REGULAR MEETING MINUTES

Thursday, September 10, 2020, 8:00 a.m.
Friday, September 11, 2020, 8:00 a.m.
Wednesday, September 23, 2020, 8:00 a.m.
Thursday, September 24, 2020, 8:00 a.m.
Thursday, October 22, 2020, 8:00 a.m.
Friday, October 23, 2020, 8:00 a.m.
Wednesday, December 9, 2020, 8:00 a.m.
Thursday, December 10, 2020, 8:00 a.m.
Thursday, January 7, 2021, 8:00 a.m.
Friday, January 8, 2021, 8:00 a.m.

Video and Teleconference Meeting Only

No Physical Meeting Location
(Authorized by and in furtherance of Executive Orders N-29-20 and N-33-20.)

Video and teleconference recordings of the meetings are currently available on the following website: https://cal-span.org/static/meetings-RWQCB-CC.php

The following is a compilation of minutes for a series of meetings dedicated to the discussion of Draft Agricultural Order 4.0 between September 10, 2020 and January 8, 2021.

Thursday, September 10, 2020, 8:00 a.m.

Chair Dr. Jean-Pierre Wolff called the video and teleconference meeting to order on Thursday, September 10, 2020, at 8:05 a.m.

Board Business

1. Roll Call
   [Tammie Olson, Clerk to the Board, 805/549-3140, Tammie.Olson@Waterboards.ca.gov ]
   
   Present: Chair Wolff, Vice Chair Gray, Member Hunter, Member Johnston, and Member Young

2. Introductions
Executive Officer Matthew Keeling introduced:
- Stephanie Yu, staff counsel; Emel Wadhwani, assistant chief counsel; Thea Tryon, assistant executive officer; Tammie Olson, clerk to the board; and section managers Chris Rose and Angela Schroeter
- Aaron Katona and Katie DiSimone, remote meeting staff
- Itze Abeyta and Mandy Roman, translators from the State Water Board Office of Public Participation
- Marc Gutiérrez, Julissa Rocha, and Leticia Reyna, translation contractors from CIT.

Discussion/Informational Items

3. Draft Ag Order 4.0 Discussion
[Elaine Sahl, 805/542-4645, Elaine.Sahl@waterboards.ca.gov; Diane Kukol, 805/542-4637, Diane.Kukol@waterboards.ca.gov; Paula Richter, 805/549-3865, Paula.Richter@waterboards.ca.gov]

Stakeholders provided comment in the form of panel presentations on the following topics:


The board engaged in discussion with panelists and staff throughout the day. Panelists were scheduled to complete their presentations and discussions with the board on September 10, followed by oral public comment on September 11. However, the presentations and discussions took longer than planned, resulting in the continuation of the panel presentations on September 11.
Chair Wolff adjourned the meeting at 5:20 p.m.

Friday, September 11, 2020, 8:00 a.m.

Chair Dr. Jean-Pierre Wolff called the meeting to order on Friday, September 11, 2020, at 8:05 a.m.

**Board Business**

1. Roll Call/Introductions
   [Tammie Olson, Clerk to the Board, 805/549-3140, Tammie.Olson@waterboards.ca.gov]

   **Present:** Chair Wolff, Vice Chair Gray, Member Hunter, Member Johnston, and Member Young.

   Member Young made a statement in reflection of September 11 and asked for a moment of silence.

2. Introductions
   [Matthew Keeling, Executive Officer, 805/549-3140, Matt.Keeling@waterboards.ca.gov]

   Executive Officer Matthew Keeling introduced:
   - Stephanie Yu, staff counsel; Emel Wadhwani, assistant chief counsel; Thea Tryon, assistant executive officer; Tammie Olson, clerk to the board; and section managers Chris Rose and Angela Schroeter
   - Aaron Katona and Katie DiSimone, remote meeting staff
   - Itze Abeyta and Mandy Roman, translators from the State Water Board Office of Public Participation
   - Marc Gutiérrez, Aldo G. Renteria, and Leticia Reyna, translation contractors from CIT.

**Discussion/Informational Items**

3. Draft Ag Order 4.0 Discussion (item continued from Thursday, September 10)
   [Elaine Sahl, 805/542-4645, Elaine.Sahl@waterboards.ca.gov; Diane Kukol, 805/542-4637, Diane.Kukol@waterboards.ca.gov; Paula Richter, 805/549-3865, Paula.Richter@waterboards.ca.gov]

   Stakeholders provided comment in the form of panel presentations on the following topics:

      Presentation – *Economic Review of Draft Ag Order 4.0.*


The board engaged in discussion with panelists and staff throughout the day. The remaining presentations and discussions carried over from September 11 took the entire day, resulting in the need to reschedule oral public comment from other stakeholders to September 23.

Chair Wolff adjourned the meeting at 6:04 p.m.

**Wednesday, September 23, 2020, 8:00 a.m.**

Chair Dr. Jean-Pierre Wolff called the meeting to order on Wednesday, September 23, 2020, at 8:04 a.m.

**Board Business**

1. **Roll Call**
   
   [Tammie Olson, Clerk to the Board, 805/549-3140, Tammie.Olson@waterboards.ca.gov]

   **Present:** Chair Wolff, Vice Chair Gray, Member Hunter, Member Johnston, and Member Young

2. **Introductions**
   
   [Matthew Keeling, Executive Officer, 805/549-3140, Matt.Keeling@waterboards.ca.gov]

   Executive Officer Matthew Keeling introduced:
   - Stephanie Yu, staff counsel; Emel Wadhwani, assistant chief counsel; Thea Tryon, assistant executive officer; Tammie Olson, clerk to the board; and section managers Harvey Packard, Chris Rose and Angela Schroeter
   - Aaron Katona and Katie DiSimone, remote meeting staff
   - Itze Abeyta and Mandy Roman, translators from the State Water Board Office of Public Participation
   - Marc Gutiérrez, Aldo G. Renteria, and Leticia Reyna, translation contractors from CIT.
3. Draft Ag Order 4.0 Discussion (item continued from Friday, September 11)

[Elaine Sahl, 805/542-4645, Elaine.Sahl@waterboards.ca.gov; Diane Kukol, 805/542-4637, Diane.Kukol@waterboards.ca.gov; Paula Richter, 805/549-3865, Paula.Richter@waterboards.ca.gov]

On September 23, the following interested persons provided oral public comment on the following topics and the board engaged with them and staff throughout the day:

1. David Rodriguez – nitrate contamination in his well.
2. David Vera – nitrate contamination in his well.
4. Marla Anderson (farmer) – nitrate contamination and high total dissolved solids in her well.
5. Lucy Hernandez – need to uphold the human right to safe drinking water law.
6. Gail Delihant (Western Growers Assoc.) – support for the Ag Partners alternative; third parties can accomplish goals for all interests.
7. Chris Hight and Danilu Ramirez (agronomists) – discussed the effect of using irrigation nitrogen only, without fertilizer, on crop production.
8. Ramy Colfer (True Organics) – request to incentivize organic forms in nitrogen application in Draft Ag Order 4.0.
9. Jennifer Spaletta (California Strawberry Commission) – discussed the potential negative effects of Draft Ag Order 4.0 on strawberry growers and production.
10. David Costa (farmer) – discussed negative economic effects of riparian area management requirement resulting from crop pests.
11. Tannis Thorlakson (Driscoll’s) – discussed alternative compliance pathway for groundwater protection using direct measurement of nitrogen loading.
12. Noelle Cremers (Wine Institute) – agrees with Strawberry Commission comments; requests water board find middle ground and streamlined requirements for vineyards.
13. Randy Record (farmer) – proposes reduced requirements for low risk growers.
14. Lowell Zelinski (Precision Ag Consulting) – proposes the application of nitrogen use efficiency ratio and a method of determining nitrogen removed using nutritional information of crops.
15. Kelli McCune – supports the Resource Conservation District and Natural Resource Conservation District’s comments, including accounting for immobilized nitrogen.
16. Kay Mercer (Provost and Pritchard Consulting Group) – discussed riparian area requirement and land taken out of production; economics of Draft Ag Order 4.0; requests the board consider Ag Partner’s proposal.
17. Karen Lowell (NRCS) – discussed need to address cover crops, scavenger crops, compost immobilization strategies, and high C:N organic sources of nitrogen.
18. Sacha Lozano (RCD) – supports concern over nitrogen leaching but recommends the board considers the economic viability of agriculture; Draft Ag Order 4.0 could disproportionately affect small farmers.

19. Joji Muramoto (University of CA Cooperative Extension (UCCE)) – recommends Draft Ag Order 4.0 expand the discount factor [used for compost] to include other organic sources of applied nitrogen; warns that nitrogen discharge limit of less than 300 lb/ac/yr might not be possible for many central coast farmers.

20. Richard Smith (UCCE) – discussed the five basic practices for efficient nitrogen use; Draft Ag Order 4.0 should incentivize these practices; nitrogen can be immobilized through grower’s use of high C:N ratio compost.

21. Michael Cahn (UCCE) – recommends that when calculating nitrogen applied for the nitrogen discharge limits, should use only crop ET water because doing so will not disincentivize the use of high-nitrogen groundwater.

22. Marc Mason (Huntington Farms) – supports the Ag Partner Proposal; recommends looking at a watershed-scale implementation and compliance assessment strategy because the discharge from some farms is comingled with discharge from farms higher up in the watershed.

23. Parry Klassen (Central Coast Groundwater Coalition) – supports the Ag Partner’s proposal; is a proponent of the third-party approach to implementing agricultural orders; supports Preservation Inc.’s third-party approach to groundwater trend monitoring; supports a boots-on-the-ground approach to solving water quality issues at the ranch level.

24. Maria Gonzales – has high nitrogen levels and 1,2,3-TCP in her well; recommends that residents in agricultural areas be notified prior to pesticide use.

25. Paul Robbins (RCD) – appreciates that staff consulted with RCD when developing the riparian area management requirement; the riparian area management requirement needs more flexibility for strategic planning; recommends that the RCDs be allowed to work collaboratively with growers to comply with the requirement; some riparian areas may need engineered hard structure to stabilize them.

26. Karen Serrano – has nitrate contamination in her well of 101 [units not provided]; requests that the water board’s control nitrogen [use].

Chair Wolff adjourned the meeting at 5:05 p.m.

Thursday, September 24, 2020, 8:00 a.m.

Chair Dr. Jean-Pierre Wolff called the meeting to order on Thursday, September 24, 2020, at 8:11 a.m.

Board Business

1. Roll Call
   [Tammie Olson, Clerk to the Board, 805/549-3140, Tammie.Olson@Waterboards.ca.gov]
Present: Chair Wolff, Vice Chair Gray, Member Hunter, Member Johnston, and Member Young

2. Introductions

[Matthew Keeling, Executive Officer, 805/549-3140, Matt.Keeling@waterboards.ca.gov]

Executive Officer Matthew Keeling introduced:
- Stephanie Yu, staff counsel; Emel Wadhani, assistant chief counsel; Thea Tryon, assistant executive officer; Tammie Olson, clerk to the board; and section managers Harvey Packard, Chris Rose and Angela Schroeter
- Aaron Katona and Katie DiSimone, remote meeting staff
- Itze Abeyta and Mandy Roman, translators from the State Water Board Office of Public Participation
- Marc Gutiérrez, Aldo G. Renteria, and Leticia Reyna, translation contractors from CIT.

3. Draft Ag Order 4.0 Discussion (item continued from Wednesday, September 23)

[Elaine Sahl, 805/542-4645, Elaine.Sahl@waterboards.ca.gov; Diane Kukol, 805/542-4637, Diane.Kukol@waterboards.ca.gov; Paula Richter, 805/549-3865, Paula.Richter@waterboards.ca.gov]

On September 24, water board staff began their presentations and the board engaged in discussions regarding various aspects of the presented material; Chris Rose presented slides on legal and programmatic questions, and Elaine Sahl presented slides summarizing Draft Ag Order requirements, written comments, comparisons between Draft Ag Order 4.0 requirements, and changes proposed in written requirements.

Staff were unable to complete the presentations and the board directed staff to continue their presentation at the October 22-23, 2020 board meeting. The board also directed staff to develop a table comparing requirements outlined in Draft Ag Order 4.0 with requirements proposed in alternative proposals, including the Ag Partners’ proposal.

Chair Wolff adjourned the meeting at 5:16 p.m.

Thursday, October 22, 2020, 8:00 a.m.

Chair Dr. Jean-Pierre Wolff called the meeting to order on Thursday, October 22, 2020, at 8:08 a.m.

Board Business

1. Roll Call
Present: Chair Wolff, Vice Chair Gray, Member Hunter, Member Johnston, and Member Young

2. Introductions

Executive Officer Matthew Keeling introduced:
• Stephanie Yu, staff counsel; Emel Wadhwani, assistant chief counsel; Thea Tryon, assistant executive officer; Tammie Olson, clerk to the board; and section managers Harvey Packard, Chris Rose, and Angela Schroeter
• Aaron Katona and Katie DiSimone, remote meeting staff
• Itze Abeyta and Mandy Roman, translators from the State Water Board Office of Public Participation
• Marc Gutiérrez, Aldo G. Renteria, and Leticia Reyna, translation contractors from CIT.

Discussion/Informational Items

3. Draft Ag Order 4.0 Discussion (item continued from Thursday, September 24)

Please see Friday, October 23 below for the combined minutes of October 22 and 23 for Item 3.

Chair Wolff adjourned the meeting at 4:52 p.m.

Friday, October 23, 2020, 8:00 a.m.

Chair Dr. Jean-Pierre Wolff called the meeting to order on Friday, October 23, 2020, at 8:10 a.m.

Board Business

1. Roll Call/Introductions

Present: Chair Wolff, Vice Chair Gray, Member Hunter, Member Johnston, and Member Young.
2. Introductions
   [Matthew Keeling, Executive Officer, 805/549-3140, Matt.Keeling@waterboards.ca.gov ]

   Executive Officer Matthew Keeling introduced:
   - Stephanie Yu, staff counsel; Emel Wadhwani, assistant chief counsel; Thea Tryon, assistant executive officer; Tammie Olson, clerk to the board; and section managers Harvey Packard, Chris Rose, and Angela Schroeter
   - Aaron Katona and Katie DiSimone, remote meeting staff
   - Itze Abeyta and Mandy Roman, translators from the State Water Board Office of Public Participation
   - Marc Gutiérrez, Aldo G. Renteria, and Leticia Reyna, translation contractors from CIT.

Discussion/Informational Items

3. Draft Ag Order 4.0 Discussion (item continued from Thursday, October 22)
   [Elaine Sahl, 805/542-4645, Elaine.Sahl@waterboards.ca.gov; Diane Kukol, 805/542-4637, Diane.Kukol@waterboards.ca.gov; Paula Richter, 805/549-3865, Paula.Richter@waterboards.ca.gov]

   Staff addressed the following subject matter in their presentations:
   Elaine Sahl provided the board with a presentation that identified key Draft Ag Order 4.0 issues and decision points upon which the board deliberated in order to ultimately direct staff on the content of the next version of Order 4.0.

   Staff received direction from the board via a consensus-based approach led by Chair Wolff to include the following in in the next version of the order, albeit with clarifications and varying degrees of modifications in some cases:

   - Inclusion of various management plans in growers’ farm plans.
   - Continuing education requirements for growers.
   - Prioritizing and phasing-in of specific requirements over time.
   - Nitrogen discharge targets and limits extended over a 30-year timeframe.
   - Incentives to help growers better manage nitrogen application and removal from ranches.

   The board also directed staff to provide periodic reports to the board after adoption of the order to evaluate implementation effectiveness as it relates grower requirement compliance and third-party efficacy, particularly with respect to meeting discharge targets and limits.

   Due to the need to address additional key components of Draft Ag Order 4.0, the Board directed staff to continue the item for additional discussion and board deliberation and direction during the December 9-10, 2020 meeting.
Chair Wolff adjourned the meeting at 5:00 p.m.

Wednesday, December 9, 2020, 8:00 a.m.

Chair Dr. Jean-Pierre Wolff called the video and teleconference meeting to order on Wednesday, December 9, 2020, at 8:05 a.m.

Board Business

1. Roll Call
   [Harvey Packard, Section Manager filling in for Clerk to the Board, 805/549-3140.]
   Present: Chair Wolff, Vice Chair Gray, Member Hunter, Member Johnston, and Member Young

2. Introductions
   [Matthew Keeling, Executive Officer, 805/549-3140, Matt.Keeling@waterboards.ca.gov]

   Executive Officer Matthew Keeling introduced:
   • Stephanie Yu, staff counsel; Emel Wadhwani, assistant chief counsel; Thea Tryon, assistant executive officer; Harvey Packard section manager filling in for the clerk to the board; and section managers Chris Rose and Angela Schroeter.
   • Charles Steves, Marc Gutierrez, and Aldo G. Renteria, translation contractors from CIT.

Discussion/Informational Items

3. Draft Ag Order 4.0 Discussion (item continued from Friday, October 23)
   [Elaine Sahl, 805/542-4645, Elaine.Sahl@waterboards.ca.gov; Diane Kukol, 805/542-4637, Diane.Kukol@waterboards.ca.gov; Paula Richter, 805/549-3865, Paula.Richter@waterboards.ca.gov]

   Please see Thursday, December 10, 2020 below for combined minutes of the December 9-10 meeting for item 3.

Chair Wolff adjourned the meeting at 5:10 p.m.

Thursday, December 10, 2020, 8:00 a.m.

Chair Dr. Jean-Pierre Wolff called the video and teleconference meeting to order on Thursday, December 10, 2020, at 8:00 a.m.

Board Business
1. Roll Call
[Harvey Packard, Section Manager filling in for Clerk to the Board, 805/549-3140]

Present: Chair Wolff, Vice Chair Gray, Member Hunter, Member Johnston, and Member Young

2. Introductions
[Matthew Keeling, Executive Officer, 805/549-3140, Matt.Keeling@waterboards.ca.gov ]

Executive Officer Matthew Keeling introduced:
- Stephanie Yu, staff counsel; Emel Wadhwani, assistant chief counsel; Thea Tryon, assistant executive officer; Harvey Packard section manager filling in for the clerk to the board; and section managers Chris Rose and Angela Schroeter.
- Itze Abeyta and Mandy Roman, translators from the State Water Board Office of Public Participation
- Leticia Reyna, Ttzo Lopez, and Jasmine Carrasco, translation contractors from CIT.

Discussion/Informational Items

3. Draft Ag Order 4.0 Discussion (item continued from Thursday, December 9)
[Elaine Sahl, 805/542-4645, Elaine.Sahl@waterboards.ca.gov; Diane Kukol, 805/542-4637, Diane.Kukol@waterboards.ca.gov; Paula Richter, 805/549-3865, Paula.Richter@waterboards.ca.gov]

On December 9-10, 2020, Water Board staff continued their presentation of key issues and decision points from the October 22-23, 2020 meeting.

The board provided direction to staff on many of the requirements, as described below, using a consensus-based approach led by Chair Wolff. The discussion included common board member comment themes shared during previous meetings regarding: streamlining and reducing order complexity, increasing requirement flexibility and reasonableness while maintaining focus on Water Boards’ mandate to protect water quality and beneficial uses, limits versus targets, considerations for small growers and specialty crops, coordination with and leveraging of third parties, and the consideration of alternative compliance pathway proposals by stakeholders. The board provided consensus-based direction to staff on what requirements to include in Revised Ag Order 4.0, including but not limited to the following areas:

1. Include fertilizer nitrogen application limits.
2. Encourage soil testing through reporting requirements.
3. Pre-trend groundwater well monitoring should use the primary irrigation well only and include testing for nitrate and total dissolved solids (TDS) only (i.e., eliminate general minerals).
4. Domestic well monitoring should include nitrate and 1,2,3-TCP and not general minerals or total dissolved solids (TDS).
5. Allow growers, under some circumstances, to use a nearby well to comply with individual groundwater trend monitoring requirements.
6. Allow growers 120 days to develop and submit a workplan for ranch level groundwater discharge monitoring, when required by the Executive Officer.
7. Ranch level surface discharge monitoring should be used sparingly and in coordination with third parties assisting with grower compliance.
8. Develop further, justify and provide additional guidance in support of erosion and sedimentation control requirements where impermeable surfaces, such as plastic used for berries, are used.

Water Board legal counsel, Ms. Stephanie Yu, provided an update of the lunchtime closed session regarding the Superior Court order to adopt Ag Order 4.0 by April 16, 2021. The update led to a board discussion regarding the time needed for the board to fully vet and discuss the riparian area management requirements and third-party alternative proposals and for staff to develop a revised Draft Ag Order 4.0 to meet that deadline. The board then scheduled a special meeting on January 7-8, 2021 to complete its discussion of and deliberation on Draft Ag Order 4.0.

The board preempted staff’s planned presentation on the riparian requirements (i.e., Table 5) with a discussion of their significant concerns about the very complex and controversial nature of the proposed riparian area requirements and directed staff to not include the proposed riparian area management requirements in the revised order for board consideration, with the exception of retaining the requirement to maintain existing riparian vegetation as currently required in Ag Order 3.0. As part of this discussion the board agreed about the importance of developing meaningful and defensible riparian area management requirements to protect water quality and beneficial uses, and the board directed staff to further consider riparian area management requirements at a later date in coordination with key stakeholders after the adoption of Ag Order 4.0 (i.e., in about one year).

The board agreed about the importance of third-party programs and the need to fully vet and incentivize them as part of the ongoing collaborative Draft Ag Order 4.0 process. The board subsequently agreed to use the January 7-8 special meeting to discuss third party proposed alternative compliance pathways with an emphasis on the three primary alternative proposals consisting of the ag partners proposal, public interest proposal, and Preservation Inc. proposal. The board agreed to consider materials submitted by the three above noted parties up to October 31, 2020, through public comment or ex-parte, and directed staff to provide copies of the most recent and pertinent proposal documents to the board by close of business Monday, December 14, 2020 so they could review them prior to the next meeting.

Vice Chair Gray adjourned the meeting at 5:29 p.m.
Thursday, January 7, 2021, 8:00 a.m.

Chair Dr. Jean-Pierre Wolff called the video and teleconference meeting to order on Wednesday, December 9, 2020, at 8:00 a.m.

**Board Business**

1. **Roll Call**
   [Tammie Olson, Clerk to the Board, 805/549-3140, Tammie.Olson@waterboards.ca.gov]
   
   **Present:** Chair Wolff, Vice Chair Gray, Member Hunter, Member Johnston, and Member Young

2. **Introductions**
   [Matthew Keeling, Executive Officer, 805/549-3140, Matt.Keeling@waterboards.ca.gov ]

   Executive Officer Matthew Keeling introduced:
   - Stephanie Yu, staff counsel; Emel Wadhwani, assistant chief counsel; Thea Tryon, assistant executive officer; Tammie Olson, clerk to the board; and section managers Harvey Packard, Chris Rose, and Angela Schroeter.
   - Charles Steves, Aldo G. Renteria, and Leticia Reyna translation contractors from CIT.

**Discussion/Informational Items**

3. **Draft Ag Order 4.0 Discussion** (item continued from Thursday, December 10)
   [Elaine Sahl, 805/542-4645, Elaine.Sahl@waterboards.ca.gov; Diane Kukol, 805/542-4637, Diane.Kukol@waterboards.ca.gov; Paula Richter, 805/549-3865, Paula.Richter@waterboards.ca.gov]

   Please see Friday, January 8, 2021 below for combined minutes of the January 7-8 meeting for item 3.

Chair Wolff adjourned the meeting at 5:17 p.m.

**Friday, January 8, 2021, 8:00 a.m.**

Chair Dr. Jean-Pierre Wolff called the video and teleconference meeting to order on Friday, January 8, 2021, at 8:03 a.m.
Board Business

1. Roll Call
   [Tammie Olson, Clerk to the Board, 805/549-3140, Tammie.Olson@Waterboards.ca.gov]

   Present: Chair Wolff, Vice Chair Gray, Member Hunter, Member Johnston, and Member Young

2. Introductions
   [Matthew Keeling, Executive Officer, 805/549-3140, Matt.Keeling@waterboards.ca.gov]

   Executive Officer Matthew Keeling introduced:
   - Stephanie Yu, staff counsel; Emel Wadhwani, assistant chief counsel; Thea Tryon, assistant executive officer; Tammie Olson, clerk to the board; and section managers Harvey Packard, Chris Rose, and Angela Schroeter.
   - Leticia Reyna, Charles Steves, and Aldo G. Renteria, translation contractors from CIT.

Discussion/Informational Items

3. Draft Ag Order 4.0 Discussion (item continued from Thursday, January 7)
   [Elaine Sahl, 805/542-4645, Elaine.Sahl@waterboards.ca.gov; Diane Kukol, 805/542-4637, Diane.Kukol@waterboards.ca.gov; Paula Richter, 805/549-3865, Paula.Richter@waterboards.ca.gov]

   Water Board staff delivered a presentation outlining concepts for the incorporation of substantive components of the proposed third-party alternative compliance pathways. As previously discussed and directed by the board, staff's proposed alternative compliance pathway concepts included incentives and backstops/consequences where appropriate to help ensure the effectiveness of the third-party alternatives. Through discussion and deliberation the board directed staff via a consensus-based approach to include the following third-party compliance pathway elements in a revised Ag Order 4.0 in addition to the individual requirements discussed during the September, October and December meetings:

   1. To further incentivize the use of nitrogen in groundwater, compliance with the nitrogen discharge formula 1 (total applied nitrogen – total removed nitrogen, or $A(\text{total}) - R(\text{total})$) can be assessed using the nitrogen in irrigation water available through crop evapotranspiration (i.e., ET), rather than all the nitrogen applied in irrigation water. This applies to both the individual compliance alternative and the third-party alternative.
   2. A third compliance formula for nitrogen discharge (i.e., for groundwater protection) that does not use nitrogen from irrigation water to assess compliance. Nitrogen discharge formula 3 is: fertilizer nitrogen applied – total nitrogen removed = some
target and limit, which must be determined. The intent of formula 3 is to provide a means of compliance for growers with medium-high nitrate concentration in irrigation wells.

3. Fertilizer application limits based on the 90th percentile of current fertilizer nitrogen application data with a step-down to the 85th percentile at a later date for individual grower compliance. The third-party alternative will be subject to the same 90th and 85th percentiles, but as “targets” with consequences instead of limits subject to enforcement.

4. Application of toxicity requirements to all surface waters regardless of TMDL.

5. A third-party implemented groundwater protection area, values and targets alternative compliance pathway in coordination with regional groundwater trend monitoring developed via a stepwise, incremental workplan development, submittal and EO approval process (i.e., 35%, 70% and 100% workplans; 35% workplan due 2 year after order adoption, and; 70% workplan vetted via public comment and board workshop process) where compliance is assessed at a collective groundwater protection area scale on an annual basis using combined data submitted by growers.

6. Growers participating in the third-party groundwater protection area approach will be required to collect and submit the same nitrogen applied and removed data as growers participating in the individual compliance approach.

7. Growers complying through the third-party groundwater protection area alternative must meet the fertilizer application targets by one year past their effective date, and if they do not, be subject to progressive attention until the targets are met, or potentially lose membership in the third-party.

8. The third-party alternative will include nitrogen discharge targets of 500, 400 and 300 pounds per acre per year (lbs/acre-year) using the nitrogen discharge formula 1; the targets will not expire. Growers who do not meet the final target of 300 lbs/acre-year within a year of its effective date will be subject to progressive attention until the target is met, or potentially lose membership in the third-party. The final target of 300 lbs/acre-year will be reevaluated prior to becoming effective based on new information associated with nitrogen applied and removed data and management practice effectiveness to meet the target.

9. The third-party will develop groundwater protection targets; the earliest targets will be effective in 2025. Members of the third-party in a groundwater protection area that exceeds the groundwater protection targets by 20% or more as a three-year running average will lose membership in the third-party; the board will consider compliance with the targets and consequences as part of annual updates targets.

10. Third-party members that exceed the groundwater nitrogen discharge targets for a two-year running average are subject to annual irrigation and nutrient management plan certification.

11. Third-party members are not subject to ranch-level groundwater discharge monitoring.

12. Third-party members participating in the enhanced surface water follow-up program will have alternative priority areas, which define when follow-up implementation plans are due.
13. All total maximum daily loads with compliance dates prior to December 31, 2031, will have revised compliance dates of December 31, 2031; this applies to growers complying individually or through a third-party.

14. Growers participating in an approved third-party may request additional time to comply with surface receiving water limits through a time-schedule order. Growers complying individually may individually request a time-schedule order for additional time to comply with surface receiving water limits.

15. Third-party plans for groundwater protection areas and enhanced surface water follow-up will include clear performance criteria for determining individual membership good standing and grounds for membership termination. Third-party plans will also include membership termination transition timing and membership reentry criteria.

The board directed staff to develop Revised Ag Order 4.0 with the third-party proposal and compliance pathway elements outlined above, as well as other elements directed by the board during September, October and December meetings, for consideration at the April 14-16, 2021 board meeting. Revised Ag Order 4.0 will be subject to 30-day public comment period, with comments limited to changes relative to Draft Ag Order 4.0 released on February 21, 2020, prior to developing a proposed order for board consideration at the April 14-16, 2021 meeting.

Chair Wolff adjourned the meeting at 12:03 p.m.

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Dr. Jean-Pierre Wolff, Chair