



Ag Order in 2025 Progress & Requirements

Central Coast Water Quality Preservation, Inc.

Sarah Lopez, Executive Director

www.ccwqp.org

02/19/25
UCCE Irrigation &
Nutrient Meeting
Salinas, CA

Contact Info

ENGLISH

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Outline

- ▶ Important 2025 compliance dates
- ▶ Total Nitrogen Applied (TNA, and INMP) reporting
- ▶ Surface Water “Follow-Up” program

Ag Order Compliance Dates in 2025

Third Party Dues & State Fees

- Membership ensures compliance with surface water monitoring & reporting requirements, future groundwater “trend monitoring,” and the ACP (Alternative Compliance Pathway for Irrigation & Nutrient Management)
- Invoices were mailed by 11/15/24; current membership was reported to Water Board on 2/1/2025
- Non-members must pay high individual-rate State Fees and submit Individual Work Plans for all Ag Order components

Ag Order Compliance Dates in 2025

March 1st should be on your calendar!

- Update Annual Compliance Form (ACF) in eNOI on GeoTracker (if no changes, review then click “save/submit”)
- TNA/INMP Reports due (Total Nitrogen Applied or Irrigation & Nutrient Management Plan)
- Well sampling period begins (3/1 through 5/31)
 - All on-farm domestic and dual-purpose wells
 - One “primary” irrigation well (if no dual-purpose wells are present)
 - Well sampling effort must match the well types/counts in your eNOI

Ag Order Compliance Dates in 2025

Surface Water Follow-Up

- Ranches in the lower-Salinas Valley are “High Priority”
- Many East Side ranches were also the subject of a series of stormwater sediment complaints by County & residents
- Sediment & Erosion Management Plans (SEMP) should be in place and effective this year, before October 1st
- Also need to address Nitrate & Pesticides in any runoff

Ag Order Compliance & Third Party Membership

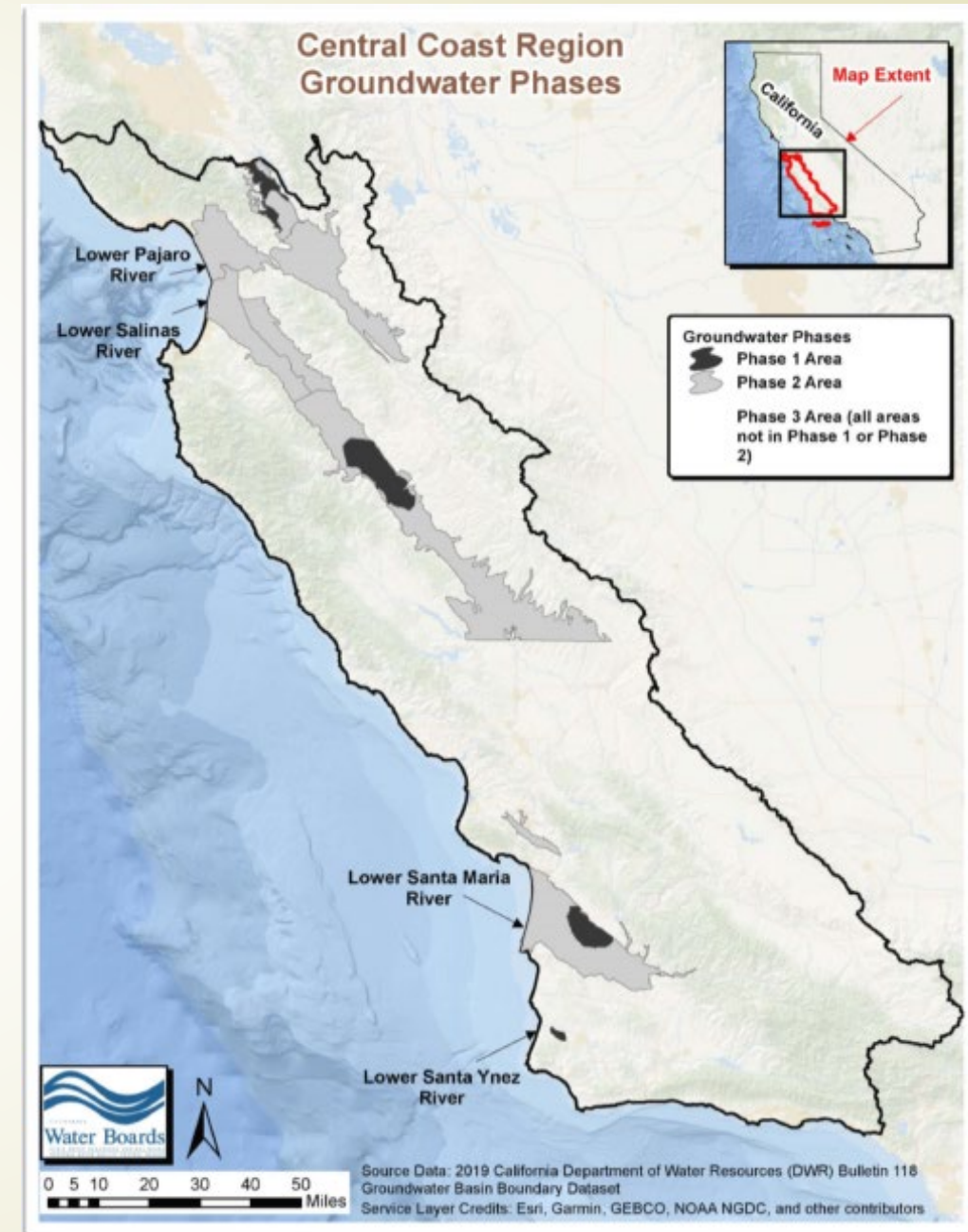
- ▶ Annual membership dues & State Fees must be paid on-time (or within grace period)... multiple reminders are sent
- ▶ Any unpaid individual State Fees from prior years must be paid (Water Board rule)
- ▶ Prior-year TNA/INMP report must be submitted (if no report, receive a certified-mail notice instead of an invoice)
- ▶ Prior-year well sampling must be complete relative to eNOI well counts/types (if no/incomplete sampling, receive a certified-mail notice instead of an invoice)



Irrigation & Nutrient Management Reporting

“Phase Areas” in Ag Order 4.0

- ▶ Ranches in Phase Area 1 must report INMP by March 1st, 2025 for their 2024 crops
- ▶ All other ranches must report TNA by March 1st, 2025 for their 2024 crops
- ▶ www.ccwqp.org/phaseareamaps for close-up views of Phase 1 areas
- ▶ **Ranches in Phase Area 2 should be keeping records NOW (in 2025) to report INMP by March 1st, 2026**



Finding your ranch's Phase Area in the eNOI

CA .GOV STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER ESI

TOOLS

- Upload EDD
- Check EDD
- VVL Search Tool
- Edit Field Points
- Other Tools
- Funding Programs
- Update eNOI Forms
- Add Program
- Guides / Resources
- Contact Us
- Account Information
- Logout

CAROLINE WEBSTER TEST ACCOUNT

[EDIT OPERATION INFORMATION](#) [PRINT OPERATION FORM](#) [ADD RANCH / FARM TO THIS OPERATION](#)

RANCH / FARM NAME	ADDRESS	CITY	IRRIGATED ACRES	TAILWATER ACRES	GW PHASE AREA	SW PRIORITY AREA
[EDIT RANCH INFO] CAROLINE'S PEACH FARM	895 AEROVISTA PLACE, SUITE 101	SAN LUIS OBISPO	0	0	3	[EDIT COMPLIANCE INFO] [SUBMIT TNA REPORT]

GW PHASE AREA
3

Or contact
Support@ccwqp.org or
831-761-8644 for help

Or view street maps:
www.ccwqp.org/phaseareamaps

Total Nitrogen Applied (TNA) and Irrigation & Nutrient Management Plan (INMP) Reporting in 2024

~ reports on 2023 crops ~

	<u>TNA</u>	<u>INMP</u>
Number of acres* reporting	328,063	46,274
Number of ranches reporting	3632	304
Ranches with past-due reports**	168 (4%)	11 (4%)

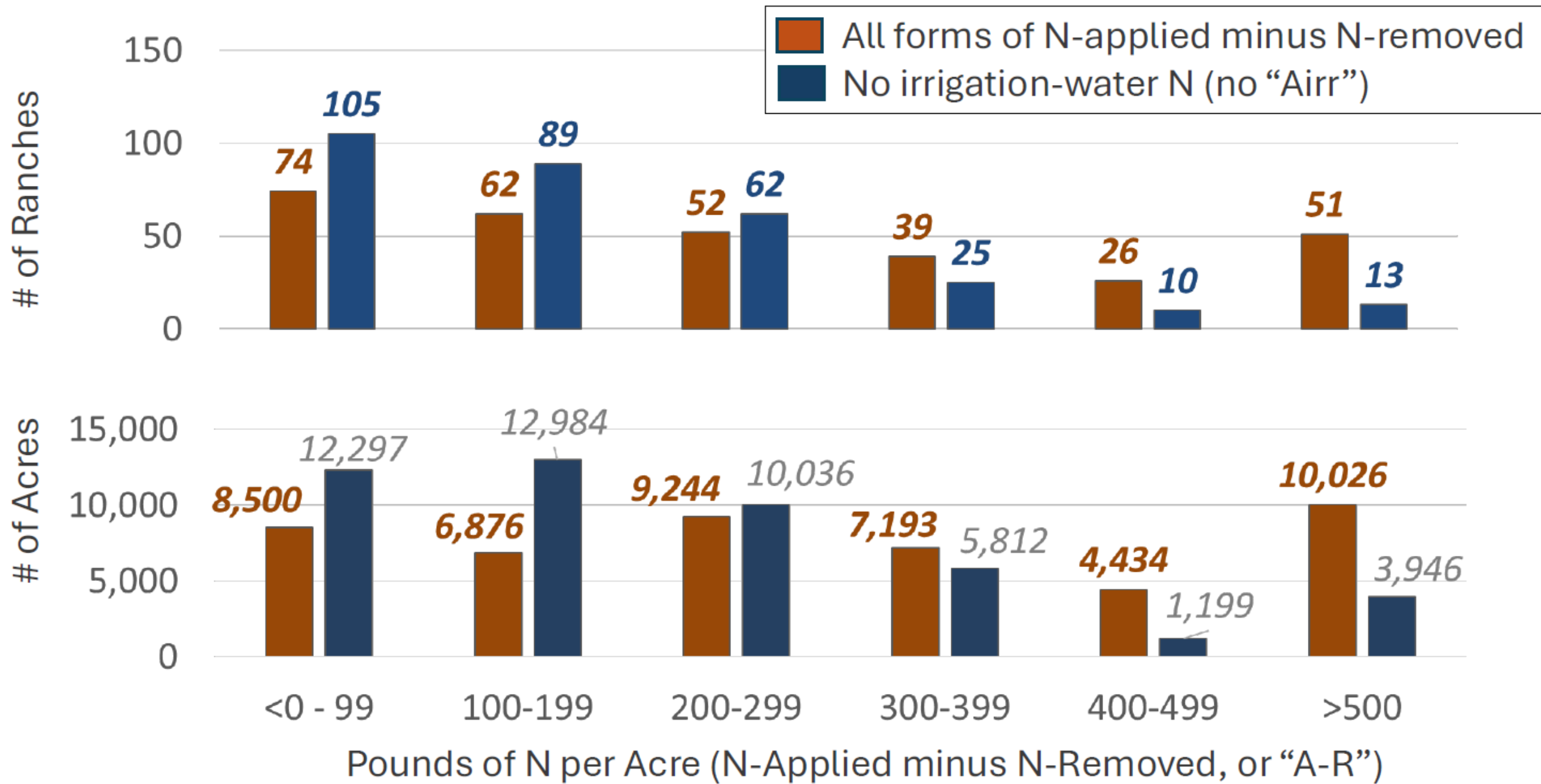
* ranch-acres (not crop-acres)

** Third Party membership revoked; report required to reinstate membership 11

Follow-Up Efforts in 2024

- ▶ Individual calls to all Operators of ranches with “high” INMP reports
 - ▶ i.e. A-R (N-applied minus N-removed) balance >500 and >400 lbs N/acre
- ▶ Individual calls to Operators of ranches with very low INMP report results (i.e. << 0 lbs N/acre)
- ▶ Outcome 1: Calculation errors played a significant role in high/low reports
 - ▶ Example: Reporting “pounds applied or removed” instead of “pounds per acre”
- ▶ Outcome 2: Purposely high N-application rates played a small role
 - ▶ Example: Sequential storms in early 2023 drove multiple fertilizer applications on some ranches that would have otherwise only applied once or twice
- ▶ Outcome 3: N in irrigation water played a significant role in high reports

N-Applied minus N-Removed (“A-R”), 2023 crops





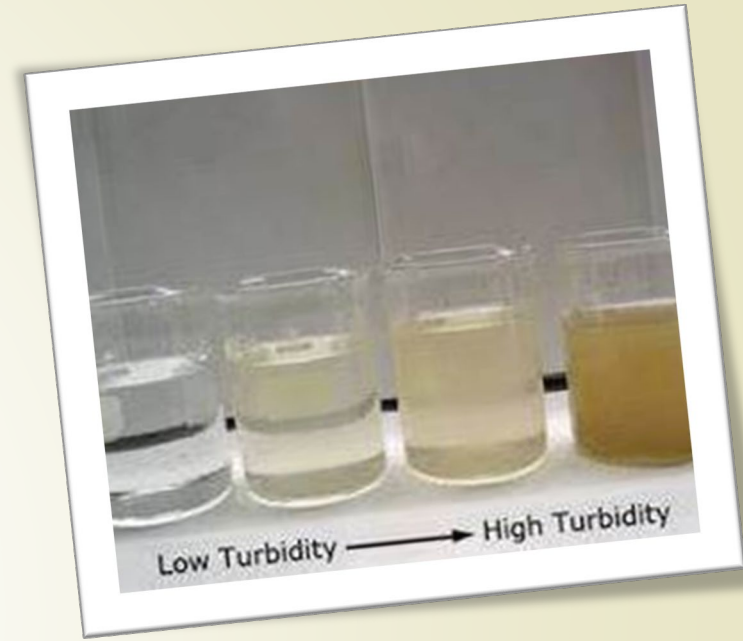
Well Sampling

Well Sampling →→ Long-Term Trends

- ▶ First GQTM (Groundwater Quality Trend Monitoring) Work Plan revised and resubmitted; currently in-review by Water Board staff
- ▶ 7 additional GQTM Work Plans in-prep for 9/1/25
- ▶ GQTM networks have reduced number of wells, with known construction (target shallow aquifer)
- ▶ On-farm domestic well sampling will continue

On-Farm Well Sampling in 2025

- Preservation, Inc. field & lab contractors
- Chain Of Custody is pre-populated with ranch info from eNOI on GeoTracker
- Sampling matches the eNOI = Compliance
- Sampling less than eNOI info = Non-Compliance
- Result Notificiations must be posted for Domestic well users AND eNOI updated to confirm posting



Surface Water Follow-Up & Complaint Response

Follow-Up Areas of Focus in 2024 & 2025

- ▶ High Priority watersheds (per Ag Order 4.0)
 - ▶ Santa Maria (8), Lower Salinas (10), Upper Pajaro (1)
- ▶ Ranch-level awareness of irrigation runoff (“tailwater”)
 - ▶ Participation mandatory
 - ▶ Nitrate, turbidity, pesticides, volume/frequency
 - ▶ 170 introductory meetings and > 330 individual ranch visits conducted
- ▶ Response to stormwater/sediment complaints
 - ▶ Sediment Erosion Management Plans (SEMP)

Management Highlight: The SEMP

- ▶ SEMP = Sediment & Erosion Management Plan
- ▶ New name; not a new requirement!
 - ▶ Required section of Farm Plan (Farm Water Quality Management Plan) since 2005
- ▶ Should address irrigation runoff (tailwater) & storm runoff
- ▶ Prevention; then Containment; then Treatment
- ▶ Any runoff not prevented or contained should be treated for sediment, nutrients, and pesticides
- ▶ Required now to remain in Third Party Follow-Up program

Follow-Up Resources

- ▶ www.ccwqp.org
 - ▶ Main Menu: Surface Water
 - ▶ Sub-Menu: Surface Water Follow-Up
- ▶ Will be in-development throughout spring/summer 2025
- ▶ Completeness criteria and templates
- ▶ Preservation, Inc. ranch visits and/or SEMP reviews

End

Surface Water Trends for Key Ag Indicators

Stream Flow		Count
Increasing	↑	4
Decreasing	↓	29
No Trend		23

- Sites with no trend are frequently dry
- All increasing trends are in north
- 9 of 23 decreasing trends are in the south

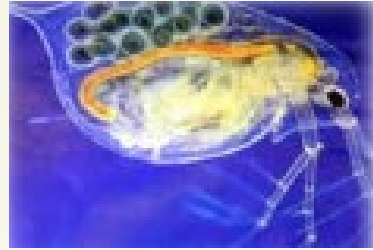
Turbidity		Count
Increasing	↑	11
Decreasing	↓	22
No Trend		23

- Most increasing trends are in south (SLO & SB counties)
- Most decreasing trends are north (Pajaro & Salinas watersheds)

Nitrate		Count (loads)
Increasing	↑	10 (5)
Decreasing	↓	15 (27)
No Trend		31 (24)

- Most increasing trends are in north (Pajaro & Salinas watersheds)
- Most decreasing trends are in south (SLO & SB counties)

Surface Water Trends for Aquatic Toxicity



Water Flea
(*Ceriodaphnia dubia*)



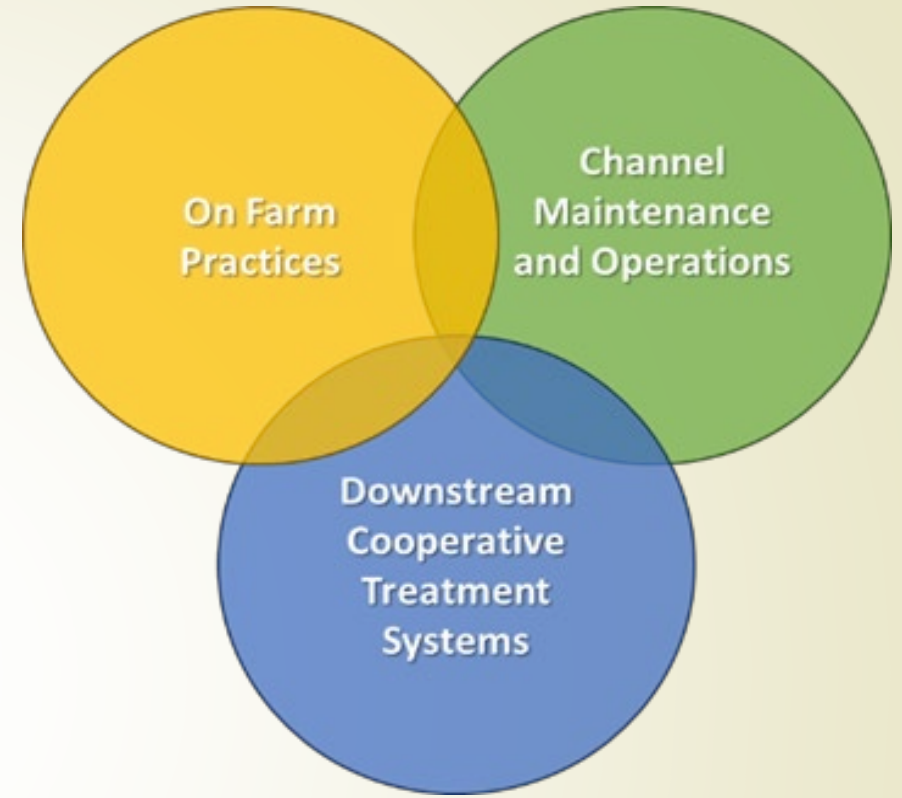
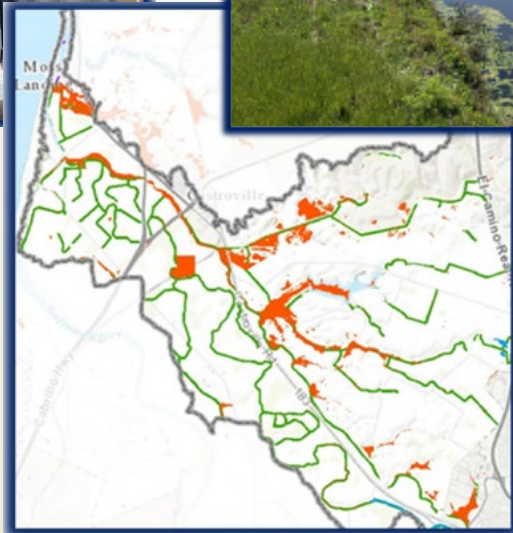
Midge Fly Larva
(*Chironomus dilutus*)

- Trends (2005-2022); Seasonal Mann Kendall test
- Majority of sites have no statistically significant trends
- Of the 10 statistically significant trends for toxicity in water, 9 were improving (increasing survival or reproduction rate over time)

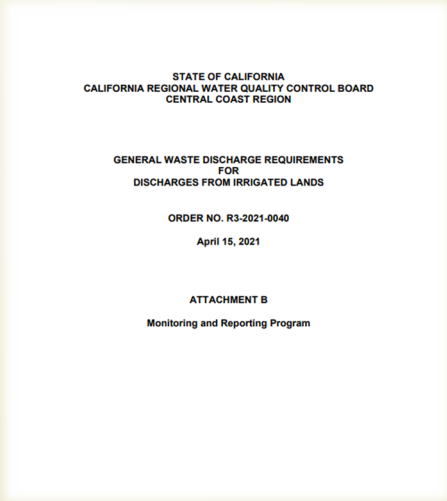
Surface Water Follow-Up Requirement

- ▶ Because despite some improving trends, most sites are still heavily impaired, and some have worsening trends
- ▶ First Work Plan due March 1st, 2024
 - ▶ All of Santa Maria area
 - ▶ East side of Lower Salinas Valley & much of the west side
- ▶ Ranch-level work will be required (even for Third Party members) – New/increased management actions
- ▶ 50% improvement from 2024 status by 2028
 - ▶ 25% improvement by 2026 (proposed as internal milestone)

Surface Water Follow-Up

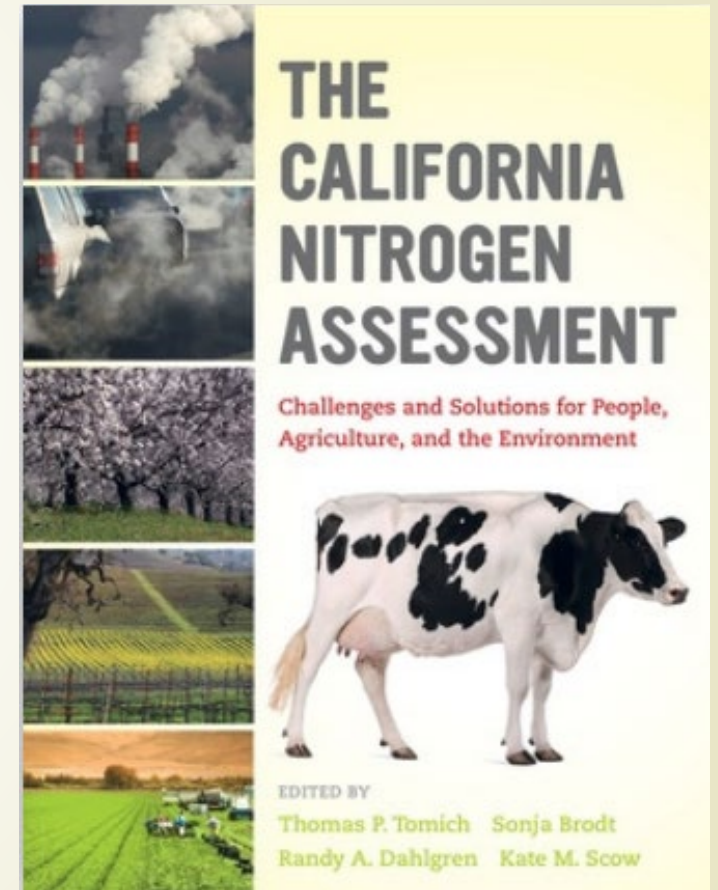


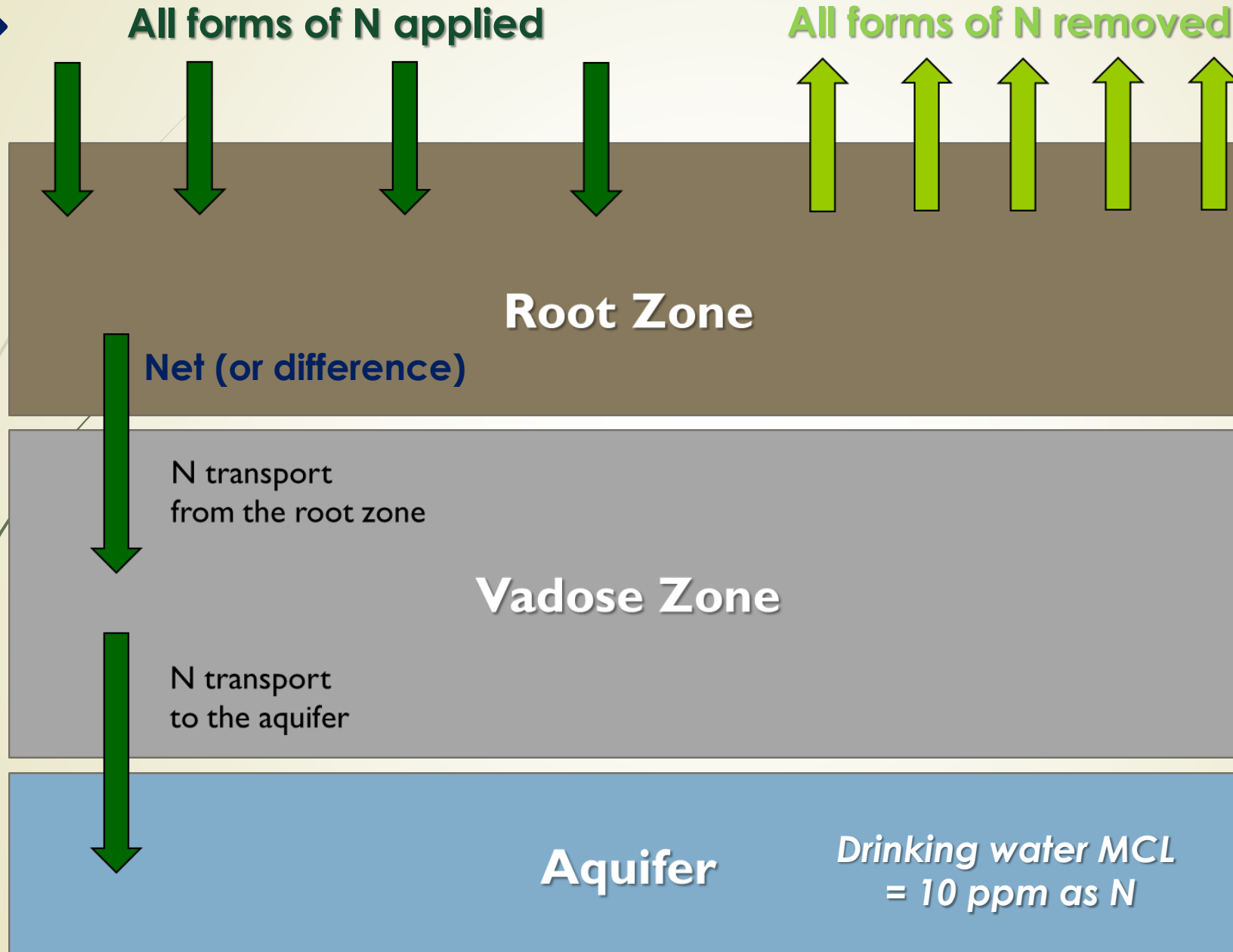
Ag Order 4.0
Attachment B
(MRP) →



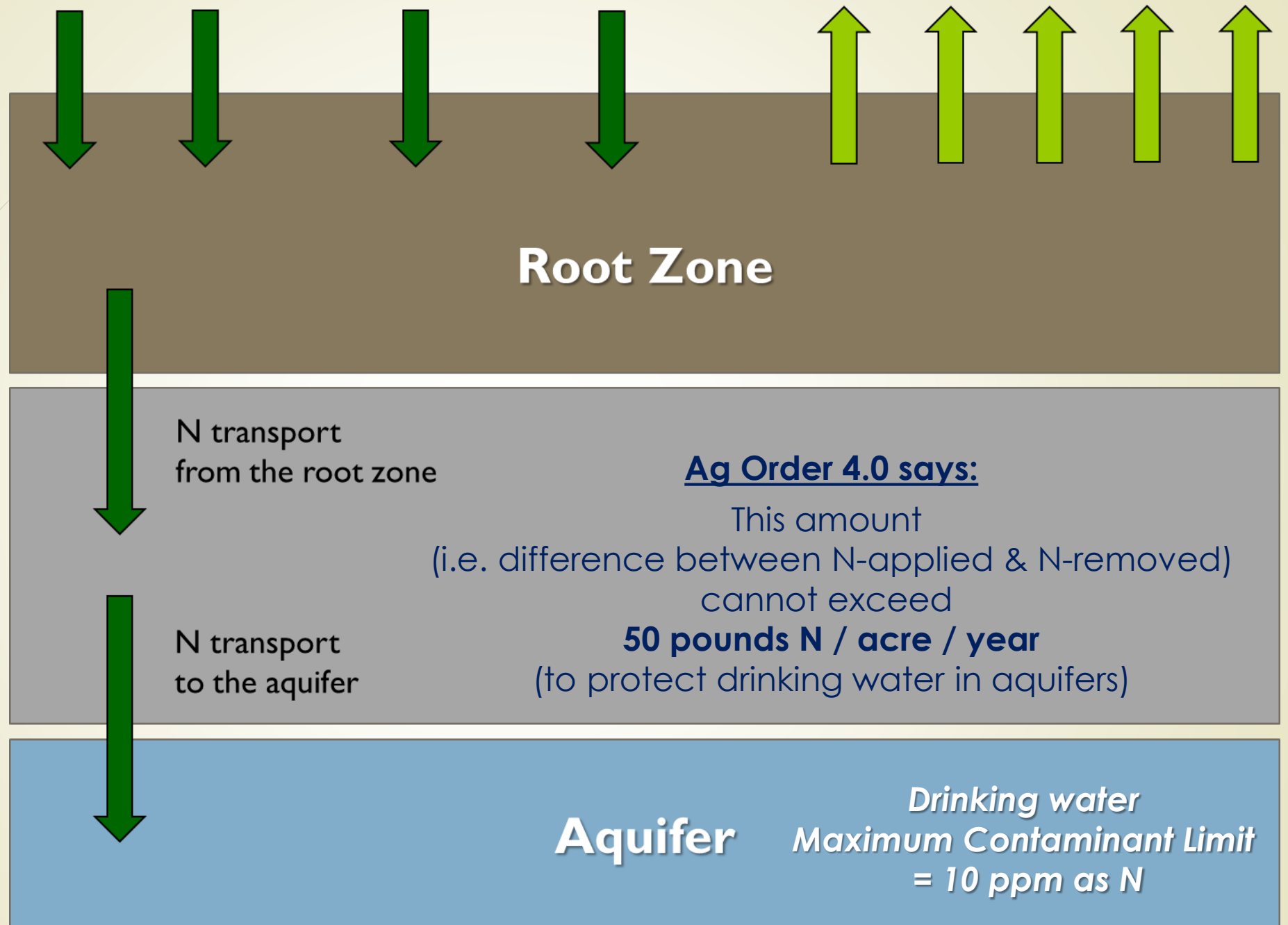
The “What” & “Why” of TNA/INMP Reporting

- TNA = Total Nitrogen Applied
- INMP = Irrigation & Nutrient Management Plan (summary report; generally, TNA info plus crop yields ... N removed at harvest)
- The difference between N-applied (A) and N-removed (R) is highly susceptible to leaching
- A statewide Expert Panel concluded:
The most important management tool for this issue is to monitor, report, and manage the A/R or (A-R) balance



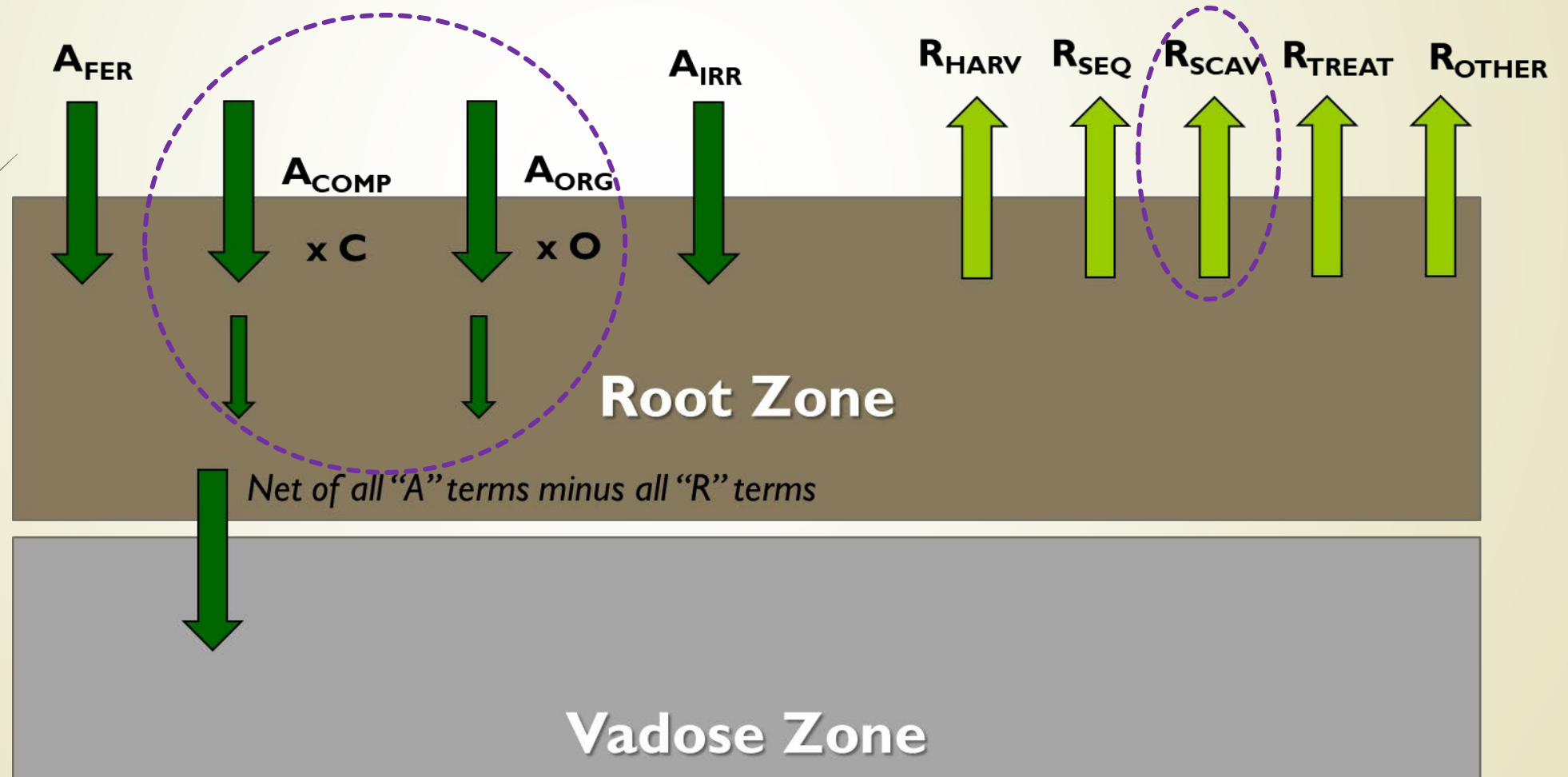


The
"A - R"
Concept



Ag Order 4.0 allows an adjustment factor for N applied in organic fertilizers (A_{ORG}) and composts (A_{COMP})

Ag Order 4.0 considers N removal in harvested plant material (R_{HARV}), non-legume cover crop uptake ($R_{SCAVENGE}$), and other pathways



TNA/INMP Reporting for SIP-Certified Wine Grape Ranches

- ▶ SIP-Certified/Preservation, Inc. collaboration passes certification data through to a TNA report
 - ▶ This process is also open to any certification program that collects the necessary ranch data
 - ▶ Applying for INMP exemption (in process)
- ▶ Entire ranch must be SIP-certified
 - ▶ Partially certified ranches must report TNA independently
- ▶ Entire ranch must be in grape production (for now?)

What and How to Report (1,2,3)

www.ccwqp.org/tna
www.ccwqp.org/inmp

This week, use .net

1. Gather records (see checklist on website)
 - Ranch info, crops, irrigation water, fertilizers & amendments, harvest/yield
2. Perform required calculations
 - List of calculations, instructions, & calculator tools on website
 - Or schedule a support session
 - Email support@ccwqp.org (English o espanol)
 - Call 831-761-8644 (English)
 - Llame a 831-240-9533 (espanol)
3. Fill out and submit form
 - Link to or download form from website (EZ Form or Spreadsheet Form)
 - Or schedule a support session (contact info above)

Report Forms

- ▶ Please use Preservation, Inc's forms to report; you do NOT need to also fill out a form on GeoTracker
- ▶ Spreadsheet Form (Excel workbook; www.ccwqp.org/tna or [/inmp](http://www.ccwqp.org/inmp))
 - ▶ Report many crops, ranches, or even Operations in single submittal
 - ▶ Auto-confirmation and feedback from "Checker" helps ensure correct reporting
 - ▶ Save your work mid-report; start next year's from this year's form
 - ▶ Auto-populate or cut-and-paste from calculator toolset
 - ▶ Get started by filling out an EZ-Form for 1-5 crops; receive pre-populated Spreadsheet Form
- ▶ EZ-Form (Google survey; no account required unless saving work)
 - ▶ Single ranch; 1-5 crops
 - ▶ Can take 5 minutes or less to complete w/ records ready

In Summary

- ▶ March 1st is an important date, every year!
 - ▶ TNA/INMP reports due
 - ▶ ACF updates due
 - ▶ Start of well monitoring period
- ▶ Third-Party invoices mailed 11/15 & due 12/15 annually
 - ▶ Non-appealable State Water Board fee applies if not paid
- ▶ Future Surface Water “Follow-Up” program
- ▶ “Follow-Up” for high TNA/INMP reports in development

Contact Info

ENGLISH

- Phone: 831-761-8644
- Support: Support@ccwqp.org
- Invoices: Office@ccwqp.org
- Web: www.ccwqp.org

ESPAÑOL

- Telefono: 831-240-9533
- Email: Support@ccwqp.org
- Web: www.ccwqp.org



← haz clic para español

TEMPORARY INFO (THIS WEEK ONLY)

- Email: ccagwaterquality@gmail.com
- Web: www.ccwqp.net
- Phone: 831-761-8644 o 831-240-9533

Who is Preservation, Inc?



*In the Central Valley,
groups like
Preservation, Inc. are
called "Coalitions"*

We are hiring!

- *INM Specialist*
- *Ag Water Quality Scientist*
- *Field Technicians*

*Indeed.com or
www.ccwqp.org/careers*

Who needs to enroll in the Ag Order?

- ▶ All commercial, irrigated farms on the Central Coast
 - ▶ If you irrigate your crop and sell it (even at a farmers market)
- ▶ All acreage within Santa Cruz, Monterey, San Benito, San Luis Obispo, and Santa Barbara Counties
- ▶ Also the Pescadero area in San Mateo County
- ▶ Also southern Santa Clara County (Morgan Hill, San Martin, Gilroy, etc.)
- ▶ Includes nurseries and greenhouses (produce, flowers, starts, etc)
 - ▶ Cannabis growers enroll in Cannabis Order

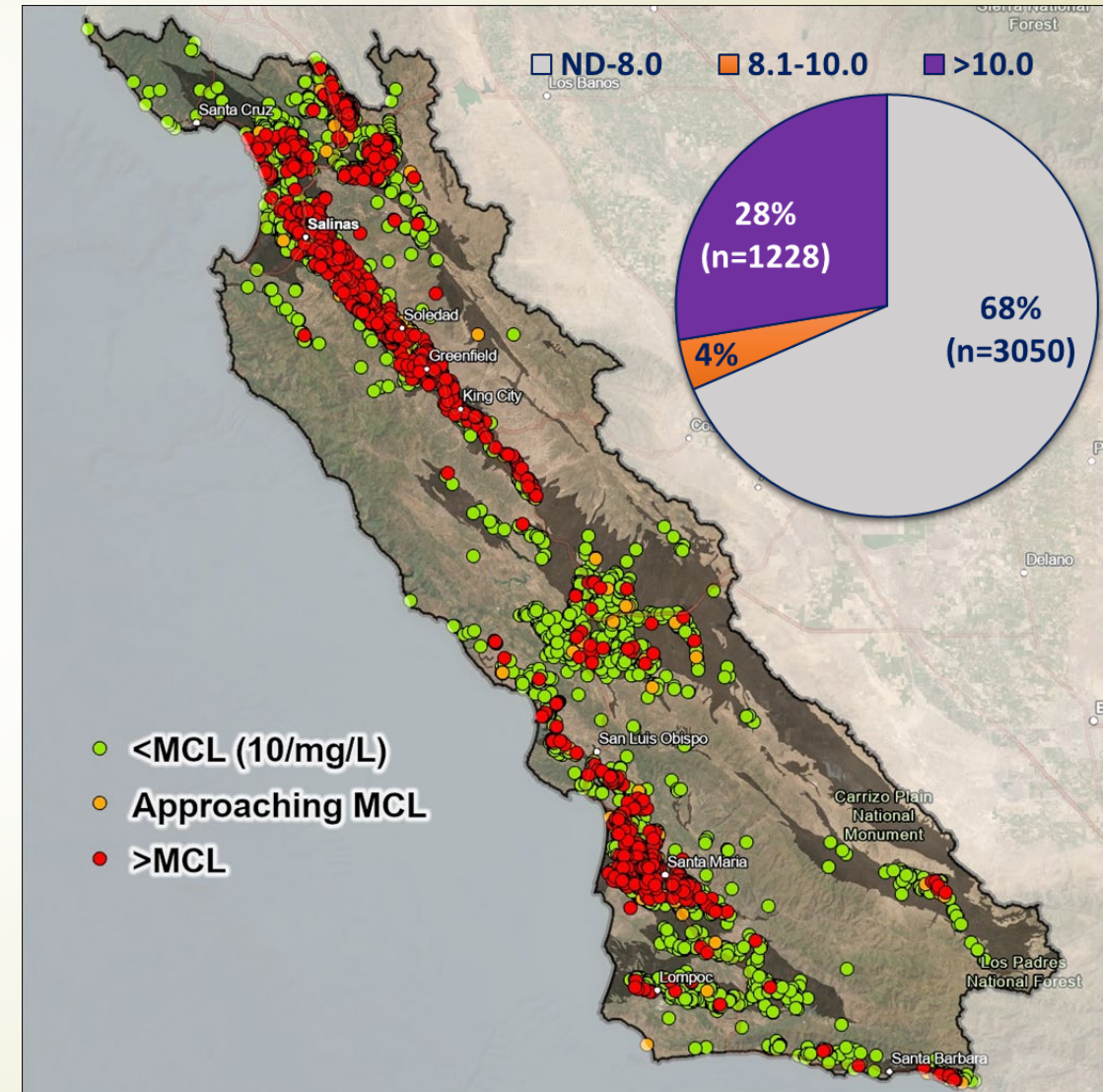
www.ccwqp.org/how-to-enroll (this week: www.ccwqp.net/how-to-enroll)

Nitrate in Central Coast Groundwater

ALL WELLS

County	Count	% > MCL	Mean	Median
Monterey	1443	38%	15.36	5.2
San Benito	282	26%	8.42	3.4
San Luis Obispo	1266	16%	6.69	1.8
San Mateo	1	0%	ND	ND
Santa Barbara	852	26%	8.90	2.37
Santa Clara	255	37%	11.68	6.8
Santa Cruz	324	26%	8.97	0.95
Ventura	16	0%	2.15	0.98
Totals	4439	28%	10.48	2.9

Nitrate as N, mg/L (ppm)



Preservation, Inc. Membership

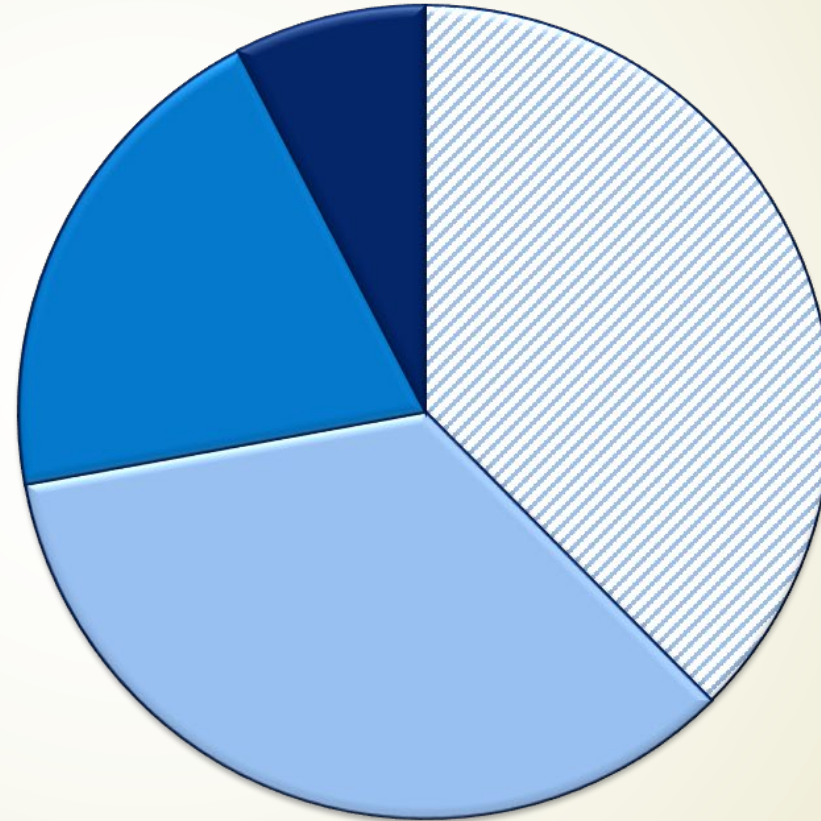
Acreage

▨ 15 or less

▨ 16 to 99

▨ 100 to 999

▨ 1000+



by
operation
size

➤ 1371 operations

➤ 3918 ranches


➤ 410,130 acres

Preservation, Inc. Membership

 Veg./Berry (66%)

 Orchard (6%)

 Vineyard (28%)

 Nursery/
Greenhouse (1%)



by
Crop
type

How can growers use this info?

1. Are my N application rates in line with plant needs?
2. Do I have N in my irrigation water, or residual N in my soil, that I can use as “free fertilizer”?
3. Is my “A minus R” balance close to 50 lbs N/acre/yr (i.e. protective of drinking water)?
 - For wine-grape growers, it likely is!
 - For Central Coast vegetable and strawberry growers, it may be 200, 300, or even 400+ lbs N/ac/yr
 - For organic farmers, it may be very high, but in a form that is not immediately at risk of leaching

How can/will the Water Board use the reported information?

- ▶ State Water Board Remand: Fertilizer and A-R “Limits” are not enforceable (for now)
 - Numeric goals are now “Targets” and don’t carry fines
- ▶ Water Board can fine you \$1000/day for failing to file a report
 - Fall 2023 fines were ~\$40,000
- ▶ If your report shows very high “A” or “A-R” balance, Preservation, Inc. will contact you to:
 - Confirm reported values are correct
 - Learn about any extenuating circumstances/challenges
 - Encourage changes and offer resources to bring levels down

In Summary...

- ▶ All Central Coast farmers who irrigate and sell their crops must enroll in the “Ag Order”, and must report either TNA or INMP by March 1st of this year
- ▶ Filing the report form can be fast/simple (contact Preservation, Inc. or RCD for assistance)
 - Record-keeping and calculations can be a heavy lift, especially for growers of highly diverse crop mixes
- ▶ Fertilizer applications should align with plant needs; and an A-R balance of about 50 or less (lbs/ac/yr) is needed to protect drinking water
- ▶ Organic growers with highly diverse crop mixes face special challenges
 - Adjustment factors for organic fertilizers and composts are key
 - Cover cropping (and credits) are key to increasing “R” and preventing leaching of N by winter rains

Possible INMP Exemption for Ranches Meeting Final Target/Limit

- ▶ If N-Applied minus N-Removed does not exceed 50 lbs/N/acre/year
 - ▶ Requires a TNA report (or similar) plus certified N-Removed data as basis
 - ▶ SIP-Certified Vineyards may qualify (negotiations in-progress)
- ▶ If Total N Applied does not exceed 50 lbs N/acre/year
 - ▶ Basis: If TNA < 50, then A-R must be < 50, even if “R” is zero
 - ▶ Preservation, Inc. to submit request for SIP-Certified in Feb.
 - ▶ We can also submit for any vineyard that files TNA early

What exemptions are possible?

- ▶ “No threat” (to either surface or groundwater) exemption from both TNA and INMP requirements has extremely high bar and is unlikely to be met in most cases
- ▶ “Meeting final Target/Limit” exemption can be met by many (perhaps most) winegrape growers
 - ▶ Exemption is from reporting “R” (i.e. harvest/yield)
 - ▶ This does NOT exempt you from reporting TNA
 - ▶ SIP-Certified TNA data will still be reported, even with this exemption

Simplified Example

Registros del Fertilizante – Granulado

Total de libras de
nitrógeno
aplicado

=

total en libras de
fertilizante usado

x

porcentaje de
nitrógeno en la
etiqueta

10-5-5 NPK = 10% nitrógeno



100 libras



10 acres

=



10 libras / 10 acres

=



1 libra / acre

1. Gather Records

www.ccwqp.org/inmp

∨ Jump to: Section I – Introduction & Checklist

- Basic info (e.g. name, company, email, reporting year, ranch name, APN, acres farmed vs. fallow)
- Irrigation info (e.g. water sources, volume applied in gallons, Nitrate concentration in water)
- List of crops planted (and acreage for each), with amount of synthetic & organic fertilizers applied to each
- Amount of Nitrogen in soil (from at least one soil-N test)
- Amount of N removed from the field in each harvested crop, sequestration in woody vines/canes/trunks, cover crops, etc.

2. Perform Calculations

www.ccwqp.org/inmp

∨ Jump to: Section II – Recordkeeping & Calculations

- Convert irrigation water acre-feet or acre-inches to gallons
- Convert soil N to “pounds of N per acre”
- For each crop and fertilizer type, convert the fertilizer-applied into “pounds of N applied per acre”
- For organic fertilizers and high-carbon amendments, find the Carbon:Nitrogen ratio to adjust for slow conversion of N
- Determine the Crop Evapotranspiration (Crop-ET) for each crop

Preservation, Inc's Member Support team, and RCD's, are available to help!

3. Submit Report

www.ccwqp.org/inmp

∨ Jump to: Section III – Submit a Report

- TNA EZ Form; INMP EZ Form (English y espanol)
 - Google form (no account required)
 - With records in-hand, can take only 5 minutes to complete
 - Click “submit” and receive email confirmation & copy
 - Preservation, Inc. checks and submits report to Water Board
- Spreadsheet Form
 - Better for lots of crops
 - Use prior-year report to start next-year report
 - Copy and paste from your records, and some of our calculator tools
 - Fill out EZ Form for 1 crop, and we will email you a populated Spreadsheet Form

Preservation, Inc's Member Support team, and RCD's, are available to help!

Key Changes in Ag Order 4.0

- ▶ TNA reporting begins for all growers (2023 crops, due 3/1/24)
- ▶ INMP reporting phases in for some growers (2023 crops, due 3/1/24)
- ▶ High-N TNA/INMP reports require follow-up (not fines... for now...)
- ▶ Well Monitoring for trend purposes shifts to “networks”
 - ▶ Pending Work Plan approval by Water Board
 - ▶ Reduces formal irrigation well sampling; Domestic well sampling continues, with possible reduction in 123-TCP sampling
- ▶ Surface Water Follow-Up

Things that haven't changed

- ▶ All growers must enroll through and keep current their eNOI accounts on GeoTracker (Water Board and Pres, Inc. requirement)
- ▶ Requirements that apply at the Operation or Ranch level (e.g. well sampling, TNA, Annual Compliance Form, etc) must be met
- ▶ Every ranch needs a Farm Plan, and the management practices in that plan must be implemented to protect/improve water quality

State Water Board Remand of Ag Order 4.0

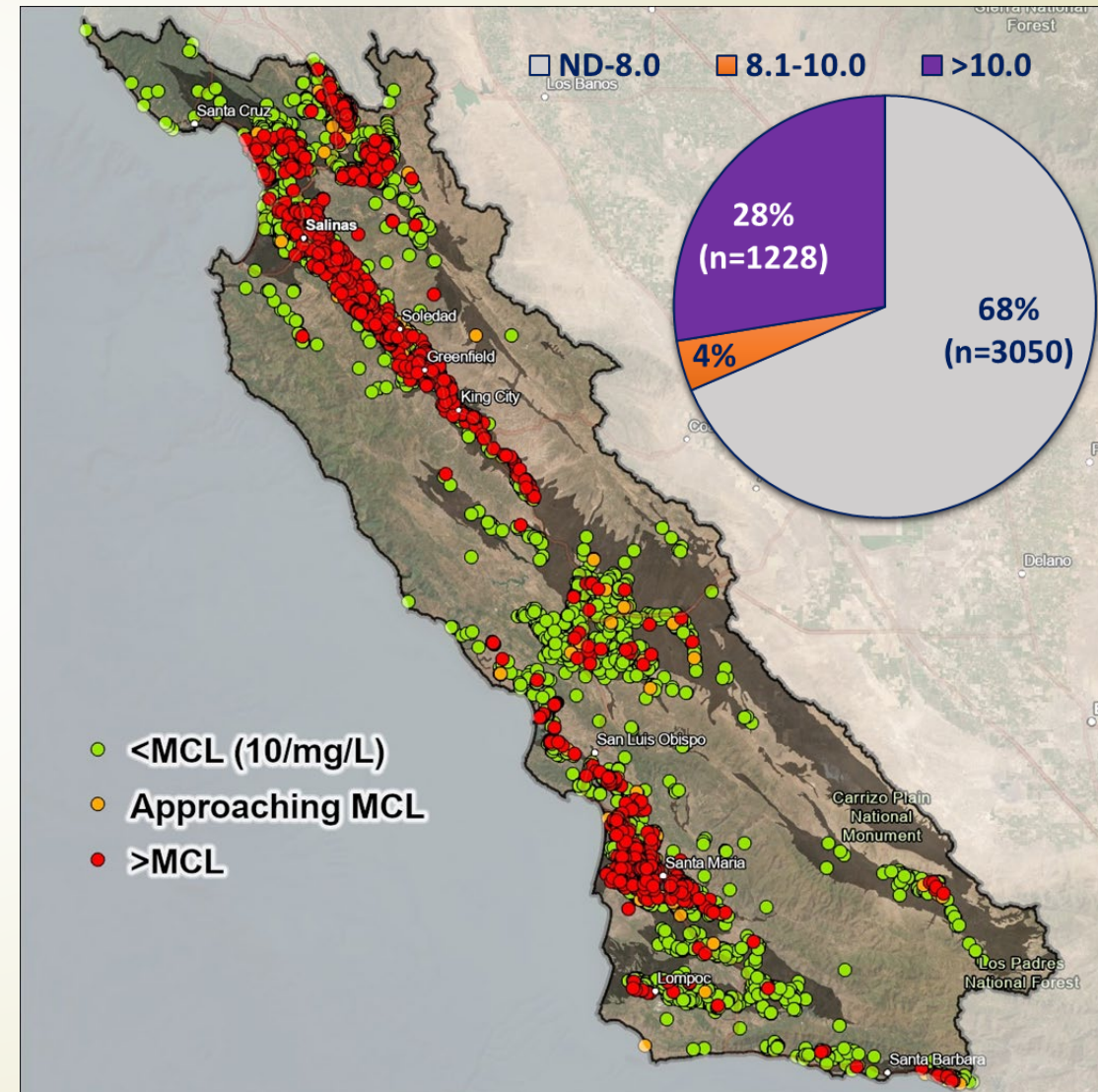
- 9/20/23 – State Board issues Order to Central Coast Water Board
- Several aspects of Ag Order 4.0 must be revised within 1 year
- A new State Expert Panel on Nitrogen (esp. A-R) should be convened
- Ag Order 4.0 Limits on N-applied and N-discharge (A-R) cannot be enforced, and cannot be used to remove growers from Third Party
- Ag Order 4.0 Targets for N-applied and N-discharge (A-R) CAN still be used to require education
- Credits for cover crops, high-carbon amendments can stay

Groundwater Nitrate in Central Coast Ag Basins (2023 results)

ALL WELLS

County	Count	% > MCL	Mean	Median
Monterey	1443	38%	15.36	5.2
San Benito	282	26%	8.42	3.4
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Totals	4439	28%	10.48	2.9

Nitrate as N, mg/L (ppm)



Phase Area 1 in Santa Maria Valley



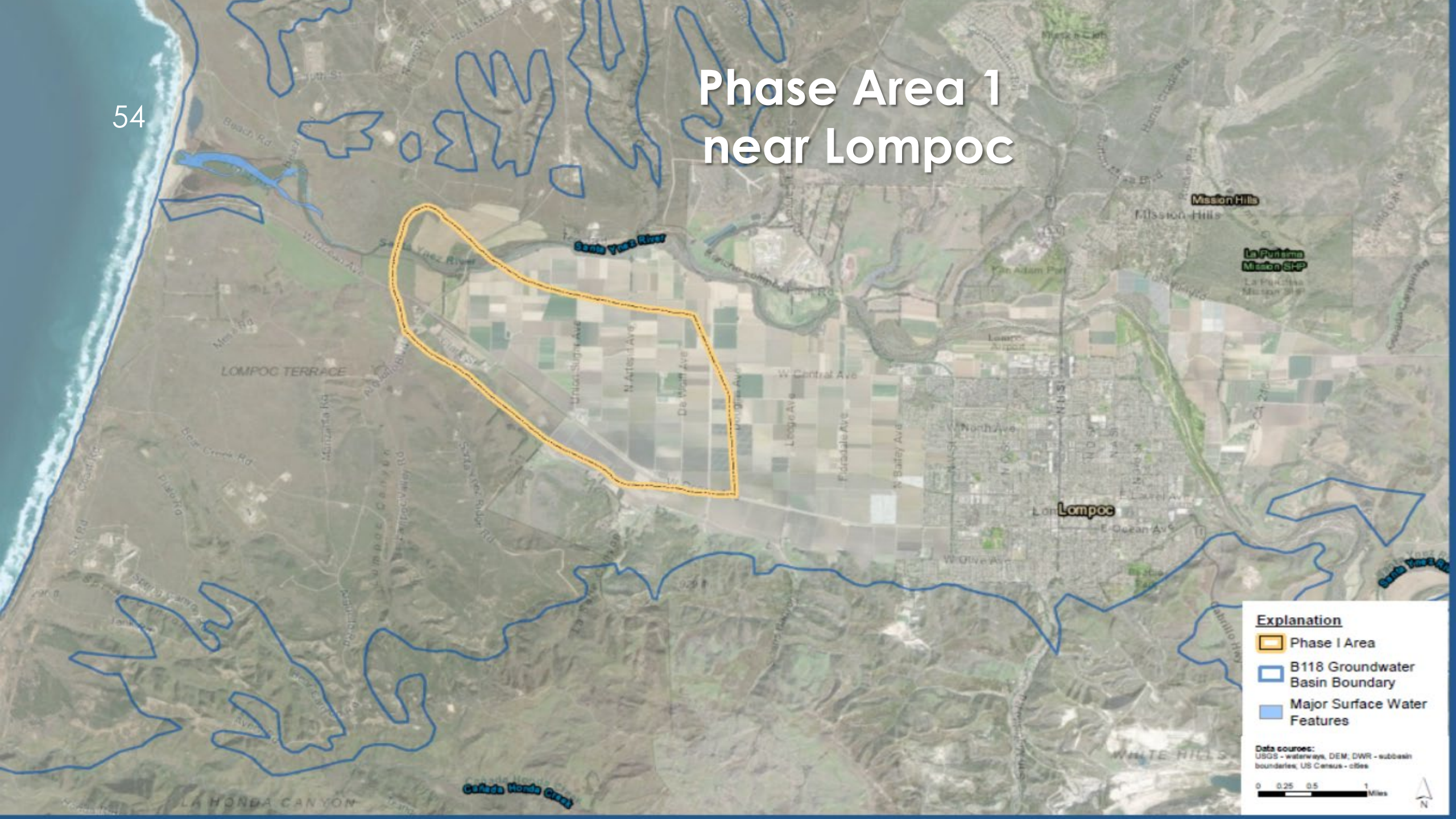
Explanation

- Phase I Area (RB)
- B118 Groundwater Basin Boundary
- Santa Maria Valley Management Area Boundary
- Major Surface Water Features

Data sources:
USGS - waterways, DEM, DWR - subbasin boundaries, US Census - cities

0 0.25 0.5 1 Miles

Phase Area 1 near Lompoc

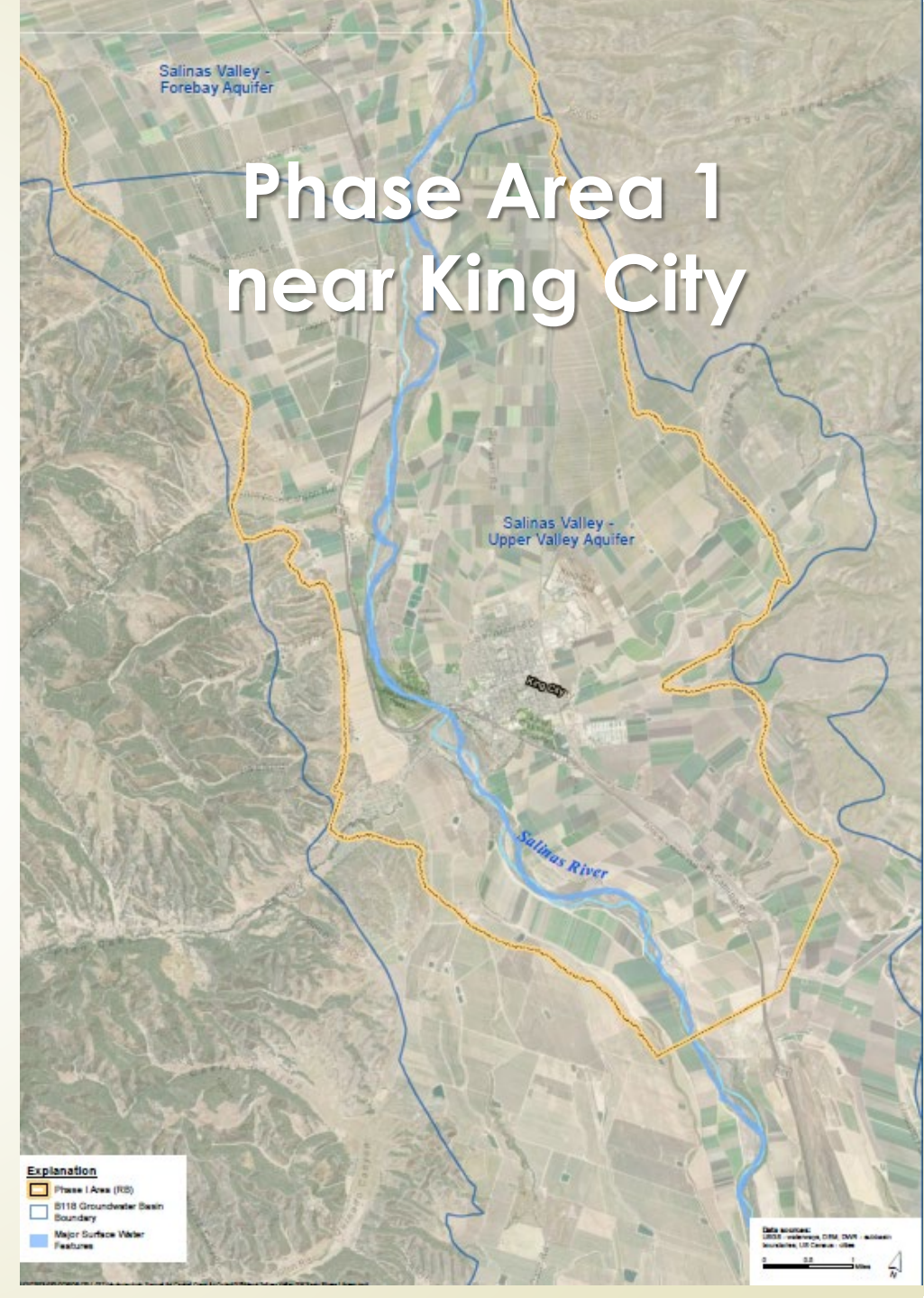


Explanation

-  Phase I Area
-  B118 Groundwater Basin Boundary
-  Major Surface Water Features

Data sources:
USGS - waterways, DEM, DWR - subbasin boundaries, US Census - cities





Phase Area 1 around Gilroy & Morgan Hill



Finding a Ranch's Phase Area in the eNOI

CA .GOV  STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER ESI

TOOLS

- Upload EDD
- Check EDD
- VVL Search Tool
- Edit Field Points
- Other Tools
- Funding Programs
- Update eNOI Forms
- Add Program
- Guides / Resources
- Contact Us
- Account Information
- Logout

CAROLINE WEBSTER TEST ACCOUNT

[EDIT OPERATION INFORMATION](#) [PRINT OPERATION FORM](#) [ADD RANCH / FARM TO THIS OPERATION](#)

RANCH / FARM NAME	ADDRESS	CITY	IRRIGATED ACRES	TAILWATER ACRES	GW PHASE AREA	SW PRIORITY AREA
[EDIT RANCH INFO] CAROLINE'S PEACH FARM	895 AEROVISTA PLACE, SUITE 101	SAN LUIS OBISPO	0	0	3	[EDIT COMPLIANCE INFO] [SUBMIT TNA REPORT]

Or contact
Support@ccwqp.org
for help

GW PHASE AREA

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The “1,2,3” of TNA & INMP Reporting

- 1) Keep (or find!) the necessary records
- 2) Perform calculations
(or find someone to do it for you!)
- 3) Submit a report form

Section I – Introduction & Checklist

You will need the following information in order to complete the TNA report. You can download this checklist here: [TNA Reporting Materials Checklist](#)

Puedes descargar esta lista de verificación aquí: [TNA Checklist_SPANISH_092923](#)

- Preparer Name
- Preparer Company
- Preparer Email
- Preparer Phone Number
- Calendar year of TNA data being reported
- Ag Waiver (AW) number
- Global ID (AGL) number
- Ranch name
- Assessor Parcel Number(s) (APN's) farmed
- The total number of acres that were farmed
- Total number of acres left fallow
- Whether or not the ranch is a greenhouse, nursery, or hydroponic operation
- Primary source of irrigation water (i.e. well versus city versus recycled, etc.)
- Total volume (in gallons) of irrigation water applied to the entire reported acreage during the reporting period
- The average nitrate concentration (in mg/L or ppm) of irrigation water applied
- The average nitrate concentration unit of irrigation water applied
- Crop(s) you are reporting
- Total crop acres for selected crop*
 - Crop acres takes into account successions (i.e. if you have 10 acres and you did two successions of lettuce then you will report 20 acres)
- Amount of Nitrogen present in soil as pounds of Nitrogen per crop acres (lbs/crop-acre)
- Amount of conventional (synthetic) fertilizers and other materials pounds of Nitrogen per crop acre (lbs/crop-acre)

Required Records

www.ccwqp.org/tna

or

www.ccwqp.org/inmp

Calculations Needed

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- 1) Irrigation water volume applied
- 2) Nitrate concentration in irrigation water → Pounds of N applied
- 3) Soil N concentration → Pounds of N in soil
- 4) Fertilizers applied → Pounds of N applied
- 5) Organic amendments applied → Pounds of N applied
- 6) Crop-Evapotranspiration (INMP only)
- 7) Quantity of crop harvested → Pounds of N removed at harvest

Fill out the report



Total Nitrogen Applied (TNA) EZ Form

Preservation, Inc.

Please populate this form as completely as possible. You can answer questions and return later with the answers populated. Once you Submit your answers, though, you must contact Preservation, Inc. to make changes.

This form allows you to enter up to 5 parcel numbers (APNs) and 5 crops, but you cannot enter compost or other materials to improve soil properties and/or as a source of nitrogen information for credit. If you want the soil amendment/other materials credit or if you have more APNs, and/or crops to report, please use the Preservation, Inc. MS Excel TNA Template available on the [CCWQP TNA page](#).

Your answer

DI Global ID number? *

AGL##### as shown in the eNOI (example AGL123456789).

ch name? *

shown in the eNOI.

farm this Ranch in the calendar year of TNA data you selected *

Clear form

What if my TNA results are “high”?

TNA Limits in Ag Order 4.0

Crop	90 th Percentile AFER =	Compliance Date	85 th Percentile AFER =	Compliance Date
Broccoli	295	12/31/2023	280	12/31/2025
Cauliflower	310		285	
Celery	360		330	
Lettuce	275		255	
Spinach	245		230	
Strawberry	320		295	
All Other Crops	500		480	

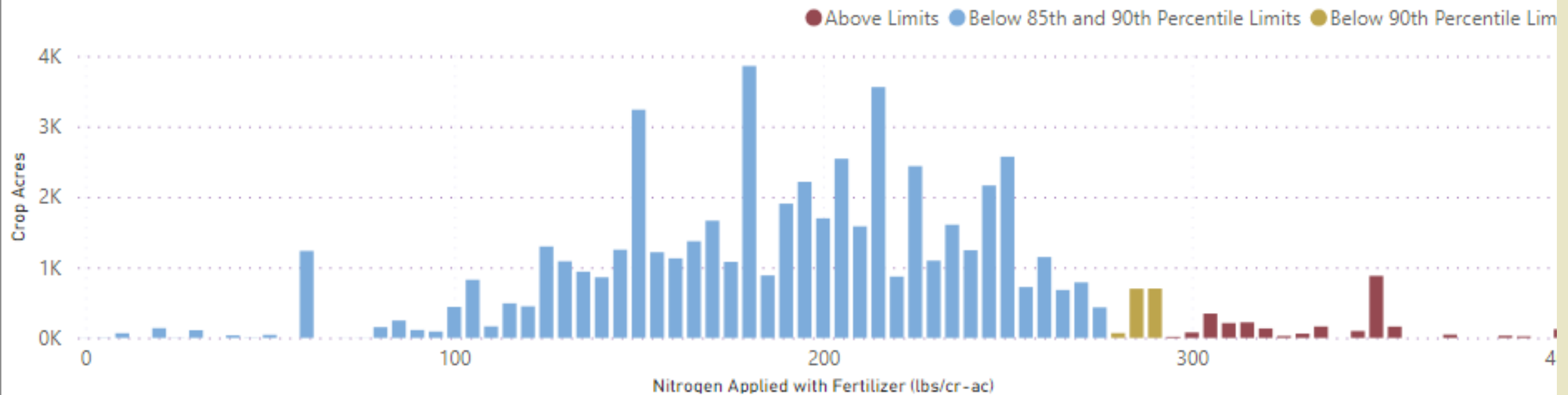
If your TNA report shows very high applied-fertilizer levels, Preservation, Inc. will contact you to discuss.

Right now, the Water Board cannot fine you for exceeding these limits, but education and/or improved management could be required.

2022 TNA Results for Broccoli in Monterey Co.

Grouping of Nitrogen Applied with Conventional Fertilizer by Agricultural Order Fertilizer Application Targets

Broccoli



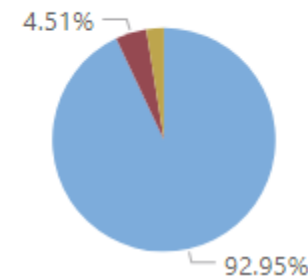
90th Percentile
Fertilizer Application
Target

295

85th Percentile
Fertilizer Application
Target

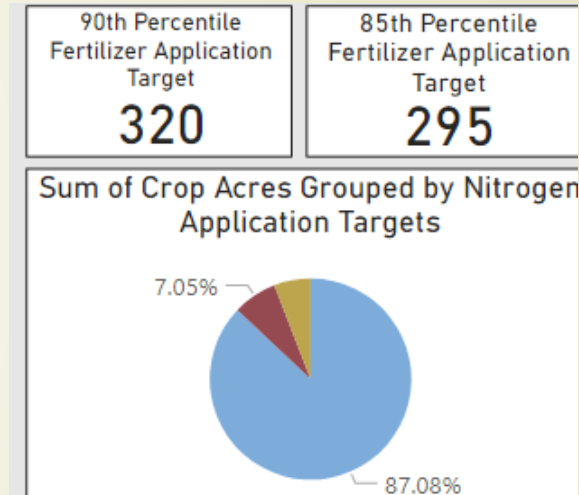
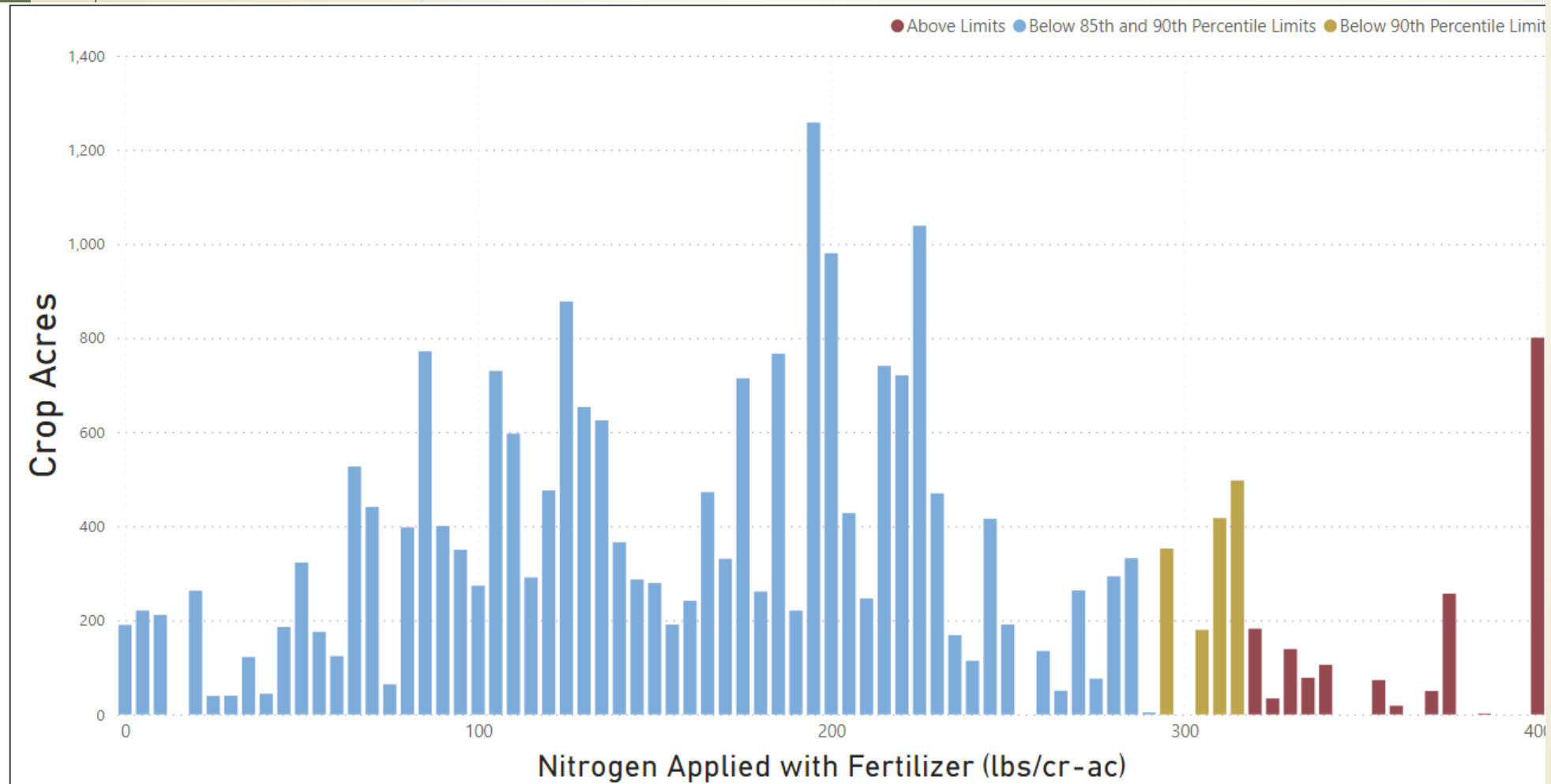
280

Sum of Crop Acres Grouped by Nitrogen Application Targets



www.waterboards.ca.gov/centralcoast/water_issues/programs/ilp/dashboard.html

2022 TNA Results for Strawberries in Monterey



www.waterboards.ca.gov/centralcoast/water_issues/programs/ilp/dashboard.html

What if my INMP results are “high”?

Table C.1-3. Compliance Dates for Nitrogen Discharge Targets and Limits

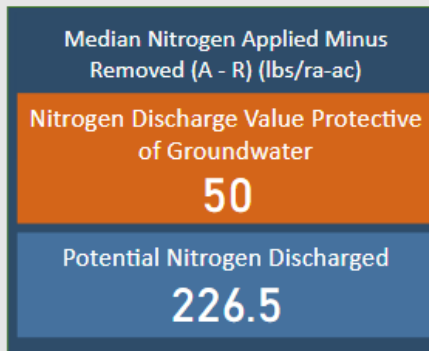
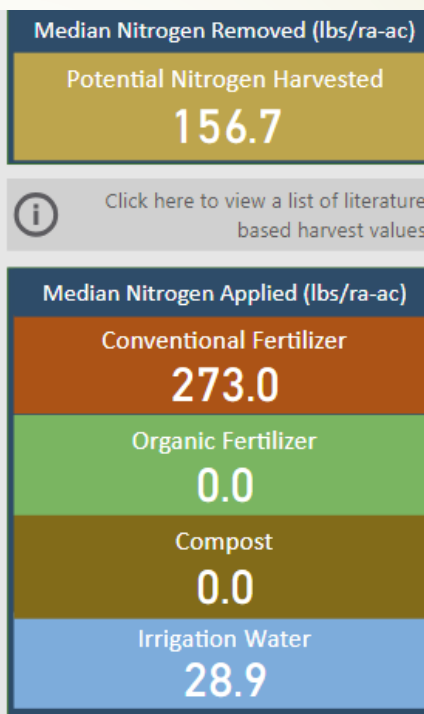
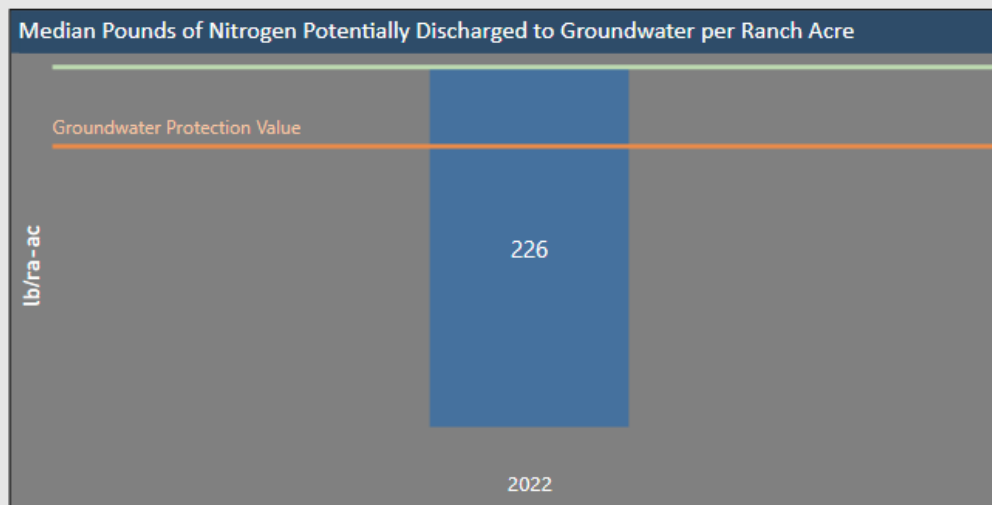
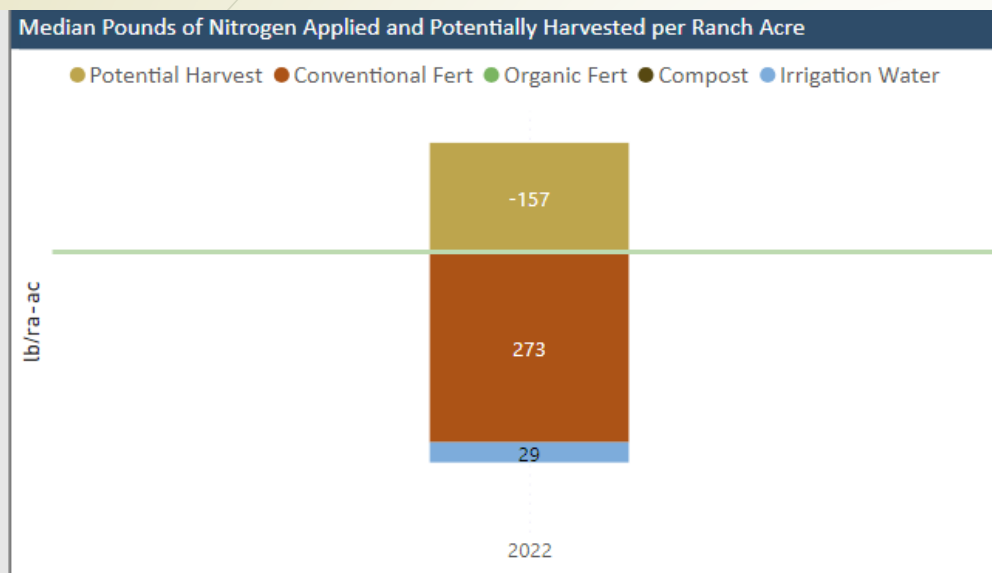
	Compliance Date	
Target	500	12/31/2023
Target	400	12/31/2025
Limit	300	12/31/2027
Limit	200	12/31/2031
Limit	150	12/31/2036
Limit	100	12/31/2041
Limit	50	12/31/2051

A – R =

If your INMP report shows very high applied-fertilizer levels, Preservation, Inc. will contact you to discuss.

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INMP “A-R Balance” Projections for Monterey County (all crops, median basis)



Target (A-R net)	Compliance Date
500	12/31/2023
400	12/31/2025
300	12/31/2027

www.waterboards.ca.gov/centralcoast/water_issues/programs/ilp/dashboard.html

Alternative Compliance Pathway (ACP)

- ▶ Third Party proposal (Work Plans – 35%, 70% and Final) must be approved by Water Board
- ▶ May offer compliance at the “Area” level (i.e. not just on a single-ranch basis)
- ▶ Third Party must propose scientifically justified Areas, Formulas, Values & Targets for groundwater protection
- ▶ Targets could be different than Ag Order 4.0 “Final Limit” of 50 lbs N/acre/year (A-R balance), however there may not be a scientific basis for numbers much greater or smaller than 50
- ▶ 35% Work Plan submitted 4/15/23; Now undergoing revisions

In Summary...

- ▶ Ag Order 4.0 brings TNA & INMP reporting requirements for more (all) ranches
- ▶ “Follow-up” efforts will be required to address exceedances of surface and groundwater targets
- ▶ TNA/INMP reporting is not easy, but there is a “1,2,3”
- ▶ Many (most) ranches are meeting current targets
- ▶ Targets will ratchet down over time, even with a successful Third Party ACP, in order to meet water quality objectives