement edge-of-field sampling to demonstrate attainment of water quality objectives and compliance with receiving water limitations, as described in H (3) (Recommendation 6). A more systematic approach to Adaptive Management cannot undo decades of water quality degradation, but it may compensate for the inevitable delays associated with the initial implementation of the Order.

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CDFW-16	The Monitoring and Reporting Program is essential to evaluate the effectiveness of the Order's terms and conditions, assess compliance, and trigger Adaptive Management. The North Coast Water Board's decision to transition from the hardness-based California Toxics Rule (CTR) to the Biotic Ligand Model (BLM) will provide a more sensitive and biologically relevant prediction of copper toxicity, and the addition of two surface water monitoring stations will facilitate a more targeted approach to address benchmark exceedances. However, the proposed sampling frequency may not be sufficient to allow for oversight and meaningful feedback. The most recent SWAMP studies (NCRWQCB 2018, NCRWQCB 2025) included three or more wet season sampling events and at least two dry season sampling events, and occasionally extended almost year-round (e.g., 2022, 2023). The Order would instead reduce sampling frequency to only three times per water year during the wet season, omitting dry season sampling altogether. It would further restrict sampling by changing the definition of "wet season" from October through May to November 1 through April 30. However, storms producing more than an inch of precipitation occur outside that narrower window and could rapidly mobilize agricultural pollutants. Missing the "first flush" of the rainy season due to a mismatch with the prescribed sampling schedule could fail to detect exceedances during a critical period for salmonids. Moreover, there were several exceedances of water quality criteria for imidacloprid and predicted copper toxicity during the period that would now be defined as the "dry season" (NCRWQCB 2018, NCRWQCB 2025). In fact, the only exceedances of imidacloprid in 2024 occurred during the dry season and were not associated with precipitation in the preceding 24 hours – exceedances that would not have been detected under the proposed sampling schedule. To improve the sensitivity of the monitoring program and ensure timely feedback, CDFW recommends adhering to the sampling framework of earlier SWAMP studies, with at least three wet and two dry season sampling events and a schedule that captures the shoulder seasons in October and May (Recommendation 7). Sampling could be pared back in the future if results confirm that reduced sampling would not affect detection probability.
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CDFW-17	CDFW agrees with the DEIR's assessment of the Order as largely beneficial to biological resources, though we believe it must be strengthened to effectuate immediate and substantial change. The only comment pertaining to the DEIR is a refinement of Mitigation Measure BIO-1, which addresses potential impacts to biological resources associated with the construction and maintenance of management practices (e.g., grassed swales, detention basins). Rather than advising enrollees to avoid and minimize disturbance to sensitive habitats and special status species, CDFW recommends explicitly restricting new construction to the footprint of existing fields outside Streamside Areas (Recommendation 8). If construction would encroach into Streamside Areas or extend beyond the footprint of existing fields and appurtenant field roads, the enrollee would have to assess habitat conditions and undertake additional environmental review and permitting, as described in the mitigation measure.
CDFW-18	The North Coast Water Board's decision to transition from the hardness-based California Toxics Rule (CTR) to the Biotic Ligand Model (BLM) will provide a more sensitive and biologically relevant prediction of copper toxicity, and the addition of two surface water monitoring stations will facilitate a more targeted approach to address benchmark exceedances.
CDFW-19	CDFW has previously recommended more active planting and management to optimize the capacity of Streamside Areas. However, CDFW understands Streamside Areas are intended to implement the Temperature Policy of the Basin Plan, and the North Coast Water Board cannot prescribe the particular manner of compliance with its orders.
CDFW-2	Coho Salmon (<i>Oncorhynchus kisutch</i> ; ST, FT) migrate through the estuary and mainstem river and rear in low-gradient coastal streams and tidal sloughs. Larger tributaries like Rowdy Creek and Morrison Creek also provide spawning habitat (Parish and Garwood 2015, Walkley and Garwood 2017). Although spawning is concentrated in the Mill Creek sub-basin (Garwood and Larson 2014, Walkley and Garwood 2017), a substantial portion of the population depends on natal and non-natal winter rearing habitat in coastal tributaries and sloughs (Parish and Garwood 2015, Parish and Garwood 2016). These low-velocity waters provide refuge and increased foraging opportunities vital to growth and development, as well as transitional habitat for smoltification. The Smith River population is listed as part of the Southern Oregon/Northern California Coast (SONCC) Coho Salmon Evolutionarily Significant Unit (ESU) and is designated as a core, functionally independent population, meaning that it is critical to the recovery of the ESU. Unfortunately, this population is at high risk of extinction and likely below the depensation threshold (NMFS 2014).

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CDFW-20	Although CDFW understands the purpose of offsite mitigation, it does not support the Riparian Vegetation Area Restoration Alternative because the riparian component is fundamental to improving and protecting water quality and associated fish and wildlife values. Offsite mitigation may be suitable where it provides a net benefit to impacted ecosystems, but in this case, riparian restoration elsewhere in the sub-watershed would have no bearing on the fundamental problem of water quality degradation in core rearing habitat. The shading and filtering capacity of existing riparian corridors is already limited due to channelization and the suppression and removal of riparian vegetation. Allowing offsite mitigation in lieu of meeting the Riparian Vegetation Area minimum widths would subvert the stated goals of the Order.
CDFW-3	The Smith River is also an important stronghold for other salmonid species, including Chinook Salmon (<i>O. tshawytscha</i>; SSC) and steelhead (<i>O. mykiss irideus</i>; SSC), which migrate through the mainstem and rear in the lower estuary and coastal tributaries. Chinook Salmon spawn below the Fred Haight Bridge, within the area impacted by lily bulb cultivation (J. Walkley, pers. comm.). The entire Smith River watershed hosts a significant population of Coastal Cutthroat Trout (<i>O. clarkii</i>; SSC). The mainstem Smith River is an important migratory corridor for Green Sturgeon (<i>Acipenser medirostris</i>; SSC), Western Brook Lamprey (<i>Lampetra richardsoni</i>; SSC), Eulachon (<i>Thaleichthys pacificus</i>; FT, SSC) and Pacific Lamprey (<i>Entosphenus tridentatus</i>; SSC), while the estuary provides habitat for the northernmost population of Tidewater Goby (<i>Eucyclogobius newberryi</i>; FE, SSC) (Schmelzle 2015).
CDFW-4	CDFW supports the North Coast Water Board's efforts to protect and restore water quality through General Waste Discharge Requirements for commercial lily bulb operations. Years of water quality monitoring have established a clear nexus between lily bulb cultivation and degraded water quality conditions in the Smith River Plain. Copper fungicides are of particular concern due to their neurobehavioral toxicity, though synthetic pesticides like imidacloprid and ethoprop pose similar threats to salmonids and other aquatic life. Concentrations of dissolved copper and synthetic pesticides are consistently elevated at monitoring stations downstream of lily bulb fields, often at levels considered toxic to aquatic life. In 2018, Tillas Slough and Delilah Creek were added to the 303(d) List of Impaired Water Bodies for copper, and in 2026, Delilah Creek was added for diuron.

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CDFW-5	Although the most recent Smith River Plain Surface Water Monitoring Report (NCRWQCB 2025) detected fewer exceedances of water quality criteria relative to the 2013-2015 study (NCRWQCB 2018), attributed to voluntary compliance with best management practices and an overall decline in cultivation, there are still consistent and widespread exceedances of copper toxicity thresholds, as well as exceedances of some synthetic pesticides (NCRWQCB 2025). The Smith River population of Coho Salmon is particularly vulnerable to water quality degradation in the lower watershed because it relies on winter rearing habitat in coastal tributaries and sloughs, which are directly impacted by these agricultural pollutants.
CDFW-6	Even at low concentrations, dissolved copper can impair or destroy sensory systems that mediate ecologically important behaviors, such as the ability to detect and evade predators, identify potential mates, and respond to migratory cues (Baldwin et al. 2003, NMFS 2007, Sandahl et al. 2007, McIntyre et al. 2012). Effects manifest within minutes of exposure and persist for days to weeks (Baldwin et al. 2003), and there is no evidence of acclimation or compensation (Sandahl et al. 2007). Ethoprop and imidacloprid affect many of the same behaviors (Chung et al. 2023, Laetz et al. 2013, Sandoval-Herrera et al. 2019) and could result in additive or synergistic toxicity. Collectively, these physiological and behavioral effects render fish less responsive to cues in their environment, placing them at greater risk of predation. A reduction in individual survival and lifetime reproductive success has potential implications for the long-term viability of the Smith River population, particularly if entire cohorts are affected.
CDFW-7	The Smith River Plain is essential to the resiliency and recovery of Coho Salmon and other anadromous fish. There has been significant progress in the restoration of salmon and steelhead habitat, from the removal of fish passage barriers to instream habitat restoration and the reestablishment of ecosystem processes. In addition to projects in the mid- and upper watershed, there are multiple projects in the coastal plain, including Delilah Creek, Rowdy Creek, and Dominie Creek. There are also plans for extensive estuary and floodplain restoration. However, without also improving water quality, we risk undermining these efforts and creating an ecological trap. Prompt, meaningful action is crucial to the continued existence and recovery of the Smith River population of Coho Salmon.

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CDFW-8	The Order argues that water quality degradation during initial compliance "is expected to be limited and, in many cases, reversible" (Finding No. 117). There is little data to support this conclusion, and without more stringent controls, the unavoidable delay in implementation is likely to be detrimental to salmonids due to their strict three-year life history. Spikes in toxicity during the winter storm season (NMFS and CDFW 2018, NCRWQCB 2018, NCRWQCB 2025) correspond to critical periods of juvenile growth and development. Every life stage risks exposure, whether as adults passing through the lower estuary during spawning migration or sub-yearlings and smolts rearing in coastal tributaries and sloughs.
CDFW-9	A substantial portion of the copper enters tributaries in its particulate form bound to sediment and dissolved organic matter (Hurst et al. 2022), where it then accumulates in sediment. However, a change in environmental conditions (such as pH) can shift speciation in favor of the toxic dissolved form. Depressed pH associated with storm events was a primary driver of predicted copper toxicity (NCRWQCB 2025), a trend which may reflect chemical speciation shifts in accumulated sediment in addition to increased dissolved copper in agricultural runoff. Although it may be impossible to redress years of copper accumulation, every feasible measure should be taken to prevent or substantially reduce further discharge.
Crockett United Lily-1	The concerns raised by various environmental groups, environmental agencies and the Tolowa Nation appear to be significantly overstated when looking closely at the actual environmental documentation and management of Easter lilies. The actual data indicates a de minimis exceedance of chemical constituents that exceed water quality criterion established by the NCRWQCB.
Crockett United Lily-10	Eliminate or simplify the required Irrigation and Nitrogen Management Plan (INMP) requirements.
Crockett United Lily-11	Delay implementation of the Order by at least one (1) year and allow further adaptive management techniques that have been identified to potentially resolve the issue of soluble copper. We are working with NRCS, USDA and your staff to develop management techniques and costs estimates to incorporate biochar into our production cycle. Biochar has been shown to significantly reduce soluble copper in soils.
Crockett United Lily-12	We recognize the value of monitoring streams 3 times per year and would support the increased monitoring by water quality staff or through funding the Del Norte Resource Conservation District to pay for that level of monitoring.

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Crockett United Lily-2	The Smith River Plain Surface Water Monitoring Report 2021-2024 show no water quality exceedances at Morrison Creek, for diuron, ethoprop or imidacloprid and only one exceedance for dissolved copper. Morrison Creek was in near proximity to a few of our lily fields in the past. As a result, our lily fields have been moved away from the Morrison Creek drainage.
Crockett United Lily-3	The issue of soluble copper from lily bulb production requires additional evaluation from the RWQCB prior to adoption of the draft lily order. No evidence has been established that indicates soluble copper from lily production causes detrimental impacts to salmonids. The evidence provided by the fisheries agencies is based solely on laboratory experiments and has not been verified in field trials. The speculation that lily bulb production is negatively affecting fish populations in the Smith River is just that - speculation at best.
Crockett United Lily-4	Ironically, the number of salmonid adults returning to the Smith River has almost tripled in the past three years. While this could be attributed to better ocean conditions, it does not indicate that lily bulb production is causing detrimental impacts to salmonids.
Crockett United Lily-5	Over the past ten (10) years, Crockett United Lily Growers has embarked upon multiple adaptive management activities to effectively reduce the potential environmental impact of growing lily bulbs. These activities include: • Reducing the number of acres in production • Reducing lily bulb field size • Reducing the amount and toxicity of pesticides used in production • Establishing field buffers around active growing areas • Rotating out lily bulb production fields near streams negating the possibility of sediment transfer, irrigation water or storm water discharge to streams. • Integrating multiple field buffers between lily bulb fields to eliminate surface water connections to stream corridors. • Eliminating historical road and field access areas that could potentially cause sediment transfer or stormwater water discharge to surface waters. • Increasing field rotation time-frames from traditional rotations to allow increased regenerative soil recovery • Moving primary lily production areas to higher elevations that are not hydrogeologically connected to any surface waters.

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Crockett United Lily-6	These activities have been documented through reports and field observations by your staff. They represent a significant financial and time management commitment by Crockett United Lily Growers to reduce and potentially eliminate environmental impacts associated with lily crop production on our lands. The proposed draft lily order indicates that our adaptive management efforts have been futile as the direction of the Board is to regulate the demise of the lily industry through financial and administrative hardship. The order sets forth regulatory actions that cannot be financially absorbed by Crockett United Lily Growers. Adoption of the order, as proposed, will result in the complete demise of this specialty crop in California. It would appear that this result has been the goal of the Board all along.
Crockett United Lily-7	Of note, the draft Order proposes an additional monitoring site associated with our lily production area. This proposed monitoring site has no hydrogeologic connection to any surface waters and should be eliminated. Twice, this area was observed in the field by your staff who investigated and concluded the area has no connection to a surface stream or river.
Crockett United Lily-8	Reduce Surface Water Monitoring from 3 times per year to 1 time per year.
Crockett United Lily-9	Reduce Surface Water Monitoring Locations to the 4 locations where lily bulb production occurs - Delilah, Morrison, Mello and Kamph Creeks.
CT-1	CalTrout has long advocated for the Smith River, focusing on protecting the Smith River's unique status as California's premiere Salmon Stronghold. The protection of the Smith River, and especially its estuary, is vital to salmonid recovery in this important Salmon Stronghold. All life stages of several salmonid species use the Smith River estuary year-round, and this habitat is critical to their growth and physiological transition from fresh to salt water. We have been engaged in this issue since the initial public working groups began in 2012, and we are relieved to finally receive the North Coast Regional Water Quality Control Board's Draft Lily Bulb Order. We encourage the Board to finally establish regulations as soon as possible to protect water quality beneficial uses in the Smith River.
CT-10	In no case shall other management methods substitute for a reduction in TMDL-listed pesticide, herbicide, or fungicide application rate or the substitution of a TMDL-listed pesticide, herbicide, or fungicide with a lower-risk alternative.

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CT-11	Additional sensitive species inhabiting the watershed warrant consideration as well, including Southern Oregon/Northern California Chinook (<i>Oncorhynchus tshawytscha</i>), Coastal Cutthroat Trout (<i>Oncorhynchus clarkii clarkii</i>), eulachon (<i>Thaleichthys pacificus</i>), and green and white sturgeon (<i>Acipenser medirostris</i> ; <i>Acipenser transmontanus</i>). The watershed may also provide habitat for longfin smelt (<i>Spirinchus thaleichthys</i>), a species that no longer appears to be present in the Smith River. As documented in the draft order, dissolved copper poses a recognized toxic threat to these fish species as well. See Lily WDR at ¶ 55.
CT-2	CalTrout is concerned that the adaptive management process proposed in the Draft Lily Bulb Order will not lead to the reduction of TMDL listed pollutants below the thresholds set through the Regional Water Board process. As noted in Hurst, 2024, filter strips/vegetated barriers do not effectively manage pollution. Given that pesticide applications occur in an estuary that is frequently inundated, we do not support management practices designed to merely reduce the amount of storm water runoff into waterways; these practices will ultimately be ineffective in the estuary where their ability to meter out pollutants will wane during frequent floods that inundate the entire floodplain.
CT-3	The Draft Lily Bulb Order gives growers the option of using these ineffective methods for several adaptive management cycles (at least 7 years, possibly much longer) before a violation, at which point the Board could choose to grant a waiver. In summary, the adaptive management process as outlined in the order would allow continued exceedances of water quality limits for the foreseeable future as long as the Draft Lily Bulb Order's management practices are implemented.
CT-4	As an alternative to the surface water quality benchmarks proposed in the Draft Order, the RWB should implement a zero-discharge limit for listed TMDL pesticides, herbicides, and fungicides, with surface water discharge monitored at the "edge of field". A zero-discharge limit should reduce the risk of take to listed species and health risks to nearby communities. The RWB should implement a rigorous adaptive management program to ensure zero discharge of TMDL listed pollutants to receiving waters.

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CT-5	To best protect receiving waters, all TMDL-listed pesticide, herbicide, and fungicide applications should cease until the water quality standard is met. Once the water quality standard is met, a conservative fraction of the pesticide application rate described in Table II.5: Annual Active Ingredient Application Amount (lbs./year) Performance Standard by Tributary may be applied until monitoring shows no detection/zero discharge in ground and surface waters for a substantive length of time. After monitoring during this period continues to show no detection, TMDL listed pesticides, herbicides, and/or fungicides may be applied at the rates equal to or less than those shown in Table II.5, with continued monitoring demonstrating zero discharge/zero detection. If at any point detections occur, applications of these TMDL-listed pesticides, herbicides, and fungicides will be discontinued until the water quality standard is attained.
CT-6	We support implementation of other management practices such as riparian buffers in addition to a reduction in the application rate. These methods should be applied in addition to limitations on application rate, but in no case shall other management methods substitute for a reduction in TMDL-listed pesticide, herbicide, or fungicide application rate or the substitution of a TMDL-listed pesticide, herbicide, or fungicide with a lower-risk alternative.
CT-7	As the Regional Water Board moves toward issuing the forthcoming Draft Order, it must ensure that any protective measures adopted are adequate to prevent the Taking of listed species within the Smith River. This obligation extends at minimum to the federally threatened Southern Oregon/North California Coast coho salmon (<i>Oncorhynchus kisutch</i>) and the federally endangered tidewater goby (<i>Eucyclogobius newberryi</i>). Additional sensitive species inhabiting the watershed warrant consideration as well, including Southern Oregon/Northern California Chinook (<i>Oncorhynchus tshawytscha</i>), Coastal Cutthroat Trout (<i>Oncorhynchus clarkii clarkii</i>), eulachon (<i>Thaleichthys pacificus</i>), and green and white sturgeon (<i>Acipenser medirostris</i> ; <i>Acipenser transmontanus</i>). The watershed may also provide habitat for longfin smelt (<i>Spirinchus thaleichthys</i>), a species that no longer appears to be present in the Smith River.

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CT-8	Regulatory frameworks that fail to adequately constrain take expose the Regional Board to liability for vicarious take under the Endangered Species Act. The ESA broadly prohibits not only direct taking but also any attempt, solicitation, or causation of a prohibited act. See 16 U.S.C. § 1538(g). Courts have construed this provision to bar government entities from authorizing activities that foreseeably result in take. The First Circuit articulated this principle in <i>Strahan v. Coxe</i> , holding that the ESA "not only prohibits the acts of those parties that directly exact the taking, but also bans those acts of a third party that bring about the acts exacting a taking." 127 F.3d 155, 163 (1st Cir. 1997), cert. denied, 525 U.S. 830 (1998). There, Massachusetts officials were found liable for licensing commercial fishermen who used gear known to injure listed whale species. The Ninth Circuit has similarly and repeatedly affirmed the doctrine of vicarious take liability.
CT-9	We do not believe that the Draft Order as it is currently written will be effective in protecting beneficial uses, human health, and listed species. We propose a zero-discharge threshold for TMDL listed pesticides, herbicides, and fungicides in place of the receiving water limitations presented in the Draft Order, an adaptive management process that starts with attainment of water quality standards prior to further pesticide application, and a management approach relying on a reduction in TMDL listed pesticide, herbicide, or fungicide applications, or the use of a lower-risk pesticide, herbicide, or fungicide alternative.
Dettmar-1	After reviewing the General Waste Discharge Requirements for Easter Lily Bulb Cultivation ("Bulb Order") and the Draft EIR, I urge the Board to adopt the strictest available protections, implement a zero-tolerance policy on pesticide discharge into the Smith River and its tributaries, and enforce regulations with meaningful consequences.
Dettmar-10	The prescribed monitoring window is unlikely to capture first-flush peak concentration events.
Dettmar-11	The Order's progressive enforcement culminates in civil liability only after two documented exceedances — meaning years of additional harm before any meaningful consequence. When staff was asked at the February 18th Board meeting what would follow a third exceedance, the only answer offered was "additional management practices" — ongoing permission to contaminate. For decades, lily bulb growers have violated regulations with little to no consequence. This Board must not allow this to continue.
Dettmar-12	Adopt a zero-discharge requirement for all pesticides, consistent with Porter-Cologne, the Clean Water Act, and the Basin Plan.
Dettmar-13	Recognize salmon and other living cultural resources as integral to the cultural heritage of the Tolowa Dee-ni' Nation, and apply protections accordingly.

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Dettmar-14	Establish a hard trigger so that a third exceedance results in immediate revocation of coverage.
Dettmar-15	Explicitly acknowledge cumulative pesticide impacts in both the Order and EIR.
Dettmar-16	Strengthen monitoring to include automated first-flush sampling and sediment-bound pollutant analysis.
Dettmar-17	Align enforcement with the Cannabis Order's risk-tiered, individually accountable structure.
Dettmar-2	The Smith River Plain is the ancestral homeland of the Tolowa Dee-ni' Nation, and the cultural resources at stake here extend far beyond the archaeological record. The river, its tributaries, and the salmon that return to them each year are living cultural resources of profound and irreplaceable significance. Salmon are not merely a food source for the Tolowa Dee-ni' — they are central to ceremony, spiritual practice, oral tradition, and Tribal identity. The health of the salmon runs is inseparable from the health of the culture itself. Pesticide contamination of the Smith River watershed therefore causes cultural harm that cannot be remediated.
Dettmar-3	The sloughs and wetlands most impacted by lily bulb runoff — including Delilah Creek and Tillas Slough — are not simply water bodies; they are places of deep cultural memory and ongoing Tribal use. The Board's legal and moral obligations include protecting these living cultural resources with the same rigor applied to archaeological sites.
Dettmar-4	A zero-discharge requirement is not only justified — it is legally supported and arguably required. Under the Porter-Cologne Water Quality Control Act, the Clean Water Act, the North Coast Basin Plan, and the State Board's Anti-Degradation Policy (Resolution 68-16), the Board must prescribe requirements sufficient to ensure compliance with water quality standards. The North Coast Basin Plan requires that all waters be maintained free of toxic substances at concentrations producing detrimental physiological responses in human, plant, animal, or aquatic life. Pesticides are toxic by design. The current draft Order relies on best management practices and adaptive management — none of which guarantee compliance or substitute for enforceable prohibitions.
Dettmar-5	I urge the Board to align the Bulb Order with Order WQ 2023-0102-DWQ (the "Cannabis Order"), which provides a stronger model through clear discharge prohibitions, tiered compliance obligations, mandatory monitoring, and explicit enforcement authority.
Dettmar-6	Coho Salmon and Tidewater Goby have Critical Habitat designations in the low-flow tributaries most impacted by lily bulb pollutants — specifically Delilah Creek and Tillas Slough. The failure of voluntary management is not speculative; it is documented. These waterways were listed as impaired for copper in 2018, and in 2026 Delilah Creek was additionally listed as impaired for Diuron, a herbicide used in lily bulb cultivation — five years after the Board directed staff to develop a voluntary management strategy.
Dettmar-7	Granting continued discharge under these conditions is, in effect, issuing a permit to violate the ESA.

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Dettmar-8	Copper is applied at alarming rates, frequently causing exceedances after first-flush rainfall events in fall and winter — precisely when ESA-listed juvenile Coho Salmon seek off-channel refugia in the affected sloughs. Low pH from tannic soils further amplifies copper toxicity, as demonstrated by laboratory analysis.
Dettmar-9	The Order and EIR also fail to address cumulative impacts from multiple pesticides applied in combination.
DNRCD-1	Today, lily bulb production in Del Norte County is but a remnant agricultural industry from its heyday of the 70s and 80s with over 25 growers in Northern California and Southern Oregon. There are only three small growers left, comprising less than 200 acres in annual production. These growers have historically, and still are an integral part of the DNRCD, serving on the Board and establishing objectives for the district.
DNRCD-2	These adopted objectives include the need to effectively manage water quality and restore compromised agricultural lands. Specific objectives include: Water Quality: Effectively manage agriculture, forestry and natural resources towards improving water quality including improving drainage, erosion control and productivity on agricultural lands; restoring riparian habitat by establishing native vegetation; advocating on-site nutrient management; establishing buffer areas between tilled agriculture and natural stream corridors; and restoring natural fluvial processes for sediment transport. Agricultural Lands Restoration: Advocate and work with agricultural property owners and renters to restore compromised agricultural lands to increase productivity. Coordinate with the Natural Resource Conservation Service for education and financial assistance, and advocacy towards maintaining and preserving the utilization of historical agricultural lands in the county.
DNRCD-3	Clearly, the DNRCD advocates maintaining and preserving historical lily bulb production in the county. The NCRWQ Order includes multiple regulatory requirements that impose a cost burden on the lily growers which will likely result in the continued demise of the industry. This action is inconsistent with the objectives of the DNRCD to maintain and preserve the utilization of agricultural lands in the county.
DNRCD-4	As you are aware, the lily growers are involved in regenerative adaptive management activities with guidance from your staff. This continued adaptive management approach coupled with the de minimis pesticide residuals noted in the ongoing water quality monitoring results do not justify adopting regulations to eliminate this industry.

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DNRCD-5	There are constructive adaptive management and regenerative agricultural approaches that the DNRCD are pursuing with the lily growers. This includes working with the USDA, Agricultural Research group on the integration of biochar into lily production to minimize soluble copper entering surface waters.
DNRCD-6	Reduce Surface Water Monitoring from 3 times per year to 1 time per year.
DNRCD-7	Reduce Surface Water Monitoring Locations to the 4 locations where lily bulb production occurs – Delilah, Morrison, Mello and Kamph Creeks.
DNRCD-8	Eliminate or simplify the required Irrigation and Nitrogen Management Plan (INMP) requirements.
DNRCD-9	The DNRCD recognizes the value of monitoring streams 3 times per year and would support the increased monitoring by water quality staff or through funding to the DNRCD or Easter Lily Research Foundation to pay for that level of monitoring.
Dremann-1	Commenter, a licensed REALTOR in California (Crescent City) and Oregon (Brookings), requests the Board outlaw the use of any pesticides in the Smith River Plain, characterizing it as a very sensitive ecological area where any pesticide use can be detrimental to all aquatic life including salmon.
ELF-1	The Draft Order contains flaws and omissions that we believe will lead to continued unacceptable water quality impacts resulting from lily bulb operations. Most notably, there is a significant disconnect between the extensive, decades-long line of evidence that lily bulb operations have caused and continue to cause significant discharges of harmful pesticides and the extensive timeline for compliance that permits ongoing exceedances for several years. These ongoing exceedances have and will continue to cause unacceptable harm to the Smith River Plain, one of California's crown jewels. The Smith is California's last undammed river, a Wild and Scenic River that should host thriving populations of salmonids, but does not.

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ELF-10	The Draft Order's background section does not acknowledge several important events that precipitated the development of a WDR for lily bulb operations. (See Draft Order at pp. 5-8.) The Draft Order does not mention important monitoring showing additional evidence of copper toxicity, nor does it mention the Regional Board's earlier efforts to develop a permit, the abandonment of those efforts in 2018, or the ELF/PCFFA State Board petition that precipitated development of this Draft WDR. First, the Draft Order does not discuss the Smith River Plain Dissolved Copper Monitoring Report issued by the National Marine Fisheries Service (NMFS) and CDFW in 2018. This report found significant toxicity violations in the Smith River Plain waters: Of the 14 water samples collected in waters below lily fields, seven (50%) exceeded the aquatic life criterion to protect freshwater from chronic toxicity impacts. A total of six water samples (43%) exceeded criterion maximum concentration (CMC) for freshwater aquatic life criteria for reproductive and/or acute toxicity. None of the three control samples exceeded CCC or CMC.
ELF-11	The Draft Order also neglects previous recent attempts to develop a permit, which, if it had been considered, underlines the urgency of the request for a shorter timeline and more assertive measures. The Regional Board has been aware of serious pollution resulting from lily bulb farms since at the latest 1982. In 2011, the Regional Board began work on a waiver or WDR for discharges from lily bulb operations. No draft permit was ever released, as the Regional Board directed Staff to cease work on the draft in April 2018 and instead work on developing a purely voluntary Smith River Plain Water Quality Management Plan (2021 Management Plan). In response, ELF, Pacific Coast Federation of Fishermen's Associations, and Institute for Fisheries Resources filed their 2018 Petition with the State Water Resources Control Board in November 2018 pursuant to Water Code section 13320. This decades-long history is necessary context for our request for more assertive restrictions on discharges: the Regional Board is not acting on a blank slate.

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ELF-12	The Draft Order concludes that since "implementation of the 2021 Management Plan, in which all lily bulb growers agreed to voluntarily implement a suite of water quality management practices designed to reduce pesticide and nutrient runoff, erosion, and direct discharge of pollutants to surface waters, concentrations of synthetic pesticides and dissolved copper have decreased." Yet this conclusion is not supported by the evidence in the record. The 2025 SWAMP Report does not support a conclusion that concentrations have decreased. The 2025 SWAMP Report itself does not reach this conclusion—or even that concentrations have declined at all, despite having as a stated objective to "Determine water quality/pesticide status and trends in surface waters" and containing a section discussing trends. Yet the discussion of trends makes no mention of decreasing concentrations as compared to the 2018 SWAMP Report.
ELF-13	Pesticide detections in the 2025 SWAMP Report were higher in some cases than those detected by NOAA in its 2018 report, or by the Regional Board in its 2018 SWAMP Report. For instance, maximum diuron concentrations were higher in Morrison Creek in 2025, and ethoprop maximum concentrations were higher in Delilah Creek in 2025. Copper in Morrison and Rowdy Creeks also had higher maximum concentrations in the 2018 SWAMP report than the 2025 report. At the very least, this data shows that concentrations were not declining uniformly throughout the lily bulb production area. And without a robust statistical analysis of all of the data available, it is difficult to see how the Regional Board reached its conclusion that concentrations were decreasing.
ELF-14	In presentations by the Regional Board in March 2026, staff stated that there has been a decrease in planted lily bulb acres over the past several years. Reduction in acreage, not changes in management practices, therefore, could be driving any reduction in pollutant concentrations. It is also possible that reduction in pesticide application could be responsible for any decline in concentrations. But California Department of Pesticide Regulation (DPR) data cited by the Draft Order to show decreases in copper application only covers 2012-2021. This data, therefore, cannot show any effect from the 2021 Management Plan. The data simply does not support an interpretation that the management practices themselves had an impact. The takeaway from the 2025 SWAMP Report is that despite purportedly improving management practices, and despite a reduction in acreage, exceedances are still occurring.

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ELF-15	The 2021 Management Plan, and to an extent the Draft Order, rely heavily on imposition of setback requirements between lily fields and waterways. Despite the well-known environmental benefits resulting from protecting riparian areas, the evidence does not show that setbacks alone will control pesticide discharges from lily fields, and, in fact, evidence shows that they will not work without significant reductions in pesticide application. Key Element 2 of the Nonpoint Source Policy requires a Regional Board to find that required management practices will have a "high likelihood" of achieving water quality objectives. Relying heavily on setbacks alone therefore raises a potential violation of the Policy. The reason setbacks do not work in the Smith is because of two factors: the extreme amounts of copper and other pesticides applied to lily bulbs, and the extreme weather. The Smith River Plain is one of the rainiest places in the US, with precipitation averaging 75 inches per year or more.
ELF-16	The only study cited by the Draft Order on the effectiveness of management practices of the type recommended by the 2021 Management Plan (and adopted as components of Tier 1 adaptive management), show that they do not work. The study by Matt Hurst and his team demonstrates that dissolved copper discharge was not reduced by 80-foot setbacks between lily bulb fields and waterways. But even under ideal conditions, the strips removed less than 40% of copper. And when the strips were saturated by heavy rains in December and January, they removed almost no copper. The Hurst study contains numerous pictures of filter strips completely submerged with stormwater. Constructed berms were washed away under heavy rains. Further, reporting conducted under the 2021 Management Plan reveals that growers widely implemented management practices such as "filter strip," "vegetative barrier," "maintain stream setbacks," and "riparian area support". Yet, as demonstrated by the 2025 SWAMP Report, exceedances continued during this period.

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ELF-17	The Draft Order requires strips that are even smaller than those studied in the Hurst report. The vegetated strips in the Hurst study were designed to be 80 feet wide, far wider than the 50-foot streamside areas proposed in the Draft Order. It is unclear why the Draft Order relies on setbacks that are smaller than those shown not to function. The Draft Order cites two other studies purporting to demonstrate the effectiveness of setbacks. Yet neither of these studies consider conditions as extreme as in the Smith. And in any event, as the Draft Order points out, the Fischer study recommends buffer widths up to 100 feet, and both studies recommend varying setback widths based on hydrology. The Regional Board should take this recommendation and significantly increase buffer widths.
ELF-18	Setbacks do not address groundwater discharge of pollutants. Setbacks trap sediment and allow any pollutants within that sediment to begin migrating to groundwater. This is especially concerning for persistent pollutants like copper, diuron, and imidacloprid. The 2025 SWAMP Report also notes that levels of imidacloprid and diuron remain detectable even outside of the wet season, indicating that groundwater transport may be responsible for discharge. Management practices such as filter strips and setbacks will not address groundwater transport of these pollutants: only reduction in their use will do so.
ELF-19	The Draft Order creates a new water quality benchmark for copper—the Toxicity Unit (TU)—but the order does not provide a basis for its derivation. The TU benchmark is based on outputs from the Biotic Ligand Model. One violation of the benchmark constitutes an acute violation, and two violations in a year constitute a chronic violation. The Draft Order states that the derivation of the TU is described in Attachment D of the Order. However, Attachment D contains no such definition. As a result, the public may not evaluate the derivation of the TU. And while the Regional Board may establish water quality standards that are more stringent than federal law, it has no authority to set standards that are less protective. (33 U.S.C. § 1370.) Without access to the TU methodology, the public cannot evaluate whether the TU is more or less stringent than relevant standards set by the Basin Plan or federal law. The Regional Board must provide this methodology and an opportunity for the public to comment on it.
ELF-2	We believe that these impacts additionally constitute violations of the Porter Cologne Water Quality Act and binding state water quality policies. They also reflect a failure to give adequate weight to Tribal beneficial uses, environmental justice concerns, and the extraordinary ecological value of the Smith River estuary, all of which the Draft EIR itself recognizes as central to the proposed project.

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ELF-20	The Draft Order provides for a complicated, multi-step iterative process that allows growers several tries before subjecting them to potential enforcement. Under the Adaptive Management Program, growers in some watersheds may await a further water quality exceedance, then will be placed in Tier 1 adaptive management. In Tier 1, growers can choose one of several minimally prescriptive options. If a further exceedance is detected, only then does a grower move to Tier 2. And only after a third exceedance does the grower finally become subject to enforcement. By staff's calculations, a violation of the order could not occur for ten years. The Regional Board fails to show—as is its burden—that the 10-year minimum time schedule is as short as practicable. Under the Nonpoint Source Policy, a time schedule for compliance "may not be longer than that which is reasonably necessary to achieve an NPS implementation program's water quality objectives." The Draft Order omits this language from its discussion of its compliance with the Nonpoint Source Policy. And it provides no evidence that immediate compliance (or a much, much shorter time schedule) is not feasible.
ELF-21	While some watersheds start in Tier 1 due to historical exceedances, Tillas Slough is excluded despite experiencing two acute and four chronic exceedances between 2021 and 2024. Likewise, Lower Rowdy Creek is excluded despite having a chronic exceedance during that period. There is no reason to exclude these watersheds from the advanced schedule that the other creeks are on.
ELF-22	There is limited or no evidence that management practices of the types available in Tier 1 will be effective. Key Element 2 of the Nonpoint Source Policy requires a Regional Board to find that required management practices will have a "high likelihood" of achieving water quality objectives. The Regional Board fails to fulfill these requirements here because the evidence in the record and the analysis and findings in the Draft Order do not support the conclusion that the Tier 1 requirements will achieve water quality objectives. Under Tier 1, growers may choose only one of three options to remain in compliance: "Treat and Control Management Practices," "Watercourse Setback," or "Active Ingredient Application Performance Standard." Yet it is not clear from the record that any one of these options (or even all three in combination) will be effective.
ELF-23	There is no evidence that setbacks—even the 100-foot setbacks available as the "Watercourse Setback" option will successfully eliminate exceedances. As a result, this option—by itself—cannot be found to have a "high likelihood" of addressing the pollution problem and thus should not be available as an option by itself.

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ELF-24	The pesticide performance standards in the "Active Ingredient Application Performance Standard" are unsupported by analysis that these amounts will result in attainment of water quality benchmarks. While we support firm limits on pesticide application to the fullest extent of the Regional Board's legal authority, those limits must be supported by analysis showing that they will be effective. Further, it is unclear how growers are expected to pro-rate the amount of pesticides applied in the event that more than one grower is operating in the same watershed: setting a limit without a clear method to apportion responsibility is a recipe for confusion at best, violations at worst.
ELF-25	The "Treat and Control Management Practices" are so vaguely defined as to be almost meaningless. The Order must be revised to include specific requirements if this approach is used. Further, the management practices already implemented as part of the 2021 Management Plan have not resulted in eliminating exceedances. If this option is intended to require more or different management practices than those implemented previously without success, the Order must be revised to specify that requirement.
ELF-26	Growers have had decades to develop management practices that could effectively control pesticide discharges. But they have failed to do so on their own initiative, and even under the 2021 Management Plan, exceedances have continued. The Regional Board should begin by requiring all growers to adopt a WQMP immediately that conforms to the requirements of the "Certified WQMP" in the Draft Order. Following imposition of the WQMP, detections of pesticides should lead to immediate imposition of edge-of-field monitoring for all fields in the watershed where the detection occurred. Any further exceedances after the WQMP is imposed should constitute permit violations and subject the grower to immediate investigation and potential enforcement. For too long, beneficial users have borne the burden of degraded water quality while the Regional Board delayed imposing a permit and allowed growers to experiment with failed management practices. The Regional Board must shift the risk onto the growers by conducting enforcement when they occur.

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ELF-27	The Draft Order does not include requirements relating to a suite of other pesticides that are commonly used in the Smith, including metam sodium, 1,3-dichloropropene, and permethrin. These pesticides have been detected in surface and ground waters and pose threats to beneficial uses, including human health and aquatic life. Permethrin was detected at a level exceeding aquatic life benchmarks in a sample that had a positive result for toxicity. Water Code section 13263 requires control of discharges of waste via WDRs; and the Regional Board does not have authority to simply ignore certain discharges. The Regional Board should revise this Draft Order to include monitoring for these pesticides and measures to control exceedances. Additional pesticides used in the Smith River Plain include chlorthalonil, napropamide, and phorate, all of which have serious human and environmental risks.
ELF-28	The Monitoring and Reporting Program (MRP) calls for surface water monitoring three times per year at particular locations. We are concerned that this requirement is insufficient and underspecified. Sampling should occur during the dry season to track pesticide transport via shallow groundwater. It should also occur during the "first flush" storm in the fall, even if that storm is before November 1. A sample should also be taken during saturated conditions that tend to occur by December or January, as documented in the Hurst report. Additionally, in dry winters, samples should be taken at regular intervals even if no Major Storm occurs. Monitoring must include the full suite of pesticides regularly applied in the Smith River plain, including 1,3-dichloropropene, permethrin, and metam sodium.

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ELF-29	Edge-of-field monitoring must be mandatory when pesticides are detected in order to isolate the causes of detections. Even where pesticides are not detected, edge-of-field monitoring should be implemented on a representative basis. Edge-of-field monitoring should be publicly available and not associated with an anonymous ID. The Regional Board here gives no justification for anonymity for edge-of-field monitoring results. The Nonpoint Source Policy provides that "monitoring programs should be reproducible . . . and be available to the public." The Regional Board should also require independent verification of at least a portion of monitoring results. Key Element 4 of the Nonpoint Source Policy requires "feedback mechanisms" that are capable of ensuring that the program is achieving its stated purposes. Last, the MRP permits an unspecified delay while the Coalition(s) form, develop workplans, and then begin monitoring. The Regional Board should not permit such a lengthy gap: monitoring should commence immediately upon adoption of the Order.
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ELF-3	All programs for control of nonpoint source (NPS) pollution must comply with the Nonpoint Source Policy. Any nonpoint source control program must comply with all five of the Policy's mandatory Key Elements. These elements are: KEY ELEMENT 1: An NPS control implementation program's ultimate purpose shall be explicitly stated. Implementation programs must, at a minimum, address NPS pollution in a manner that achieves and maintains water quality objectives and beneficial uses, including any applicable antidegradation requirements. KEY ELEMENT 2: An NPS control implementation program shall include a description of the management practices (MPs) and other program elements that are expected to be implemented to ensure attainment of the implementation program's stated purpose(s), the process to be used to select or develop MPs, and the process to be used to ensure and verify proper MP implementation. KEY ELEMENT 3: Where a RWQCB determines it is necessary to allow time to achieve water quality requirements, the NPS control implementation program shall include a specific time schedule, and corresponding quantifiable milestones designed to measure progress toward reaching the specified requirements. KEY ELEMENT 4: An NPS control implementation program shall include sufficient feedback mechanisms so that the RWQCB, dischargers, and the public can determine whether the program is achieving its stated purpose(s), or whether additional or different MPs or other actions are required. KEY ELEMENT 5: Each RWQCB shall make clear, in advance, the potential consequences for failure to achieve an NPS control implementation program's stated purposes.
ELF-30	The reporting schedule allows for annual reporting via an annual compliance form. However, this schedule can allow months to pass before the Regional Board and the public learn of an exceedance. If monitoring reveals an exceedance, that should be reported to the Regional Board immediately so that it can begin taking the next steps.

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ELF-31	The lack of evidence supporting the finding that management practices control discharge belies the conclusion of the Draft Order's antidegradation analysis. That analysis concludes that the requirements in the Order constitute BPTC and that "any limited degradation that may occur as a result of Commercial Lily Bulb Operations, despite implementation of measures required by this Order, is consistent with the maximum benefit to the people of the state." Because the finding that management practices will reduce exceedances of water quality objectives is unsupported, the finding that the adaptive management schedule and the Order's other requirements constitute BPTC or are consistent with the maximum benefit to the people of the state are also unsupported and therefore legally insufficient. Failed approaches cannot constitute BPTC. In addition, the Draft Order fails to adequately balance the costs of failing to control pollution. It contains a placeholder in the discussion of social and environmental costs of the ongoing discharge. The Regional Board must fully analyze these impacts and provide a discussion for public comment. The agency must take every precaution to protect water quality for threatened Coho.
ELF-32	The Draft EIR also appears to fall short in its alternatives analysis. CEQA requires the Regional Board to analyze a reasonable range of alternatives that would avoid or substantially lessen the project's significant impacts. Yet the Draft EIR's alternatives discussion focuses on variations of the proposed regulatory approach and the No Project Alternative, while failing to meaningfully analyze an alternative that would prohibit or phase out lily bulb cultivation in the most sensitive areas of the Smith River Plain. That omission is particularly significant here because scoping comments expressly requested evaluation of halting lily bulb farming and restoring the estuary, and because the Draft EIR itself identifies ongoing controversy over whether the proposed project goes far enough to control pesticide and copper pollution.

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ELF-33	The Draft Order relies in large part on applying aspects of the 2018 ESJ Order to the Smith River Plain, but the precedential value of the ESJ Order is less than what the Draft Order perceives. Only provisions expressly designated as precedent have binding power. Even so, an enactment's precedential value is "coextensive only" with similar facts. The industry regulated by the ESJ Order is several orders of magnitude larger and more complex than the lily bulb operations regulated by the Draft Order. The Central Valley contains tens of thousands of growers growing hundreds of crops across hundreds of thousands of acres. The Smith River Plain has only a few growers, on a few hundred acres in any given year, growing a single crop. It makes little sense to interpose a new organization—a Coalition—to manage these few operations. The potential for just a few operations to form a coalition that regulate those same operations would be absurd. A coalition structure would only add complexity and cost while robbing the program of transparency. The ability for a single grower to form a coalition to hide its own data gives rise to "risks associated with the fox guarding the henhouse."
ELF-34	The Draft Order does not contain certain components required by the ESJ Order that could aid in protection of beneficial uses, including the precedential requirement that growers prepare Sediment and Erosion Control Plans. These plans must be required, or at the minimum the Regional Board must explain how the Order's requirements are equal to or more protective than the Sediment and Erosion Control Plan requirement in the ESJ Order.
ELF-35	The Draft Order's section 13149.2 analysis is cursory and insufficient. It fails to summarize anticipated water quality impacts in impacted communities, including to tribal communities located in the immediate area or whose fisheries rely on Smith River salmonids, including the Smith River Rancheria and the Tolowa Dee-Ni' Nation. It also fails to acknowledge impacts to low income communities located in or near Smith River who have experienced or are at risk of negative health impacts from proximity to heavy pesticide use in lily bulb operations, groundwater contamination, and surface water contamination. The inadequacy of this discussion is especially stark because the Draft EIR itself identifies "health and environmental justice concerns" as a central area of controversy.

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ELF-36	The analysis does not adequately identify measures within the Board's authority to address those impacts. (Wat. Code § 13149.2, subds. (b)(2), (c).) While it alludes to some measures taken in the Draft Order, those measures are not the full suite of the Regional Board's powers. The Regional Board could also impose more stringent time schedules, monitoring, and permit requirements. It could also adopt a basin plan prohibition on any pesticide or other pollutant discharge resulting from the cultivation of lily bulbs outright. Activities that result in discharge are not vested rights, and a Regional Board may prohibit those discharges. (See Wat. Code § 13263, subd. (g).) A compliant analysis must analyze the Regional Board's powers and explain why the Board chose the path that it did.
ELF-37	The Draft Order does not mention or acknowledge that the State and Regional Boards have both adopted resolutions on racial equity. Both resolutions acknowledge that indigenous people, people of color and other disadvantaged groups experience worse environmental outcomes and that displacement of indigenous people has resulted in those people no longer controlling ancestral homes or being able to take advantage of the beneficial uses of water which were theirs historically. And both resolutions commit to the protection of water quality and attainment of beneficial uses for the benefit of disadvantaged groups. Yet these resolutions appear to have been forgotten in the drafting of this Order, despite the clear and present harm to people, salmonids, and other beneficial uses that will persist under its terms.
ELF-38	The Draft Order requires the following revisions, at a minimum, in order to comply with the law and to achieve its stated goals of reaching water quality objectives on the shortest practical timeline: • Revisions to the procedural history and reference to all available monitoring data • Definition of the Toxicity Unit for Copper • Revisions to minimum setback widths to 100 feet • Elimination of Tier 1 of Adaptive Management and revisions to Tier 2 • Additional monitoring requirements • Improved antidegradation analysis • Elimination of data anonymity and the coalition model • Improved A.B. 2108 and racial justice analysis
ELF-39	The Draft Order contains no specific protections or provisions relating to the tidewater goby. This omission only makes sense if the Regional Board believes that its provisions are protective of the species, a conclusion that the Regional Board should make explicit if it has evidence that it is true.

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ELF-4	Courts have confirmed that a Regional Board must comply with the Nonpoint Source Policy as it is written. In <i>Monterey Coastkeeper v. State Water Resources Control Board</i> (2018) 28 Cal.App.5th 342, 370, the Court of Appeal held that a waiver of WDRs for agricultural discharges in the Central Coast violated the Policy because it improperly substituted Key Element 3's requirement of specific time schedules for a "vague requirement of 'improved' management practices and a 'conscientious' effort." The Court held that this substitution constituted unlawfully "rewriting—or amending" the Policy.
ELF-40	The Draft Order relies on a report by Dr. Matt Hurst finding that high copper is often associated with high DOC, stating that high DOC levels can be somewhat protective despite high copper levels. But the NMFS Monitoring Report provides evidence that high DOC levels do not always accompany high copper levels, even in the wet season. The Hurst study found a number of data points with both low DOC and high copper. Second, Hurst noted that DOC tends to be lower in the dry season, meaning DOC would give no protection during the summer. Last, the study that the Hurst paper and the Draft Order rely on—McIntyre (2008)—did not consider Chinook or other salmonids. And it explicitly noted that Coho olfaction undergoes significant changes during adaptation to salt water, something that is very likely to be taking place as juvenile Coho take refuge in Smith River Plain tributaries on their way to the ocean.
ELF-41	In its Petition for Review filed with the State Board in November 2018 (2018 Petition), one of the undersigned organizations, Environmental Law Foundation (ELF), provided detailed background information on the history of extensive water pollution stemming from lily bulb operations in the Smith River plain. That letter is attached here with its exhibits and is incorporated by reference.
ELF-42	The MRP permits an unspecified delay while the Coalition(s) form, develop workplans, and then begin monitoring. The Regional Board should not permit such a lengthy gap: monitoring should commence immediately upon adoption of the Order. Growers should be individually responsible for monitoring until such time as Coalitions are prepared to do so and the Workplan is approved; and the Regional Board should act as a backstop to perform monitoring if the growers do not. A better solution, discussed below, would be to remove the Coalition option entirely.
ELF-43	If the Regional Board chooses to stick with the coalition model, it should exercise its discretion to request all data whenever pesticide detections occur—something allowed by the current Draft Order (and the ESJ Order).
ELF-44	Sampling should occur during the dry season to track pesticide transport via shallow groundwater. The 2025 SWAMP Report notes that levels of imidacloprid and diuron remain detectable even outside of the wet season, indicating that groundwater transport may be responsible for discharge.

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ELF-5	WDRs must also comply with the Statement of Policy with Respect to Maintaining High Quality Waters in California (Antidegradation Policy), which requires that where a water body was of a higher quality than the water quality objectives as of 1968, that high quality must be maintained unless the state can meet certain narrow exceptions contained in the Policy. In AGUA, supra, 210 Cal.App.4th 1255, the court held that a general WDR for dairy operations was invalid for failure to comply with the Antidegradation Policy. Among other things, it held that a Regional Board must conduct an analysis to determine whether water at issue is high quality. If a Regional Board determines that the waters are high quality and thus that the Policy applies, then before allowing any degradation, it must make a finding that any such degradation is consistent with the maximum benefit to the people of the state. And the Regional Board must impose Best Practicable Treatment and Control (BPTC) and find that any degradation does not result in pollution or nuisance.
ELF-6	In 2022, the Legislature amended Porter-Cologne to add a requirement that when "issuing or reissuing" regional or statewide WDRs or amending state water quality policy, a water board must "make a concise, programmatic finding on potential environmental justice, tribal impact, and racial equity considerations related to the issuance." (Wat. Code § 13149.2, subds. (b), (c).) The Water Board's findings must be based on information in the record, summarize how the permitted activity will impact water quality in disadvantaged or tribal communities as a result of the activity, and identify measures within their authority to address the anticipated impacts from the activity.
ELF-7	In its Petition for Review filed with the State Board in November 2018, ELF provided detailed background information on the history of extensive water pollution stemming from lily bulb operations in the Smith River plain. Lily bulb growers apply extraordinary amounts of pesticides in order to grow their crop. Application rates for copper, imidacloprid, ethoprop, diuron, and other pesticides are among the highest in the state. These pesticides are routinely detected in surface waters throughout the Smith River plain, frequently at levels that violate relevant water quality standards. The creeks and streams feeding the Smith River estuary should provide key rearing habitat for ESA-threatened Coho salmon as well as other salmonids, especially as the upper Smith River is the last major undammed river in the State. Yet populations are consistently low. State and federal wildlife agencies have identified water quality impairment directly caused by lily bulb farming as a key limiting factor for salmonid recovery. That letter is attached here with its exhibits and is incorporated by reference.

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ELF-8	Since the filing of that petition in 2018, fisheries on the West Coast have suffered greatly. The California Chinook commercial fishery has been closed since 2022. Chinook escapement in the Smith River reached its lowest number on record in the 2022-2023 season (8,206 individuals), but rebounded somewhat by the 2024-2025 season (27,427 individuals). Likewise, Steelhead escapement reached a low of 4,450 individuals in 2023 and rebounded to 7,689 individuals in the 2024-2025 season. And the report estimates Coho escapement of 2,365 individuals. The recovery goal for Coho in the Smith River is 6,800 spawners.
ELF-9	Scientific research continues to show the importance of estuarine habitats like the Smith River plain for rearing Coho. Estuaries serve as "stopover" habitats where Coho can gain energy and increase body size before venturing into the ocean. And Coho display variable life histories where some individuals migrate from spawning areas earlier than average, and spend additional time in estuaries. Coho juveniles can adapt to brackish estuary water and can even return upstream later in the first year of life to overwinter.
ELRF-1	The Easter Lily Research Foundation (a 501(c)(3) organization established for lily research, signed by President Ezekiel Harms, states it is willing and able to collect acreage fees and submit data to the North Coast Regional Water Board if the Board chooses to use the Foundation for this purpose.
EPIC-1	We incorporate by reference the comments on the Draft Lily Bulb Order submitted separately by the Environmental Law Foundation on behalf of Save California Salmon and co-signatories ("WDR Comments"). These EIR-specific comments focus on the legal sufficiency of the Draft EIR under the California Environmental Quality Act (CEQA) and identify ways in which the document must be strengthened before the Board can lawfully certify it. As detailed in the WDR Comments, the evidence in the record compels a far more assertive regulatory response than the Draft Order provides. The same record-based failures that undermine the Draft Order also undermine the Draft EIR: an EIR that concludes impacts are less than significant on the basis of regulatory commitments that the record affirmatively shows have not worked, and that defers core analytical questions to future adaptive management iterations, cannot satisfy CEQA's informational mandate. For the reasons set forth below, we respectfully request that the Board revise and recirculate the Draft EIR, or at minimum substantially revise it before certification.

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EPIC-10	The Draft EIR's alternatives discussion focuses primarily on the No Project Alternative and reduced regulatory scope options, including reduced streamside area setbacks. That is too narrow. The EIR's own scoping record expressly includes public requests to halt lily bulb cultivation in the most sensitive floodplain areas and to restore estuarine function. Yet, no such alternative was considered. At minimum, the revised EIR must evaluate the following alternatives: • A zero-discharge alternative for synthetic pesticides and copper into fish-bearing waterways and their tributaries. • A wet-weather prohibition alternative, which would ban pesticide application during defined wet-weather and first-flush periods. • An expanded, hydrologically-based buffer alternative, with setback widths calibrated to actual hydrologic connectivity and fish-bearing status rather than a uniform 50-foot standard. • An immediate certified WQMP alternative, which would require all enrollees to submit certified Water Quality Management Plans upon enrollment rather than awaiting Tier 2 adaptive management triggers. • An independent monitoring alternative, which would replace or supplement coalition-based monitoring with third-party oversight. • A high-risk field restriction alternative, which would prohibit or phase out lily bulb cultivation in fields with direct hydrologic connectivity to the estuary and its immediate tributaries.
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EPIC-11	The EIR's analysis appears to focus on cultural resources in the archaeological and site-disturbance sense, rather than on living cultural practices that depend on salmon, clean water, functioning wetlands, and access to the estuarine ecosystem. Salmon, shellfish and smelt are not merely a biological resource; they are central to Tolowa Dee-ni' subsistence, ceremony, and cultural continuity. Continued contamination of juvenile rearing habitat, estuary habitat, sloughs, nearby coastlines and tributaries threatens those living uses in ways that must be disclosed and analyzed under CEQA. Consideration of these resources was specifically added as a requirement for EIRs following the passage of AB 52 enacted in 2014 and codified in Public Resources Code section 21080.3.1 et seq. Public agencies must, when feasible, avoid damaging effects to any tribal cultural resource. Pub. Res. Code § 21084.3(a). The EIR must be revised to: • specifically analyze impacts to living Tribal cultural practices that depend on functioning salmonid populations and clean water; • address the disproportionate burden borne by Tribal communities as a result of degraded water quality and impaired fisheries; and • evaluate the adequacy of the Project's protections in light of the Tolowa Dee-ni' Nation's treaty rights, subsistence practices, and ceremonial uses.
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EPIC-12	The Draft EIR's own scoping summary records specific concerns from residents regarding pesticide exposure, chronic illness, contaminated soil, and the proximity of an elementary school adjacent to lily bulb fields. The public record includes reports of acute spray drift exposure, including burning skin and eyes, tongue swelling, blisters, and difficulty breathing, as well as reported chronic symptoms including: skin rashes, nausea, respiratory issues, headaches, digestive and urinary problems, and concerns about elevated cancer incidence in the community. CEQA does not require proof of legal causation before requiring disclosure and analysis of credible community health concerns. What CEQA requires is that the EIR fairly disclose and analyze the reasonably foreseeable health consequences of the project, including exposure to airborne pesticide drift, groundwater contamination of domestic wells, and the cumulative community health burden of long-term proximity to intensive pesticide use. (CEQA Guidelines §§ 15126, 15126.2; see also <i>Californians for Alternatives to Toxics v. Department of Food & Agriculture</i> (2005) 136 Cal.App.4th 1.) The EIR must be revised to: • Evaluate potential community exposure pathways, including spray drift from adjacent fields, volatilization of applied pesticides, and surface transport under wind conditions; • Analyze domestic well contamination risks in light of the 2025 finding that pesticides were detected in six of nine domestic wells sampled; • Address school adjacency concerns and the potential for children's acute and chronic exposure; • Evaluate the cumulative health burden on the Smith River community as a low-income rural community with limited access to healthcare; and • Assess the Project's compliance with the State Water Board's Racial Equity Resolution and the Regional Board's own environmental justice commitments.
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EPIC-13	The Draft EIR acknowledges that pesticides and nitrate were detected in irrigation and domestic wells located within current and historical lily bulb cultivation areas. The 2025 SWAMP Report further establishes that imidacloprid and diuron are detectable outside of the wet season, strongly suggesting groundwater transport as a discharge pathway independent of storm-event surface runoff. The EIR's analysis is disproportionately focused on surface runoff pathways and does not adequately evaluate: • the persistence of copper and pesticide residues in soils and shallow groundwater; • seasonal lag effects that may result in continued discharge to receiving waters even after surface runoff controls are improved; • cumulative loading to shallow aquifers over years of intensive cultivation; • the adequacy of surface-buffer strategies where groundwater transport, rather than overland flow, is the dominant pollutant pathway; and • the risk that persistent pesticides (including copper, diuron, and imidacloprid) will continue to affect domestic wells even after surface management practices are improved. CEQA requires analysis of the complete range of significant environmental effects, including those that occur through indirect or delayed pathways. The groundwater pathway is neither indirect nor speculative: the record directly documents pesticide presence in wells.
EPIC-14	The Draft EIR's antidegradation analysis cannot satisfy these requirements because: • the EIR concludes that the Order's requirements constitute BPTC, but the record shows the management practices the Order relies upon have not eliminated exceedances; • management practices that the Hurst study demonstrates to be ineffective under Smith River conditions cannot, by definition, constitute BPTC; and • the EIR does not adequately analyze the social and environmental costs of continued degradation during the compliance period, including the "incalculable" value of ESA-listed species that courts have recognized must be given the highest priority. (Tennessee Valley Auth. v. Hill (1978) 437 U.S. 153, 187, 194.) The EIR must be revised to provide a legally sufficient antidegradation analysis that honestly confronts what the record shows.

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EPIC-15	Before certifying the EIR, the Regional Board should revise the Draft EIR to: 1. Provide substantial evidence supporting any less-than-significant conclusion, specifically addressing why the Project is likely to achieve water quality objectives given the documented failure of comparable management practices; 2. Analyze the environmental consequences of continued exceedances during the adaptive management compliance period; 3. Strengthen the cumulative impacts analysis to address the interaction of habitat simplification, hydrologic alteration, estuarine impairment, climate-related runoff variability, groundwater contamination, grazing impacts, roading impacts, and ongoing pollutant loading; 4. Revise the mitigation analysis to address the record-documented failure of 80-foot setbacks and acknowledge that surface management practices cannot address groundwater transport pathways; 5. Revise the mitigation analysis to be less vague by requiring specific performance standards; 6. Significantly shorten the 10-year delay of enforcement; 7. Evaluate the full range of feasible alternatives, including zero-discharge, wet-weather prohibitions, expanded buffers, immediate certified WQMPs, independent monitoring, and high-risk field restrictions; 8. Improve the analysis of Tribal beneficial uses and living cultural impacts; 9. Expand the environmental justice and community health analysis; 10. Provide a legally sufficient groundwater transport analysis; and 11. Revise the antidegradation analysis to bridge the analytic gap between ongoing exceedances and the conclusion that BPTC is being applied.
EPIC-16	An EIR's analysis must evaluate impacts during the entire project implementation period, not merely after a project is presumed to be successful. CEQA Guidelines § 15126.2 expressly requires disclosure of significant environmental effects that may occur as a result of phased implementation. Where a project involves staged compliance with continued interim pollutant loading, the EIR must analyze the environmental consequences of that interim period. (See Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova (2007) 40 Cal.4th 412, 449.)
EPIC-17	EPIC and other commenters have repeatedly suggested management practices that would actually reduce these impacts to less than significant. See WDR Comments.

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EPIC-18	The EIR also touches on grazing impacts and nitrogen pollution, but does not address the ongoing cumulative impacts with the rotation of lily bulbs and grazing and the serious impacts of estuary and riparian grazing. The serious impacts of roading and ditching are not addressed as a cumulative impact despite the substantial evidence that roads and ditches are directly responsible for conveying sediments and chemicals to impaired waterways.
EPIC-19	These setbacks are not defined and the board does not address issues such as soil type, groundwater connectivity, yearly rainfall, slope, roading and ditch impacts, or whether grazing will be allowed within these filter strips and set backs. This makes it impossible to assess whether they will be effective.
EPIC-2	The Draft EIR acknowledges that surface water monitoring between 2013 and 2024 documented synthetic pesticides, including diuron, ethoprop, and imidacloprid, and dissolved copper in downstream tributaries and sloughs at levels that periodically exceed U.S. EPA aquatic life benchmarks. The 2025 SWAMP Report confirms that exceedances have persisted through the four years since the adoption of the 2021 Management Plan: imidacloprid exceedances were detected in 40% of samples; copper exceedances of the chronic BLM criterion occurred in 100% of Lower Mello Creek samples and 56% of Lower Delilah Creek samples; and concentrations correlated strongly with application rates and increased markedly downstream of lily bulb operations. These exceedances have been so severe that the Smith River recently was listed for several agricultural chemicals under the state's 303(d) list. These listings can directly be attributed to the years of inaction by this board in creation of this permit. The EIR cannot conclude that water quality impacts will be less than significant when its own cited record demonstrates that the very management practices the Project relies upon have not significantly decreased those impacts over multiple years of implementation. A less-than-significant conclusion premised on the assumption that a regulatory framework will function as intended is not supported by substantial evidence where the record shows the framework's antecedents have not worked.
EPIC-20	The public record includes reports of acute spray drift exposure, including burning skin and eyes, tongue swelling, blisters, and difficulty breathing, as well as reported chronic symptoms including: skin rashes, nausea, respiratory issues, headaches, digestive and urinary problems, and concerns about elevated cancer incidence in the community. The Draft EIR's own scoping summary records specific concerns from residents regarding pesticide exposure, chronic illness, contaminated soil, and the proximity of an elementary school adjacent to lily bulb fields.

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EPIC-21	Water Code section 13149.2 separately requires that when issuing or reissuing WDRs, a water board must make programmatic findings on tribal impact, environmental justice, and racial equity considerations, and must identify measures within its authority to address those impacts. As the WDR Comments explain in detail, the Draft Order's section 13149.2 analysis is cursory and insufficient. The Draft EIR, as the foundational environmental document, must provide the analytical basis for those findings. It currently does not.
EPIC-22	Whether viewed from a civil rights disparate impact lens or from a conventional cumulative impact lens, lead agencies that receive state or federal funding should include a disparate impact analysis in their CEQA analysis under both state and federal law (Cal. Gov. Code § 11135; Title VI of the Civil Rights Act of 1964) and further include less discriminatory options in any alternatives analysis.
EPIC-3	NOAA's 2014 Final Recovery Plan for the SONCC coho salmon identifies copper concentrations in the Smith River as potentially causing acute toxic effects and impairing olfaction and reproduction in coho salmon at concentrations far below the California Toxics Rule standard. The 2018 NMFS/CDFW Monitoring Report found that dissolved copper has neurobehavioral toxicant effects on salmonids at levels of 0.18 to 2.1 µg/L above background (levels below the CTR threshold) and that multiple sampling locations in the Smith River Plain exceeded even CTR levels during monitoring events. The Draft EIR does not adequately address these sublethal and chronic biological effects. CEQA requires analysis of the full range of reasonably foreseeable environmental effects to listed species, including sublethal harms to salmonids such as impaired olfactory function and predator avoidance, reduced reproduction, prey base impacts, and the cumulative consequences of repeated storm-driven pollutant pulses in estuarine rearing habitat. Under both the Federal Endangered Species Act and California Endangered Species Act, sub-lethal impacts that otherwise harm a species by interfering with behavior, reproduction, or other essential life pathways may constitute take of an endangered species. <i>Babbitt v. Sweet Home Chapter of Communities for a Great Oregon</i>, 515 U.S. 687 (1995). The EIR's biological analysis must be revised to directly engage the NOAA recovery science and to explain, with evidence, why the Project's chosen pace and structure are sufficient to prevent significant harm to ESA-listed and CESA-listed species and their habitat.

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EPIC-4	The Draft Lily Bulb Order's adaptive management structure allows a minimum of approximately ten years before enforcement can be triggered. The Draft EIR does not analyze the environmental consequences of continued exceedances during that decade-long compliance period. CEQA Guidelines § 15126.2 requires disclosure and analysis of impacts during implementation, not merely upon theoretical completion. The reasons for this are obvious. Without this requirement, lead agencies could simply delay consideration of impacts until after the project was completed, thus avoiding the informational and harm avoidance directives of CEQA. CEQA is a "look before you leap" law. This current project proposes to leap for 10 years before looking. The EIR must be revised to evaluate what the record already demonstrates: that if management practices continue to be insufficient, the consequence is continued loading of copper and synthetic pesticides into some of California's most ecologically sensitive and legally protected waters for an extended period, with foreseeable ongoing harm to coho salmon, tribal fisheries, and downstream beneficial uses.
EPIC-5	The Board already possesses specific, detailed information about the nature and extent of pollution: over a decade of surface water monitoring, the 2025 SWAMP Report, the 2018 NMFS/CDFW Monitoring Report, multiple years of management practice reporting, and groundwater monitoring showing pesticide detections in six of nine domestic wells sampled in 2025. Where the existing record contains sufficient information to analyze impacts, an agency may not defer that analysis by invoking programmatic uncertainty. (Communities for a Better Environment, supra, 184 Cal.App.4th at 92-95.) Critically, the EIR cannot simultaneously invoke programmatic uncertainty to justify incomplete analysis while also relying on those same uncertain future practices to conclude that impacts are less than significant. That is the kind of logical circularity that courts have rejected as insufficient to constitute substantial evidence. (See Kings County Farm Bureau v. City of Hanford (1990) 221 Cal.App.3d 692, 717.) The EIR must be revised to evaluate these impacts now, using the information that the agency already has.

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EPIC-6	The Draft EIR relies heavily on vegetated setbacks and filter strips as the primary mitigation mechanism for water quality impacts. These setbacks are not defined and the board does not address issues such as soil type, groundwater connectivity, yearly rainfall, slope, roading and ditch impacts, or whether grazing will be allowed within these filter strips and set backs. This makes it impossible to assess whether they will be effective. <i>Sierra Club v. County of Fresno</i> 6 Cal.5th 502 (2018) (holding that an EIR must provide sufficient detail and analysis to support its mitigation conclusions). Similarly, the CEQA guidelines require mitigation measures to have "specific performance standards... and the means by which the mitigation measure will be achieved and monitored." (CEQA Guidelines § 15126.4(a)(1)(B)-(C)) The mitigation for this project is not supported by substantial evidence, is fatally vague, does not have specific performance standards, and therefore constitutes a legally deficient mitigation finding under CEQA.
EPIC-7	The Hurst study, (the only study in the record that evaluates the effectiveness of management practices specifically designed for Smith River Plain conditions) demonstrates that 80-foot setbacks did not reduce dissolved copper discharge one of the main environmental impacts at issue here. During saturated storm conditions in December and January, filter strips removed essentially no copper. Constructed berms were washed away. The proposed mitigation was therefore ineffective at reducing this significant environmental harm. Despite this, the Draft Order proposes 50-foot setbacks (shorter than the 80-foot setbacks shown to fail in the Hurst study) as a Tier 1 compliance option. The Draft EIR cannot conclude that such setbacks will reduce impacts to a less-than-significant level when the record affirmatively demonstrates they will not. CEQA requires that proposed mitigation measures be supported by substantial evidence that they will actually be effective. (Pub. Res. Code § 21002; CEQA Guidelines § 15126.4(a)(1)(B); <i>Federation of Hillside & Canyon Assns. v. City of Los Angeles</i> (2000) 83 Cal.App.4th 1252, 1261.) Where the only site-specific study in the record contradicts the EIR's mitigation conclusion, that conclusion is not supported by substantial evidence.

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EPIC-8	Setbacks do not address groundwater transport pathways. The record establishes that imidacloprid and diuron are detectable outside the wet season, indicating groundwater transport as a significant mechanism for contamination. Even if the setbacks were to capture surface runoff but still allowed persistent pesticide residues to migrate through soils to shallow groundwater and receiving waters, they cannot constitute adequate mitigation for the full scope of identified discharge pathways. Mitigation that only partially mitigates an impact by failing to address a significant mechanism by which that impact occurs cannot be said to mitigate below a significant level. <i>Sierra Club v. County of Fresno</i> 6 Cal.5th 502 (2018)
EPIC-9	The Draft EIR acknowledges that the Smith River Plain has already been extensively modified by diking, tide gates, agricultural conversion, and riparian removal, and that NOAA's recovery documents identify the lower Smith River and estuary as already impaired. Yet the EIR fails to synthesize these stressors into a meaningful cumulative analysis. The EIR also touches on grazing impacts and nitrogen pollution, but does not address the ongoing cumulative impacts with the rotation of lily bulbs and grazing and the serious impacts of estuary and riparian grazing. The serious impacts of roading and ditching are not addressed as a cumulative impact despite the substantial evidence that roads and ditches are directly responsible for conveying sediments and chemicals to impaired waterways. A rigorous cumulative impacts analysis must evaluate the interaction of: (1) habitat simplification and altered hydrology from decades of agricultural conversion; (2) ongoing and documented pesticide and copper loading from lily bulb operations; (3) groundwater contamination detected in domestic wells; (4) estuarine impairment limiting juvenile coho rearing capacity; (5) climate-driven shifts in runoff timing and intensity; and (6) the compounding vulnerabilities of a federally listed salmonid population already operating far below its recovery target of 6,800 spawners, with recent escapement estimates as low as 2,365 individuals. A level of contaminant loading that might be tolerable in a healthy, diverse watershed becomes potentially devastating when overlaid on degraded floodplain structure, constrained tidal exchange, and the biological needs of a listed species under active recovery stress.

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Free-1	The draft Lily Bulb Order does not use the best available science or BMPs for mitigating sediment, pesticide, and nutrient delivery based on monitoring and implementation of BMPs during the implementation of the Smith R Water Quality Management Plan. Additionally, the stream side management zones are inconsistent with pesticide labels for protection of aquatic habitat. We recommend a minimum 100 foot no-go zones for perennial streams and 50-foot zones for ephemeral streams and ditches that deliver to fish-bearing streams. We don't understand the larger buffers for wetlands and ponds when compared to ephemeral streams and ditches that deliver to higher-order streams. Finally, the 90% cover requirement for vegetated buffers and allowing activities within these buffers is not scientifically defensible. The climate of the Smith River almost always results in precipitation and run-off from storms that occur beginning in October and often extends into June. Most permits for other activities that generate sediment and run-off (e.g., bridge construction) are restricted to the October to June 15th time period to account for Northern California precipitation patterns. Also, the purpose of the vegetated buffers is to capture sediment, pesticides, and nutrients and constant disturbance of these areas will simply mobilize these sequestered contaminants.
Free-2	Allowing mitigation for the riparian vegetation requirement outside watershed areas directly affected by lily bulb agriculture is inconsistent with the purpose of the riparian vegetation which is to reduce sediment, pesticide, and nutrient delivery to fish-bearing streams.
Free-3	The monitoring required in the Lily Bulb Order is inadequate to identify potential locations/fields that are discharging pollutants and, therefore, is inadequate for implementing the proposed adaptive management portion of the Order. We recommend that edge of field monitoring is implemented and dry season sampling is conducted.
Free-4	The adaptive management plan proposed in the Order is inadequate to protect state and federally listed coho salmon given the strict 3-year life history of the listed species and the extended feedback from monitoring to action to monitoring loop proposed in the adaptive management plan and the proposed compliance/enforcement of the Order.
Free-5	The proposed Order does not take into consideration the synergistic toxicity of a number of the pesticides/herbicides and water chemistry of the affected streams where sensitive species (e.g., coho salmon) are exposed. We know heavy metals can increase the toxicity of various pesticides (e.g., organochlorides) and vice versa.
Free-6	As proposed, we do not believe that the draft Order will protect the beneficial uses of the Smith R including the conservation and recovery of state and federally listed species and their habitats. Additionally, it does not protect Public and Tribal Trust resources.

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Galea-1	Commenter, a Crescent City native who worked for CDFW on salmon work, states he has heard his whole life that living in Smith River is inadvisable due to lily bulb pesticides. Commenter explains that pesticides at the river mouth cause salmon approaching from the ocean to perceive the entire river system as contaminated, causing them to go elsewhere rather than enter their natal stream.
Galea-2	Commenter explains salmon straying science: normally approximately 10% of salmon stray to non-natal streams, which mixes genetics and maintains population health and adaptability. When salmon smell pesticides in their natal stream from the ocean, far more than 10% stray from the Smith River, damaging population genetics and long-term resilience. Commenter requests removal of lily bulb operations from the area.
HFMA-1	The future of California coast-wide Commercial, Sport, and Tribal fisheries is tied to the future of ESA and CESA-listed, threatened coho salmon stocks, and Coastal Chinook, a "species of concern" in the Smith River System. But, all of these fish stocks are 'Off Limits' unless the responsible agencies determine that there is a "harvestable surplus" of salmon, over and above the population levels required for delisting as 'Threatened' or 'Endangered' with extinction. Green Sturgeon and Eulachon are also listed as threatened. Moreover, the regulations limit fishing for unlisted, healthy salmon stocks that mix in the ocean and river in order to protect stocks that are still listed, further compounding the impacts to the economic viability of several coastal communities, many of which are beyond the Smith River Basin.
HFMA-10	It is highly unlikely that the Order will protect water quality standards, prevent degradation of high quality water, or comply with state law, including the Nonpoint Source Policy, the Federal and State Antidegradation Policies, the Porter Cologne Water Quality Act ("Porter-Cologne")(Water Code §§ 13000-16100) or the Basin Plan itself.
HFMA-11	It is necessary and in the public interest to completely stop the contamination of the estuary that all the salmonids that swim to and from these 300+ miles of Wild and Scenic Rivers have to pass through year after year. If the pollution doesn't stop, this amounts to managing the slow but steady decline of these salmon species and the other beneficial uses listed in the North Coast Region Basin Plan.
HFMA-12	For all of the above reasons, we strongly urge the Board to adopt a "cease and desist" order, "cleanup and abatement" orders, and establish a "zero waste discharge limit" for all agricultural chemicals into the Smith River Estuary and its tributaries, just as this Regional Water Board did with the herbicide 245-T used in reforestation plantation development. The RWB has the authority, ability, and "affirmative duty to act", to prohibit any pesticides from reaching this salmon bearing river system.

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HFMA-13	Our preferred Alternative in the EIR would have to include all 3 Objectives if you remove "minimize" from Objective # 1; but Objective #2, "Effectively track and quantify achievement of the stated objectives over a specific, defined time schedule" cannot be met under the described Monitoring and Reporting Program.
HFMA-14	The monitoring and reporting are a conflict of interest because the person monitoring and reporting, whether an individual or a "Coalition", has a vested interest in the outcome. This built-in feature of the plan is inconsistent with the basic principle of checks and balances of our governmental system; Then, the response to a violation is also self-regulated, with the violator choosing the fix; Then, the delay in the reporting to the agency means that the agency cannot act in a timely manner to address a problem--even if one is reported accurately!
HFMA-15	Much evidence has been presented to this Water Board on the health risks of contaminated wells for drinking water in the area. Since pesticide-loaded water that infiltrates groundwater cannot be removed, prevention is essential for the health of the community.
HFMA-16	Some additional Beneficial Uses that would need to be included in the DWDR for Smith River are: Wetland Habitat (WET), Groundwater Recharge (GWR), Water Quality Enhancement (WQE), and Flood Peak Attenuation/Flood Water Storage (FLD), along with ones listed in the Order: Estuarine Habitat (EST) and Freshwater Replenishment (FRSH); are all beneficial uses that protect riparian and wetland habitats. (CDFW to Matt St. John, NC Water Board EO, October 6, 2014)
HFMA-17	The RWB has the authority, ability, and "affirmative duty to act", to prohibit any pesticides from reaching this salmon bearing river system.
HFMA-2	The Smith River System has some of the highest quality Recreational and Ecological waters in California according to the State Water Quality Control Board with 375 miles designated for its "Outstandingly Remarkable" values as Wild and Scenic, and is recommended by the State Water Board to be designated "Outstanding National Resource Waters". It is important to bear in mind that each Beneficial Use of water listed in this DWDR, such as Navigation, Commerce, Fishing, Recreation, Aesthetic Value, Domestic Water Supply--has a public and a private benefit; and that no one value should be sacrificed for short term private gain by a few at the expense of long-term socio-economic cohesion and prosperity over time for the rest of us. Our bottom line is the stream channel itself which drains these forest and rangelands and through the wetlands at the bottom, nobody owns the water; we all own it and have a right to the beneficial uses of the water.

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HFMA-3	Many beneficial uses are inter-related and critical to the recovery of sensitive and listed fish stocks in the Smith River System. Some additional Beneficial Uses that would need to be included in the DWDR for Smith River are: Wetland Habitat (WET), Groundwater Recharge (GWR), Water Quality Enhancement (WQE), and Flood Peak Attenuation/Flood Water Storage (FLD), along with ones listed in the Order: Estuarine Habitat (EST) and Freshwater Replenishment (FRSH); are all beneficial uses that protect riparian and wetland habitats. (CDFW to Matt St. John, NC Water Board EO, October 6, 2014)
HFMA-4	After reviewing your draft Order we have found many serious problems that need to be addressed. Our members are very concerned that the Order and EIR as written are highly unlikely to achieve the Water Quality Objectives to protect the beneficial uses of water, especially threatened and endangered salmonids that inhabit the Smith River Estuary and its tributaries while spawning and smolting, as required by applicable law. Moreover, much evidence has been presented to this Water Board on the health risks of contaminated wells for drinking water in the area. Since pesticide-loaded water that infiltrates groundwater cannot be removed, prevention is essential for the health of the community.
HFMA-5	The goals of this Order seem appropriate, but the Objectives in the Order are inadequate, because "minimizing and reducing" the pollution will not be enough to prevent further, ongoing damage to the salmon life cycles in the Smith River or protect the other beneficial uses in the Basin Plan. In fact, they do not achieve the Objectives of your own North Coast Basin Plan: "Pesticides. Waters shall not contain any individual pesticide or combination of pesticides in concentrations that cause nuisance or adversely affect beneficial uses. There shall be no bioaccumulation of pesticide concentrations in bottom sediments or aquatic life that cause nuisance or adversely affect beneficial uses." "Toxicity. Waters shall not contain toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. This objective applies regardless of whether the toxicity is caused by a single substance or the synergistic effect of multiple substances."

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HFMA-6	The monitoring and reporting are a conflict of interest because the person monitoring and reporting, whether an individual or a "Coalition", has a vested interest in the outcome. This built-in feature of the plan is inconsistent with the basic principle of checks and balances of our governmental system; Then, the response to a violation is also self-regulated, with the violator choosing the fix; Then, the delay in the reporting to the agency means that the agency cannot act in a timely manner to address a problem--even if one is reported accurately!
HFMA-7	Compounding this problem, one of the main proposed Management Practices—filter strips or vegetative buffers—have been shown to not be effective in keeping copper, and likely other pesticides, out of the Smith River Estuary. The Management Practices relied on in the Order cannot protect the estuary from copper and other pesticide runoff because the lily crops are grown in a seasonal wetland. (Hurst 2024) Minimizing these chemicals is not adequate to keep them from further damaging sensitive and listed stocks in various stages of their life cycles, such as spawning, egg incubation, and smolting.
HFMA-8	Additionally, the economic reasoning given for merely "minimizing," and not prohibiting release of pesticide pollutants, as well as nitrogen and sediment, does not take into account the economic impacts of threatened, endangered, and declining fisheries, as well as the other beneficial uses listed in the Basin Plan.
HFMA-9	It is important to bear in mind that Section 4 of the ESA states that species can be listed as threatened or endangered if they meet one or more of the following five criteria: Habitat Destruction: The present or threatened destruction, modification, or curtailment of its habitat or range. Overutilization: Overutilization for commercial, recreational, scientific, or educational purposes. Disease or Predation: Disease or predation affecting the species' survival. Inadequate Regulations: The inadequacy of existing regulatory mechanisms to protect the species. Other Factors: Other natural or manmade factors affecting its continued existence. Unfortunately, the stocks that are listed in the Smith already qualify for all five!

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Holland-1	Commenter draws the lead/neurological development analogy: dissolved copper impairs salmonid olfactory systems at low concentrations — the sensory basis for homing navigation — at estuary entry before upstream migration begins, rendering a fish's migration meaningless even if it survives acute toxicity. At documented concentrations in the Smith River estuary, no margin of safety remains. Copper levels in estuary tributaries found at nearly 28 times the California Toxics Rule threshold; state scientists documented acute and chronic reproductive toxicity in estuary-feeding streams; 17 pesticides detected in surface waters; 300,000 pounds of highly toxic pesticides applied annually in the floodplain. Note: this letter's structure, arguments, and citations closely mirror Tyler Kharazi's submission, likely from a shared advocacy template.
Holland-2	Commenter notes that NMFS formally notified growers in 2018 of ESA violations for illegal take of coho salmon, characterizing this as a turning point that was not acted upon; that the Smith River flows through Tolowa Dee-ni' ancestral homelands and is a living cultural and spiritual foundation; and requests buffer zones, wet-weather prohibition, Tribal use protections, enforcement with meaningful consequences, and a ban on all further pesticide/copper discharges as the logical conclusion of the evidence.
Hostler-1	I as a resident of smith river and Tolowa indigenous person who deeply cares about the health and safety of the people, plants and all life of the smith river am requesting you to adopt the strongest possible protections from easter lilly pesticides, herbicides, chemicals and management. This area that my people have called home for thousands of years is greatly degraded from this industry. The smith river is one California last wild rivers and should be a ecological refuge where industrial chemical pollution isn't managed but prevented.
Hostler-10	Independent monitoring with transparent public reporting.
Hostler-11	Full protection of Tribal uses, fisheries and drinking water. Traditional and contemporary Cultural use of river water includes bathing and ingestion of water and salmon during first salmon ceremony.
Hostler-12	The protection of this unique and beautiful river is up to you. Future generations are counting on you to give them a better future free of toxic chemicals.
Hostler-2	Permit must have enforceable protections that reflects the realities of this unique watershed.

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Hostler-3	There must be no chemicals used during the rainy season or on windy days. I've personally been exposed multiple times as a passerby from these toxic chemicals sprayed on windy days. I've smelled the chemicals, had watery eyes and numb lips after driving by fields being sprayed. I've called the local contact for pollution control in del Norte county and left messages but response was days later. Even as a child at smith river elementary School I remember being exposed to chemicals on adjacent Easter lilly fields.
Hostler-4	No discharge of chemicals including copper into surface and ground water.
Hostler-5	Enforceable pollution limits not ineffective voluntary management practices.
Hostler-6	200-300 foot buffer around fields, waterways, homes and schools. Retire fields adjacent to school.
Hostler-7	Retire and restore lands unsuitable for lilly bulb farming. Especially in estuaries.
Hostler-8	Prioritize non chemical pest control.
Hostler-9	Enforcement penalties must be strictly enforced.
Ihara-1	Commenter, an Arcata, CA resident, notes decades of pesticide discharge by lily bulb farms, describes the Smith River upstream as one of California's most pristine rivers but contaminated as it approaches the ocean. Requests a zero-discharge threshold for all synthetic pesticides, wet-weather spraying prohibition, buffer zones between fields, waterways, residences, and schools to protect children, meaningful enforcement with significant consequences, and guaranteed clean drinking water for the Smith River community.
Johansen-1	Second submission from commenter (who also submitted in Round 1). The email body contains only the subject line as content: states that chemicals used as herbicides and pesticides are 'overwhelmingly poisoning our food our water our clothing our own bodies' and calls for manufacturing with naturally occurring chemicals. Body text reads only 'Sent from my iPhone' — no substantive comment content available.
Jordan-1	Commenter cites Save California Salmon's framing and the perspective of the Tolowa Dee-ni' Nation Natural Resources Director: pesticides from a non-food ornamental crop are washing into creeks and the Smith River, harming salmon and degrading tribal waters. Requests the permitting system mandate prevention of pesticides and other toxins including copper from entering waterways.
Kharazi-1	I am a California resident with no personal connection to the Smith River, but a deep concern for the state's salmon populations. I write to urge the strongest possible protections in the Draft Lily Bulb Order and its accompanying Environmental Impact Report. That California's last truly wild and undammed river is being measurably degraded to support the cultivation of an ornamental flower sold for a single holiday demands serious scrutiny.

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Kharazi-10	Enforce the order with meaningful consequences for violations.
Kharazi-11	Disallow any further pesticide discharges, including copper, to waterways—the logical conclusion of the evidence before you.
Kharazi-12	Voluntary compliance has failed this river for forty years. The Board now has an opportunity and a legal obligation to act. I ask that you meet this moment with the full force of your regulatory authority.
Kharazi-2	An analogy may help clarify why copper contamination is so specifically devastating. We understand viscerally what lead does to a child's developing nervous system: it doesn't just poison acutely, it steals the capacity to think, to orient, to navigate the world. Dissolved copper does something remarkably similar to salmon. Even low concentrations impair the salmonid olfactory system—the very sense that guides a salmon home. A salmon's entire life is oriented around a single return journey, sometimes hundreds of miles upriver, navigated by smell. Copper contamination strikes at the beginning of that journey, in the estuary, before the fish has swum a single mile upstream. A fish that survives acute toxicity may complete the journey unable to find its ancestral spawning grounds, its migration rendered meaningless. At the concentrations documented in the Smith River estuary, there is no margin of safety left.
Kharazi-3	Water quality testing found copper levels in estuary tributaries at nearly 28 times the California Toxics Rule threshold, with state scientists documenting acute and chronic reproductive toxicity in streams feeding the estuary—meaning invertebrates forming the base of the salmonid food chain cannot survive or reproduce in these waters.
Kharazi-4	Seventeen different pesticides have been detected in surface waters, along with 10 instances of contamination of the aquatic food chain. To put the scale of this in concrete terms: lily bulb growers apply an annual average of 300,000 pounds of highly toxic pesticides across these fields, concentrated in the floodplain of one of California's most ecologically critical waterways, for an ornamental crop.
Kharazi-5	Most critically, the National Marine Fisheries Service formally notified growers in 2018 of Endangered Species Act violations for illegal "take" of coho salmon. That federal determination should have been a turning point. Instead, voluntary measures and buffer zones that have proven ineffective have been allowed to substitute for real regulation for decades.
Kharazi-6	The Smith River is California's last major undammed river and a stronghold for salmon at a moment when populations across the West are in freefall. It flows through the ancestral homelands of the Tolowa Dee-ni' Nation, for whom it is not merely habitat but a living cultural and spiritual foundation. These ecological and cultural stakes are precisely what the Board's regulatory authority exists to protect.

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Kharazi-7	Establish large, effective, and enforceable buffer zones between fields and all waterways, residences, and schools.
Kharazi-8	Prohibit pesticide application during wet weather conditions.
Kharazi-9	Guarantee specific protections for Tribal beneficial uses, imperiled species, and clean drinking water for the community of Smith River.
Miller-1	All of the other regions that have adopted Irrigated Lands Mgmt Programs are dealing with a completely different agricultural system. Here in the Smith River area there are only 3 growers left producing lily bulbs. The production area over the last 20 years has been reduced from about 450 acres to less than 200 today. Because of the limited number of growers there are some specific issues in the order that need modification.
Miller-2	Because of the limited number of growers the forming of a coalition requirement needs to be modified to better fit this area.
Miller-3	The requirements for testing seem too broad. Surface water monitoring locations need to be reviewed. There are 8 locations listed on page 6 of monitoring and reporting program. Some need to be modified or deleted.
Miller-4	The 21-24 swamp report gave results of testing for 3 pesticides. This testing showed very limited number of exceedance of the water quality criteria. Because there were no exceedance in various creeks, the number of tests that growers are required to do should be negotiable in some of the locations. Page 18 & 19 of the 21-24 Swamp Report for Diuron, Ethoprop and Imadecloprid testing shows 69 tests for Diuron with 1 exceedance, 64 tests for Ethoprop and with 1 exceedance, and 109 samples taken for Imadecloprid with 8 exceedances only.
Miller-5	Three samples per year in locations with NO exceedance does not seem reasonable. Yes, a couple locations may require 3 tests, but the majority seems like 1 test during runoff would be acceptable. Yes, testing Copper 3 times per year all locations.
Miller-6	The total expense to comply with reporting seems high. Table 1.11 shows the "coalition" expense for technical reports yearly. Remember there are less than 200 acres for this crop. When costs for reports rise to \$10,000, \$20,000, \$30,000, \$40,000 that is \$50 - \$200 per acre.
Miller-7	Nitrogen management does not seem to apply here. There have not been any drinking water well tests that have exceeded the 10 mg/l MCL (2025 NCRWQC Board staff samples). There is a lot of dairy liquid waste being applied to dairy land in the Smith River valley. Costs to develop plans and show trends seem not to be applicable here especially the need to report on a field by field basis.

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Montagne-1	Commenter strongly supports adoption of an effective permit, emphasizing dissolved copper hydroxide as particularly harmful to salmon olfaction and homing. Calls for meaningful enforcement beyond a 'slap on the wrist,' protection of Tribal sovereignty, buffer zones with mandatory pollution control, and guaranteed clean drinking water. Notes additional concurrent stressors on the Smith River: fires upriver, a rapidly shrinking glacier as the river's source, and 6PPD-q contamination from automobile tires on Highway 199. Requests confirmation her comments were received and recorded.
Obrien-1	Humboldt County resident and self-described 'Smith River Lover,' commenter submits an emphatic letter requesting the Board stop pesticide discharges, ban copper from the water, stop pesticide spraying, create buffer zones to protect children, and impose consequences for violations. Requests an EIR that actually protects the public and ecosystem. Uses standard form letter themes but with emotionally urgent language, partially in all caps.
Pace-1	Adopt enforceable water quality limits with no exceedance of thresholds for pesticides, metals, nutrients, sediment, or other pollutants that could harm fish, wildlife, or drinking water.
Pace-10	Provide protections that safeguard Tribal beneficial uses, imperiled species within the estuary, and guarantee clean drinking water for the Community of Smith River.
Pace-11	The regulations and other actions you've taken so far have not worked. Buffers are good but runoff from fields is exiting them via access roads and going into ditches that discharge into the estuary. I've sent you photos and videos of that pollution but you have done nothing to end it. Shame on you all. End the pollution now because it is eminently feasible and not expensive. Stop protecting the lily bulb growers and their profits; protect residents health instead as is your duty.
Pace-12	It is your duty to end those discharges by requiring runoff detention ponds at access road points.
Pace-2	Require storm-event monitoring so pollution during heavy rains or irrigation runoff can be detected and addressed.
Pace-3	Increase monitoring locations in tributaries, wetlands, and drainage channels across the Smith River Plain.
Pace-4	Require independent verification of monitoring data to ensure transparency and accountability.
Pace-5	Require immediate corrective action and enforcement with strict penalties when pollution is detected, including clear timelines for fixing violations.
Pace-6	Disallow any further pesticide discharges to waterways, including copper.
Pace-7	Disallow the spraying of pesticides during wet weather.
Pace-8	Create large and effective buffer zones between fields, waterways, residences, and schools.

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Pace-9	Effectively enforce the regulations outlined within the order via significant consequences following order violations.
Powell-1	Commenter, a longtime Southern Oregon Coast resident from Port Orford, OR, explains how copper hydroxide bioavailable dissolved copper from lily bulb fungicides leaches into Smith River estuary tributaries, impairs salmonid olfactory systems, and prevents salmon return to spawning grounds. Commenter encourages lily bulb growers to utilize alternatives to all chemical fertilizers, suggests they consult tribal experts on natural solutions, and argues that going organic is not difficult or more expensive based on personal experience.
Powell-2	Commenter notes the Smith River's protection matters to tribal members up and down the coast and that ecological protection of the river is linked to the interests of salmon populations, native habitats, and indigenous communities throughout the region.
Reeder-1	Commenter, a Crescent City, CA resident, emphasizes the Smith River's unique water quality value for salmon and sturgeon fisheries, estuary and near-shore ecosystem recovery, Del Norte County's increasingly tourism-dependent economy, and the Tolowa tribe's significant investment in coastal ecosystem recovery. Argues the highest and best purposes for water use must protect water quality, and requests zero pesticide/copper discharge, cessation of wet-weather spraying, and large monitored buffers with heavy penalties for violations.
Sargent-1	Commenter requests strict, continuous chemical testing below the Dr. Fine Bridge to measure the true ecological load of bioavailable dissolved copper entering the estuary, and demands that private property lines — specifically Tidewater-associated lands — not be allowed to shield state-mandated downstream water testing, citing Clean Water Act, ESA, Porter-Cologne, and CEQA compliance obligations.
Sargent-2	Commenter requests enforceable safety buffers including strict buffer zones between fields, waterways, and schools, alongside a total ban on pesticide spraying during wet weather to comply with the Clean Water Act, Endangered Species Act, Porter-Cologne Water Quality Control Act, and CEQA.
Sargent-3	Commenter raises a separate municipal infrastructure issue: as a recognized Disadvantaged Community (DAC), Crescent City's City Manager Eric Wier is pursuing a \$50 million repair to the failing 1970s coastal wastewater treatment plant located in a tsunami and coastal erosion zone — a facility the City Manager himself has called 'inevitable' to relocate. Commenter argues proposed water and sewer rate increases violate Proposition 218 protections and may be designed to price legacy families out of their homes and force surrender of grandfathered properties to high-density developers. Requests regulatory accountability and financial partnership from the Board in relocating the municipal wastewater facility inland.

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Sargent-4	Commenter proposes transforming the closed Crescent City Landfill (a monitored Brownfield site, originally developed through her grandfather Evert Ralph Sargent's investment in the sand dunes that became Del Norte Disposal) into a relocated inland water management utility. Argues this would unlock federal Brownfield revitalization grants, remove volatile industrial waste infrastructure from the coastal shoreline and crabbing habitats, and future-proof the community's sovereign stability rather than perpetuating a failing coastal system.
Scott-1	Commenter, an enrolled tribal member of the Tolowa Dee-ni Nation from Klamath, CA, documents the historical context of indigenous rights being disregarded since California statehood in 1850. States the Tolowa people deserve to protect and restore natural resources for future generations who cannot speak for themselves, and that water is life — without water there can be no life.
Scott-2	Commenter describes the Tolowa people's cultural dependence on clean water: tribal families have been forced to assimilate and relinquish most cultural traditions; the right to subsist by hunting, fishing, and gathering traditional foods from wetlands, coastal rivers, and ocean access points without poisonous chemicals is a fundamental cultural right. Requests the Board consider Tolowa people, future generations, and cultural needs when determining the safest EIR outcome.
Shade-1	Commenter writes with long-standing frustration from multiple years of calls and letters about pesticide pollution of the Smith River estuary. Alleges pesticides are making people sick, harming children at nearby schools, and raising cancer rates in the area. Demands no pesticide discharge be allowed, period — lily farms should go organic or cease operations.
Shade-2	Commenter alleges that a tribal member married to a lily farmer polluter should not be allowed to speak for the rest of the tribes and people affected by decades of pollution. Notes lily bulbs are shipped only two months of the year. Separately raises concern about STAA designation along Highway 199, which commenter alleges would allow the longest oversized interstate big rig trucks into the area, creating accident risk and potential for trucks to fall into the Smith River and cause additional pollution. References Sun Valley Lily's departure from Arcata leaving polluted acreage behind.

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St.Clair-3	My name is Ethan St.Clair. I am a Tolowa Tribal Member who would go to the banks of the Smith River, participating in our Naa-dash equinox celebrations. Nii-li is where I go to refuel my soul, to fish for salmon and trout, and uphold the highest respect for the majestic beauty and power of the water. I am writing to formally submit my comments on both the Draft Lily Bulb Order and the associated Environmental Impact Report (EIR). 1. The Moral Fallacy of "Allowable" Poison I cannot fathom that the owners of these companies would want their own families ingesting these poisonous chemicals. While I overstand the logic of "money over life" in a corporate sense, I do not understand how this Board can justify a permit that treats a sacred river as a drainage ditch. If this water is not safe enough for your children or grandchildren to drink, it is not safe enough for our river.
St.Clair-4	Rebuttal of Technical Misinformation The current Draft and EIR rely on industry-friendly fallacies that must be corrected: The Sensory Blindness Lie: Industry claims low copper levels are "safe." Science proves that even 2–5 ppb of dissolved copper destroys the olfactory neurons of our Chinook, Coho, Steelhead, and Cutthroat trout. A salmon that cannot smell is an ancient intelligence being erased.
St.Clair-5	The "Buffer" Myth: 2025 data confirms that water-soluble toxins like Diuron and Imidacloprid bypass vegetative filters and flow directly into our creeks. You cannot "filter" a spirit; you can only protect it or poison it.
St.Clair-6	Failure to Protect Cultural Beneficial Use The State is failing its obligation to protect Native American Culture (NAC) beneficial uses. My right to spiritual refuge and ceremony is violated by the knowledge that the water is carrying a "toxic soup." I speak for our elders—the Green Sturgeon and Pacific Lamprey—and the macroinvertebrates that are the foundation of the river's life.

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Taylor-1	I oppose non-organic farming in the Smith River area and non-edible, ornamental crops such as Easter Lillys especially. As you are already aware, the Smith River is a crucial habitat for our native salmon. Salmon are a fatty fish know to absorb the heavy metals in their environment. The bioavailable dissolved copper that is being introduced into the river by these farming operations are toxic to the salmon and interfere with their ability to navigate in order to return their breeding grounds. Also, any heavy metals invested by the Salmon can be injected by humans. I would also point out that the River and wildlife are a sacred part of the ancestral lands of the indigenous population we share our home with. As a property owner and taxpayer in Del Norte County I believe that it is incumbent upon us to alleviate and remediate any damages being caused by these agricultural operations. I am also aware of the health concerns of Smith River residents and know that when I looked at property in Smith River to buy my small 8yr old son found a 5 legged frog by the creek that ran through the property. After looking at the most recent soil reports my wife whose a Doctor of Comparative Pathology and Immunology and I decided that it would be a poor choice to purchase a home there. Please take these concerns seriously as the health of our rivers are important to all of us.
Tays-1	Commenter, an Arcata, CA resident and concerned environmentalist, requests the Board incorporate strict controls on permits for commercial lily bulb operations to protect the Smith River Estuary from improper runoff and release of pesticides, nutrients, and sediment. Specifically names Chinook and Coho Salmon, Tidewater Goby, and Eulachon smelt as priority species for protection due to their endangered and threatened status.
TDN-1	The Tolowa Dee-ni' Nation ("Nation") is a federally recognized tribal nation headquartered in Smith River, CA and governed by a seven-member, duly elected Tribal Council. The Aboriginal Lands of the Nation's territory encompasses the lands and watersheds of Daa-ghestlh-ts'a' Tr'ee-ghii~li~ (Wilson Creek) to the South, Ts'aa-;;, 'Wi.i-chit Taa-ghii~li~ (Sixes River) to the North, East to Taa-;;, 'Uu-me' Tr'ee-ghii~li~ (Applegate watershed) in the Coastal Range, and West to the Pacific Ocean horizon, all sea stacks including Point St. George Lighthouse, and all usual and accustomed places. The above lands constitute our place of origin and our continued habitation and occupancy, demonstrated by the ancestral villages of our people within these boundaries. Yan'-daa-k'vt ("Yontocket") is the spiritual center of the Nation, and Xaa-wan'k'wvt ("Howonquet") is the seat of the Tolowa government.
TDN-10	The Nation is concerned with the absence of independent audits or third-party technical review, which also exposes the Board to reliance on potentially unreliable data.
TDN-11	The prescribed sampling window is unlikely to capture first-flush and peak concentration events, thereby reducing the reliability of compliance determinations.

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TDN-12	To provide a more accurate representation, the following should be considered for implementation, especially due to hydraulic complexity and tidal interference of the Smith River Plain: Automated water samplers, such as ISCO brand, triggered by flow or conductivity sensors, can be deployed to ensure the capture of the critical first flush regardless of the time of day or time-interval compositing could be used in which samplers take aliquots every 15-30 minutes during the rising limb of the hydrograph. This accounts for the high variability in pesticide and nutrient concentrations during the initial surge of water.
TDN-13	Samples should be analyzed for both dissolved and sediment-bound phases. Since many pesticides used in bulb farming (like metam-sodium or copper-based fungicides) have high soil-adsorption rates, analyzing only the water column may lead to a significant underestimation of total pollutant load.
TDN-14	Reliance on manual grab samples, without flow-weighted or automated methods, risks systematic under- or overestimation of pollutant loads.
TDN-15	Attachment D omits standard QA/QC requirements, including field blanks, duplicate samples, calibration records, and reporting of detection limits. These omissions limit data defensibility.
TDN-16	Order WQ 2023-0102-DWQ ("Cannabis Order") is performance-based and enforceable with clear prohibition on discharges causing exceedance of Basin Plan objectives, tiered compliance obligations, mandatory monitoring, and explicit enforcement authority. The draft Order relies on implementation of BMPs, coalition compliance, and adaptive management. BMP implementation alone does not guarantee compliance with water quality objectives and are not a substitute for explicit enforcement actions.
TDN-17	We recommend using the following language to align the Draft Lily Bulb Order with the Cannabis Order structure: "Discharges shall not cause or contribute to exceedance of any applicable Basin Plan water quality objective."
TDN-18	Add a risk-tiered system to include Tier 1: Low-risk parcels, Tier 2: Moderate risk (slope, nitrogen application rates, proximity to creeks), and Tier 3: High-risk (proximity to impaired waters, wetlands, or shallow groundwater).
TDN-19	Include mandatory corrective action triggers such as numeric nitrate threshold exceedance, sediment/turbidity exceedance, and repeated pesticide detections.

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TDN-2	The Nation maintains the position that there is no acceptable level of discharge of inorganic or organic pesticides into the river, and urges the Board to consider the long-term impacts of this unregulated industry while working toward swift adoption and immediate enrollment of all cultivators into a phase of adaptive management with resultant enforcement as necessary.
TDN-20	Remove coalition participation and limit to individual discharger liability.
TDN-21	Set groundwater numeric protection standards, i.e. early warning trigger (e.g., 8 mg/L nitrate-N), compliance violation trigger (10 mg/L nitrate-N).
TDN-22	Mandate watershed-scale monitoring requiring cumulative nitrogen loading assessments annually.
TDN-23	The goal of the Order should be to strengthen environmental protection and enforcement; in its current draft, it does not do this. The Cannabis Order provides a stronger regulatory model because it uses risk tiering, links monitoring to enforcement, imposes clear prohibitions, maintains individual accountability, and operates under explicit statewide enforcement authority.
TDN-24	The Nation appreciates the Board's attention to these comments and also intends to continue in formal consultation and with staff-level meetings throughout this process. Questions may be directed to the Nation's Natural Resources Department Director, Rachel McCain, at Rachel.mccain@tolowa.gov or 707.954.8594, or the Nation's Tribal Heritage Preservation Officer, Cynthia Ford, at cynthia.ford@tolowa.gov.
TDN-3	As written, the Order continues to allow exceedances of water quality parameters outlined in the North Coast Basin Plan before encouraging cultivators to adopt adaptive management practices for discrete fields, and only for certain pesticides or compounds.
TDN-4	The Nation acknowledges the limited authority of the Board to broadly address compounded and long-term effects of Easter Lily cultivation on water quality; however there is ample documented authority to address current harms via input of agricultural waste discharges into State and Tribal waterways.

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TDN-5	Under the Porter-Cologne Water Quality Control Act, the Clean Water Act, the North Coast Basin Plan, and the State Board's Anti-Degradation Policy (Resolution 68-16), the Board must prescribe requirements necessary to ensure compliance with water quality standards. If pesticide discharge cannot be reliably prevented through best management practices (BMPs) alone, a zero-discharge requirement is legally justified and required. Water Code §13263(a) mandates that Regional Boards "shall prescribe requirements as to the nature of any proposed discharge ... necessary to implement any relevant water quality control plans." A zero-discharge requirement is therefore well within statutory authority. The North Coast Basin Plan states, "All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life." Pesticides are toxic by design.
TDN-6	The Porter-Cologne Act mandates the Water Boards to attain the highest water quality which is "reasonable" considering all demands and the total values involved. Currently, the only parties benefiting from ongoing pesticide use and water quality exceedances are three lily bulb growers: Dahlstrom and Watt/Miller Enterprises, Palmer Westbrook, Inc., and Crockett United Lily Growers.
TDN-7	Delilah Creek and Tillas Slough were added to the 303(d) list for copper in 2018. Additionally, in 2026, Delilah Creek was also listed for Diuron, a pesticide used in lily bulb cultivation. This listing came 5 years after the North Coast Water Board directed staff to develop a targeted collaborative (yet voluntary) water quality management strategy.
TDN-8	Copper is applied by growers at an alarming rate, frequently resulting in water quality exceedances after the 'first flush' of rainfall in the fall and winter months. This is a critical time for ESA-listed juvenile coho salmon, who are displaced from the upper watersheds and seek low velocity off-channel habitats for refugia. These wetland and slough areas in the Smith River estuary should be high quality habitats that result in high overwintering survival and growth rates for these fish. In contrast, they are hotspots that vary between acutely and chronically toxic to aquatic organisms.
TDN-9	In addition, water chemistry factors such as low pH (from tannic soils and organic waste runoff) increase the toxic effects of copper on aquatic organisms, as demonstrated in laboratory analysis.
TU-1	I am aware of the detected presence of 17 pesticides, including 1,3D, Phorate, Metam Sodium, Ethoprop, and Copper Hydroxide in the surface waters of the Smith River Estuary. These hazardous chemicals are used in the production of Easter lilies and are deadly to humans and salmonids.
TU-2	The Smith River is one of the last undammed, wild and scenic rivers in the western United States and is home to native salmon and steelhead which depend on cold, clean water to thrive. Its value to your local economy and significance for local Native American tribes is immeasurable.

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TU-3	I fully support frequent testing of groundwater, drinking water supply well, and surface water in this area.
TU-4	I fully support rigid enforcement of the Order and all related statutes, rules, and regulations, and harsh penalties for all violations.
TU-5	Because the Smith River watershed is home to endangered Coho and threatened Chinook, strict measures must be taken to regulate pesticides appropriately considering the significant adverse impacts that they present.
TU-6	Additionally, currently unrestricted copper products should be designated as restricted use in Del Norte County and should be banned for any uses in proximity to waterways.
TU-7	It is imperative that our government agencies responsible for the protecting the environment, do just that and be the example of good stewards of the planet. I hope you see the value in protecting this extraordinary environment and use your authority to take appropriate action to protect and preserve it.
TU-N-1	The Smith River, the largest remaining undammed coastal river in California, is the most prized fishery in California for wild salmon and steelhead. The Smith attracts anglers from around the world, and commercial guiding and other fishing-related businesses are important economic drivers for Del Norte County. The Smith River also is one of California's precious few remaining "salmon strongholds," the type of relatively intact freshwater habitat resource prioritized for conservation under Governor Newsom's Salmon Strategy for a Hotter, Drier Future. Fishes of the family Salmonidae (salmon, trout, and char) are highly sensitive to water quality conditions, and cannot thrive in waters whose water quality is chronically comprised by excessive heat or pollution. And as with other coastal stream systems inhabited by salmon and steelhead, the estuaries of these systems are of outsized importance for salmonids -- all life stages of salmonids utilize the Smith River estuary, year-round.
TU-N-10	We recommend the Board consider a zero-discharge threshold for TMDL listed pesticides, herbicides, and fungicides in place of the receiving water limitations presented in the Draft Order, and an adaptive management process that affirms compliance with the water quality standard prior to further pesticide application, and which encourages a reduction in TMDL listed pesticide, herbicide, or fungicide applications.
TU-N-2	Because of the value of the Smith River for wild salmon and steelhead, the unique angling opportunities these species provide, and the known or probable adverse impacts of commercially applied chemicals and synthetic compounds on salmonids, the presence of commercial lily bulb growing operations that use pesticides adjacent to the Smith River estuary is a longstanding concern. Many other parties share this concern, reflected in the Board's previous actions to address this issue.

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TU-N-3	TU acknowledges the voluntary efforts to implement best management practices (BMPs) in connection with development of the Smith River Plain Water Quality Management Plan, which was finalized in November 2021. While monitoring results presented at the Board's November 2025 meeting show these efforts appear to have resulted in decreased levels of synthetic pesticides and dissolved copper downstream of cultivated fields, exceedances of thresholds for copper are still being documented.
TU-N-4	In light of this, we share the concern with other fish conservation groups that the adaptive management process proposed in the Draft Lily Bulb Order will not lead to the reduction of TMDL listed pollutants below thresholds established through the Regional Water Board process. Given that pesticide applications occur in an estuary that is frequently inundated, we are not convinced management practices designed to merely reduce the amount of storm water runoff into waterways will prove effective in the estuary, where measures such as filter strips and vegetated barriers will lose efficacy in preventing pollutant discharge during frequent floods that inundate the entire floodplain.
TU-N-5	The Draft Lily Bulb Order provides growers with the option of using these potentially ineffective methods for several adaptive management cycles (at least 7 years, possibly much longer) before a violation, at which point the Board could choose to grant a waiver. (We note that lily bulbs are cultivated on a three-year rotational cycle. A single field cultivated with bulbs in year 1 is then left fallow or pasture in years 2 and 3 before becoming bulbs again in year 4. This rotation requires time to adaptively manage any single field.)
TU-N-6	In summary, we believe the adaptive management process as outlined in the order would likely allow continued exceedances of water quality limits as long as the Draft Lily Bulb Order's management practices are implemented.
TU-N-7	TU strongly supports sustainable agriculture – we work closely with agricultural operators across the western United States to restore and reconnect trout and salmon waters -- but stronger protections for salmonids in the Smith River should be prioritized here. Given the toxicity of the pollutants to be regulated by this Draft Order and their impacts on the estuary, we recommend the following changes to the Lily Bulb Order.
TU-N-8	As an alternative to the surface water quality benchmarks proposed in the Draft Order, the Board should implement a zero-discharge limit for listed TMDL pesticides, herbicides, and fungicides, with surface water discharge monitored at the "edge of field".
TU-N-9	The Board should implement a rigorous adaptive management program to ensure zero discharge of TMDL listed pollutants to receiving waters.

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Wade-1	I am submitting this report as a late-file public comment because the health crisis in Smith River cannot wait for another regulatory cycle. While your staff evaluates technical benchmarks for fish and aquatic life, my family and neighbors are evaluating the cost of our lives.
Wade-2	In my home and on my street, cancer is an epidemic. My father, my mother, and my stepfather have all been diagnosed. My aunt has had it. My neighbors across the street and on both sides of me have had it. We are the "Human Benchmarks" of the lily bulb industry's runoff into Rowdy Creek.
Wade-3	Furthermore, Smith River School is surrounded by these fields. We are raising our children in a drift zone of known carcinogens like Telone II (1,3-Dichloropropene) and Chlorothalonil.
Wade-4	I formally demand that the Board: Conduct a Cancer Cluster Investigation for the 95567 zip code in coordination with the State.
Wade-5	Establish a 1-Mile Mandatory No-Spray Buffer around Smith River School and all residential clusters to prevent drift and groundwater leaching.
Wade-6	Implement Mandatory Independent Well Testing for all residents living within a mile of commercial bulb operations.
Wade-7	The voluntary measures of the past have failed us. House by house, we are getting sick. I ask you to prioritize our health over the industry's convenience before this Order is finalized in August.
Westbrook-1	Prior to World War II, Easter lily bulbs were cultivated in Japan and exported to greenhouses throughout the United States in time for the Easter holiday. With the onset of the war, imports from Japan were abruptly halted, even as demand for the flowers persisted. In response, seed companies began searching for American farmers willing to take on the challenge of propagating and producing Easter lily bulbs domestically. The process involved years of experimentation and adaptation, stretching from Portland, Oregon, to San Francisco, California. Ultimately, the Smith River Valley was identified as the ideal location, and it became the final stronghold of Easter lily production in the United States. Today, only three farmers remain in the United States who produce Easter lily bulbs for commercial use, and I am proud to be one of them. This distinction carries a deep personal significance, as I represent the third generation of my family dedicated to growing lilies as a commercial crop.
Westbrook-10	The current proposed draft of the water quality order places nearly all lily production areas directly into adaptive management tier 1. This approach effectively penalizes local agricultural producers, even though they are already following the practices recommended by the water board. Previous water sampling results were collected during periods when best management practices were still being developed and refined. However, there have been no sampling outcomes from the past two growing seasons that would justify requiring lily bulb growers to implement any adaptive management measures.

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Westbrook-11	The mountains surrounding the Smith River Valley have a long history as producers of various heavy metals, including copper. It is well documented that copper traces are present above areas used for Easter lily production, indicating that these metals occur naturally and are not solely the result of agricultural activity. In a recent discussion with Chris Watt, Engineer at the North Coast Regional Water Quality Control Board (NCRWQCB), he confirmed that "all water has copper in it." This acknowledgement highlights the reality that copper is found throughout the Smith River plain, independent of any agricultural input.
Westbrook-12	Additionally, Water Quality sampling data has revealed several instances of synthetic pesticides being detected above the areas designated for lily production. These findings may be linked to other forms of agriculture including illegal marijuana cultivation occurring upstream. Despite the documented presence of both copper and synthetic pesticides originating from non-agricultural sources, these contaminants are not accounted for in the draft order addressing water quality regulation for the region.
Westbrook-13	Even though it increases an already burdensome cost baseline testing should be required.
Westbrook-14	According to page 15, #52 of the draft water quality order, the monitoring and evaluation requirements are not intended to determine the individual sources of pollutants that cause an exceedance of a Water Quality Benchmark. Instead, when an exceedance is detected, the order mandates that all Enrollees, or "Easter lily farmers", must implement adaptive management strategies to achieve individual compliance, as outlined in Section II.H. This means that regardless of the actual origin of the pollutant, the responsibility for compliance measures falls on the Enrollee. Such a provision poses significant risks, as it may result in penalizing those who are not responsible for the pollution while potentially absolving those who are. This approach leaves open the possibility that some external sources of pollution may never be identified or properly addressed.
Westbrook-15	The entire water quality program, the essence of this order, is fundamentally based on water sampling conducted by the water board. The effectiveness and ongoing success of the program will be determined exclusively by water sampling results that are now the complete responsibility of the program Enrollees. As currently outlined, the program imposes substantial cost burdens on the small number of remaining lily farmers. Moreover, it does not adequately account for the risks posed by external pollutants, which are outside the control of growers. The cumulative requirements of the sampling process threaten the economic viability of these farms.

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Westbrook-16	It is essential to continue baseline water sampling above areas of lily production to safeguard the region's waterways. If initial sampling indicates that certain parameters are met, it should be possible to reduce the frequency of testing below lily production, lessening the burden on farmers. Furthermore, groundwater sampling data has not demonstrated sufficient evidence to warrant the frequency or scope originally proposed.
Westbrook-17	The increasing regulatory and financial pressures may force remaining lily farmers out of business, making it more difficult to find stakeholders willing and able to manage and monitor the Smith River ecosystem. Given the significant influence of sampling requirements and resulting data, it is imperative that the monitoring plan is as thorough and robust as possible. While there is urgency to implement the program, it is important to recognize that a rushed, insufficient plan will not achieve its intended goals.
Westbrook-18	Easter lilies have been cultivated commercially in the Smith River Basin for over 80 years. There are absolutely no exceedances, or detections for that matter, of any pesticides in the main body of the Smith River itself. There have been a few detections and a few less exceedances in some of the surrounding tributaries. A number of these detections occurred above Easter lily production. The draft's listed beneficial uses have all remained ongoing during this period. While the water board has a large and important task to undertake it is very important to keep in mind the fragile state of the beneficial use to this region that will be most adversely affected.
Westbrook-2	The annual cycle of harvesting Easter lilies involves many dozens of field and shed workers, all collaborating in the digging, processing, planting, and packaging of the crop. The camaraderie that develops from this collective effort is unique and not easily found elsewhere. This shared commitment and teamwork are what make the work so meaningful and rewarding.
Westbrook-3	Farmers in California, as well as in other regions, are confronted with a wide array of financial challenges. Property taxes, payroll taxes, fuel taxes, state excise taxes, debt reduction credit taxes, and sales taxes all continue to rise, steadily driving up the cost of necessary inputs for agricultural operations. These increasing expenses make it progressively harder for farmers to maintain profitability and remain competitive in the industry. The regulatory landscape adds further complexity. Farmers must obtain permits for nearly every aspect of their work: building structures, using equipment, making repairs, acquiring new assets, or disposing of old ones. Each permit represents an additional hurdle, both in terms of time and expense, complicating the day-to-day management of a farming business.

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Westbrook-4	Labor costs have experienced exponential growth, with the minimum wage more than doubling since 2013. At the same time, overtime exemptions for farm labor have diminished, resulting in even higher payroll expenses. Despite these increased wages, it remains difficult to attract and maintain a reliable labor pool. State policies, particularly those related to taxation, have made it financially advantageous for individuals to remain at home rather than seek agricultural employment. This shortage of workers further strains farm operations.
Westbrook-5	Farmers who persevere through these obstacles must also secure comprehensive insurance coverage for their land, structures, vehicles, equipment, employees, owners, liability, and threats such as fire, flood, earthquakes, and terrorism. Even with robust policies, farmers are exposed to significant legal risks under California employment law. Employees may initiate lawsuits at any time, for any reason, and without providing evidence. The cost of defending such cases often exceeds the cost of settling, and the legal framework tends to favor employees, placing additional pressure on farm owners.
Westbrook-6	The Smith River Valley presents a distinct set of agricultural challenges compared to other regions in California. Its small size and rural character contribute to these unique difficulties. Due to the area's isolation, shipping costs are substantial, requiring higher profit margins to stay competitive. Additionally, the limited available land for agriculture continues to shrink as new regulations require increased setback distances, further constraining farming operations in the region.
Westbrook-7	Easter lilies require a lengthy cultivation period—twelve to fourteen months—making them more susceptible to pests, fungi, and environmental threats than typical crops. Growers mainly use synthetic pesticides and fertilizers designed for larger crops, as the small volume of Easter lilies doesn't justify specialized products. Many of these inputs are approved for multiple crops and some are OMRI-listed for organic farming. Regulatory agencies at federal, state, and local levels strictly monitor all chemical usage to ensure environmental and consumer safety.
Westbrook-8	Our team has been actively engaged with the North Coast Regional Water Quality Control Board to develop a waste discharge permit specifically for Easter lily production in the Smith River Plain. The main objective of this collaboration is to safeguard all beneficial uses of the Smith River basin and estuary. Despite these efforts, there is a strong likelihood that regulations placed on Easter lily farming will become so restrictive that continuing operations may no longer be economically feasible. The protection of other uses of the river system could result in limitations that significantly increase costs for growers.

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Westbrook-9	According to the proposed water quality plan on page 30, #94 reads, "Water Quality Benchmarks for surface water and groundwater monitoring pesticide parameters were determined by reviewing all available pesticide water quality values, including U.S. EPA aquatic life benchmarks, and, exercising best professional judgment consistent with scientific evidence, selecting the most protective (i.e., lowest) values for relevant beneficial uses." To me, this sounds like an educated guess that is being used to determine the future of agriculture in the Smith River Valley. I do understand it is of utmost importance to get this order out and in effect. Is it truly taking into account all beneficial uses? It might not be a bad idea to get a better understanding of the parameters within "best professional judgement".
Wilson-1	Commenter, a Del Norte County resident who has monitored groundwater and waterway pollution for over a decade, characterizes the situation as 'money over impact': income from lily bulbs benefits a very limited number of people in Del Norte County while the damage to the natural environment, river, coastal ocean, land, and wildlife is 'HUGE.' She has family, friends, and coworkers in Smith River dependent on contaminated water, and is personally relieved to live further out and not use that water for drinking, bathing, or livestock.
Wilson-2	Commenter requests the permit be publicly posted including on Facebook, where most Del Norte residents get their news, and requests that the environmental impact assessment be conducted by an unbiased, unconnected individual or group with no ties to county government or grant-funded organizations with conflicts of interest.
Wilson-3	Commenter argues that spraying pesticides in wet, rainy, foggy conditions causes pesticides to wash off plants directly into groundwater, soil, and waterways, reducing effectiveness and requiring reapplication — creating a double toxic effect and additional cost to growers. Also characterizes copper as lethal to livestock like sheep, and notes that any animal or fish ingesting elevated copper levels can contaminate meat and dairy products consumed by humans.
Wilson-4	Commenter proposes that violation fines be directed specifically to fund toxin testing for Smith River residents. Anonymized toxin results from people, fish, livestock/wildlife, and groundwater should be published publicly and on Facebook, providing community transparency, serving as a deterrent if human monitoring shows rising toxin levels, and placing growers on notice. Also requests unannounced inspections and frequent monitoring samples in addition to consequences that directly benefit the local Smith River population rather than being spent outside Smith River.

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Form Letter 1	Form Letter 1 was submitted by 135 commenters. The letter urged the Board to adopt an effective permit for the Draft General Waste Discharge Requirements for Commercial Lily Bulb Operations in the Smith River Plain and the Draft Environmental Impact Report. The letter made five core requests: 1. Disallow any further pesticide discharges to waterways, including copper. 2. Disallow the spraying of pesticides during wet weather. 3. Create large and effective buffer zones between fields, waterways, residences, and schools. 4. Effectively enforce the regulations outlined within the Order via significant consequences following order violations. 5. Provide protections that safeguard Tribal beneficial uses, imperiled species within the estuary, and guarantee clean drinking water for the community of Smith River. Approximately 20 of the 135 signatories personalized their submissions with additional context, including: • Nancy Nichols (Deadwood, OR): Reported a miscarriage after crossing a newly-planted lily bulb area with fresh pesticide applications while early in pregnancy; characterized the chemicals as "very dangerous." • Sharon Paltin, MD: Family physician with 36 years of service to Mendocino and Humboldt County communities; holds BS in Conservation of Natural Resources from UC Berkeley; noted "human health is a subset of environmental health." • Mary Ann Madej, Ph.D.: River scientist and frequent Smith River swimmer; stated lily bulb production "should not outweigh the benefits of a healthy riverine ecosystem." • Julia Hawkins, PhD: Associate Professor of Classics at Ohio State University; spends significant time in Smith River each summer. • Robert H. Retallick, RN: Smith River area registered nurse (12541 Mouth of Smith River Rd.). • James Warfel: Smith River resident, 82nd Airborne veteran, voter, land steward, and water right holder. • Denise Padgett: Smith River resident for 69 years. • Cari Torres: Argued lily bulbs are not essential food crops, the river and fish are worth more to the community than ornamental flowers, and suggested employment agencies assist displaced workers. • Matt Richardson (San Francisco, CA): UCSB Biology Sciences graduate (1995); aware of long-standing chemical dumping. • John Mertes: Noted decades of pesticide pollution and that healthy salmon populations support Del Norte tourism and fishing economies. • Cinda Johansen: Added a personal paragraph suggesting the Board deny the permit entirely and force closure of lily bulb operations. • Amanda Sears: Expressed frustration that basic environmental protection still requires public advocacy in 2026.
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	• Austin Koontz: Research Consultant (M.Sc., Hoban Lab) urging a cautious approach; specifically requested firm unexceedable pollution limits and storm/runoff event monitoring, noting "once water quality is degraded it is difficult to restore." • Rachel Bradley: Modified the form letter language, using "forbid" and "prohibit" instead of "disallow," and "substantial" instead of "large" buffer zones. • Deborah Filipelli, PhD: Identified herself by academic credential. • Scott Douglas Laxier: Urged the Board to make decisions "through the lens of sustainability rather than greed." • Joseph Alvarado: Opened with the legal phrase "Res Ipsa Loquitur, Time is of the Essence." • Jessica Jones: Added personal support for the Tolowa Nation specifically. • Mark Hayden: Emphasized stewardship of lands and waterways. • Laurie Christomos (Centralia, WA): Expressed appreciation for the Smith River's ecological value. Geographic distribution included: Smith River (8), Crescent City (7), Gasquet (3), McKinleyville (3), Brookings OR (2), Gold Beach OR (2), Arcata (2), San Francisco (2), Fort Bragg, Sacramento, Sebastopol, Ashland OR, Belmont, Centralia WA, Deadwood OR, Newport News VA, and numerous locations not specified.
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Form Letter 2	Form Letter 2 was submitted by 4 commenters. The letter made five core requests: 1. Adopt enforceable water quality limits with no exceedance of thresholds for pesticides, metals, nutrients, sediment, or other pollutants that could harm fish, wildlife, or drinking water. 2. Require storm-event monitoring so pollution during heavy rains or irrigation runoff can be detected and addressed. 3. Increase monitoring locations in tributaries, wetlands, and drainage channels across the Smith River Plain. 4. Require independent verification of monitoring data to ensure transparency and accountability. 5. Require immediate corrective action and enforcement with strict penalties when pollution is detected, including clear timelines for fixing violations.
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Part 2: Comments on the DEIR

Comment #	Comment Text
EPIC-22	Whether viewed from a civil rights disparate impact lens or from a conventional cumulative impact lens, lead agencies that receive state or federal funding should include a disparate impact analysis in their CEQA analysis under both state and federal law (Cal. Gov. Code § 11135; Title VI of the Civil Rights Act of 1964) and further include less discriminatory options in any alternatives analysis.
ELF-32	The Draft EIR also appears to fall short in its alternatives analysis. CEQA requires the Regional Board to analyze a reasonable range of alternatives that would avoid or substantially lessen the project's significant impacts. Yet the Draft EIR's alternatives discussion focuses on variations of the proposed regulatory approach and the No Project Alternative, while failing to meaningfully analyze an alternative that would prohibit or phase out lily bulb cultivation in the most sensitive areas of the Smith River Plain. That omission is particularly significant here because scoping comments expressly requested evaluation of halting lily bulb farming and restoring the estuary, and because the Draft EIR itself identifies ongoing controversy over whether the proposed project goes far enough to control pesticide and copper pollution.
CDFW-17	CDFW agrees with the DEIR's assessment of the Order as largely beneficial to biological resources, though we believe it must be strengthened to effectuate immediate and substantial change. The only comment pertaining to the DEIR is a refinement of Mitigation Measure BIO-1, which addresses potential impacts to biological resources associated with the construction and maintenance of management practices (e.g., grassed swales, detention basins). Rather than advising enrollees to avoid and minimize disturbance to sensitive habitats and special status species, CDFW recommends explicitly restricting new construction to the footprint of existing fields outside Streamside Areas (Recommendation 8). If construction would encroach into Streamside Areas or extend beyond the footprint of existing fields and appurtenant field roads, the enrollee would have to assess habitat conditions and undertake additional environmental review and permitting, as described in the mitigation measure.

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Comment #	Comment Text
CCR-3	The EIR for this Order spends much time discussing impacts to agricultural lands in the form of removing some acreage from farming due to adaptive management implementation, and also to sediment and water temperature considerations, but relatively little on pesticides, and there is absolutely no mention of cumulative impacts on Endangered Species or water quality from the application of a combination of toxic pesticides. Thus even though exceedance of individual toxins may not be reached, the cocktail of a combination of poisons that fish and wildlife (and people) are exposed to is not addressed at all. Please direct me to any section of the Order or EIR that addresses this if I have missed it.
CCR-7	2) that you acknowledge in writing both in the Order and EIR that there exists a cumulative impact of application of a variety of pesticides that is more severe than individual pesticides as measured by your proposed monitoring program.
HFMA-13	Our preferred Alternative in the EIR would have to include all 3 Objectives if you remove "minimize" from Objective # 1; but Objective #2, "Effectively track and quantify achievement of the stated objectives over a specific, defined time schedule" cannot be met under the described Monitoring and Reporting Program.
Dettmar-9	The Order and EIR also fail to address cumulative impacts from multiple pesticides applied in combination.
Dettmar-15	Explicitly acknowledge cumulative pesticide impacts in both the Order and EIR.

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Comment #	Comment Text
EPIC-1	We incorporate by reference the comments on the Draft Lily Bulb Order submitted separately by the Environmental Law Foundation on behalf of Save California Salmon and co-signatories ("WDR Comments"). These EIR-specific comments focus on the legal sufficiency of the Draft EIR under the California Environmental Quality Act (CEQA) and identify ways in which the document must be strengthened before the Board can lawfully certify it. As detailed in the WDR Comments, the evidence in the record compels a far more assertive regulatory response than the Draft Order provides. The same record-based failures that undermine the Draft Order also undermine the Draft EIR: an EIR that concludes impacts are less than significant on the basis of regulatory commitments that the record affirmatively shows have not worked, and that defers core analytical questions to future adaptive management iterations, cannot satisfy CEQA's informational mandate. For the reasons set forth below, we respectfully request that the Board revise and recirculate the Draft EIR, or at minimum substantially revise it before certification.

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Comment #	Comment Text
EPIC-2	The Draft EIR acknowledges that surface water monitoring between 2013 and 2024 documented synthetic pesticides, including diuron, ethoprop, and imidacloprid, and dissolved copper in downstream tributaries and sloughs at levels that periodically exceed U.S. EPA aquatic life benchmarks. The 2025 SWAMP Report confirms that exceedances have persisted through the four years since the adoption of the 2021 Management Plan: imidacloprid exceedances were detected in 40% of samples; copper exceedances of the chronic BLM criterion occurred in 100% of Lower Mello Creek samples and 56% of Lower Delilah Creek samples; and concentrations correlated strongly with application rates and increased markedly downstream of lily bulb operations. These exceedances have been so severe that the Smith River recently was listed for several agricultural chemicals under the state's 303(d) list. These listings can directly be attributed to the years of inaction by this board in creation of this permit. The EIR cannot conclude that water quality impacts will be less than significant when its own cited record demonstrates that the very management practices the Project relies upon have not significantly decreased those impacts over multiple years of implementation. A less-than-significant conclusion premised on the assumption that a regulatory framework will function as intended is not supported by substantial evidence where the record shows the framework's antecedents have not worked.

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Comment #	Comment Text
EPIC-3	NOAA's 2014 Final Recovery Plan for the SONCC coho salmon identifies copper concentrations in the Smith River as potentially causing acute toxic effects and impairing olfaction and reproduction in coho salmon at concentrations far below the California Toxics Rule standard. The 2018 NMFS/CDFW Monitoring Report found that dissolved copper has neurobehavioral toxicant effects on salmonids at levels of 0.18 to 2.1 µg/L above background (levels below the CTR threshold) and that multiple sampling locations in the Smith River Plain exceeded even CTR levels during monitoring events. The Draft EIR does not adequately address these sublethal and chronic biological effects. CEQA requires analysis of the full range of reasonably foreseeable environmental effects to listed species, including sublethal harms to salmonids such as impaired olfactory function and predator avoidance, reduced reproduction, prey base impacts, and the cumulative consequences of repeated storm-driven pollutant pulses in estuarine rearing habitat. Under both the Federal Endangered Species Act and California Endangered Species Act, sub-lethal impacts that otherwise harm a species by interfering with behavior, reproduction, or other essential life pathways may constitute take of an endangered species. <i>Babbitt v. Sweet Home Chapter of Communities for a Great Oregon</i>, 515 U.S. 687 (1995). The EIR's biological analysis must be revised to directly engage the NOAA recovery science and to explain, with evidence, why the Project's chosen pace and structure are sufficient to prevent significant harm to ESA-listed and CESA-listed species and their habitat.

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Comment #	Comment Text
EPIC-4	The Draft Lily Bulb Order's adaptive management structure allows a minimum of approximately ten years before enforcement can be triggered. The Draft EIR does not analyze the environmental consequences of continued exceedances during that decade-long compliance period. CEQA Guidelines § 15126.2 requires disclosure and analysis of impacts during implementation, not merely upon theoretical completion. The reasons for this are obvious. Without this requirement, lead agencies could simply delay consideration of impacts until after the project was completed, thus avoiding the informational and harm avoidance directives of CEQA. CEQA is a "look before you leap" law. This current project proposes to leap for 10 years before looking. The EIR must be revised to evaluate what the record already demonstrates: that if management practices continue to be insufficient, the consequence is continued loading of copper and synthetic pesticides into some of California's most ecologically sensitive and legally protected waters for an extended period, with foreseeable ongoing harm to coho salmon, tribal fisheries, and downstream beneficial uses.
EPIC-5	The Board already possesses specific, detailed information about the nature and extent of pollution: over a decade of surface water monitoring, the 2025 SWAMP Report, the 2018 NMFS/CDFW Monitoring Report, multiple years of management practice reporting, and groundwater monitoring showing pesticide detections in six of nine domestic wells sampled in 2025. Where the existing record contains sufficient information to analyze impacts, an agency may not defer that analysis by invoking programmatic uncertainty. (Communities for a Better Environment, supra, 184 Cal.App.4th at 92-95.) Critically, the EIR cannot simultaneously invoke programmatic uncertainty to justify incomplete analysis while also relying on those same uncertain future practices to conclude that impacts are less than significant. That is the kind of logical circularity that courts have rejected as insufficient to constitute substantial evidence. (See Kings County Farm Bureau v. City of Hanford (1990) 221 Cal.App.3d 692, 717.) The EIR must be revised to evaluate these impacts now, using the information that the agency already has.

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Comment #	Comment Text
EPIC-6	The Draft EIR relies heavily on vegetated setbacks and filter strips as the primary mitigation mechanism for water quality impacts. These setbacks are not defined and the board does not address issues such as soil type, groundwater connectivity, yearly rainfall, slope, roading and ditch impacts, or whether grazing will be allowed within these filter strips and set backs. This makes it impossible to assess whether they will be effective. <i>Sierra Club v. County of Fresno</i> 6 Cal.5th 502 (2018) (holding that an EIR must provide sufficient detail and analysis to support its mitigation conclusions). Similarly, the CEQA guidelines require mitigation measures to have "specific performance standards... and the means by which the mitigation measure will be achieved and monitored." (CEQA Guidelines § 15126.4(a)(1)(B)-(C)) The mitigation for this project is not supported by substantial evidence, is fatally vague, does not have specific performance standards, and therefore constitutes a legally deficient mitigation finding under CEQA.
EPIC-7	The Hurst study, (the only study in the record that evaluates the effectiveness of management practices specifically designed for Smith River Plain conditions) demonstrates that 80-foot setbacks did not reduce dissolved copper discharge one of the main environmental impacts at issue here. During saturated storm conditions in December and January, filter strips removed essentially no copper. Constructed berms were washed away. The proposed mitigation was therefore ineffective at reducing this significant environmental harm. Despite this, the Draft Order proposes 50-foot setbacks (shorter than the 80-foot setbacks shown to fail in the Hurst study) as a Tier 1 compliance option. The Draft EIR cannot conclude that such setbacks will reduce impacts to a less-than-significant level when the record affirmatively demonstrates they will not. CEQA requires that proposed mitigation measures be supported by substantial evidence that they will actually be effective. (Pub. Res. Code § 21002; CEQA Guidelines § 15126.4(a)(1)(B); <i>Federation of Hillside & Canyon Assns. v. City of Los Angeles</i> (2000) 83 Cal.App.4th 1252, 1261.) Where the only site-specific study in the record contradicts the EIR's mitigation conclusion, that conclusion is not supported by substantial evidence.

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Comment #	Comment Text
EPIC-8	Setbacks do not address groundwater transport pathways. The record establishes that imidacloprid and diuron are detectable outside the wet season, indicating groundwater transport as a significant mechanism for contamination. Even if the setbacks were to capture surface runoff but still allowed persistent pesticide residues to migrate through soils to shallow groundwater and receiving waters, they cannot constitute adequate mitigation for the full scope of identified discharge pathways. Mitigation that only partially mitigates an impact by failing to address a significant mechanism by which that impact occurs cannot be said to mitigate below a significant level. <i>Sierra Club v. County of Fresno</i> 6 Cal.5th 502 (2018)

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Comment #	Comment Text
EPIC-9	The Draft EIR acknowledges that the Smith River Plain has already been extensively modified by diking, tide gates, agricultural conversion, and riparian removal, and that NOAA's recovery documents identify the lower Smith River and estuary as already impaired. Yet the EIR fails to synthesize these stressors into a meaningful cumulative analysis. The EIR also touches on grazing impacts and nitrogen pollution, but does not address the ongoing cumulative impacts with the rotation of lily bulbs and grazing and the serious impacts of estuary and riparian grazing. The serious impacts of roading and ditching are not addressed as a cumulative impact despite the substantial evidence that roads and ditches are directly responsible for conveying sediments and chemicals to impaired waterways. A rigorous cumulative impacts analysis must evaluate the interaction of: (1) habitat simplification and altered hydrology from decades of agricultural conversion; (2) ongoing and documented pesticide and copper loading from lily bulb operations; (3) groundwater contamination detected in domestic wells; (4) estuarine impairment limiting juvenile coho rearing capacity; (5) climate-driven shifts in runoff timing and intensity; and (6) the compounding vulnerabilities of a federally listed salmonid population already operating far below its recovery target of 6,800 spawners, with recent escapement estimates as low as 2,365 individuals. A level of contaminant loading that might be tolerable in a healthy, diverse watershed becomes potentially devastating when overlaid on degraded floodplain structure, constrained tidal exchange, and the biological needs of a listed species under active recovery stress.

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Comment #	Comment Text
EPIC-10	The Draft EIR's alternatives discussion focuses primarily on the No Project Alternative and reduced regulatory scope options, including reduced streamside area setbacks. That is too narrow. The EIR's own scoping record expressly includes public requests to halt lily bulb cultivation in the most sensitive floodplain areas and to restore estuarine function. Yet, no such alternative was considered. At minimum, the revised EIR must evaluate the following alternatives: • A zero-discharge alternative for synthetic pesticides and copper into fish-bearing waterways and their tributaries. • A wet-weather prohibition alternative, which would ban pesticide application during defined wet-weather and first-flush periods. • An expanded, hydrologically-based buffer alternative, with setback widths calibrated to actual hydrologic connectivity and fish-bearing status rather than a uniform 50-foot standard. • An immediate certified WQMP alternative, which would require all enrollees to submit certified Water Quality Management Plans upon enrollment rather than awaiting Tier 2 adaptive management triggers. • An independent monitoring alternative, which would replace or supplement coalition-based monitoring with third-party oversight. • A high-risk field restriction alternative, which would prohibit or phase out lily bulb cultivation in fields with direct hydrologic connectivity to the estuary and its immediate tributaries.

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Comment #	Comment Text
EPIC-11	The EIR's analysis appears to focus on cultural resources in the archaeological and site-disturbance sense, rather than on living cultural practices that depend on salmon, clean water, functioning wetlands, and access to the estuarine ecosystem. Salmon, shellfish and smelt are not merely a biological resource; they are central to Tolowa Dee-ni' subsistence, ceremony, and cultural continuity. Continued contamination of juvenile rearing habitat, estuary habitat, sloughs, nearby coastlines and tributaries threatens those living uses in ways that must be disclosed and analyzed under CEQA. Consideration of these resources was specifically added as a requirement for EIRs following the passage of AB 52 enacted in 2014 and codified in Public Resources Code section 21080.3.1 et seq. Public agencies must, when feasible, avoid damaging effects to any tribal cultural resource. Pub. Res. Code § 21084.3(a). The EIR must be revised to: • specifically analyze impacts to living Tribal cultural practices that depend on functioning salmonid populations and clean water; • address the disproportionate burden borne by Tribal communities as a result of degraded water quality and impaired fisheries; and • evaluate the adequacy of the Project's protections in light of the Tolowa Dee-ni' Nation's treaty rights, subsistence practices, and ceremonial uses.

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Comment #	Comment Text
EPIC-12	The Draft EIR's own scoping summary records specific concerns from residents regarding pesticide exposure, chronic illness, contaminated soil, and the proximity of an elementary school adjacent to lily bulb fields. The public record includes reports of acute spray drift exposure, including burning skin and eyes, tongue swelling, blisters, and difficulty breathing, as well as reported chronic symptoms including: skin rashes, nausea, respiratory issues, headaches, digestive and urinary problems, and concerns about elevated cancer incidence in the community. CEQA does not require proof of legal causation before requiring disclosure and analysis of credible community health concerns. What CEQA requires is that the EIR fairly disclose and analyze the reasonably foreseeable health consequences of the project, including exposure to airborne pesticide drift, groundwater contamination of domestic wells, and the cumulative community health burden of long-term proximity to intensive pesticide use. (CEQA Guidelines §§ 15126, 15126.2; see also <i>Californians for Alternatives to Toxics v. Department of Food & Agriculture</i> (2005) 136 Cal.App.4th 1.) The EIR must be revised to: • Evaluate potential community exposure pathways, including spray drift from adjacent fields, volatilization of applied pesticides, and surface transport under wind conditions; • Analyze domestic well contamination risks in light of the 2025 finding that pesticides were detected in six of nine domestic wells sampled; • Address school adjacency concerns and the potential for children's acute and chronic exposure; • Evaluate the cumulative health burden on the Smith River community as a low-income rural community with limited access to healthcare; and • Assess the Project's compliance with the State Water Board's Racial Equity Resolution and the Regional Board's own environmental justice commitments.

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Comment #	Comment Text
EPIC-13	The Draft EIR acknowledges that pesticides and nitrate were detected in irrigation and domestic wells located within current and historical lily bulb cultivation areas. The 2025 SWAMP Report further establishes that imidacloprid and diuron are detectable outside of the wet season, strongly suggesting groundwater transport as a discharge pathway independent of storm-event surface runoff. The EIR's analysis is disproportionately focused on surface runoff pathways and does not adequately evaluate: • the persistence of copper and pesticide residues in soils and shallow groundwater; • seasonal lag effects that may result in continued discharge to receiving waters even after surface runoff controls are improved; • cumulative loading to shallow aquifers over years of intensive cultivation; • the adequacy of surface-buffer strategies where groundwater transport, rather than overland flow, is the dominant pollutant pathway; and • the risk that persistent pesticides (including copper, diuron, and imidacloprid) will continue to affect domestic wells even after surface management practices are improved. CEQA requires analysis of the complete range of significant environmental effects, including those that occur through indirect or delayed pathways. The groundwater pathway is neither indirect nor speculative: the record directly documents pesticide presence in wells.

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Comment #	Comment Text
EPIC-14	The Draft EIR's antidegradation analysis cannot satisfy these requirements because: • the EIR concludes that the Order's requirements constitute BPTC, but the record shows the management practices the Order relies upon have not eliminated exceedances; • management practices that the Hurst study demonstrates to be ineffective under Smith River conditions cannot, by definition, constitute BPTC; and • the EIR does not adequately analyze the social and environmental costs of continued degradation during the compliance period, including the "incalculable" value of ESA-listed species that courts have recognized must be given the highest priority. (Tennessee Valley Auth. v. Hill (1978) 437 U.S. 153, 187, 194.) The EIR must be revised to provide a legally sufficient antidegradation analysis that honestly confronts what the record shows.

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Comment #	Comment Text
EPIC-15	Before certifying the EIR, the Regional Board should revise the Draft EIR to: 1. Provide substantial evidence supporting any less-than-significant conclusion, specifically addressing why the Project is likely to achieve water quality objectives given the documented failure of comparable management practices; 2. Analyze the environmental consequences of continued exceedances during the adaptive management compliance period; 3. Strengthen the cumulative impacts analysis to address the interaction of habitat simplification, hydrologic alteration, estuarine impairment, climate-related runoff variability, groundwater contamination, grazing impacts, roading impacts, and ongoing pollutant loading; 4. Revise the mitigation analysis to address the record-documented failure of 80-foot setbacks and acknowledge that surface management practices cannot address groundwater transport pathways; 5. Revise the mitigation analysis to be less vague by requiring specific performance standards; 6. Significantly shorten the 10-year delay of enforcement; 7. Evaluate the full range of feasible alternatives, including zero-discharge, wet-weather prohibitions, expanded buffers, immediate certified WQMPs, independent monitoring, and high-risk field restrictions; 8. Improve the analysis of Tribal beneficial uses and living cultural impacts; 9. Expand the environmental justice and community health analysis; 10. Provide a legally sufficient groundwater transport analysis; and 11. Revise the antidegradation analysis to bridge the analytic gap between ongoing exceedances and the conclusion that BPTC is being applied.

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Comment #	Comment Text
EPIC-16	An EIR's analysis must evaluate impacts during the entire project implementation period, not merely after a project is presumed to be successful. CEQA Guidelines § 15126.2 expressly requires disclosure of significant environmental effects that may occur as a result of phased implementation. Where a project involves staged compliance with continued interim pollutant loading, the EIR must analyze the environmental consequences of that interim period. (See Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova (2007) 40 Cal.4th 412, 449.)
EPIC-17	EPIC and other commenters have repeatedly suggested management practices that would actually reduce these impacts to less than significant. See WDR Comments.
EPIC-18	The EIR also touches on grazing impacts and nitrogen pollution, but does not address the ongoing cumulative impacts with the rotation of lily bulbs and grazing and the serious impacts of estuary and riparian grazing. The serious impacts of roading and ditching are not addressed as a cumulative impact despite the substantial evidence that roads and ditches are directly responsible for conveying sediments and chemicals to impaired waterways.
EPIC-19	These setbacks are not defined and the board does not address issues such as soil type, groundwater connectivity, yearly rainfall, slope, roading and ditch impacts, or whether grazing will be allowed within these filter strips and set backs. This makes it impossible to assess whether they will be effective.
EPIC-20	The public record includes reports of acute spray drift exposure, including burning skin and eyes, tongue swelling, blisters, and difficulty breathing, as well as reported chronic symptoms including: skin rashes, nausea, respiratory issues, headaches, digestive and urinary problems, and concerns about elevated cancer incidence in the community. The Draft EIR's own scoping summary records specific concerns from residents regarding pesticide exposure, chronic illness, contaminated soil, and the proximity of an elementary school adjacent to lily bulb fields.

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Comment #	Comment Text
EPIC-21	Water Code section 13149.2 separately requires that when issuing or reissuing WDRs, a water board must make programmatic findings on tribal impact, environmental justice, and racial equity considerations, and must identify measures within its authority to address those impacts. As the WDR Comments explain in detail, the Draft Order's section 13149.2 analysis is cursory and insufficient. The Draft EIR, as the foundational environmental document, must provide the analytical basis for those findings. It currently does not.
St.Clair-1	Cumulative Desecration: The EIR fails to address the 40-year buildup of these toxins in the sediment of our estuary.
St.Clair-2	Conclusion The "No Project" alternative is insufficient. I demand a Zero-Detection standard and an alternative that mandates the complete elimination of toxic discharges into the Smith River.

California Farm Bureau comments CAFB-7--CAFB-21 appear below as text blocks for readability:

CAFB-7

The North Coast Regional Board DEIR for the Draft Lily Bulb Order or proposed Project constitutes a prejudicial abuse of discretion⁴ in that the North Coast Regional Board failed to proceed in a manner required by law and its decision is not supported by substantial evidence as the DEIR does not comply with the California Environmental Quality Act ("CEQA") (Pub. Resources Code, §§ 21000 et seq.) The Draft Lily Bulb Order includes significant and prescriptive requirements that unreasonably impact growers and the agricultural industry in the North Coast. Although growers and the agricultural

⁴ "A prejudicial abuse of discretion occurs 'if the failure to include relevant information precludes informed decision-making and informed public participating, thereby thwarting the statutory goals of the EIR process.'" (Berkeley Keep Jets Over the Bay v. Board of Port Comm'rs (2001) 91 Cal.App.4th 1344, 1355 (quoting Santiago County Water Dist. v. County of Orange (1981) 118 Cal.App.3d 818, 829).)

North Coast growers at a severe disadvantage in a very competitive marketplace. As the state agency tasked to ensure the reasonable regulation of the North Coast's water quality given all the demands made upon the water, it is imperative that the Regional Board comply with all laws, including CEQA, and act appropriately and reasonably when it adopts the Draft Lily Bulb Order. (Wat. Code, §§ 13241; 13260(a); 13263; 13267; 13269; Pub. Resources Code, § 21001.)

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CEQA requires that an agency analyze the potential environmental impacts of its proposed actions in an environmental impact report (except in certain limited circumstances). (See, e.g., Pub. Resources Code, § 21100.) CEQA is designed to inform decision-makers and the public about potential, significant environmental effects of a project. (Cal. Code Regs., tit. 14, § 15002(a)(1), ("CEQA Guidelines").) "Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made. Thus, the EIR 'protects not only the environment, but also informed self-government.'" (Citizens of Goleta Valley v. Board of Supervisors (1990) 52 Cal.3d 553, 564.)

In general, the Regional Board failed to properly follow and comply with CEQA in that the analysis in the DEIR is superficial, fails to adequately represent baseline conditions, fails to evaluate the entire project, inadequately analyzes the environmental impacts associated with the project, fails to analyze the economic impacts associated with the proposed Project, fails to properly identify and analyze alternatives, fails to adequately address cumulative impacts, and fails to support several of its conclusions and thresholds with substantial evidence. Due to these inadequacies, the DEIR is not a legally adequate document and cannot be relied upon.

CAFB-8

CEQA was enacted to address concerns about environmental quality in the state of California. CEQA establishes processes and procedures to ensure that California agencies complete an environmental analysis and consider and disclose to the public the environmental impacts of a proposed project. (Pub. Resources Code, §§ 21000 et seq.; Cal. Code Regs., tit. 14, § 15000 et seq.) CEQA's statutory framework clearly sets forth a series of analytical steps intended to promote the fundamental goals and purposes of environmental review—information, public participation, mitigation, and governmental agency accountability. (Cal. Code Regs., tit. 14, § 15002; see also Pub. Resources Code, §§ 21001, 21001.1, 21002, 21003, 21006, 21064.) CEQA's intent and purpose foster informed public participation and decision-making. (Laurel Heights Improvement Assn. v. Regents of University of California (1988) 47 Cal.3d 376, 404 ("Laurel Heights I"); Citizens of Goleta Valley, supra, 52 Cal.3d at p. 564.) As the lead agency for the proposed Project, the Regional Board must comply with CEQA's overall objectives, which are to: 1) inform the decision-makers and public about the potential significant environmental effects of a proposed project; 2) identify ways that environmental damage may be mitigated; 3) prevent significant, avoidable damage to the environment by requiring changes in projects, through the use of alternatives or mitigation measures when feasible; and 4) disclose to the public why an agency approved a project if significant effects are involved. (Pub. Resources Code, § 21080.5(a).)

An attempt to review the environmental impacts of the Draft Lily Bulb Order was included within the DEIR. Unfortunately, a full CEQA review and environmental analysis has been avoided due to the DEIR's improper conclusions of "speculative" and "less than significant" impacts. Without preparing a proper and adequate environmental document, the public has been precluded from gaining a full understanding of the environmental impacts and consequences of the Draft Lily Bulb Order as well as gaining assurance that all consequences have in fact been analyzed to the fullest extent required by law. (See Vineyard Area Citizens for Responsible Growth, Inc., supra, (2007) 40 Cal.4th at pp. 449–450, ["The preparation and circulation of an EIR is more than a set of technical hurdles for agencies and developers to overcome. The EIR's function is to ensure that government officials who decide to build or approve a project do so with a full understanding of the environmental consequences and, equally important, that the public is assured those consequences have been taken into account. [Citation.] For the EIR to serve these goals it must present information in such a

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manner that the foreseeable impacts of pursuing the project can actually be understood and weighed, and the public must be given an adequate opportunity to comment on that presentation before the decision to go forward is made."], emphasis added.)

As described herein, the Regional Board has failed to comply with the provisions of CEQA as the DEIR prepared for the proposed Project5 fails to satisfy the requirements of CEQA and the CEQA Guidelines, title 14, California Code of Regulations, section 15000 et seq.6 As demonstrated below, the Regional Board's DEIR is flawed and legally inadequate.

CAFB-9

A. The DEIR is Legally Deficient Because It Fails to Properly Identify the Baseline and Environmental Setting

The DEIR contains an incomplete and flawed environmental baseline and environmental setting. (See Cal. Code Regs., tit. 14, §§ 15125(a), (c).) The existing setting omits relevant information, relevant regulations, programs, and plans, and truncates information that is included. Further, the Draft WDR and the DEIR utilize different numbers for the total acres in lily bulb production as well as the annual planted acres, casting doubt on what acreage numbers were used to analyze impacts, including economic impacts, and the adequacy of the existing setting and baseline. (DEIR, pp. 54-55; Draft WDR, pp. 5054.) With this conflict, the environmental setting fails to describe accurately the existing environmental conditions, and thus prevents a proper analysis of significant adverse effects. (Pub. Resources Code, § 21061; Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova (2007) 40 Cal.4th 412, 428, Neighbors for Smart Rail v. Exposition Metro Line Construction Authority (2013) 57 Cal.4th 439, 447, [An EIR must contain an appropriate environmental baseline and environmental setting in order for a legally proper analysis of any significant effects the project may have on the environment].) "Knowledge of the regional setting [of the project] is critical to the assessment of environmental impacts...The EIR must demonstrate that the significant environmental impacts of the proposed project were adequately investigated and discussed and it must permit the significant effects

5 The term "project" refers to the proposed General Waste Discharge Requirements for Commercial Lily Bulb Operations in the Smith River Plain and all attachments in their entirety.

6 All future references to Guidelines are to the CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq.) developed by the Governor's Office of Planning and Research and adopted by California's Natural Resources Agency. (Pub. Resources Code, § 21083.) "[C]ourts should afford great weight to the Guidelines except when a provision is clearly unauthorized or erroneous under CEQA. [Citation.]" (Laurel Heights I, supra, (1988) 47 Cal.3d 376, 391, fn. 2).)

of the project to be considered in the full environmental context." (Cal. Code Regs., tit. 14, § 15125(c).) "To make such an assessment, an EIR must delineate environmental conditions prevailing absent the project, defining a "baseline" against which predicted effects can be described and quantified. (Communities for a Better Environment v. South Coast Air Quality Management Dist. (2010) 48 Cal.4th 310, 315.)" (Neighbors for Smart Rail, supra, 57 Cal.4th at p. 447.) Toward that end, the DEIR "must include a description of the physical environmental conditions in the vicinity of the project, from both a local and a regional perspective. This

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environmental setting will constitute the baseline physical conditions by which a Lead Agency determines whether an impact is significant." (Id. at § 15125(a); *Neighbors for Smart Rail*, supra, 57 Cal.4th at p. 447.)

For example, the environmental setting fails to convey important features of North Coast agriculture that are relevant for assessing the physical and economic impacts of the Order. The DEIR fails to describe baseline conditions for the covered watersheds, specifically water quality conditions. There is no discussion of existing sediment loads per watershed and sources of those loads, current amounts of riparian habitat in the watersheds, or current stream temperature conditions. Without this information, the DEIR, especially the environmental setting and baseline, does not provide an accurate overview of lily bulb production throughout the North Coast region or the economic factors that affect planting decisions, land retirement, and jobs, and income opportunities for communities in the region. There is no discussion of how implementation of the Draft Lily Bulb Order would impact standard and cultural practices in the North Coast Region, and associated costs of implementing the Order. "Agriculture is fundamentally an economic activity that makes use of, and affects, many aspects of the physical environment. Therefore, understanding the environmental impact of the Order requires that its economic effect on agricultural operations play an important role in the analysis." (Attachment A, ERA Economics, Technical Memorandum, p. 1.)⁷ The DEIR's use of outdated and limited information fails to appropriately capture and describe the proposed Project's environmental setting.

Additionally, the DEIR fails to provide substantial evidence in support of its assumptions regarding sediment loads and sources, turbidity levels and sources, economics, impacts, agricultural land conversion, etc, within the project boundaries, and therefore fails to accurately reflect and detail existing conditions. This sets up for a false impact analysis as the impacts of the project must be measured against the "real conditions on the ground." (*Save our Peninsula Committee*, supra, 87 Cal.App.4th at p. 121; see also *City of Carmel-by-the Sea v. Board of Supervisors* (1986) 183 Cal.App.3d 229, 246; *Environmental Planning & Information Council v. County of El Dorado* (1982) 131 Cal.App.3d 350, 354; *County of Amador v. El Dorado County Water Agency*, supra, 76 Cal.App.4th at p. 952; *Galante Vineyards v. Monterey Peninsula Water Management Dist.*, (1997) 60 Cal.App.4th 1109, 1122.)

By choosing a baseline not supported by substantial evidence and merely presenting unsupported conclusions, figures, or references to projects/studies/plans without analysis, the DEIR fails to provide sufficient baseline and environmental setting information for intelligent decision-making and skirts CEQA's requirements. "The court in *County of Amador* underscored the 'importance of an adequate baseline description, for without such a description, analysis of impacts, mitigation measures and project alternatives becomes impossible.' (Id. at p. 953.) The court concluded that '[a]n adequate EIR requires

7 Although the ERA Economics Technical Memorandum was prepared for the Central Coast Regional Water Board's Ag Order 4.0, the memo's conclusions regarding a proper economic analysis for agricultural waste discharge requirements apply to the Lily Bulb Order.

more than raw data; it requires also an analysis that will provide decision makers with sufficient information to make intelligent decisions.' (Id. at p. 955; see also *Guidelines*, § 15151.)" (*Save Our Peninsula Committee*, supra, 87 Cal.App.4th at p. 124; see also *County of Amador*, supra, 76 Cal.App.4th 931, 955.)

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"Even when a project is intended and expected to improve conditions in the long term—20 or 30 years after an EIR is prepared—decision makers and members of the public are entitled under CEQA to know the short- and medium-term environmental costs of achieving that desirable improvement. These costs include not only the impacts involved in constructing the project but also those the project will create during its initial years of operation. Though we might rationally choose to endure short- or medium-term hardship for a long-term, permanent benefit, deciding to make that tradeoff requires some knowledge about the severity and duration of the near-term hardship. An EIR stating that in 20 or 30 years the project will improve the environment, but neglecting, without justification, to provide any evaluation of the project's impacts in the meantime, does not "giv[e] due consideration to both the short-term and long-term effects" of the project (Cal.Code Regs., tit. 14, § 15126.2, subd. (a)) and does not serve CEQA's informational purpose well. The omission of an existing conditions analysis must be justified, even if the project is designed to alleviate adverse environmental conditions over the long term." (Neighbors for Smart Rail v. Exposition Metro Line Construction Authority, *supra*, 57 Cal.4th at p. 455.)

Accordingly, the DEIR must be revised to include the appropriate project baseline. Without this, the DEIR fails to satisfy CEQA's fundamental requirements.

CAFB-10

B. The DEIR Contains an Inadequate Assessment of Significant Impacts and Effects on The Environment

The CEQA Guidelines define a "significant effect" as "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant." (Cal. Code Regs., tit. 14, § 15382; see also Pub. Resources Code, § 21068.) According to Public Resources Code section 21083 and CEQA Guidelines section 15065(a), if any of the following impacts result from a proposed project, the project is considered to have a significant effect on the environment:

- (1) "The project has the potential to substantially degrade the quality of the environment; ...
- (2) The project has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals.
- (3) The project has possible environmental effects which are individually limited but cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of reasonably foreseeable probable future projects.
- (4) The environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly."

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(Cal. Code Regs., tit. 14 § 15065(a).) In determining whether a project will have a significant environmental effect, the lead agency must consider the "whole of the action," which includes all discretionary approvals by governmental agencies, ministerial actions as well as discretionary actions, and all constituent parts of a project. (Cal. Code Regs., tit. 14, §§ 15003(h), 15378.)

The CEQA Guidelines further state that, "An ironclad definition of significant effect is not possible because the significance of an activity may vary with the setting. For example, an activity which may not be significant in an urban area may be significant in a rural area." (Cal. Code Regs., tit. 14, § 15064.) Appendix G of the CEQA Guidelines describes impacts that the California Resources Agency has determined are normally considered significant. These guidelines require that physical changes in the environment be evaluated based on factual evidence, reasonable assumptions supported by facts, and expert opinion based on fact. (Cal. Code Regs., tit. 14, § 15064(f)(5).) However, potential impacts are not limited to Appendix G nor are questions within Appendix G necessarily thresholds of significance. (CEQA Appendix G.)

Here, the DEIR's analysis of the Draft Lily Bulb Order fails to fully consider many of the proposed Project's significant impacts on the agricultural environment,⁸ fails to provide adequate analysis of the proposed Project's impacts that are reviewed, and improperly fails to provide sufficient detail regarding the foreseeable and cumulative significant impacts that will arise pursuant to the Draft Lily Bulb Order's requirements on lily bulb production and pasture lands with Del Norte County. The DEIR fails to comply with the requirements of CEQA in that it fails to adequately disclose, analyze and/or mitigate the proposed Project's environmental impacts as required by law, and its conclusions regarding the proposed Project's environmental impacts are not supported by substantial evidence. As a result, the proposed Project will result in significant environmental impacts that the DEIR fails to address or mitigate.

Given that many factors have to be analyzed and significant effects and impacts should be determined on a case-by-case basis, the Regional Board should review and use all data, facts, evidence, and personal knowledge prior to determining the Draft Lily Bulb Order's potential to significantly impact the environment.⁹ By failing to proceed in this manner, the DEIR does not contain an adequate environmental review for the proposed Project.

⁸ CEQA defines "environment" broadly to include the agricultural environment. (CEQA Guidelines Appendix G, section II, Agriculture and Forestry Resources; Pub. Resources Code, § 21060.5.) "'Environment' means the physical conditions which exist within the area which will be affected by a proposed project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. The area involved shall be the area in which significant effects would occur either directly or indirectly as a result of the project. The 'environment' includes both natural and man-made conditions." (Cal. Code Regs., tit. 14, § 15360; see also Pub. Resources Code, § 21060.5.) In other words, the DEIR's Environmental Analysis of Agricultural and Forestry Resources must review of the proposed Project's potential impacts on agricultural environment and analyze any resulting direct, indirect, and/or cumulative impacts that may impact agriculture.

⁹ Water quality regulations that aim to improve environmental quality can have unintended consequences that harm the environment and natural resources. The reallocation of water from one location to another, to meet water quality regulations, may reduce the well-being of fish and wildlife dependent on the water in the source region. Reduction of use of chemical pesticides that reduce farm

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productivity may lead to an increase in utilized land use and expansion of the utilized land base to previously undeveloped areas. Diversion of water resources to meet environmental quality objectives may reduce the capacity to utilize this water in provision of environmental amenities. Thus, proper environmental analysis of significant impacts is needed here.

CAFB-11

1. The DEIR Improperly Shifts the Burden of Proof and Determination Of Significance to the Public

When conducting an environmental review pursuant to CEQA, the burden of proof is on the lead agency to show that the project won't have an impact on the environment. (Cal. Code Regs., tit. 14, § 15064.) Under CEQA, if a project clearly will have an impact on the environment, its proponents, here the Regional Board, must properly identify those impacts and propose mitigations. (Cal. Code Regs., tit. 14, § 15002.) The burden of proof is not on the public to show that an environmental impact may occur. Further, the public does not bear the burden of determining which portions of a project will have a significant impact or effect on the environment. Rather, that is the fundamental duty of the lead agency. (Cal. Code Regs., tit. 14, § 15064.)

The determination of whether a project may have a significant effect on the environment is a critical step in the CEQA process, and one that requires professional knowledge and judgment, as described in California Code of Regulations, title 14, section 15064. The determination should be based on information and evidence in the record and, to the extent feasible, on scientific and factual data. (Ibid.) This determination is made prior to and separate from the development of mitigation measures for the project. During opportunities to provide oral comments on the development of the proposed Project, members of the agricultural community and technical providers provided feedback regarding the Draft Lily Bulb Order's impacts on agricultural resources, including economic impacts, impacts to total farmland acreage and land use, and impacts from riparian buffer requirements.

By providing this feedback, the public provided ample information in the form of substantial evidence to make a "fair argument" that the proposed Project may have a significant environmental impact, especially on the agricultural environment. (Cal. Code Regs., tit. 14, § 15064(g)(1); *Friends of B Street v. City of Hayward* (1980) 106 Cal.App.3d 988, 1002.) Notwithstanding those comments raised, the DEIR concludes that the majority of impacts to agriculture are speculative in nature or less than significant, thus warranting no additional analysis and resulting in less than significant conclusions. For example, the DEIR states:

"The overall cumulative costs of Management Practice implementation for a specific lily bulb operation are speculative though because, while it is generally known what practices are employed throughout the Smith River Plain through 2021 Management Plan reporting, individual or field-level information was not reported." (DEIR, p. 61.)

"It is also speculative as to which specific Management Practices an Enrollee will implement in the transition from a voluntary program framework to a regulatory one." (DEIR, p. 61.)

"In the unique circumstance where the cost of compliance may be too great or the loss of production of displaced planted areas would make the operation unprofitable, neither scenario would permanently nor irretrievably convert the affected farmland to

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nonagricultural use. The land would still be available for non-lily bulb agricultural uses and therefore implementation of Management Practices would be considered a less-than-significant impact." (DEIR, p 62.)

"During the time that this document was prepared, the specific locations of Proposed Project activities under the General Order of specific Lily bulb operations were unknown." (DEIR, p. 76.)

Regarding the offsite alternative, "However, the extent and severity of this potential impact is speculative because it is unknown which growers in which locations may choose to pursue riparian vegetation removal under this alternative. As such, these potential impacts are not considered significant, and the Reduced Setback Alternative would not be infeasible." (DEIR, p. 133.)

"The extent and severity of this potential impact is unknown and speculative, however, as growers would still have discretion as to whether to retain or remove vegetation in their specific circumstances (i.e., it cannot be determined where and to what extent removal of vegetation may occur)." (DEIR, p. 135.)

By concluding that many agricultural impacts are "speculative," the DEIR attempts to shift the burden of proof to the public and thus avoiding the issue entirely. (Cal. Code Regs., tit. 14, § 15064.) Given this, the conclusions within the DEIR regarding agricultural resources and project impacts are improper and contrary to law.

CAFB-12

2. The DEIR Is Not Based on Substantial Evidence but Rather Mere Speculation

Prior to approving a project, public and decision-makers must be provided with the fullest extent of information available upon which to base their decision. (Cal. Code Regs., tit. 14, § 15151; Pub. Resources Code, § 21005(a); *Santiago County Water Dist. v. County of Orange*, supra, 118 Cal.App.3d at p. 829, ["[T]he ultimate decision of whether to approve a project, be that decision right or wrong, is a nullity if based upon an EIR that does not provide the decision-makers, and the public with the information about the project that is required by CEQA."].) This determination is based upon whether it can be fairly argued, given the substantial evidence in light of the whole record, that a project may or may not have a significant effect on the environment. "Substantial evidence shall include facts, reasonable assumptions predicated upon facts, and expert opinion supported by fact." (Cal. Code Regs., tit. 14, § 15064(f)(5).)

The DEIR, especially in Section V. Agriculture and Forestry Resources, Section IX. Cumulative Impacts, and Section X. Alternatives Analysis is not based on substantial evidence but rather mere speculation, unsupported conclusions, and uncertainty. The DEIR is replete with the terms "speculative" "could be," "not possible," and "unknown," and "may be." (DEIR pp. 5, 43, 44, 45, 46, 60, 61, 62, 75, 76, 78, 87, 88, 104, 123, 148, 163, 168, 171, 172, 173, 182; see also Section II. B. 1., *The DEIR Improperly Shifts The Burden of Proof and Determination Of Significance To The Public*, ante.) Additionally, the DEIR lacks information such as data on the existing conditions of the watershed, sediment loads, and existing conditions of lily bulb production.

As evidenced in the small selection of examples referenced above, the DEIR is based upon speculation, uncertainty, and inaccurate conclusions rather than substantial evidence. "Like an EIR, an initial study or negative declaration 'must focus on impacts to the

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existing environment, not hypothetical situations.' (County of Amador v. El Dorado County Water Agency, *supra*, 76 Cal.App.4th at p. 955, 91 Cal.Rptr.2d 66.)" Community For A Better Environment v. South Coast Air Quality Management Dist., *supra*, 48 Cal.4th at p. 322.) By speculating on what could happen, rather than on actualities, an improper environmental baseline and resulting conclusions regarding potential significant agricultural and economic impacts have been drawn. (*Ibid.*, ["By comparing the proposed project to what could happen, rather than to what was actually happening, the District set the baseline not according to 'established levels of a particular use,' but by 'merely hypothetical conditions allowable' under the permits. (San Joaquin Raptor Rescue Center v. County of Merced, *supra*, 149 Cal.App.4th at p. 658, 57 Cal.Rptr.3d 663.)," *emphasis original*].) Mere statements of uncertainty or deflections to avoid a proper analysis regarding impacts to agricultural resources or economic impacts do not meet CEQA burdens, and the DEIR fails to satisfy the requirements of CEQA.

CAFB-13

3. The DEIR's Analysis of Agriculture and Forest Resources Is Improper And Flawed

In order to preserve agriculture and ensure a healthy farming industry, the Legislature has declared that "a sound natural resource base of soils, water, and air" must be sustained, conserved, and maintained. (Food & Agr. Code, §§ 802(g); 821(c) *see also id.* § 12786(a), ["The continued viability of the agricultural economy is of paramount importance to the people of California."]; *id.* at § 12786(c), ["The ability of the state to control, detect, exclude, and eradicate pest infestations is necessary to continue the preeminent position of this state as the leading farm state and is essential for the continuing supply of foodstuffs."].) Agriculture is one of the foundations of this state's prosperity, providing employment for many Californians and a variety and quantity of food products that both feed the region, state, and nation, and a significant source of exports. (Food & Agr. Code, § 566.) In addition to substantially impacting the state's and local counties' economy, agriculture also provides substantial benefits to the state's employment force. California agriculture provides "one out of 10 jobs in California." (Food & Agr. Code, § 566.)

In order for agriculture to remain and thrive in the North Coast, farmers and ranchers must be able to continue to be farm, especially since changes, even small ones, in agricultural production sets in motion a series of "ripple effects," which collectively cause changes in output (economic production) throughout the economy. Prior to negatively impacting agricultural lands, decision-makers must consider the impacts to the agricultural industry, the state as a whole, and "the residents of this state, each of whom is directly and indirectly affected by California agriculture." (Food & Agr. Code, § 803.)

Here, the DEIR fails to properly analyze the full range of significant impacts to agricultural resources, including the conversion of agricultural lands to non-agricultural uses and economic impacts. Although the DEIR appropriately concludes that the conversion of Prime, Farmland of Statewide Importance, and Unique Farmland to non-agricultural use due to the streamside management area setback requirements is a significant and unavoidable impact, the analysis itself is flawed. (See DEIR, pp. 50-62.) First, the amount of agricultural land estimated to be converted is significantly low and a fair argument based on substantial evidence exists that additional acreage will be taken out of production due to the setbacks. Impact AG-1 discusses the conversion of prime farmland, unique farmland, or farmland of statewide importance as defined by the CA Department of Conservation. The Draft Lily Bulb Order requires streamside area setbacks and therefore it was calculated that approximately 160 acres of Important Farmland (sum of all

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farmland definitions above) would be taken out of production. (DEIR, p. 130.) The possible 160-acre conversion is listed as being less than 1% of important farmland planted as lily bulbs. (DEIR, p. 57.) The conversion is justified for the purported purposes of achieving reductions in sediment discharge and implementing site-specific potential shade goals in the Draft Lily Bulb Order. A Reduced Setback Alternative was looked at but dismissed because although it reduced environmental impacts to agricultural resources, it did not achieve the Setback Alternative was looked at but dismissed because although it reduced environmental impacts to agricultural resources, it "would not achieve the same level of reductions in sediment discharges and temperature impacts compared to the Proposed Project and would not fully comply with Riparian Management provisions of the North Coast Water Board's Policy for the Implementation of the Water Quality Objectives for Temperature." (DEIR, p. 60.) However, the analysis of the Reduced Setback Alternative is cursory, especially the economic feasibility and impacts. (DEIR, p. 132-133.) The public is not given a full analysis of impacts (or lack thereof) to agricultural resources under the Proposed Project or Reduced Setback Alternative. Further, alternatives to the proposed Project were not considered to mitigate impacts to agricultural resources, so conversion impacts for setback requirements in the proposed Project were listed as significant and unavoidable.

Second, the DEIR does not include an analysis on the substantial economic impacts, including the production, distribution, and consumption of goods and services, valuation damage, and lost property values/lease values due to imposed setbacks. Instead, the DEIR simply concluded that the overall cost of compliance with the Draft Lily Bulb Order would have a less than significant impact on the conversion of farmland. (DEIR, p. 62, "North Coast Water Board does not find that the anticipated increased costs due to compliance with this Order alone would be large enough to necessarily cause any existing lily bulb operation to go out of business, render it economically unviable, or otherwise choose to abandon their operations.")

Third, a fair argument based on substantial evidence also exists that the proposed Project will cause additional significant impacts resulting in additional agricultural lands to be directly converted to non-agricultural use and/or conversion due to cost of compliance and economic infeasibility. Since individual sites may implement practices best suited for their operations, there was no calculation of potential acreage that may be converted to other uses. However, it was assumed that this conversion would not result in a significant number of acres being taken out of production and therefore the impact was considered less than significant. Without performing a comparative GIS analysis, it is difficult to say if the assumption that the Draft Lily Bulb Order could convert 160 acres of farmland for streamside area setback requirements is truly accurate. (DEIR, p. 57.) It is assumed that this is an underestimate due to not only the removal of current planted acreage that will be required but also potential road systems and turnarounds that will be forced to be relocated which will remove additional acreage. This underestimate will make the degree of impact more significant than stated for the preferred project. Fourth, the lack of project alternatives is improper. (DEIR, pp. 165-182; see Section II. E., The DEIR Fails to Provide a Legally Adequate Alternatives Analysis, post.)

Additionally, the environmental impacts analysis of agricultural lands ignores the legislative declarations embedded in CEQA. CEQA is a vehicle to preserve agricultural lands, prevent significant impacts to agricultural lands, and prevent conversion of agricultural lands. (See *Masonite Corp. v. Cnty. of Mendocino* (2013) 218 Cal. App. 4th 230, 238, 241, [discussing conserving agricultural land as a mitigation measure for CEQA projects]; see also Cal. Code Regs., tit. 14, § 15387 Appendix. G [listing the conversion of farmland as a potentially significant effect on the environment].) "The California legislature has indicated that the CEQA process is an

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important mechanism for preserving agricultural land." (Masonite Corp., supra, 218 Cal. App. 4th at p. 241.) Specifically, the legislature declared it is the policy of the state to:

(a) "Develop and maintain a high-quality environment now and in the future, and take all action necessary to protect, rehabilitate, and enhance the environmental quality of the state."

(Pub. Resources Code, § 21001(a).) The DEIR's environmental analysis overlooks Public Resources Code section 21001(a) because it ignores that agriculture is an environmental resource of the state that should be protected and enhanced "now and in the future." (Pub. Resources Code, § 21001(a); Pub. Resources Code, § 21060.5; Cal. Code Regs., tit. 14, § 15360; CEQA Guidelines Appendix G, section II, Agriculture and Forestry Resources.) Further, the environmental analysis ignores environmental benefits from agricultural lands, such as soil retention, pollination, biological control, sustainable management of natural resources, biodiversity preservation, and contribution to the socioeconomic viability of rural areas, among others. The DEIR should have recognized that North Coast agriculture provides economic, environmental, and socio-cultural benefits, as well as food and fiber, and included analysis of resulting impacts to these agricultural benefits.

In conducting its impact analysis, the DEIR relies solely on the five significant criteria for agricultural resources listed in Appendix G of the CEQA Guidelines to determine if the proposed Project impacts agricultural resources. (DEIR, p. 51.) Although the five significant criteria listed in Appendix G are valuable, additional criteria should have been used to analyze impacts to agriculture. (CEQA Appendix G.) Upon a quick review of the Agricultural Element of Appendix G, a "fair argument," supported by substantial evidence in the record, can be made that the proposed Project may result in significant environmental impacts to agriculture since the project will not only: a) convert prime farmland and unique farmland to non-agricultural use, b) fails to meet policy consistency analysis by conflicting with existing zoning for agricultural land use and Williamson Act contracts currently on the agricultural lands throughout the Project site, and c) will involve other changes in the existing environment will could result in conversion of farmland to non-agricultural use, but will also result in many other significant impacts, and as such, analysis should not be limited to the significance criteria laid out in the DEIR. (DEIR, p. 42; CEQA Appendix G, ["Substantial evidence of potential impacts that are not listed on this form must also be considered."]; Sundstrom v. County of Mendocino (1988) 202 Cal.App.3d 296, 311, ["CEQA places the burden of environmental investigation on government rather than the public," and if "the local agency has failed to study an area of possible environmental impact, a fair argument may be based on the limited facts in the record."].)

Rather than conducting a thorough analysis¹⁰ of all potential impacts to agricultural lands, agricultural vitality, agricultural production, agricultural resources, related regional economic sectors including employment and wages, processing, shipping, and retail industries, and socioeconomic impacts to North Coast communities, the DEIR includes conclusory statements, such as:

10 The Impact Analysis for Agriculture and Forestry Resources is limited to 14 pages. (DEIR pp. 50-64.)

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"While Prime Farmland could be taken out of production under the Lily Bulb Order due to the Streamside Area setback requirements, it is important to note that it would be converted to riparian vegetation (which is generally considered beneficial for water quality and the ecosystem) and not urban land uses." (DEIR, p. 60.)

"In the unique circumstance where the cost of compliance may be too great or the loss of production of displaced planted areas would make the operation unprofitable, neither scenario would permanently nor irretrievably convert the affected farmland to non-agricultural use. The land would still be available for non-lily bulb agricultural uses and therefore implementation of Management Practices would be considered a less-than-significant impact." (DEIR, p. 62.)

"In the unique circumstance where the cost of compliance may be too great or the loss of production of displaced planted areas would make the operation unprofitable, neither scenario would permanently nor irretrievably convert the affected farmland to non-agricultural use. The land would still be available for non-lily bulb agricultural uses and therefore implementation of Management Practices would be considered a less-than-significant impact." (DEIR, p. 62.)

"As a result, that the overall cost of complying with the proposed Lily Bulb Order would not indirectly contribute to a significant conversion of prime farmland to a nonagricultural use; this impact would be less than significant." (DEIR, p. 62.)

"However, it is not anticipated that the implementation of Management Practices will result in a significant number of acres being taken out of production. Therefore, this impact is speculative and less than significant." (DEIR, p. 62.)

CEQA's informational purposes are not satisfied by an EIR that simply ignores impacts, potential alternatives, and assumes only one approach is suitable for the regulation of potential discharges to waters of the state from agricultural lands. (Citizens Association for Sensible Development of Bishop Area v. County of Inyo, *supra*, 172 Cal.App.3d at p. 167.) Rather, decision-makers and the public must be presented with sufficient facts to evaluate the pros and cons of requirements in the form of the Draft Lily Bulb Order. (Cal. Code Regs., tit. 14, §§ 15002(a), 15121; Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova, *supra*, 40 Cal.4th 412; Santa Clarita Organization for Planning the Environment v. County of Los Angeles (2003) 160 Cal.App.4th 715.) Further, conclusory comments in support of environmental conclusions are generally inappropriate. (Laurel Heights I., *supra*, at p. 404.) "Mere conclusions simply provide no vehicle for judicial view." (Citizens Assn. for Sensible Development of Bishop Area, *supra*, at p. 171.) By failing to appropriately analyze all evidence that provides a "fair argument" of an impact, the DEIR fails to comply with CEQA. (Ibid., ["Section 1094.5, subdivision (b), states that '[abuse] of discretion is established if the respondent has not proceeded in the manner required by law, the order or decision is not supported by the findings, or the findings are not supported by the evidence.' (Topanga Assn. for a Scenic Community v. County of Los Angeles (1974) 11 Cal.3d 506, 515; Sundstrom v. County of Mendocino, *supra*, 202 Cal.App.3d at p. 311; Friends of B Street v. City of Hayward, *supra*, 106 Cal.App.3d at p. 1002.)

These conclusory statements within the DEIR provide "no basis for a comparison of the problems involved with the proposed project and the difficulties involved in the alternatives." (People v. County of Kern (1974) 39 Cal.App.3d 830, 841-842, quoting Silva v. Lynn (1973) 482 F.2d 1282, 128; see also Laurel Heights I, *supra*, at p. 404, ["but neither can we countenance a result that would require

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blind trust by the public, especially in light of CEQA's fundamental goal that the public be fully informed as to the environmental consequences of action by their public officials" (emphasis added)]; *City of Redlands v. County of San Bernardino* (2002) 96 Cal.App.4th 398, 415, ["The County's conclusory evaluation of the amendments fail to support its decision to adopt a negative declaration."].) Even if a full discussion leaves some uncertainty regarding actual impacts of the anticipated project, CEQA requires discussion of probable impacts, project alternatives, mitigation measures, and the environmental consequences of those contingencies. (*Vineyard Area Citizens for Responsible Growth, Inc.*, supra, 40 Cal.4th at p. 432.) Such discussion must also be supported by substantial evidence and allow for public participation and review.¹¹ (Pub. Resources Code, § 21091(d)(2); Cal. Code Regs., tit. 14, §§ 15088, 15121, 15384.)

The proposed Project includes expanded requirements for irrigation and nutrient management for both surface and groundwater, (Draft Lily Bulb Order, pp. 24-26), expanded pesticide management for surface water and groundwater, including specified surface water monitoring, (Draft Lily Bulb Order, pp. 13-14, 17-18, 54-56), improper riparian setbacks (Draft Lily Bulb Order, pp. 52-53), expanded riparian habitat management requirements that would require retiring productive farmland and developing setback areas, and planting native riparian vegetation (Draft Lily Bulb Order, pp. 51-53), expanded sediment and erosion management for surface water, (Draft Lily Bulb Order, pp. 48-54), and increased reporting and compliance requirements in surface water and groundwater reporting areas with new or updated reporting forms. However, these impacts were not adequately addressed; impacts were either ignored or deemed speculative, and thus, were not analyzed sufficiently within the DEIR.

Of particular importance, the DEIR fails to account for loss of farmland attributable to riparian habitat management requirements that would require retiring productive farmland, developing setback areas, and planting native riparian vegetation, fails to account for impacts of fallowing on small farming operations; fails to address flood and insect vector control related to setback requirements; fails to analyze decreases in overall land value and reductions of rental income due to loss of agricultural production area; fails to take into account increased reporting management due to the overwhelming increase in data collection points related to nutrient management and monitoring; fails to analyze economic infeasibility; fails to analyze compliance issues for smaller farms and the need for professional expertise to comply with monitoring and reporting; fails to adequately analyze land fallowing; fails to analyze significant costs of meeting surface water monitoring, groundwater monitoring, and edge of field surface water quality monitoring; fails to analyze the economic or agronomic feasibility of the requirements; fails to analyze ripple or "multiplier" effects on other agricultural related businesses and employment; and fails to analyze reductions in employment in North Coast communities due to reduced production land area. Further, the inclusion of mandatory riparian setbacks are arguably requirements that mandate a specific management action. These implementation costs, including costs associated with mandated riparian setbacks, can affect land use, land retirement, and agricultural-related jobs in the North Coast. However, the existing analysis did not evaluate these factors.

¹¹ By relying on conclusory language, lack of evidence, unidentified and unsubstantiated claims, and unlike comparisons to support its findings of less than significant environmental impacts or significant impacts with no possible mitigation will occur, the public's ability to provide input, to collaborate with, and to aid in finding solutions to maintain and/or improve water quality is largely restricted and makes it impossible for the public, many of whom have actively asserted a keen and sophisticated interest in the development of

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revised/new discharge requirements, to fully participate in the assessment of project impacts and alternatives associated with the project. (See *Mountain Lion Coalition v. Fish & Game Comm.* (1989) 214 Cal.App.3d 1043, 1051.)

By not including a meaningful review of the proposed Project's impacts on agricultural resources, the DEIR is fundamentally and basically inadequate and conclusory in nature, precluding meaningful public review and comment. (*Mountain Lion Coalition, supra*, at p. 1051; *Laurel Heights I, supra*, at p. 404; Cal. Code Regs., tit. 14, § 15063(c); see Cal. Code Regs., tit. 14, § 15088.5].) By failing to identify and analyze probable impacts and merely concluding that impacts are speculative or less than significant, the DEIR is improper, and the error is prejudicial. (See Section II.B. 2., *The DEIR Is Not Based on Substantial Evidence But Rather Mere Speculation, ante.*)

CAFB-14

C. The DEIR Lacks A Proper Economics Analysis

The DEIR fails to properly quantify and analyze the economic impacts of the proposed Project. Agriculture is fundamentally an economic activity that makes use of, and affects, many aspects of the physical environment. Therefore, understanding the environmental impact of the Draft Lily Bulb Order requires that its economic effect on agricultural operations play an important role in the analysis. The DEIR analysis, significance determination, and associated findings for the Draft Lily Bulb Order did not quantify important economic impacts that can be reasonably quantified. As a result, the analysis was unable to assess potential effects of the economic impacts on the physical environment and could not incorporate these linkages into significance determinations. The Draft Lily Bulb Order increases monitoring and reporting requirements and would impose significant management costs for growers to comply with mandated management practices (ground cover), riparian setbacks, prohibition on certain normal farming activities during the winterization period, intensive edge of field monitoring, and expansive surface and groundwater monitoring. The DEIR and Draft Lily Bulb Order do not evaluate how growers, the agricultural industry, and linked economy (socioeconomic impacts) would adjust in response to these substantial regulatory costs. In other words, the DEIR does not prepare any economic analysis, especially one compliant with Water Code section 12341. Rather than a proper analysis, the DEIR contains cursory statements:

"The Regional Water Board analyzed potential costs associated with the Proposed Project – see Attachment E. The overall cumulative costs of Management Practice implementation for a specific lily bulb operation are speculative though because, while it is generally known what practices are employed throughout the Smith River Plain through 2021 Management Plan reporting, individual or field-level information was not reported." (DEIR, p. 61.)

"The North Coast Water Board understands that profit margins may be slim for some business owners in the lily bulb industry and any increased administrative/regulatory costs could adversely affect profitability. However, the potential effects of increased costs would depend specific to an individual operation as well as current and future markets forces. The North Coast Regional Board does not find that the anticipated increased costs due to compliance with this Order along would be large enough to necessarily cause any existing lily bulb operation to go out of business, render it economically unviable, or otherwise choose to abandon their operations." (DEIR, p. 62.)

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"In the unique circumstance where the cost of compliance may be too great or the loss of production of displaced planted areas would make the operation unprofitable, neither scenario would permanently nor irretrievably convert the affected farmland to non-agricultural use. The land would still be available for non-lily bulb agricultural uses and therefore implementation of Management Practices would be considered a less than significant impact." (DEIR, p. 62.)

The DEIR's conclusory statements about the speculative impacts to agriculture provide no opportunity for comparison of the proposed Project to alternatives and require "blind trust" by the public of the potential environmental impacts of the Project. (People v. County of Kern, supra, 39 Cal.App.3d at pp. 841-842; Laurel Heights I, supra, at p. 404; City of Redlands v. County of San Bernardino, supra, 96 Cal.App.4th at p. 415.) Further, many of the conclusory statements, such as not being able to assess knowing which management practices growers will use, are incorrect. "Analyzing economic impacts of increasing regulatory costs does not require knowing what management practice would be adopted by any given grower. If this was the standard, there would never be any economic impact assessment developed. The purpose of an economic impact analysis is to establish likely impacts, disclose those impacts, and inform development of the regulations based on those impacts. Moreover, besides the economic impact requirements associated with CEQA, the California Water Code mandates that the [regional board] consider economics in adoption of the Order. (See Water Code sections 13263 and 13241.)" (Attachment A, ERA Economics, Technical Memorandum, pp. 5-6.) A proper economics analysis is needed especially since "[a]n increase in cost affects the supply for agricultural products produced in the" North Coast region. (See id. at p. 6.) "This has a resulting effect on the relative profitability of crops, land use decisions, ability to continue farming, and employment and other input purchases. In addition, the economic analysis should evaluate effects on farming risk and competitiveness" of North Coast agriculture. (See id. at p. 6.)

Although the DEIR includes estimates of some costs, mostly in the form of direct costs of monitoring, implementation of various management practices, and reporting, most costs to agriculture are not analyzed or are analyzed improperly. (See DEIR, Attachment E.) The DEIR presents some example accounting costs but does not use those costs to quantify potential economic impacts to growers, linked industries (processing, shipping, etc.), communities, and the region as a whole.

The DEIR failed to analyze the economic impacts on jobs, land use, and agricultural resources if the proposed Project is adopted; failed to quantify, discuss, or analyze various regulatory components that may make current practices economically or agronomically infeasible, which would result in substantial economic impacts (e.g., precipitous drop in land values and property taxes, and lease rates); failed to analyze the resulting effects of implementing riparian setbacks which will automatically result in land-idling and land use changes because commercial crop production is prohibited in such areas; failed to analyze changing management practices, inputs, rotations, and land uses to comply with requirements; failed to adequately analyze land use changes / taking land out of production to comply with riparian setback requirements; and opportunity cost of management time for compliance paperwork, training, and other administration.

Regarding compliance with the streamside area setback requirements, Attachment E is missing an analysis of the costs that will be incurred for the removal of productive land as well as associated costs from the removal and relocation of roads and turnarounds. Within the DEIR, a GIS analysis was performed to calculate the removal estimate of 160 acres of farmland for streamside area

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setback requirements, so there could have been some calculations to show the potential impacts on various parcels with different setback mandates based on water course type. Looking at annual crop reports, one can calculate productive land values, annual harvest figures, and losses in land value for the amount taken out of production. This number can then be analyzed within the DEIR to present an adequate representation of impacts to agricultural lands.

Further, regulatory costs are cumulative. (Attachment A, ERA Economics, Technical Memorandum, p. 7.) In addition to the Draft Lily Bulb Order, North Coast growers are managing the implementation of other regulations. Accordingly, the DEIR must be revised to include an appropriate economics analysis. Without this, the DEIR fails to satisfy CEQA's fundamental requirements.

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D. The DEIR Failed to Adequately Disclose, Analyze and/or Mitigate the Proposed Project's Land Use and Planning and Population and Housing Impacts

The DEIR contains a small section on growth inducing impacts and no sections on population/housing and land use/planning due to reliance on the 2024 Initial Study's determination that the impacts to population/housing and land use/planning were less than significant. A fair argument exists that such areas should be fully analyzed within the DEIR as the proposed Project could result in potential significant effects.

The DEIR dismisses analyzing land use and planning as "[t]he General Order would not involve construction of any new large structures or establish new impassible land uses that would substantially inhibit wildlife movement." (DEIR, p. 89.) Land use and planning are not limited to the "construction any new large structures," but rather refers to how land is used. (Ibid.; Gov. Code, § 65302(a), ["A land use element that designates the proposed general distribution and general location and extent of the uses of the land for housing, business, industry, open space, including agriculture, natural resources, recreation, and enjoyment of scenic beauty, education, public buildings and grounds, solid and liquid waste disposal facilities, greenways, as defined in Section 816.52 of the Civil Code, and other categories of public and private uses of land."].) The DEIR should have analyzed whether the Draft Lily Bulb Order would conflict with any applicable land use plan, policy, or regulation for any local jurisdiction with land use authority within areas covered by the Draft Lily Bulb Order.

CEQA also requires that an EIR discuss the ways in which a project could directly or indirectly foster economic or population growth or the construction of new housing in the surrounding environment. (Pub. Resources Code, § 21100(b)(5); Cal. Code Regs., tit. 14, § 15126.6(d).) A project has growth inducing impacts if it would (1) foster economic or population growth or additional housing; (2) remove obstacles to growth; or (3) facilitate other activities that cause significant environmental effects. (Cal. Code Regs., tit. 14, § 15126.2(d).) An EIR must discuss growth-inducing effects even though those effects will result only indirectly from the project. (Napa Citizens for Honest Government v. Napa County Board of Supervisors, *supra*, 91 Cal.App.4th at p. 368; see City of Antioch v. City Council, *supra*, 187 Cal.App.3d at p. 1335-1337; Friends of "B" Street v. City of Hayward, *supra*, 106 Cal.App.3d 988, 998-999.) Such discussion must describe the growth-accommodating features of the project that may remove obstacles to population growth.

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(Ibid.) Population growth resulting from a project can indirectly lead to further development by taxing existing community service facilities, which could require construction of new facilities. (Cal. Code Regs., tit. 14, § 15126.2(d).)

Here, the DEIR concludes that the Project is not growth inducing or growth reducing since it "would have a very small overall effect on job creation" and "construction would be short term." (DEIR, p. 138.) Although the proposed Project itself will not require housing, it does have the potential to impact the existing population, housing, and employment conditions. The proposed Project does eliminate an obstacle to growth as it will take agricultural lands out of production, which can result in growth inducement, facilitate land use conversion to other land uses besides agriculture, accelerate conflicts with local general plans, lead to community and economic distress due to lack of jobs, etc. (See Cal. Code Regs., tit. 14, § 15126.2(e); Pub. Resources Code, § 21100(b)(5); DEIR, p. 183.) This may lead to the demise of the many viable small farms in the area as has happened elsewhere in the state.

In addition to the possibility of growth-inducing impacts with the conversion of lands out of agricultural production, the project could also have a socioeconomic impact on the population, potentially leading to population reduction due to decrease in productive acreage, which would then have an environmental impact on towns throughout the region, disproportionately impacting specific disadvantaged members of the community.

Because the proposed Project converts agricultural land to other uses, thereby impacting a large economic and job sector in the region, the DEIR should contain population and housing and land use and planning sections in which the proposed Project's potential impacts on these areas can be analyzed. Accordingly, the DEIR must be revised to include the environmental impact analysis of these sections. Without this, the DEIR fails to satisfy CEQA's fundamental requirements.

CAFB-16

E. The DEIR's Mitigation Measures Are Inadequate

CEQA mandates a lead agency to adopt feasible alternatives or feasible mitigation measures that can substantially lessen the project's significant environmental impacts. (Pub. Resources Code, § 21002; Cal. Code Regs., tit. 14, §§ 15002(a)(3), 15126.4; *Sierra Club v. Gilroy City Council* (1990) 222 Cal.App.3d 30, 41.) For that reason, "[t]he core of an EIR is the mitigation and alternatives sections." (*Citizens of Goleta Valley v. Board of Supervisors*, supra, 52 Cal.3d at p. 564.) "The purpose of an environmental impact report is to identify the significant effects on the environment of a project, to identify alternatives to the project, and to indicate the manner in which those significant effects can be mitigated or avoided." (Pub. Resources Code, § 21002.1(a); see also Pub. Resources Code, § 21061.) Mitigation measures must be feasible, legally enforceable, and consistent with constitutional standards limiting exactions by public agencies, including "nexus" and "rough proportionality." (Cal. Code Regs., tit. 14, § 15126.4.) Proposed mitigation measures must be consistent with the agency's existing powers under existing law because CEQA does not grant an agency any new powers. (Cal. Code Regs., tit. 14, § 15040.) Here, in addition to an improper and inadequate alternatives analysis, the DEIR's evaluation of mitigation measures is also inadequate and certain required mitigation measures are improper. (See Section II. E., *The DEIR Fails to Provide a Legally Adequate Alternatives Analysis*, post.)

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The DEIR identifies mitigation measures that apply to growers who seek regulatory coverage under the Draft Lily Bulb Order. (See DEIR, pp. 5-6, 48, 59-64.) Some of the measures logically require that any modifications of a farming operation that cause impacts be performed in accordance with existing law. (Ibid.) However, some of the identified mitigation measures are infeasible and may exceed the Regional Board's authority. (Ibid.; see Wat. Code, § 13360(a).) First, how these measures would be triggered is uncertain. The measures appear to apply to routine farming management and operational decisions that normally would not involve regulatory approval by a public agency. If a grower chooses to implement a farm management method for reasons independent of the Draft Lily Bulb Order, it appears that the mitigation measure could still be triggered, subjecting the grower to a level of regulatory approvals and expense that otherwise would not apply. Further, even if the grower chooses to implement a management practice because of the Lily Bulb Order, the Regional Board still would not have authority to approve that individual management decision. Yet, in this scenario, the grower might be deemed in violation of the Lily Bulb Order, if he or she did not implement the measure, even if he or she has not actually discharged waste into waters of the state.

Second, the measures seek to dramatically expand the Regional Board's authority over normal farming activities beyond what is otherwise required or allowed by state and federal law. (See Wat. Code, § 13360(a).) Growers are already required to comply with applicable federal and state laws, such as endangered species laws, with certain operations on their property. Yet, various mitigation measures add a new and expanded level of regulation, and potential further CEQA review, to normal management activities that are not subject to discretionary public agency approvals. For example, BIO-3 discusses impacts to state or federally protected wetlands but fails to mention farmlands that are otherwise statutorily exempt from such regulation under the federal Clean Water Act. (See 33 C.F.R. § 328.3(a)(8).) Finally, by imposing expanded regulations on normal farm management decisions, beyond what is required by other federal and state environmental laws, the measures do not satisfy constitutional limitations. (Cal. Code Regs., tit. 14, § 15126.4.) The excessive cost of cultural resource surveys, biology surveys, and wetlands delineation and mitigation on individual fields is not roughly proportional to the likely less than significant impact from management decisions on a single farm. Nor can the Regional Board establish a rational nexus between the expanded regulation and cost imposed in the measures and the as yet unidentified impacts from any of these potential management practices. Thus, various mitigation measures must be revised or deleted.

In addition to including improper mitigation measures, the DEIR fails to properly identify mitigation measures for significant impacts from the proposed Project. Specifically, when concluding that setback requirements will be a significant effect due to taking agricultural land out of production, the DEIR also concluded that the impact is unavoidable because no feasible mitigation measures exist. (DEIR, pp. 6, 61.) Unfortunately, the DEIR fails to adequately identify, discuss, and analyze potential mitigation measures. (See *Masonite Corp. v. Cnty. of Mendocino* (2013) 218 Cal. App. 4th 230.) Conversion of farmland to non-agricultural uses (e.g., land retirement) would result in additional socioeconomic impacts that are not disclosed in the DEIR. Such errors compound and prevent proper identification of significant effects and discussion of the manner in which those significant effects can be mitigated or avoided. (See *Masonite Corp.*, supra, 218 at pp. 238, 241.)

Accordingly, the DEIR must be revised to include the appropriate mitigation measures. Without this, the DEIR fails to satisfy CEQA's fundamental requirements.

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F. The DEIR Fails to Provide a Legally Adequate Alternatives Analysis

Section 15126.6(a) of the CEQA Guidelines states that "an EIR shall describe a range of reasonable alternatives to the project or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives."¹² (Cal. Code Regs., tit. 14, § 15126.6(a); Pub. Resources Code, § 21061; County of Inyo, *supra*, 71 Cal. App.3d at p. 200, ["An EIR must describe all reasonable alternatives to the project."].) The EIR is to consider a "reasonable range" of alternatives to foster informed decision-making and public participation. (Cal. Code Regs., tit. 14, § 15126.6(a).) CEQA requires the EIR to identify alternatives to the proposed project that will feasibly attain most of the project's basic objectives while avoiding, or at least lessening, significant impacts associated with the project. (Cal. Code Regs., tit. 14, § 15126.6(a); Citizens of Goleta Valley v. Board of Supervisors, *supra*, 52 Cal.3d at p. 566, ["CEQA review must consider a reasonable range of alternatives to the project, or to the location of the project, which: (1) offer substantial environmental advantages over the project proposal (Pub. Resources Code, § 21002); and (2) may be 'feasibly accomplished in a successful manner' considering the economic, environmental, social and technological factors involved. (Pub. Resources Code, § 21061.1; Guidelines, § 15364; Goleta I, *supra*, 197 Cal.App.3d 1167, 243 Cal.Rptr. 339.)"]".)

A fundamental mandate of CEQA is that "public agencies should not approve projects as proposed if there are feasible¹³ alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of the project." (Pub. Resources Code, §§ 21002, 21081.) Therefore, as part of the decision-making process for projects involving the preparation of an EIR, governmental agencies are required under CEQA to consider alternatives to proposed actions affecting the environment. (Pub. Resources Code, § 21001(g).) One of the purposes of an EIR is to identify alternatives to a proposed project and evaluate the comparative merits of feasible alternatives. (CEQA Guidelines Section 15126.6(d).) By examining a range of alternatives, the Lead Agency can demonstrate that it has taken a "hard look" at the project objectives to select alternatives that allow for meaningful comparison. (Residents Ad Hoc Stadium Com. v. Board of Trustees (1979) 89 Cal.App.3d 274, 287; Wildlife Alive v. Chickering (1976) 18 Cal.3d 190, 197, [A major function of an EIR is "to ensure that all reasonable alternatives to proposed projects are thoroughly assessed by the responsible official" or board.]".)

¹² Alternatives, in the context of CEQA, are optional ways that the project proponent could achieve most of the project objectives, while also reducing or eliminating the environmental impacts of the proposed project. (Pub. Resources Code, § 21002; Cal. Code Regs., tit. 14, § 15126(a); Citizens of Goleta Valley, *supra*, 52 Cal.3d at pp. 564-566.) Alternatives typically involve changes to the location, scope, design, extent, intensity, or method of construction or operation of the proposed project.

¹³ CEQA defines "feasible" as follows: "'Feasible' means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors." (Cal. Code Regs., tit. 14, § 15364; see also Cal. Code Regs., tit. 14, § 15126.6(f)(1).)

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Further, EIRs "must produce information sufficient to permit a reasonable choice of alternatives." (San Bernardino Valley Audubon Society, Inc., *supra*, 155 Cal.App.3d at p. 750.) Here, the DEIR failed to consider and analyze a reasonable range of alternatives. (Cal. Code Regs., tit. 14, § 15126.6; Pub. Resources Code, § 21100(b)(4).) The alternatives to be evaluated within the EIR must be true "alternative" proposals and not abstract concepts. In order to allow for an evaluation on its merits that the alternative "may be 'feasibly accomplished in a successful manner' considering the economic, environmental, social and technological factors involved" and to allow for a robust comparison to the preferred project, alternatives must be detailed, complete, and comprehensive proposals. (Pub. Resources Code, § 21061.1; Guidelines, § 15364; Goleta I, *supra*, 197 Cal.App.3d 1167, 243 Cal.Rptr. 339.)" (Citizens of Goleta Valley *supra*, 52 Cal.3d at p. 566.) After all, "evalu[at]ion] of the comparative merits of the alternatives" cannot be done if the alternatives are cursory documents. (CEQA Guidelines, § 15126.6(a).)

Here, the DEIR included a no project alternative, a reduced streamside area setback alternative, and an offsite riparian restoration alternative. (DEIR, p. 169.) However, the analysis for the reduced streamside area setback alternative and an offsite riparian restoration alternative was limited to 9.5 pages, consisting mostly of conclusory statements and speculation. (DEIR, p. 132-133, ["The Reduced Setback Alternative would potentially be less costly to implement than the Proposed Project;" "The Reduced Setback Alternative could potentially increase removal of existing riparian vegetation and habitat, which could in turn have adverse effects on biological resources and water quality;" "However, the extent and severity of this potential impact is speculative because it is unknown which growers in which locations may choose to pursue riparian vegetation removal under this alternative."].) The offsite riparian restoration alternative concludes "[t]he Offsite Alternative would be less beneficial to water quality than the Proposed Project" and "the Reduced Setback Alternative may not achieve the same level of reductions in pollutant discharges and protection of beneficial uses compared to the Lily Bulb Order due to the lesser control of sediment discharges and temperature impact." (DEIR, pp. 132-133.) However, no explanation is given for such conclusions. How will the off-site alternative not achieve pollutant reductions?

By using cursory concepts, a true analysis between project alternatives is thwarted. The two alternatives within the DEIR only looked at changes to one component of the Draft Lily Bulb Order—vegetative buffers. There was no analysis of an alternative program containing a regulatory tiering structure based on risk to water quality or an alternative with different water quality monitoring requirements.

As evidenced in the DEIR, the "project," the Draft Lily Bulb Order, appears to be predetermined in regulatory scope which runs afoul of CEQA: "The full consideration of environmental effects CEQA mandates must not be reduced ""to a process whose result will be largely to generate paper, to produce an EIR that describes a journey whose destination is already predetermined."" (Save Tara v. City of West Hollywood (2008) 45 Cal.4th 116, 135–136, citing Natural Resources Defense Council, Inc. v. City of Los Angeles (2002) 103 Cal.App.4th 268, 271, internal citations omitted.) This failure to include the full reasonable range of alternatives in the environmental analysis directly contrasts with the explicit intent and heart of CEQA. (Watsonville Pilots Association v. City of Watsonville (2010) 183 Cal.App.4th 1059, 1086-1088.) CEQA places the burden on the approving agency, here the Regional Board, to affirmatively show that it has considered the project alternatives as well as identified means of lessening or avoiding the project's significant effects, and to explain its decision to proceed with or reject alternatives and mitigation measures. (Cal. Code

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Regs., tit. 14, § 15126.6.) "The writing of a perfect EIR becomes a futile action if that EIR is not adequately considered by the public agency responsible for approving a project. Indeed, it is almost as if no EIR was prepared at all . . ." (Resource Defense Fund v. Local Agency Formation Com. (1987) 191 Cal.App.3d 886, 898.) Additionally, using cursory draft documents as alternatives prohibits rather than fosters meaningful public participation and informed decision-making. (Cal. Code Regs., tit. 14, § 15126.6(a).)

Further, the Regional Board's job in the DEIR's alternatives analysis to craft alternatives that could feasibly reduce significant impacts, even if the alternatives will not accomplish all of the project's objectives. (Watsonville Pilots Assn. v. City of Watsonville, supra, 183 Cal.App.4th at p. 1087, ["It is virtually a given that the alternatives to a project will not attain all of the project's objectives.]; Cal. Code Regs., tit. 14, § 15126.6(c).) By simply evaluating cursory alternatives with speculative feasibility and impact conclusions, the Regional Board's alternatives preparation and analysis failed. (Cal. Code Regs., tit. 14, § 15126.6.)

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G. The DEIR's Cumulative Impacts Analysis is Cursory and Inadequate

The CEQA Guidelines define cumulative effects as "two or more individual effects that, when considered together, are considerable or which compound or increase other environmental impacts." (Cal. Code Regs., tit. 14, § 15355; Cal. Code Regs., tit. 14, § 15130(a)(1), ["[A] cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts."].) The CEQA Guidelines further state that the individual effects can be the various changes related to a single project or the changes involved in a number of other closely related past, present, and reasonably foreseeable future projects. (Cal. Code Regs., tit. 14, §§ 15355(a), (b).) Additionally, "[c]umulative impacts can result from individually minor but collectively significant projects taking place over a period of time. (Cal. Code Regs., tit. 14, § 15355(b).)

Within the DEIR, the cumulative impacts analysis fails to provide an adequate analysis of impacts to agricultural resources. The DEIR does not analyze the cumulative impact of loss of production agricultural lands across the state, although it recognizes that the proposed Project will contribute to the statewide reduction in agricultural lands. (See DEIR, p. 125.) The DEIR does not analyze the proposed Project's contribution of loss of agricultural land in context with the statewide trend of loss of agricultural land, does not analyze impacts related to local groundwater sustainability plans, does not analyze impacts to certain communities, and lacks a discussion of the cumulative impacts of the proposed Project when taken within the context of regional growth patterns. (See Section II. B. 3., The DEIR's Analysis of Agriculture and Forest Resources Is Improper And Flawed, ante; see Section II. C., The DEIR Lacks an Economics Analysis, ante.)

Additionally, the DEIR does not identify all "projects or programs adequately similar in nature, location, and type to result in a meaningful comparative analysis" that are known or should be known to the Regional Board that can lead to compounding cumulative impacts with the implementation of the proposed Project. Other programs and projects that have the potential to compound or increase other environmental impacts, especially to agricultural resources, include, but are not limited to, the Vineyard Order, applicable National Pollutant Discharge Elimination System ("NPDES") permits and other permit actions, the Regional Board's Restoration program, and implementation of total maximum daily loads. All of these, as well as additional, similar pending¹⁴ and

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existing programs and projects, have the potential to create cumulative impacts on agricultural and other environmental resources, and, thus, require analysis along with the proposed Project.

14 Current projects along with "reasonably anticipated future projects" should be considered in the DEIR and discussed in a cumulative analysis. (See *Laurel Heights Improvement Assn. v. Regents of University of California*, supra, 47 Cal.3d 376, 394 and *Citizens Assn. for Sensible Development of Bishop Area v. County of Inyo*, supra, 172 Cal.App.3d 151, 168.) As noted in *Citizens Assn. for Sensible Development of Bishop Area*, "[r]elated projects currently under environmental review unequivocally qualify as probable future projects to be considered in a cumulative analysis. [Citation.] In addition, even projects anticipated beyond the near future should be analyzed for their cumulative effect. [Citation.]" (*Citizens Assn. for Sensible Development of Bishop Area v. County of Inyo*, supra, 172 Cal.App.3d 151, 168.)" (*City of Santee v. County of San Diego* (1989) 214 Cal.App.3d 1438, 1452–1453.)

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H. The DEIR Fails to Consider the Significance Of Social And Economic Impacts And Cumulative Effects

Although impacts that are solely economic in nature do not constitute "significant effects on the environment," economic or social impacts that will or have the potential to cause a physical change should be considered. (Cal. Code Regs., tit. 14, §§ 15064(e), 15131, 15382.) The term "significant effect on the environment" is defined in Section 21068 of CEQA as meaning "a substantial or potentially substantial adverse change in the environment." (Pub. Resources Code, § 21068.) This focus on physical changes is further reinforced by sections 21100 and 21151. (See discussion following Cal. Code Regs., tit. 14, § 15131.) Despite the implication of these sections, CEQA does not focus exclusively on physical changes, and it is not exclusively physical in concern. (Ibid.) Thus, in certain situations such as the adoption of an expansive regulatory irrigated lands discharge program, economic and social effects of the project must be used to determine the significant effects on the environment. (*Citizens Assn. for Sensible Development of Bishop Area*, supra, at p. 170, ["The lead agency shall consider the secondary or indirect environmental consequences of economic and social changes."].) Since such effects were not properly considered in the DEIR, the document is incomplete and flawed.

In *Citizens Association for Sensible Development of Bishop Area v. Inyo*, the court held that "economic or social change may be used to determine that a physical change shall be regarded as a significant effect of the environment. Where a physical change is caused by economic or social effects of a project, the physical change may be regarded as a significant effect in the same manner as any other physical change resulting from the project. Alternatively, economic and social effects of a physical change may be used to determine that the physical change is a significant effect on the environment."¹⁵ (Ibid.)

15 See also *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1205: "'CEQA is not a fair competition statutory scheme.'" (*Waste Management of Alameda County, Inc. v. County of Alameda* (2000) 79 Cal.App.4th 1223, 1235, 94 Cal.Rptr.2d 740.) Therefore, the economic and social effects of proposed projects are outside CEQA's purview. (Guidelines, § 15131, subd. (a).) Yet, if the forecasted economic or social effects of a proposed project directly or indirectly will lead to adverse physical changes in the environment, then CEQA requires disclosure and analysis of these resulting physical impacts. (*Friends of Davis v. City of Davis* (2000) 83 Cal.App.4th 1004, 1019, 100 Cal.Rptr.2d 413 (*Friends of Davis*); *Citizens for Quality Growth v. City*

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of Mt. Shasta (1988) 198 Cal.App.3d 433, 445–446, 243 Cal.Rptr. 727 (Mt. Shasta).) Subdivision (e) of Guidelines section 15064 provides that when the economic or social effects of a project cause a physical change, this change is to be regarded as a significant effect in the same manner as any other physical change resulting from the project. (See, e.g., El Dorado Union High School Dist. v. City of Placerville (1983) 144 Cal.App.3d 123, 131, 192 Cal.Rptr. 480 [potential of increased student enrollment in an already overcrowded school resulting from construction of the proposed apartment complex was an environmental effect that required treatment in an EIR because it could lead to the necessity of constructing at least one new high school].) Conversely, where economic and social effects result from a physical change that was itself caused by a proposed project, then these economic and social effects may be used to determine that the physical change constitutes a significant effect on the environment. (See, e.g., Christward Ministry v. Superior Court (1986) 184 Cal.App.3d 180, 197, 228 Cal.Rptr. 868 [when a waste management facility was proposed next to a religious retreat center, CEQA required study whether the physical impacts associated with the new facility would disturb worship in the natural environment of the retreat center].)"

The Draft Lily Bulb Order will result in dramatic and severe impacts on the agricultural industry, particularly an industry down to three remaining operations, which will have a significant effect on the economic and social environment of the region. Such impacts include negative economic consequences, the possibility of eliminating agricultural lands in the area, possible loss of jobs, loss of food supply, changes to the landscape and land uses, loss of wildlife habitat, loss of groundwater recharge areas, disproportionate impacts to certain communities, as well as other social and economic impacts. In addition to direct impacts and indirect impacts and consequences, these cumulative¹⁶ social and economic consequences are reasonably foreseeable and must be analyzed.

Realizing that the second and third sentences of section 15382 can cause confusion, the discussion portion of the section provides:

"The second and third sentences pose a problem of interpretation that has caused controversy for many years. The controversy centers around the extent to which CEQA applies to the economic and social effects of projects. In determining whether an effect is significant, however, Section 21083(c) of CEQA requires an effect to be found significant if the activity would cause an adverse effect on people."

(Discussion following Cal. Code Regs., tit. 14, § 15382, emphasis added.) As indicated during public testimony, Regional Board workshops, and in written comments submitted on the Draft Lily Bulb Order, the proposed Project will have an adverse effect on the agricultural community in many ways. These economic and social impacts will adversely affect people within the North Coast and the state.

Notwithstanding substantial evidence pointing to significant impacts, the DEIR contains no cumulative impacts analysis on social and economic resources impacted by the proposed Project. This is an error. Accordingly, the DEIR should be revised to evaluate the resulting social and economic effects of the proposed Project.

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I. CONCLUSION

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CEQA's statutory framework sets forth a series of analytical steps intended to promote the fundamental goals and purposes of environmental review—information, public participation, mitigation, and governmental agency accountability. (Cal. Code Regs., tit. 14, § 15002.) Specifically, the basic purposes of CEQA review include: informing governmental decision-makers and the public about the potential significant environmental effects of proposed activities; identifying ways that environmental damage can be avoided or significantly reduced; requiring changes in projects through the use of alternatives or mitigation measures when feasible; and disclosing to the public the reasons why a project was approved if significant environmental effects are involved. (See Pub. Resources Code, §§ 21001, 21001.1, 21002, 21003, 21006, 21064.) Adopting a project without complying with the above requirements violates CEQA.

Given the numerous violations contained within the DEIR discussed herein, the appropriate remedy for the Regional Board is to conduct an appropriate environmental review of the proposed Project, revise the DEIR, and recirculate it accordingly.

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Attachment A