



THIRD PARTY PROGRAM UPDATE

CENTRAL COAST AG ORDER 4.0

SARAH LOPEZ

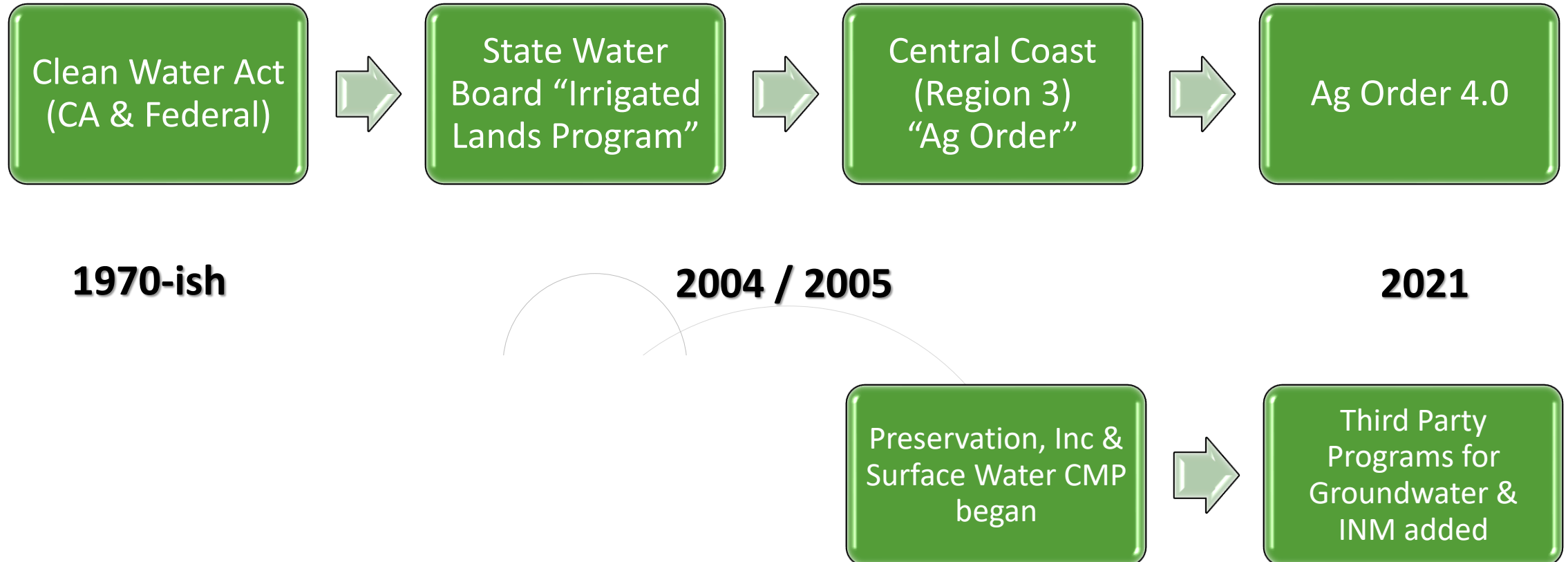
EXECUTIVE DIRECTOR

CENTRAL COAST WATER QUALITY PRESERVATION, INC.

SARAH@CCWQP.ORG

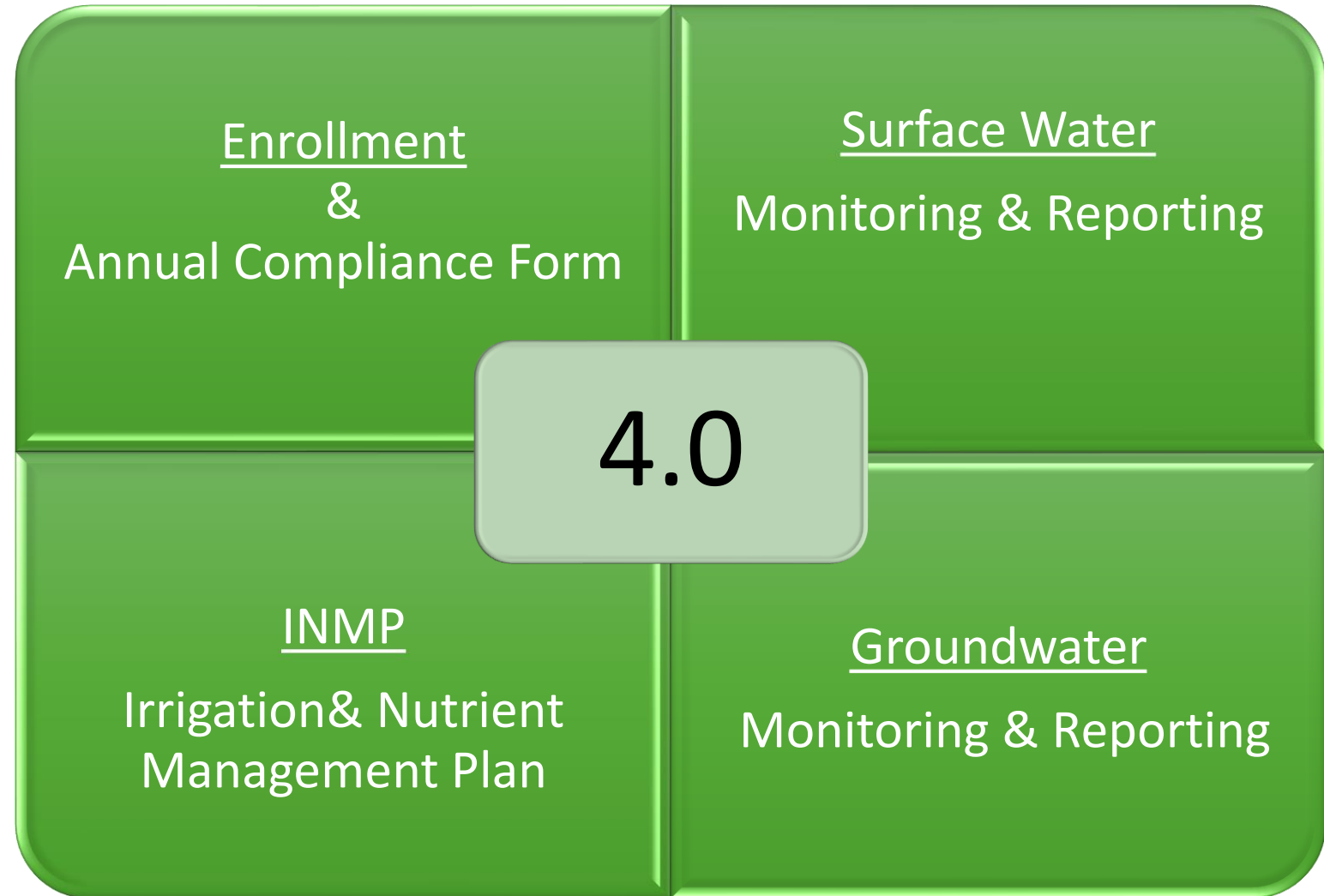


HISTORY





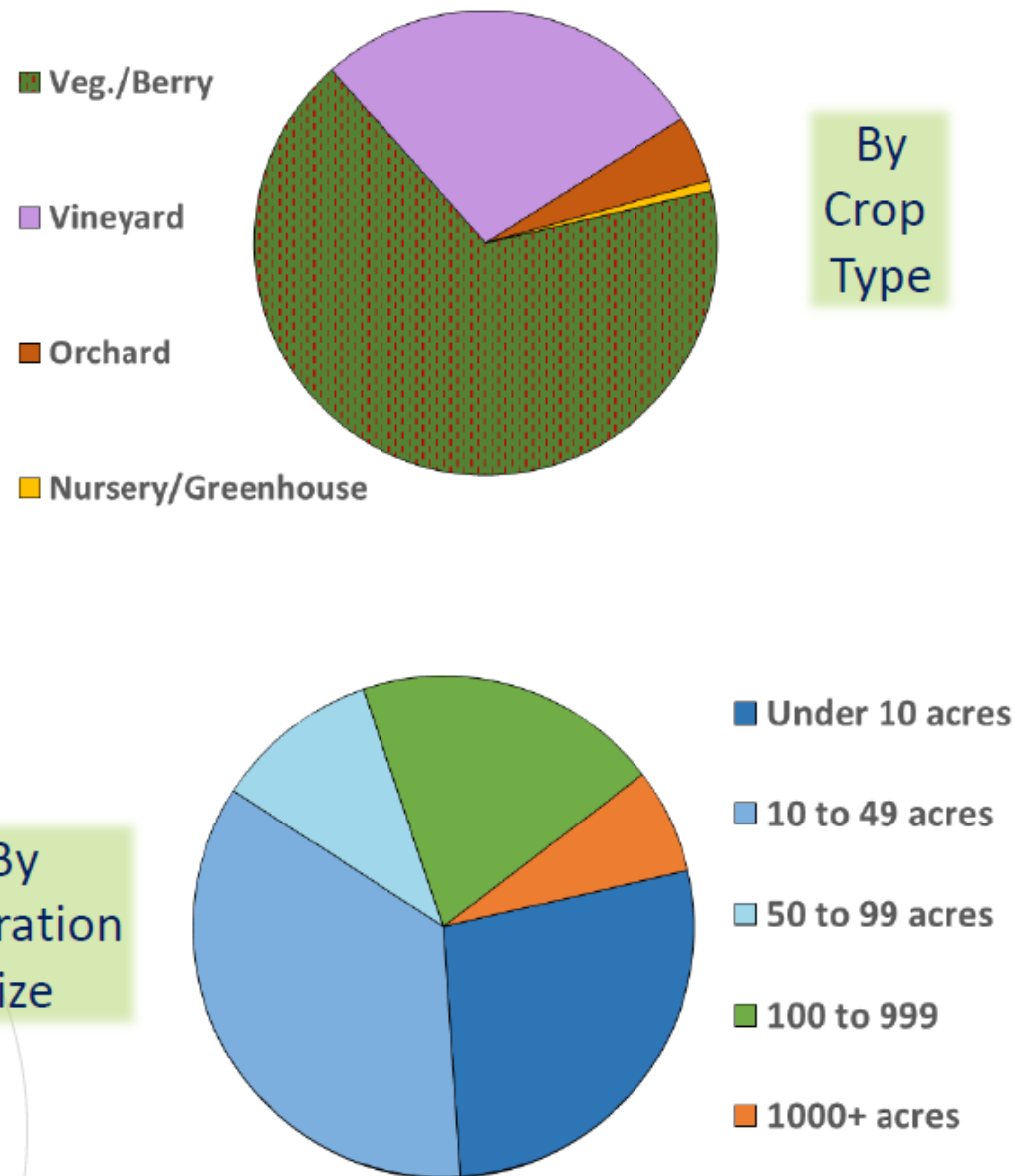
AG ORDER & THIRD PARTY COMPONENTS





THIRD PARTY MEMBERSHIP

- 94% of acres enrolled in Ag Order 4.0 are Third Party Members In Good Standing
- Vast majority of operations are <100 acres
- Majority under 50 acres
- Non-members pay individual State Water Board Fee of \$33.50/acre (\$668 minimum); conduct Individual Surface Water Monitoring; and comply with all other Order requirements as individuals





www.ccwqp.org

espanol (clic)

Contact



Membership

Surface Water

Groundwater

TNA/ INMP

Resources

About

Central Coast Water Quality Preservation, Inc.





Important Dates





Contact Us


Central Coast Water Quality Preservation, Inc.
PO Box 2227
Watsonville, CA 95077

-  831-761-8644 (phone)
-  831-761-8695 (fax)
-  office@ccwqp.org

Ag Order Compliance Support

-  831-240-9533 (phone)
-  support@ccwqp.org

Billing/ Account or Other Questions

-  Please fill out our contact form.

asistencia en espanol

www.ccwqp.org/contact

Name *

First

Last

AW# (or Operation Name)

Email *

How Can We Help You? *

- Ag Order Compliance Support
- Billing/ Account Support
- Other

Comment or Message

Submit



WHY IS THERE AN AG ORDER?

WHY DOES IT FEEL LIKE
REQUIREMENTS ARE
“RATCHETING UP”?

Primary surface water concerns for Ag



Eroded soils
(Turbidity)



Fertilizers &
soil amendments
(Nitrate, Phosphate)



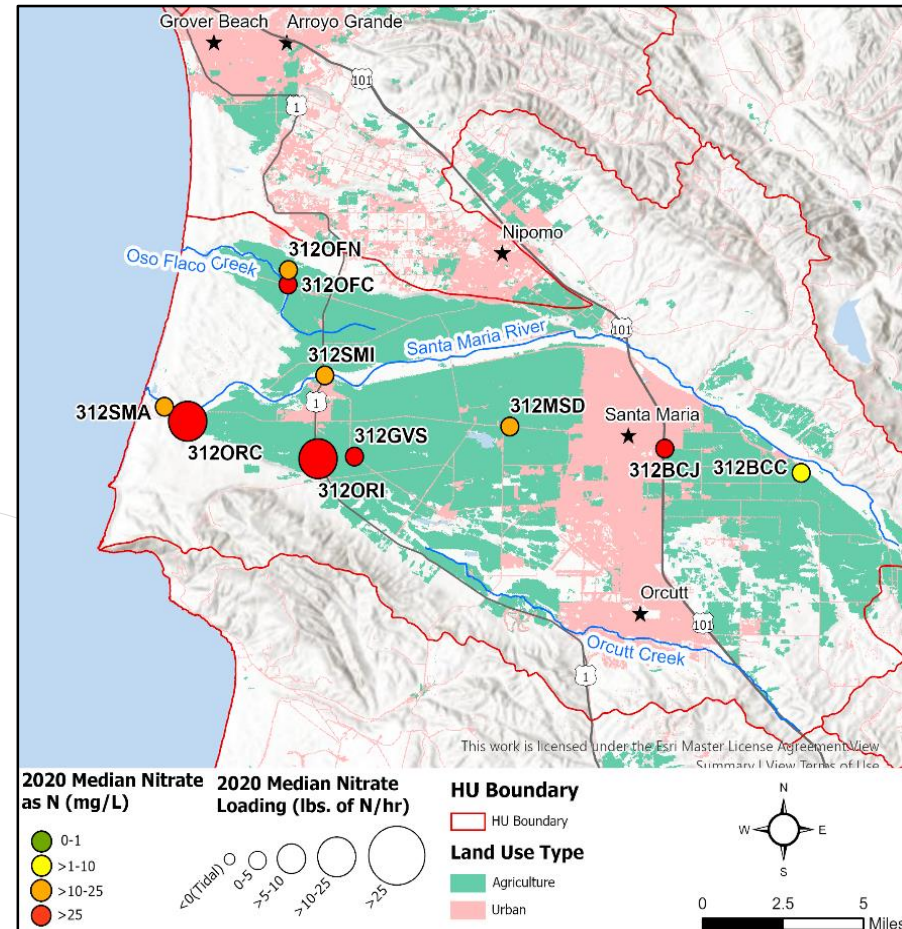
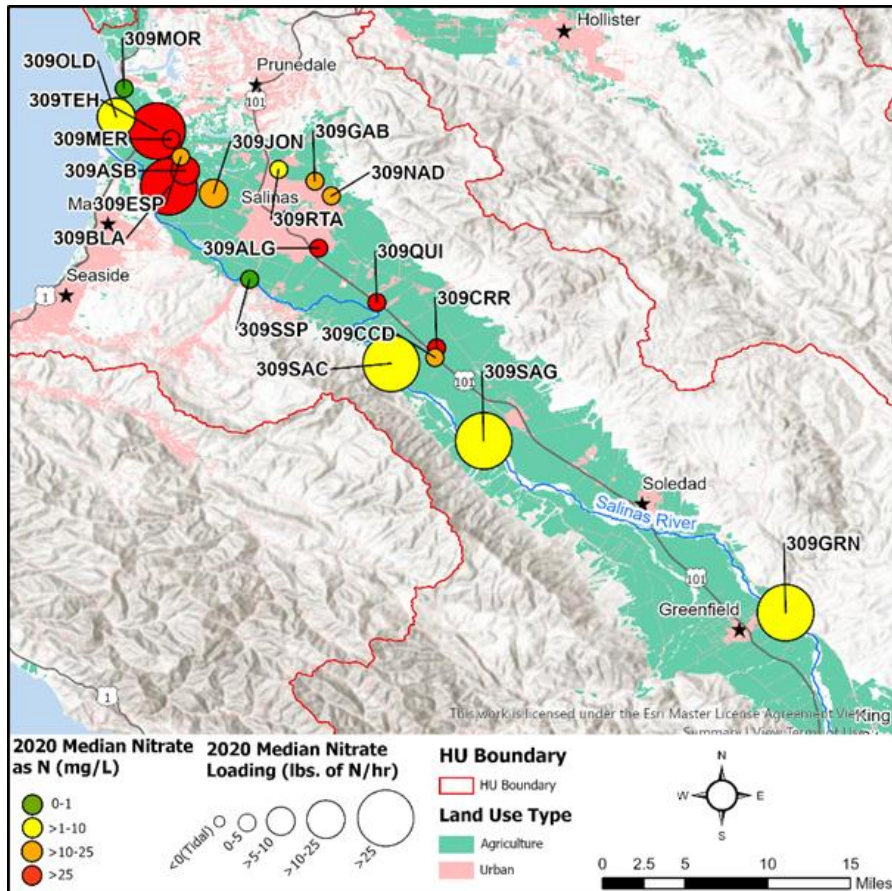
Pest control
products
**(OP's,
Pyrethroids,
Neonics,
Herbicides)**



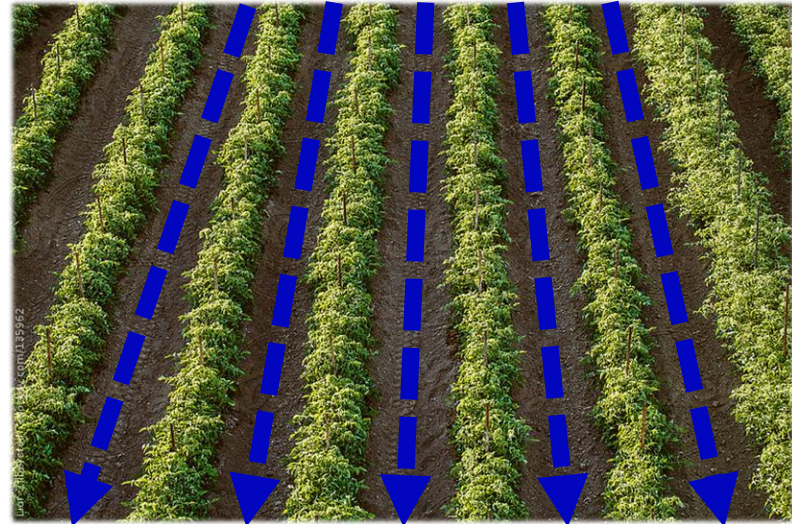
RECENT SURFACE WATER RESULTS SHOW SOME IMPROVEMENTS; ALSO LOTS OF CONTINUED IMPAIRMENT

**Median Nitrate Results For
Lower Salinas & Santa Maria, 2020**

Orange & Red = Exceeds 10ppm Drinking Water Objective
Yellow = Only Exceeds Very Low Aquatic Life Objective
Green = Generally complies with all Objectives on a median basis



- Most fields have one (or more) locations where tailwater collects and can be discharged. Is this location known for every field?
- Irrigators are tasked with putting on enough water... whose job is it to keep tabs on water leaving the ranch?
- If a lot of water is leaving, many times the following are too:
 - Soil
 - Fertilizers
 - Pest Control Products



- It's rarely possible to have "clean" tailwater. Reducing the volume of tailwater may be the most important thing you can do.



SURFACE WATER FOLLOW-UP

- Individual Surface Water Follow-Up Work Plan due March 1st, 2023 for growers not part of Third Party
- Third Party's Surface Water Follow-Up Work Plan due March 1st, 2024 for High Priority areas (generally Salinas, Santa Maria)

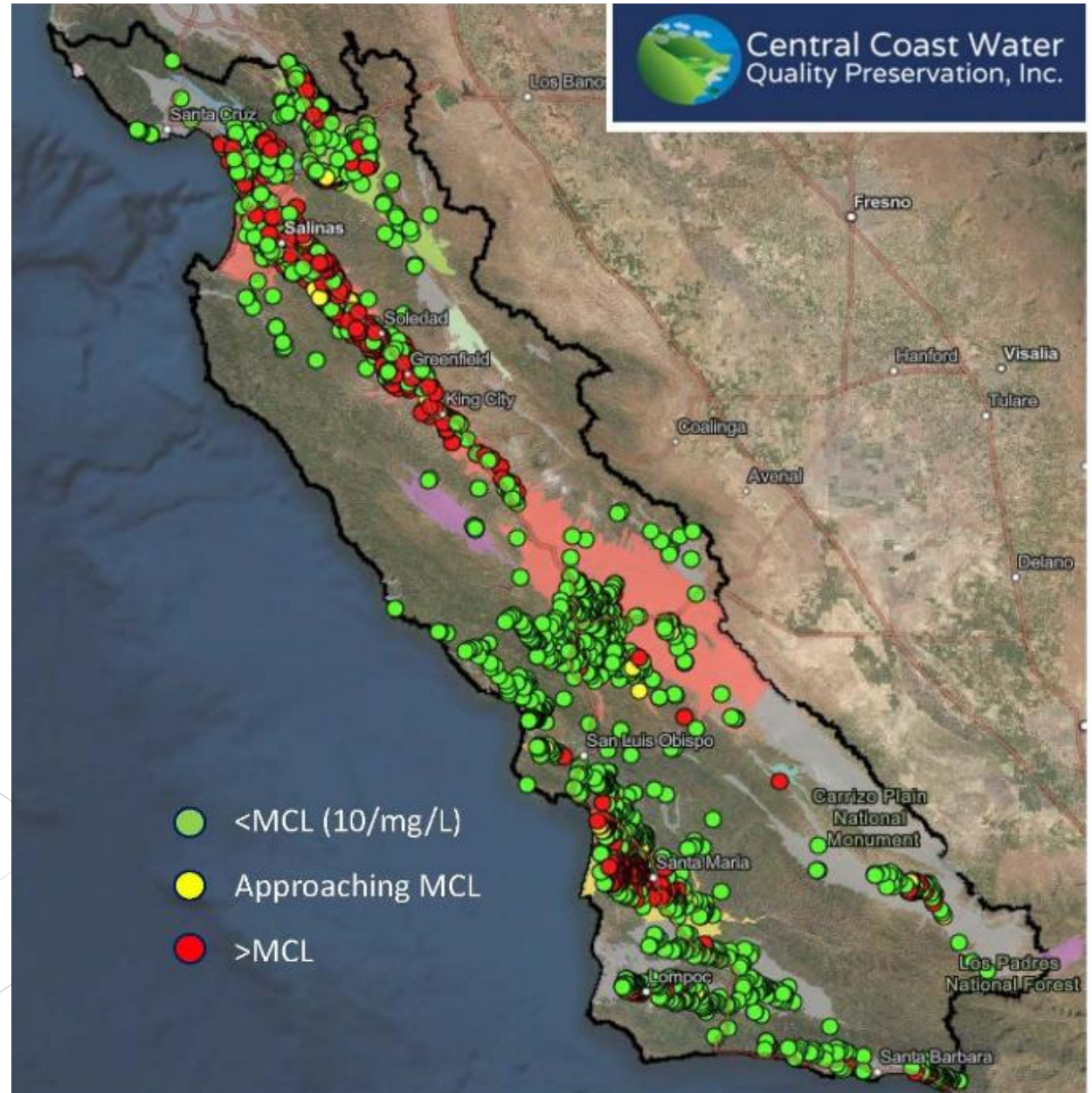
Work plans for areas with persistent exceedances of the surface water limits in the Order must identify follow-up actions to restore the degraded areas (e.g. outreach, education, management practice implementation) and additional surface receiving water monitoring locations for pollutant source identification and abatement.

- Ag Order 4.0 (MRP p.26)



RECENT GROUNDWATER RESULTS SHOW HIGH LEVELS OF NITRATE

- Points show 2022 well sampling results
- MCL = Maximum Contaminant Level (drinking water limit)

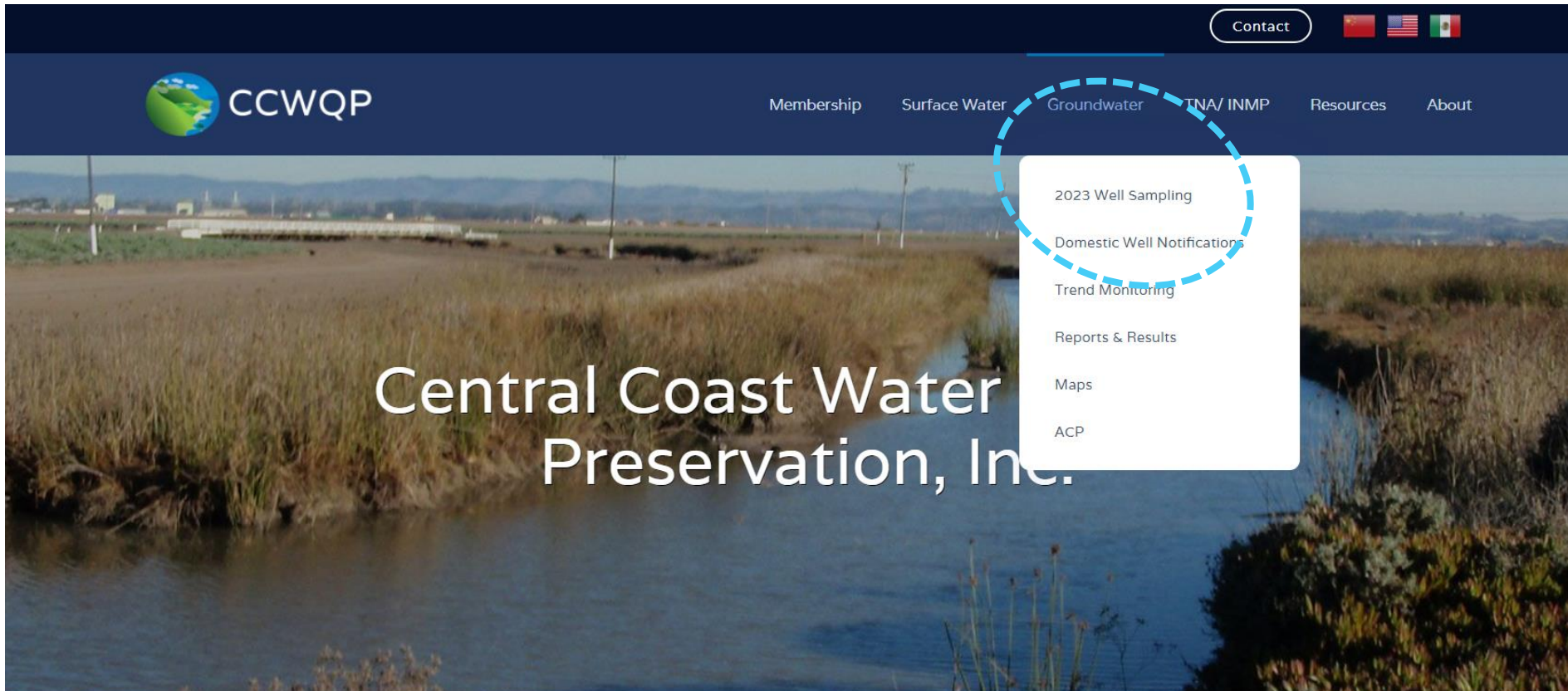




Well Sampling in 2023

March 1st – May 31st

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CCWQP

Membership Surface Water **Groundwater** TNA/ INMP Resources About

Contact

2023 Well Sampling

Domestic Well Notifications

Trend Monitoring

Reports & Results

Maps

ACP

Central Coast Water
Preservation, Inc.



Important Dates



TOTAL NITROGEN APPLIED (TNA) REPORTING & LIMITS



TIMELINE FOR TNA

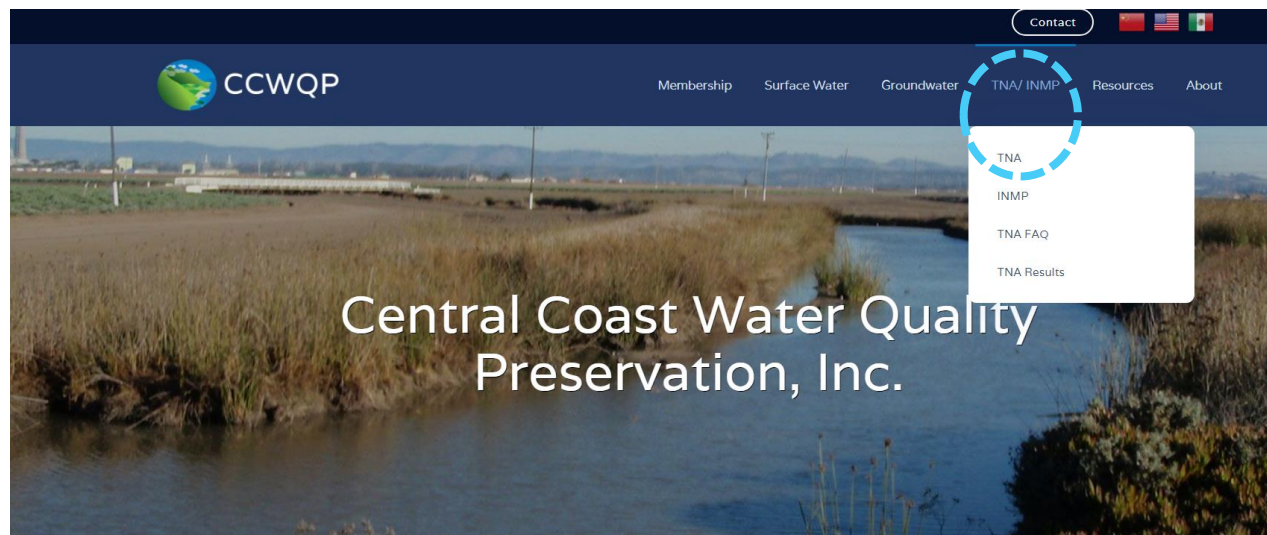
- In 2022 & 2023...
 - All ranches that had a TNA reporting requirement at any time under Ag Order 3.0 (2017-2021) need to report TNA by March 1st
 - Report applies to the prior year's crops
- Also in 2023...
 - All ranches on the Central Coast must keep records on their 2023 crops, for TNA reporting by March 1st, 2024. All ranches on the Central Coast must report TNA by March 1st, 2024.
- Also in 2023...
 - Total Nitrogen Applied LIMITS apply, per Ag Order 4.0



WHAT'S IN THE TNA REPORT?

Reporting Options for Third Party Members

- 1) Spreadsheet Form (Excel)
- 2) TNA-EZ en espanol (Google Form)
- 3) TNA-EZ in English (Google Form)



TNA Data Required by Ag Order 4.0

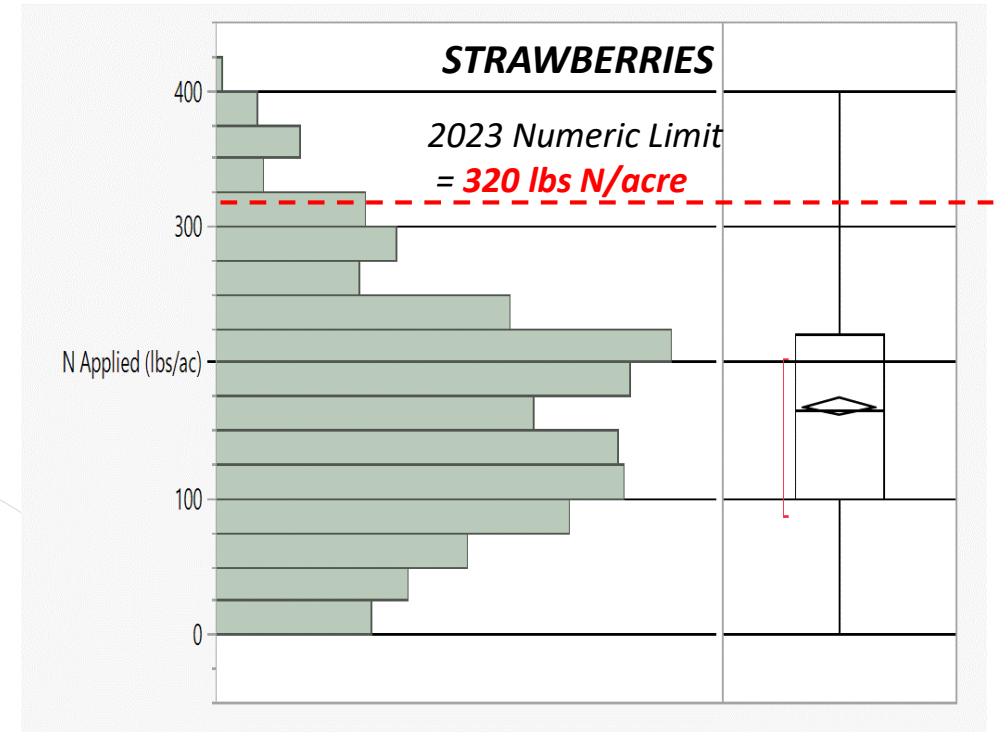
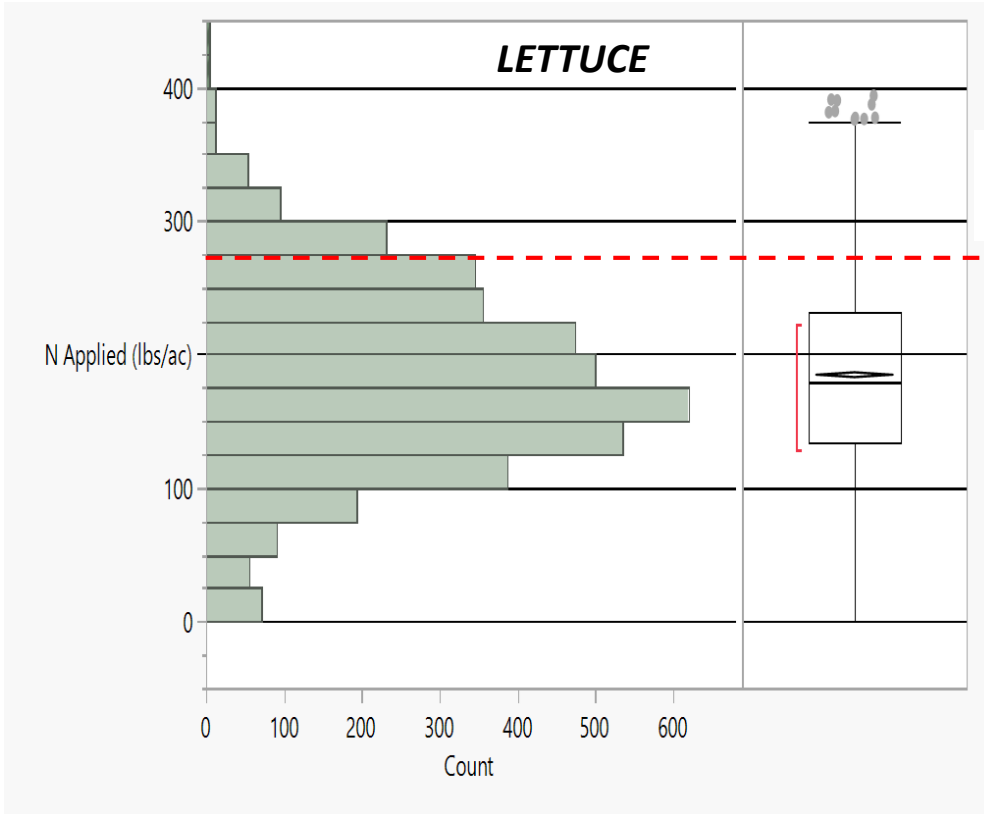
- AW/AGL/APN
- Ranch acres & Crop-acres each crop
- Fallow acres
- Irrigation water source
- Avg. Nitrate concentration in water
- Total volume of water applied w/ irrigation
- N in soil (1 test required)
- Total lbs N applied w/ compost & other materials
 - By crop or by ranch, your choice
- Total lbs N applied w/ fertilizers (each crop)
- Basis for your decision to apply total N-applied
- % N content for all fertilizers
- C:N ratio for organic fertilizers and amendments
- Comments
- Certification



RECENT TNA RESULTS & UPCOMING LIMITS

TNA Limits in Ag Order 4.0

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



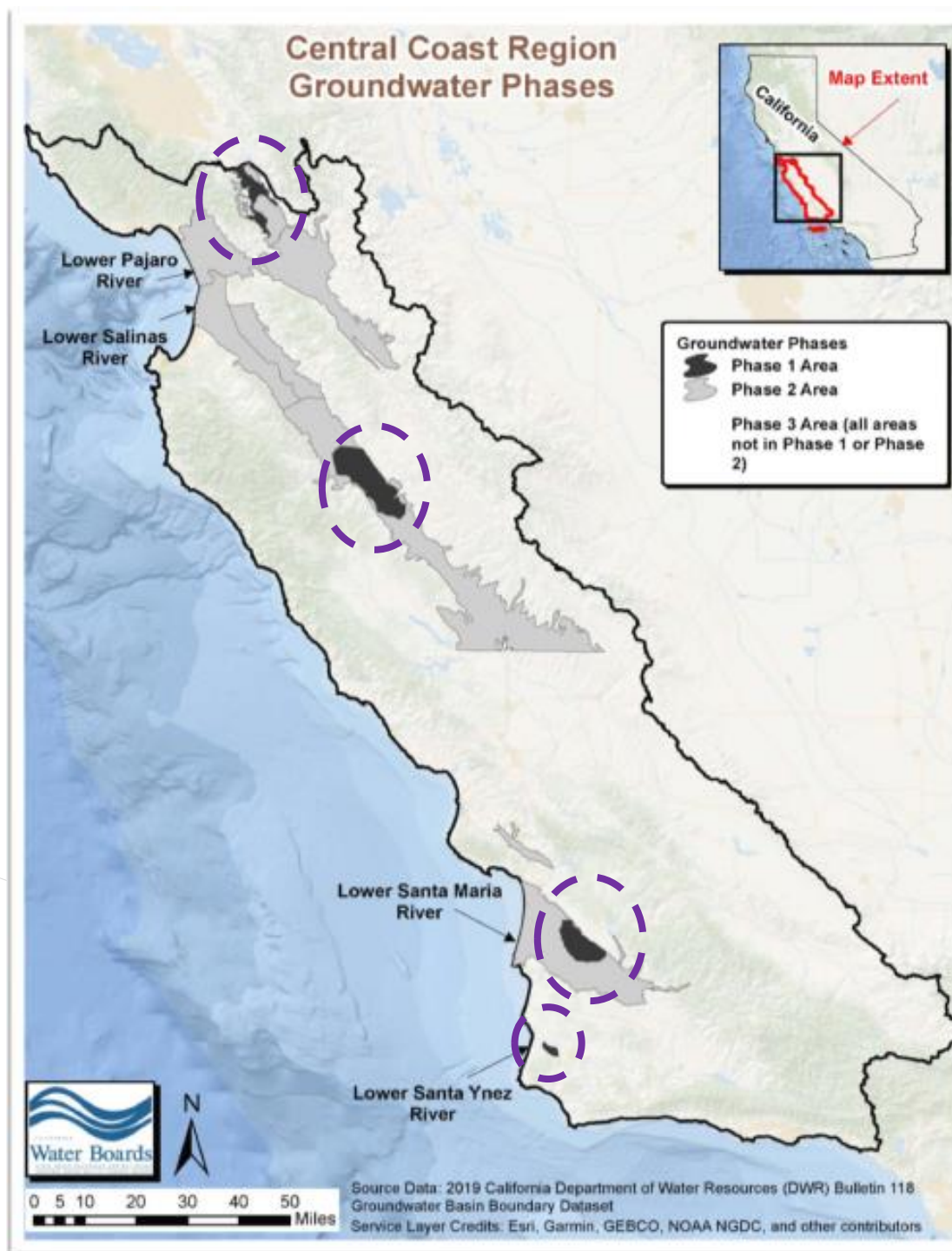


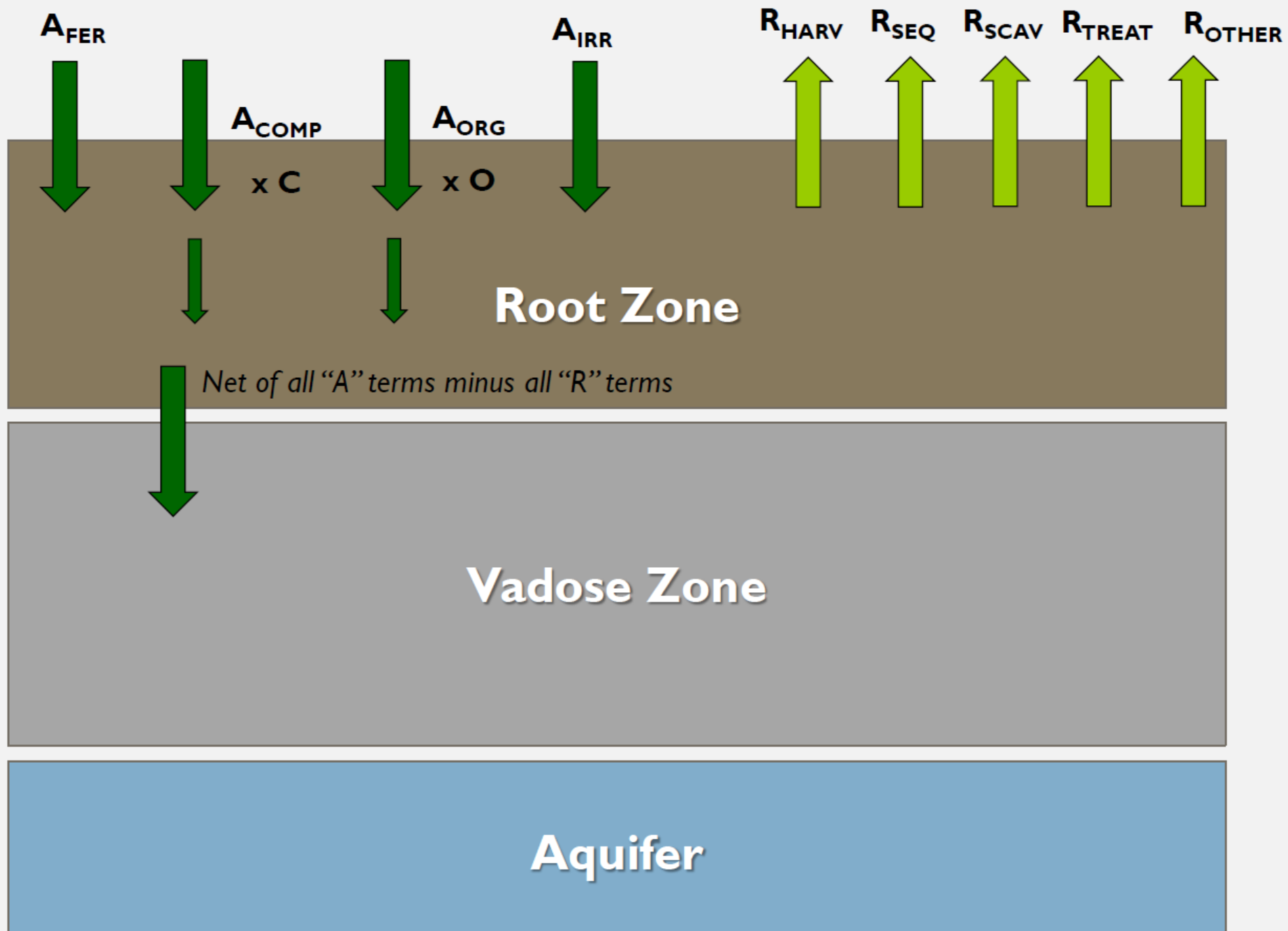
IRRIGATION & NUTRIENT MANAGEMENT (INMP) REPORTING & LIMITS

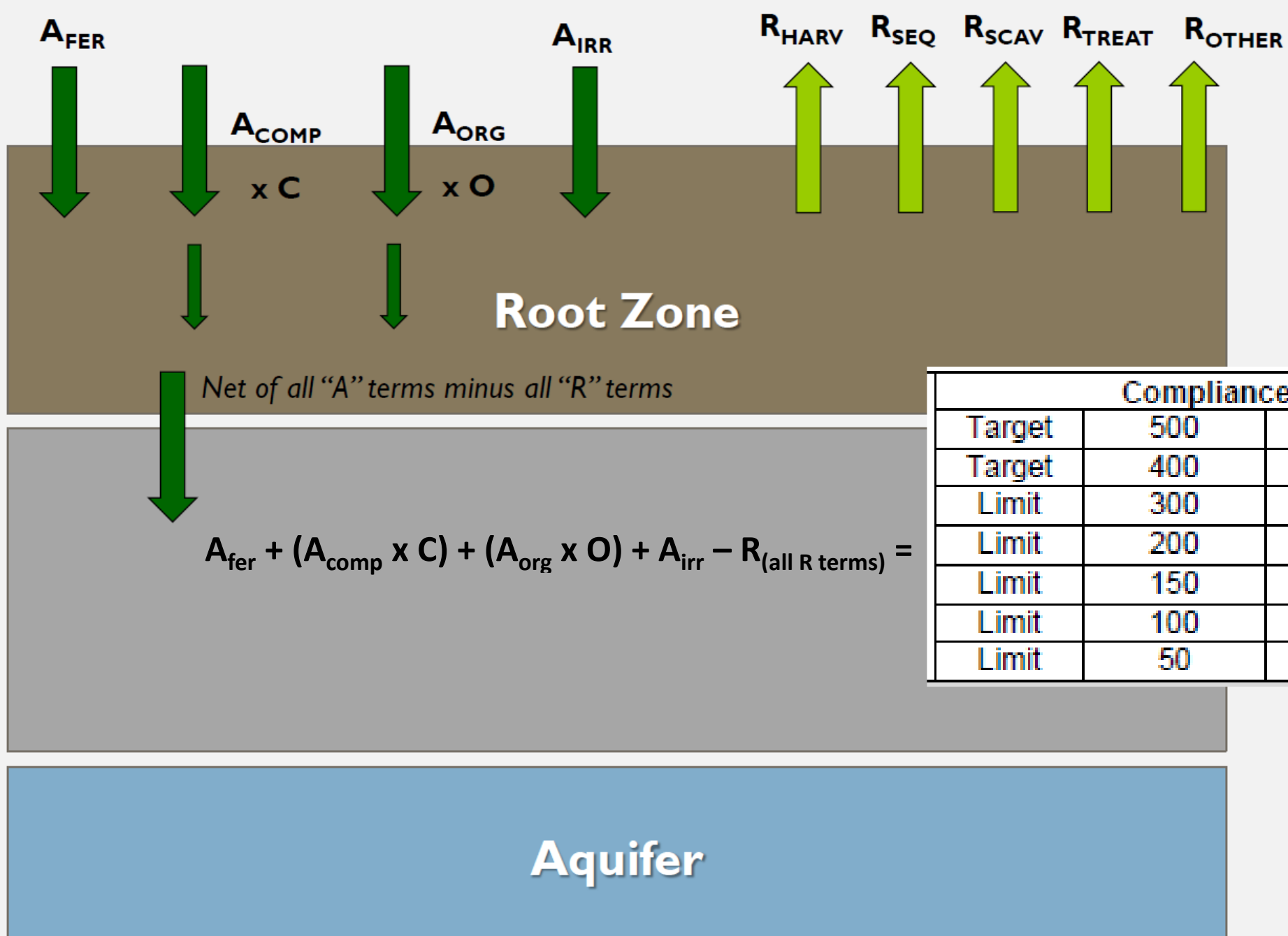


TIMELINE FOR INMP

- In 2023...
 - Ranches in Groundwater Phase 1 Areas must keep records on their 2023 crops, for INMP reporting by March 1st, 2024.
- In 2024...
 - Ranches in Groundwater Phase 1 Areas must report INMP by March 1st.
 - All other ranches report TNA
- After 2024...
 - INMP reporting phases in for other ranches



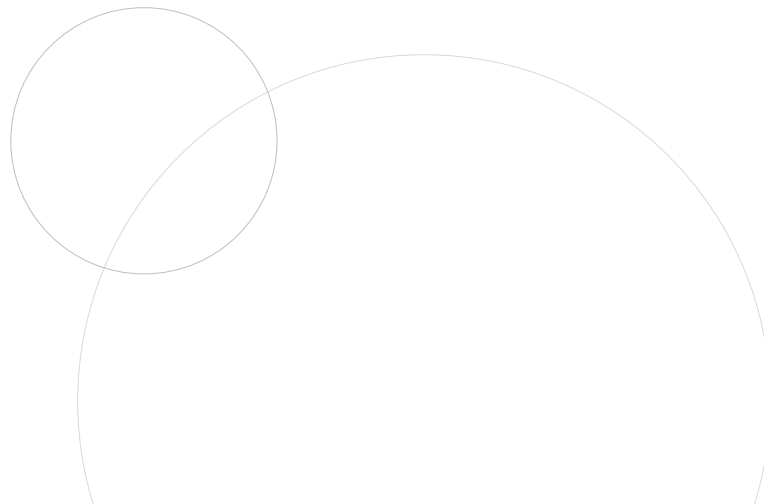




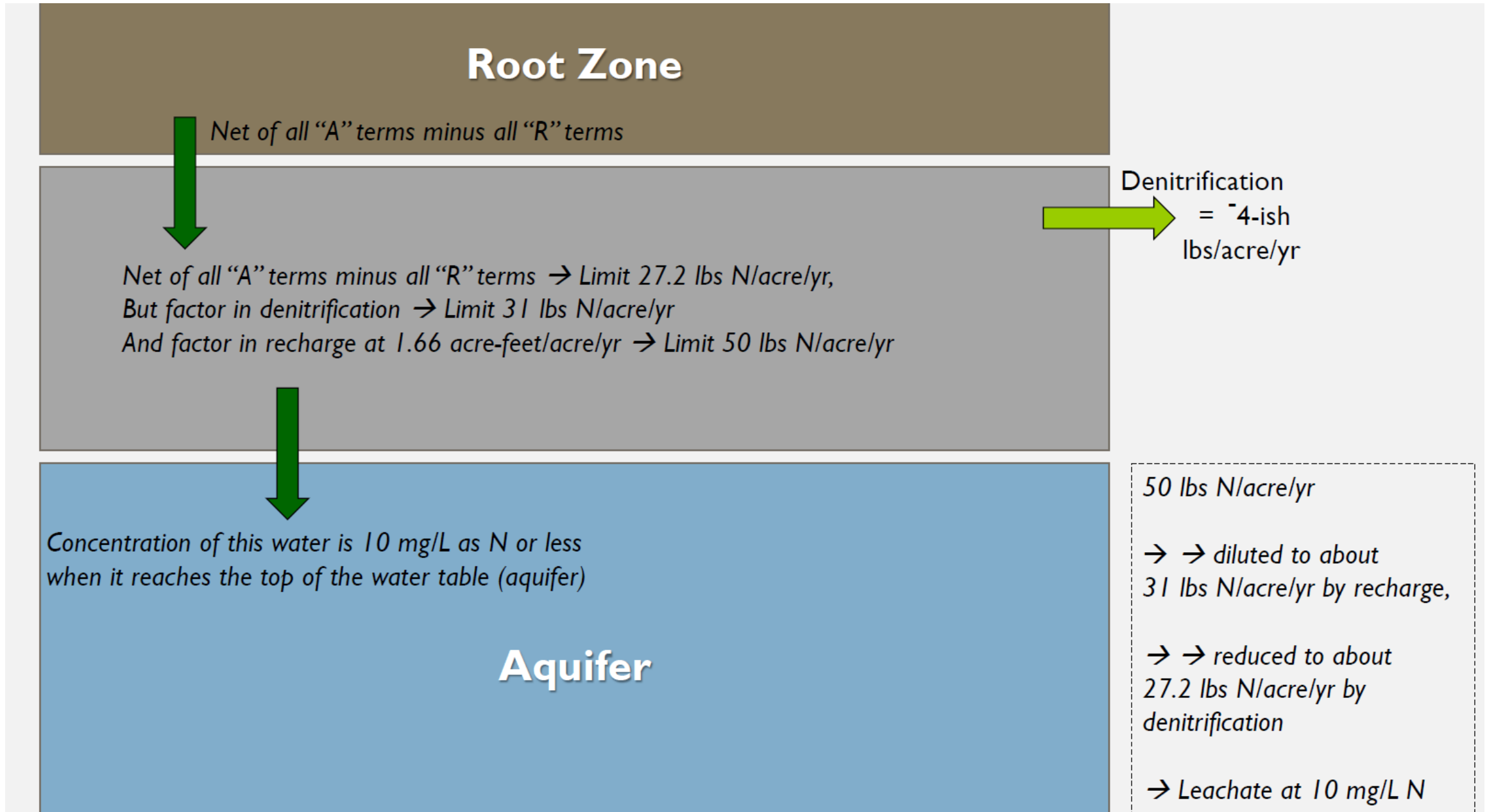
Compliance Date		
Target	500	12/31/2023
Target	400	12/31/2025
Limit	300	12/31/2027
Limit	200	12/31/2031
Limit	150	12/31/2036
Limit	100	12/31/2041
Limit	50	12/31/2051



END



Where did the final Limit of 50 lbs N/acre/year come from?



THREE “A-R” EQUATIONS IN AG ORDER 4.0, WITH TARGETS/LIMITS

$$A_{\text{FER}} + (C \times A_{\text{COMP}}) + (O \times A_{\text{ORG}}) + A_{\text{IRR}} - R = 50 \text{ lbs N/acre/yr}$$

(50 is the final Limit to be achieved by 12/31/2051, with step-down schedule of interim targets/limits beginning with 500 by 12/31/23)

$$A_{\text{FER}} + (C \times A_{\text{COMP}}) + (O \times A_{\text{ORG}}) - R = -150 \text{ lbs N/acre/yr}$$

(-150 is the final Limit to be achieved by 12/31/2051, with step-down schedule of interim targets/limits beginning with 300 by 12/31/23)

$$A_{\text{FER}} + (C \times A_{\text{COMP}}) + (O \times A_{\text{ORG}}) = R$$

(final Limit is A=R, beginning as a target of A=R by 12/31/2023)

- A_{FER} is N applied as fertilizer, in lbs/acre
- A_{IRR} is N applied in irrigation water based on volume required for crop-ET
- A_{COMP} is N applied in compost
- C is a compost discount factor reflecting delayed mineralization of N
- A_{ORG} is N applied in organic fertilizer
- O is an organic fertilizer discount factor reflecting delayed mineralization
- R is the amount of N removed from the field through harvest or other removal pathways

ADDITIONAL R (REMOVAL) TERMS IN AG ORDER 4.0

In all formulas, “R” is actually the sum of 5 possible removal terms:

- **R_{HARV}** is the N removed from the field through harvest or other removal of crop material, in lbs/acre
- **R_{SEQ}** is the N removed from the field through sequestration in woody materials of permanent or semi-permanent crops
- **R_{SCAVENGE}** is the N credited as removed from the field through nitrogen-scavenging cover crops, high-carbon amendments, or high carbon mulches
- **R_{TREAT}** is the amount of N removed through a quantifiable treatment method (e.g. denitrifying bioreactor)
- **R_{OTHER}** is the amount of N removed through other approved methods, not previously quantified



WHAT'S IN THE INMP REPORT?

Reporting Options for Third Party Members

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INMP Data Required by Ag Order 4.0

- AW/AGL/APN
- Ranch acres & Crop-acres each crop
- Fallow acres
- Irrigation water source
- Nitrate concentration in water (ALL wells)
- Total volume of water applied w/ irrigation
- N in soil (1 test required)
- Total lbs N applied w/ compost & other materials
 - By crop or by ranch, your choice
- Total lbs N applied w/ fertilizers (each crop)
- Basis for your decision to apply total N-applied
- % N content for all fertilizers
- C:N ratio for organic fertilizers and amendments
- Total lbs N removed at Harvest
- Other Removal ("R") terms
- Comments
- Certification



**OF ALL POSSIBLE “ADDITIONAL R TERMS,”
THE COVER CROP CREDIT IS ONE OF THE LARGEST,
IF NOT THE LARGEST**

