

MEMBER COMPLIANCE ASSISTANCE WORKSHOP

January 24, 2019
Kings River Water Quality Coalition



TODAY'S AGENDA

- Welcome and Overview
- Barriers to Adoption Study
- Upcoming Changes to General Orders
- Member Obligations for 2018
- Nitrogen Summary Report Data
- Online Demonstration of KRWQC Website

REGIONAL WATER QUALITY CONTROL BOARD

- Amendments to General Orders Required by State Water Resources Control Board
 - Aligns Requirements with East San Joaquin Order
 - Multiple Items Considered “Precedential”
- Regional Board Action to Approve Changes to All Other Orders February 2019
- Requirements Begin January 2020

REGIONAL WATER QUALITY CONTROL BOARD

- Amendments to Tulare Lake General Order Required by State Water Resources Control Board
 - **Drinking Water Well Testing**
 - Required Testing of **ALL** Drinking Water Supply Wells on Enrolled Parcels
 - Proper Lab Protocols Must Be Observed
 - Members Must Notify Regional Board and Users of Tested Wells If Nitrate-N Exceeds 10 ppm within 10 Days
 - Test Results Reported Directly to State by Testing Laboratory
 - Not a Coalition Function

REGIONAL WATER QUALITY CONTROL BOARD

■ Template Changes

■ Nitrogen Management Plans

- Incorporation of Irrigation and Nitrogen Management Practice Sections from Farm Evaluation
- **Consideration of Predicted Crop Water Usage (ET)**
- Consideration of Nitrogen Content of Pumped Groundwater
- Reporting of Age of Permanent Crops
- Certification Required in High Vulnerable Areas
- **Certification Required in Low Vulnerable Areas for Identified Outliers (3-year Average)**

REGIONAL WATER QUALITY CONTROL BOARD

■ Template Changes

■ Farm Evaluation Surveys

- Inventory of Drinking Water Wells per Parcel
- Removal of Irrigation and Nitrogen Management Practices
- Separation of Production Wells From Abandoned Wells
- Reporting Reduced to Once Every 5 Years
 - Report Through 2020 (to Coalition 2021), Next Report 2025 (reported 2026)

REGIONAL WATER QUALITY CONTROL BOARD

■ Template Changes

■ Nitrogen Summary Report

- Reporting of Specific Categories of Nitrogen Applied
- Reporting of Yield
- Grower Calculations Minimal
 - Not Being Asked to Calculate/Report Applied/Yield (A/Y) Values
 - Coalition Will Do Calculations and Report Back to Growers

REGIONAL WATER QUALITY CONTROL BOARD

■ Grower Data Availability

- Each Grower will be Assigned an Anonymous ID Number
- Each Parcel will be Assigned an Separate Anonymous ID Number
- Coalitions Report Data Summaries by ID Number (Grower, Parcel) WITHOUT Revealing Actual Grower Name or Location
 - Aggregated by Township
 - Such Data is Available to Regional or State Board by Request

MEMBER OBLIGATIONS

- By March 1, 2019
 - Farm Evaluation (High Vulnerability Parcels Only): Update Information on File as Needed
 - Nitrogen Summary Report: Turn in 2018 Crop Year Data (High Vulnerable Parcels Only)
 - Nitrogen Management Plan: 2019 Planning Completed and Certified (if required)

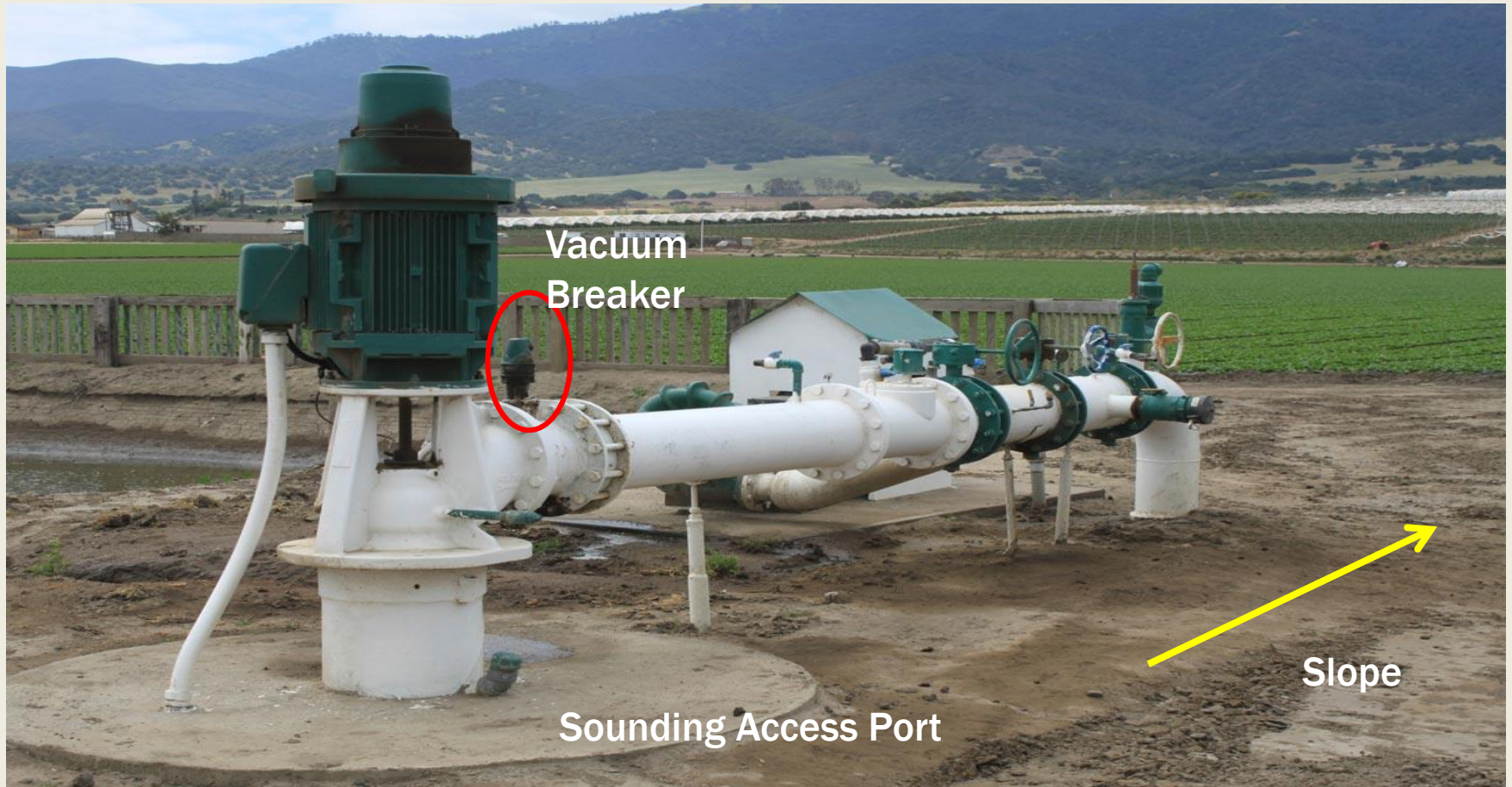
URGENT MANAGEMENT PRACTICES

- Requirements of Comprehensive Groundwater Management Plan Approved by Regional Water Quality Control Board
 - Applies to HV Areas
 - Recommended for All Areas
- Three Urgent Requirements
 - Wellhead Protection
 - Destruction of Abandoned Wells, where known
 - Pumped Groundwater Nitrate Testing

WELLHEAD PROTECTION

- Insure that Surface Water Cannot Flow into Well Casings (Ground Slopes Away from Wellhead)
- Storage of Agricultural Material Away from Wellhead
- No Standing Water Near Wellhead
- Adequate Backflow Prevention Measures in Place
 - Check Valves, Vacuum Breakers, Air Gap, Injector Interlocks

WELLHEAD PROTECTION



WELLHEAD PROTECTION



WELLHEAD PROTECTION



ABANDONED WELLS

- If Abandoned (no plans for future use), Proper Well Destruction needed
 - Consult with Professional as to specific local requirements

NITRATE TESTING

- If using groundwater to irrigate, you should have an understanding of the N concentration in your well water
 - Use the Results in the Nitrogen Management Plan
 - Certifiers may require testing and dictate frequency in order to certify your Nitrogen Management Plan (3-5 years between tests)
 - Helpful to get test results reported as ppm (parts per million) NO₃-N

AVAILABLE RESOURCES

- agmpep.com
 - Calculator for Converting Irrigation Water N to Pounds N/Ac
 - Adjusts for Ratio of Surface/Groundwater Use
 - Adjusts for Crop Water Consumption (ET)
 - ET data available at www.krcd.org (Updated Weekly)
- Website also has more information for:
 - Wellhead Protection
 - Well Destruction
 - Nitrogen Removal

AVAILABLE RESOURCES

- Personal Nitrogen Summary Report
 - Available at www.kingsriverwqc.org
 - Field by Field (Crop Specific) Performance
 - Nitrogen Applied Compared to Others
 - Applied divided by Removed (A/R) Ratio Comparison
 - Limited to Crops With Known Nitrogen Removed Coefficients
 - Provides Status (Outlier or Not) of Field (Current Year)

NITROGEN MANAGEMENT

- 4 “R”s of Nitrogen Management
 - A Concept that Promotes Nitrogen Use Efficiency
 - Right Rate
 - Right Time
 - Right Place
 - Right Source
 - All Four Are Interrelated

NITROGEN MANAGEMENT

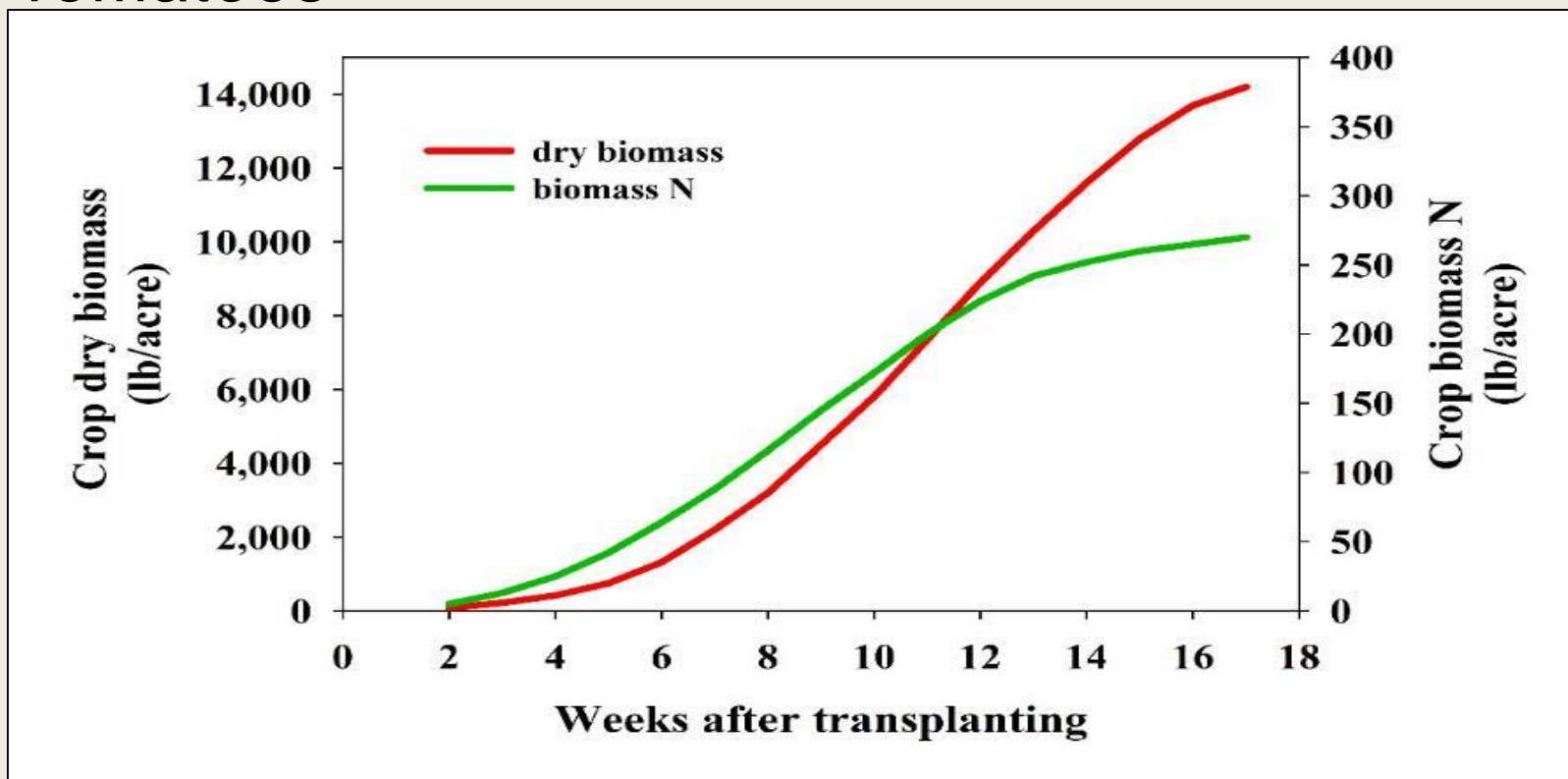
- Right Rate
 - Consideration of Nitrogen Needs for Yield Desired
 - How Much Have I Applied Before?
 - Can I Get the Same Yield With Less?
 - How Much Does the Plant Retain?
 - How Do I Narrow the Gap between Yield Requirements and Residual Soil Nitrogen?

NITROGEN MANAGEMENT

- Right Time
 - Adequate Supply Ahead of Plant Need
 - Consideration of Crop Growth Stage
 - Balance Between Vegetative and Reproductive Growth

NITROGEN MANAGEMENT

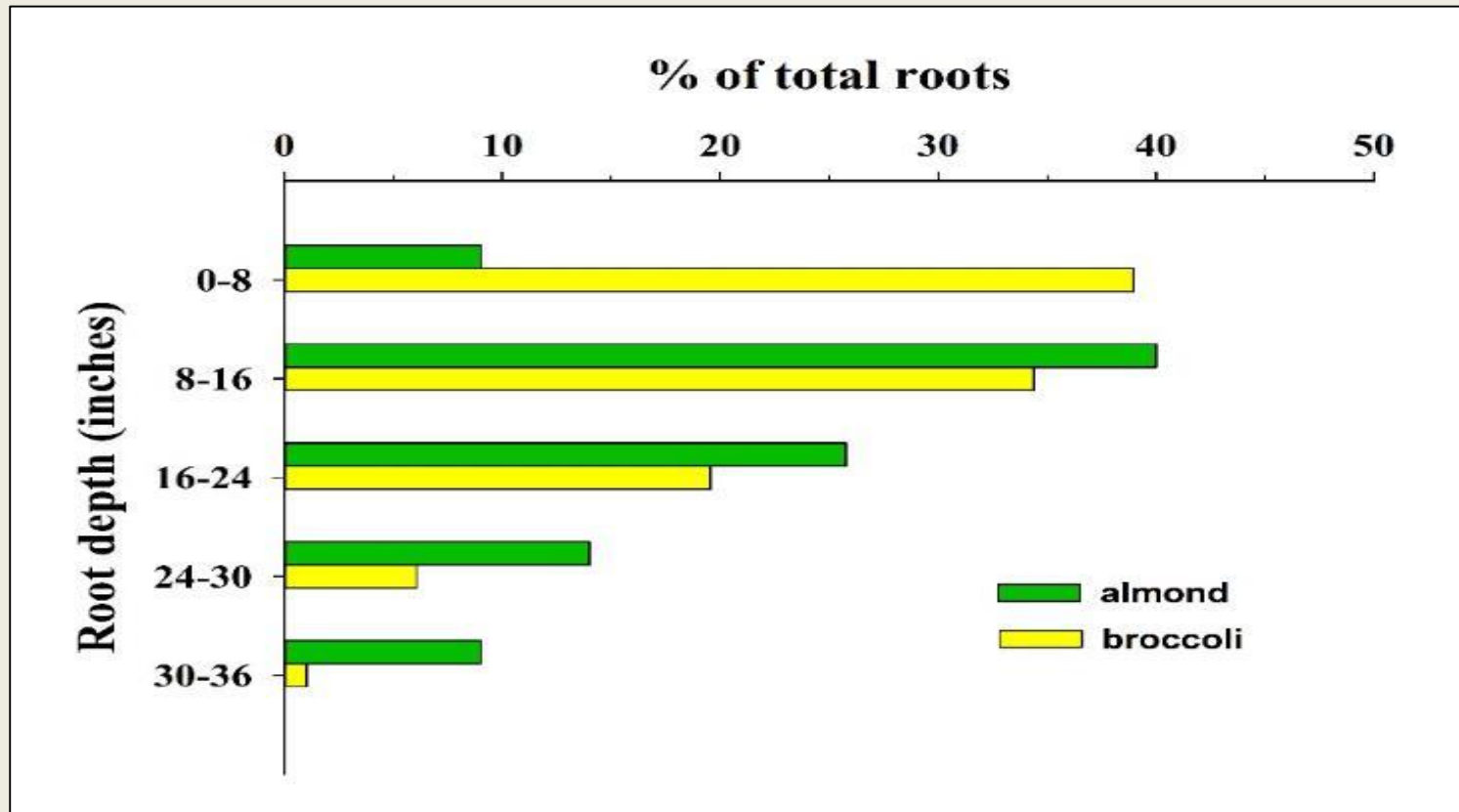
Tomatoes



NITROGEN MANAGEMENT

- Right Place
 - Putting the Nitrogen Source Where the Roots Are
 - Minimizing Movement Below Rootzone
 - Irrigation Management
 - Soil Texture
 - Form Applied

NITROGEN MANAGEMENT



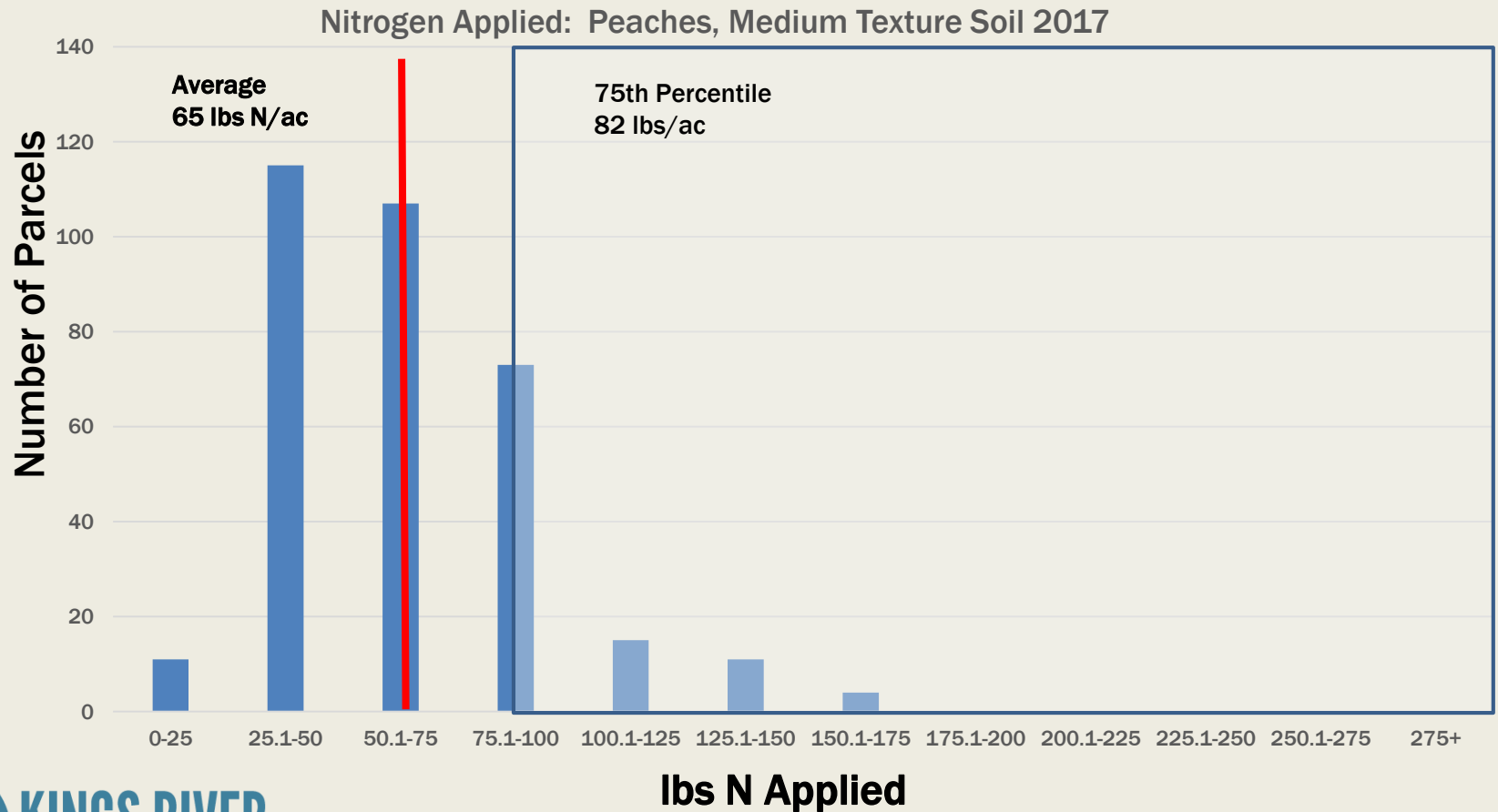
NITROGEN MANAGEMENT

- Right Source
 - Do You Need Rapid Uptake?
 - Liquid vs. Solid Formulations
 - Nitrate or Ammonium Based Product
 - Fertigation vs. Band Applications vs. Foliar
 - Does Your Soil Promote Volatilization of Nitrogen Fertilizer?
 - Soil pH, Climate, Slow Water Infiltration Rates

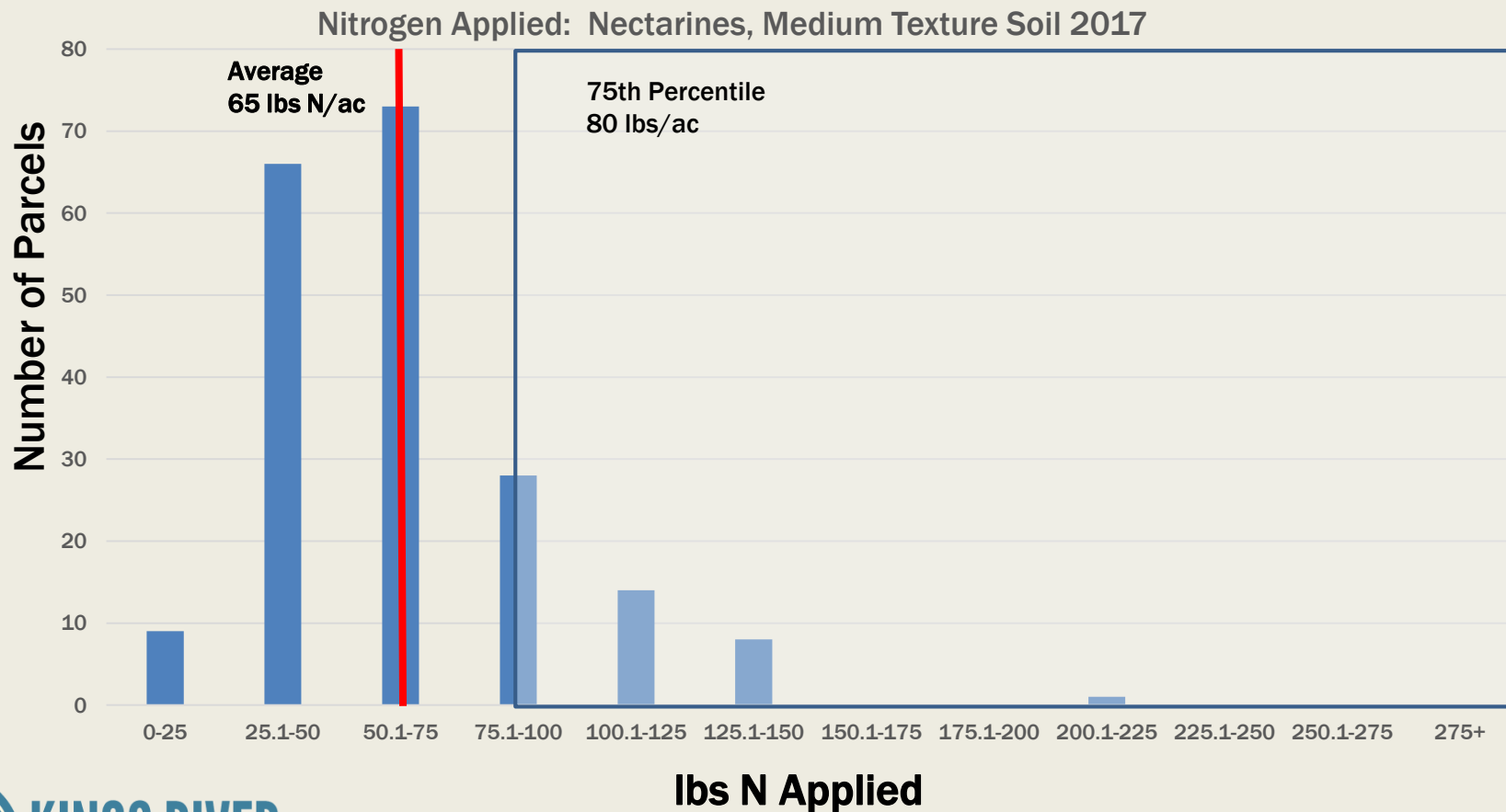
NITROGEN MANAGEMENT

- Nitrogen Management Plan and Nitrogen Summary Reporting Are Aimed at Raising Grower Awareness Regarding Nitrogen Use
 - How Much Do I Really Need?
 - How Much Do I Get For “Free”?
 - Nitrate in Pumped Groundwater
 - How Much More Do I Need to Buy?
 - Is My Crop Using All That I Apply?
 - How Am I Doing Compared to Other Growers?

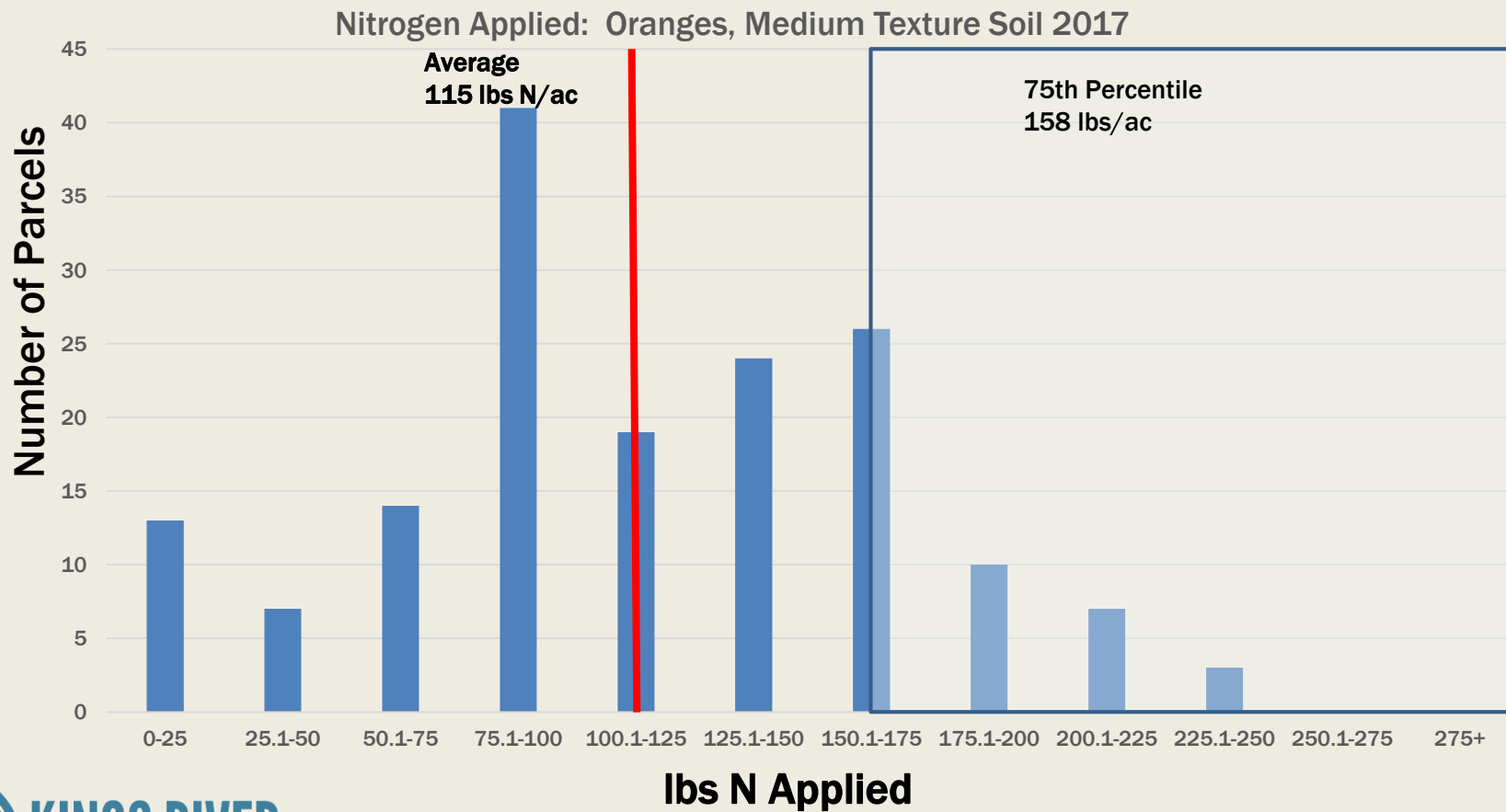
NITROGEN SUMMARY DATA



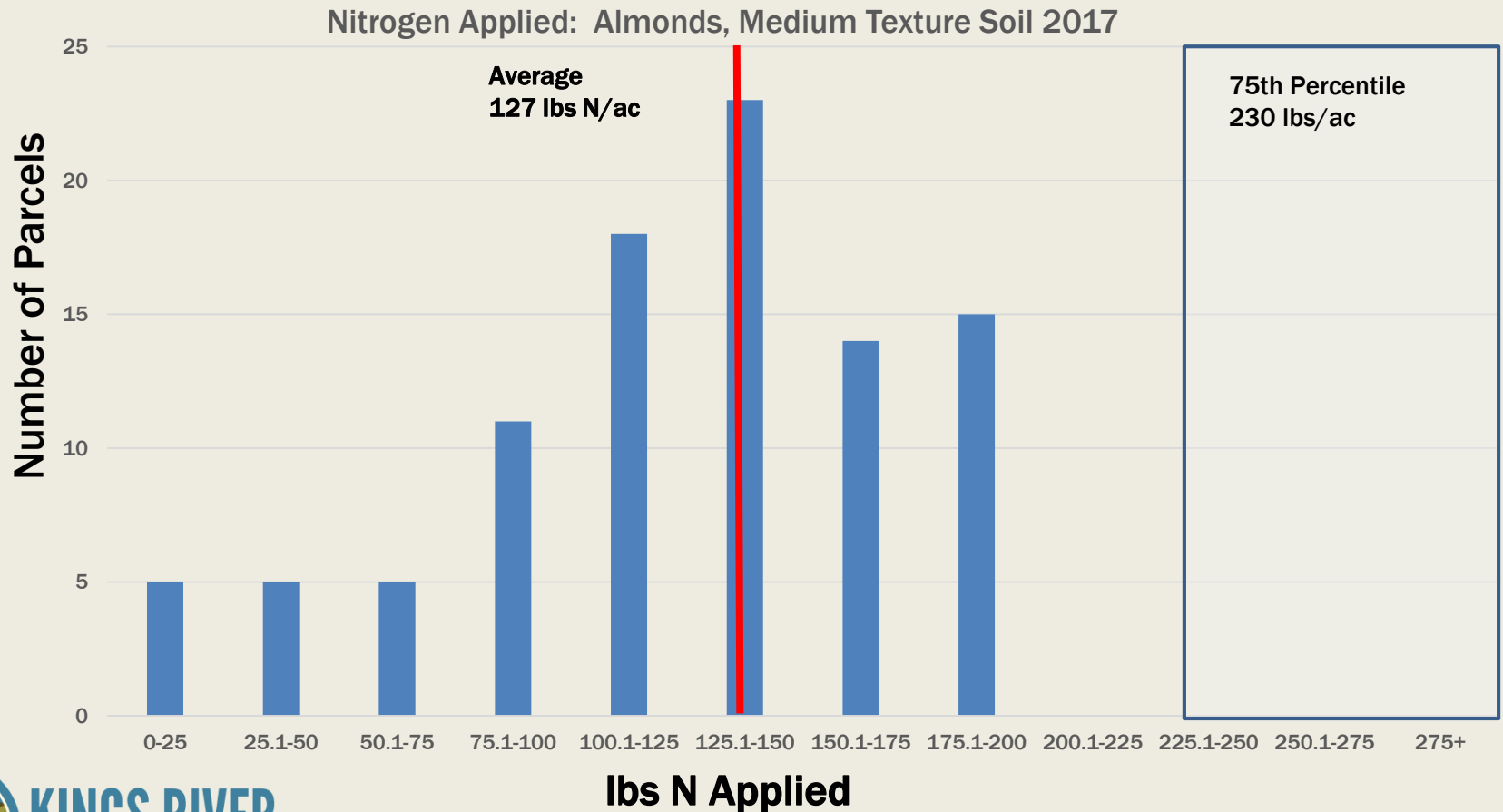
NITROGEN SUMMARY DATA



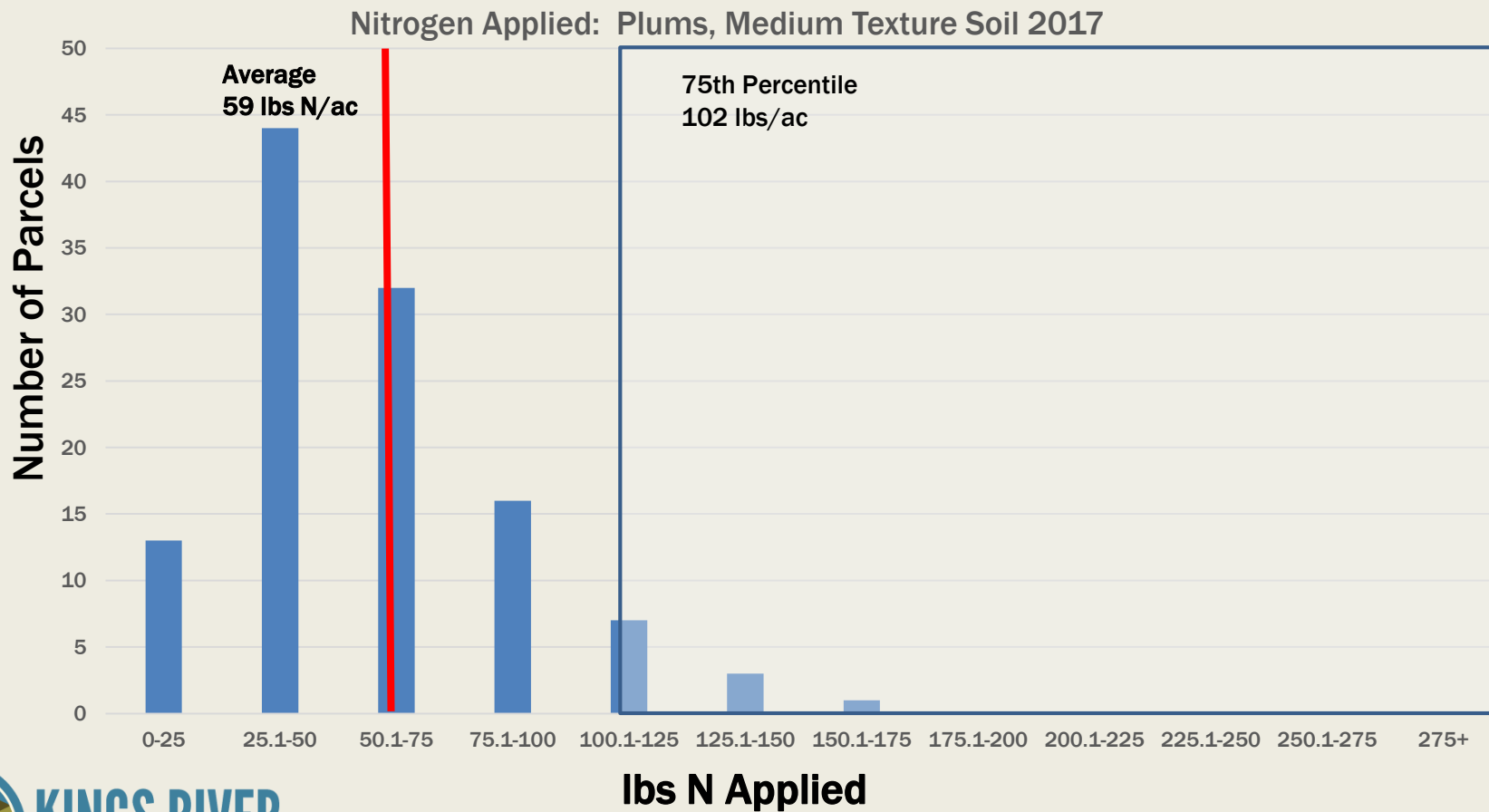
NITROGEN SUMMARY DATA



NITROGEN SUMMARY DATA



NITROGEN SUMMARY DATA



QUESTIONS?

BARRIERS TO ADOPTION STUDY

DEMONSTRATION OF ONLINE SYSTEM

CONCLUSIONS/TAKEAWAYS

- Changes to the Current Program to Take Place by 2020
- Domestic Well Testing on Enrolled Parcels Will Be Required of All Members
- Data to Date Suggests that Growers Are Efficient with Nitrogen Applications

COALITION ASSISTANCE

- Staff is available to assist you in the completion of Farm Evaluation or Nitrogen Summary Templates
- In Office visits can be scheduled as requested
- Call (559) 365-7958 or email info@kingsriverwqc.org whenever you have any questions

ONLINE SUBMISSION METHOD

Farm
Evaluation
Survey
Nitrogen
Summary
Report



HOMEPAGE



[HOME](#)

[ABOUT](#)

[RESOURCES](#)

[CONTACT](#)

[ACCOUNT](#)



Compliance Assistance Workshops

Register for one of our upcoming workshops.

[RSVP](#)



DATABASE LOG-IN

User Name is the
same as Member ID



Log in

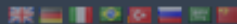
[Need Help?](#)

Usually your Member ID No.

Password

LOG IN

☐ Remember me



2017 © ILRPDB.

DASHBOARD

Coalition Documents

Coalition Faq

Coalition Info

Dashboard

Farm Evaluation

NMP Summary

Member Outreach

Membership History

FormationEta

English

KRWQC\15685

True False

Do you need help?
CLICK HERE!

MEMBERSHIP STATUS FOR : (2017-2018)

If any items are red, your membership status is "Not In Good Standing", and will be reported as such, unless you as a Member are not required to do the specific section(s).

PAID DUES
No

GOTO

MP SUMMARY

GOTO

ATTENDED EVENT
No

GOTO

QUICK LOOK FOR : (2017-2018)

110.81 AC
TOTAL ACRES

Submittal Peroid For Farm Evaluations in now open. Would you Like to Update and Submit your Farm Evaluation Now?

Cancel Yes

\$ 232.40
TOTAL DUE

MEMBER INFORMATION

Contact Information

Full Name: CASEY CREAMER
Address: 4886 E JENSEN AVE
FRESNO, CA 93725
Phone Number: (559) 365-7958

MEMBER DUES/FEE INFORMATION FOR : (2017-2018)

Fee Information

Year: 2017-2018
Start Date/End Date: 9/1/2017 - 12/15/2017
Membership Fee \$26.00
Acres Fee: \$2.15

DASHBOARD

Coalition Documents

Coalition Faq

Coalition Info

Dashboard

Farm Evaluation

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True False

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PAID DUES

No

[GOTO](#)



FARM SURVEY

No

[GOTO](#)



NMP SUMMARY

No

[GOTO](#)



ATTENDED EVENT

No

[GOTO](#)

QUICK LOOK FOR : (2017-2018)



110.81 AC
TOTAL ACRES



96.00 AC
IRRIGATED ACRES



\$ 232.40
TOTAL DUE



MEMBER INFORMATION



Contact Information

Full Name: CASEY CREAMER
Address: 4886 E JENSEN AVE
FRESNO, CA 93725
Phone Number: (559) 365-7958
Email Address: ccreamer@krcd.org
Contact Method: Both

MEMBER DUES/FEE INFORMATION FOR : (2017-2018)



Fee Information

Year: 2017-2018
Start Date/End Date: 9/1/2017 - 12/15/2017
Membership Fee \$26.00
Acres Fee: \$2.15

Member Dues and Payments

FARM EVALUATION

FARM EVALUATION PLAN FOR : (2017-2018)

8
TOTAL FIELDS



10
TOTAL WELLS



96.00
TOTAL FIELD ACREAGE



0.00
MISSING ACREAGE (PARCEL ACREAGE VS FIELD ACREAGE)



FARM EVALUATION PLAN COMPLETENESS: 100%

The progress bar does not show your overall completeness, only you as a member will know when you've finished. What the progress bar does show is the percentage of **Field** acreage vs **Parcel** irrigated Acreage

100%

Do you need help?

[CLICK HERE!](#)

Get Started

Part A: General Practices

Part B: Wells

Part C: Fields

Part D: Farm Map

Submission Form

Begin Your Farm Evaluation Survey Here

Waste discharge requirements for growers that are members of a water quality coalition requires that members complete a farm evaluation describing practices implemented to protect surface water and groundwater quality.

Farm Evaluations must be submitted by March 1.

The Farm evaluation is broken into four parts that members can easily complete by clicking on the tabs below:

A: UPDATE FARM PRACTICES



[+ CLICK HERE](#)

B: UPDATE / ADD WELLS



[+ CLICK HERE](#)

C: UPDATE / ADD FIELDS



[+ CLICK HERE](#)

SUBMIT FARM EVALUATION



[✓ CLICK HERE](#)

FARM EVALUATION (ZOOMED IN)

Do you need help?

[CLICK HERE!](#)

[Get Started](#)

[Part A: General Practices](#)

[Part B: Wells](#)

[Part C: Fields](#)

[Part D: Farm Map](#)

[Submission Form](#)

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FIELD LIST

 Get Started | [Part A: General Practices](#) | [Part B: Wells](#) | [Part C: Fields](#) | [Part D: Farm Map](#) | [Submission Form](#)

Part C: Field Evaluations

Tab 1. Field Information - Identify your field name, its total acreage and select crop type and a specific crop. You can use mapping tools to approximately draw the specific field on your parcel.

Tab 2. Field Specific Evaluation - Identify your irrigation methods and check all irrigation efficiency practices that apply to your field. For any practices not listed please identify by typing in the "other practice."

Identify nitrogen management methods to minimize leaching past the root zone by checking all that apply.

Tab 3. Sediment and Erosion Control - Identify your irrigation practices for managing sediment and erosion by checking all that apply. For any practices not listed please identify by typing in the "other practice."















Identify your cultural practices for managing sediment and erosion by checking all that apply. For any practices not listed please identify by typing in the "other practice."

[VIDEO DEMO](#)

Current YearId: 3 (here for testing)

[+ ADD NEW FIELD](#)

Field List

| Actions | Field Name | APN | On Map? | Acre | CropType | Crop Variety | Primary Irrigation Method | Irrigation Practice Name | Sediment and Erosion Practice Name |
|---|------------------------|-------------|---------|-------|--------------------------------|--------------|---------------------------|--------------------------|--|
|   | Del Rey | 309-061-40 | Yes | 17.00 | TRUCK, NURSERY AND BERRY CROPS | Misc Truck | Drip | Asian Vegetable | No Name Provided or Practice is incomplete |
|   | Indianola West | 309-140-56 | Yes | 13.00 | TRUCK, NURSERY AND BERRY CROPS | Misc Truck | Drip | Asian Vegetables | No Name Provided or Practice is incomplete |
|   | Indianola/Clinton | 309-061-07 | Yes | 13.00 | TRUCK, NURSERY AND BERRY CROPS | Misc Truck | Drip | Asian Vegetables | No Discharge |
|   | Shields | 309-061-49 | Yes | 14.00 | IDLE | Fallow | Fallow | Unplanted | No Name Provided or Practice is incomplete |
|   | Greenwood | 309-192-01 | Yes | 18.00 | TRUCK, NURSERY AND BERRY CROPS | Misc Truck | Drip | Asian Vegetables | No Name Provided or Practice is incomplete |
|   | Adademy | 309-180-435 | Yes | 8.00 | TRUCK, NURSERY AND BERRY CROPS | Misc Truck | Drip | Asian Vegetables | No Name Provided or Practice is incomplete |
|   | Academy Fallowed Field | 309-180-435 | Yes | 10.00 | IDLE | Fallow | Fallow | Unplanted | No Name Provided or Practice is incomplete |

tion/GettingStarted#GetStarted

SUBMITTING REPORTS

8

TOTAL FIELDS



10

TOTAL WELLS



96.00

TOTAL FIELD ACREAGE



0.00

MISSING ACREAGE (PARCEL ACREAGE VS FIELD ACREAGE)



FARM EVALUATION PLAN COMPLETENESS: 100%

The progress bar does not show your overall completeness, only you as a member will know when you've finished. What the progress bar does show is the percentage of **Field** acreage vs **Parcel** irrigated Acreage

100%

Do you need help?

[CLICK HERE!](#)

[Get Started](#)

[Part A: General Practices](#)

[Part B: Wells](#)

[Part C: Fields](#)

[Part D: Farm Map](#)

[Submission Form](#)

I certify under penalty of law this document and all attachments were prepared under my direction in accordance with a system designed to assure that qualified personal or represented Members properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment for violations.

Current YearId: 3 (here for testing)

Preparers Name

☐

Accepted Terms

☐

Is Template Submitted

 SUBMIT FARM SURVEY

OPTION TO PRINT-OUT REPORT

8
TOTAL FIELDS

10
TOTAL WELLS

96.00
TOTAL FIELD ACREAGE

0.00
MISSING ACREAGE (PARCEL ACREAGE VS FIELD ACREAGE)

FARM EVALUATION PLAN COMPLETENESS: 100%

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100%

Do you need help?

CLICK HERE!

Get Started

Part A: General Practices

Part B: We

I certify under penalty of law this document and all attachments are true and accurate to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment for violations.

Current YearId: 3 (here for testing)

Preparers Name

cc

Accepted Terms

Is Template Submitted

SUBMIT FARM SURVEY

Print Farm Evaluation

Would you like to print a copy of your Current Farm Evaluation?

Cancel

Yes

Saved successfully.

AFTER COMPLETING THE FES

Coalition Documents

Coalition Faq

Coalition Info

Dashboard

Farm Evaluation

NMP Summary

Member Outreach

Membership History

FormationEta

True True

Do you need help?

[CLICK HERE!](#)

MEMBERSHIP STATUS FOR : (2017-2018) If any items are red, your membership status is "Not In Good Standing", and it will be reported as such, unless you as a member are not required to do the specific section(s).



PAID DUES

No

[GOTO](#)



FARM SURVEY

Yes

[GOTO](#)



NMP SUMMARY

No

[GOTO](#)



ATTENDED EVENT

No

[GOTO](#)

QUICK LOOK FOR : (2017-2018)

110.81 AC

TOTAL ACRES



96.00 AC

IRRIGATED ACRES



\$ 232.40

TOTAL DUE



MEMBER INFORMATION



Contact Information

Full Name: CASEY CREAMER

Address: 4886 E JENSEN AVE
FRESNO, CA 93725

Phone Number: (559) 365-7958

Email Address: ccreamer@krccd.org

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Fee Information

Year: 2017-2018

Start Date/End Date: 9/1/2017 - 12/15/2017

Membership Fee: \$26.00

Acres Fee: \$2.15

LISTING OF FIELDS FROM FES

NMP SUMMARY COMPLETENESS: 0%

Progress bar shows completeness of NMP Summary, Every Field in your Farm Evaluation must have an NMP Summary. Once every Field has a NMP Summary, progress will show 100% complete

0%

+ ADD NMP SUMMARY

Export to Excel

| Field Name | Crop Type | Crop Variety | Field Acreage | Primary Irriga... | A (lbs/acre) | A ÷ Y | Production Unit | N... | | |
|-------------------------------------|--------------------------------|--------------|---------------|-------------------|--------------|-------|-----------------|------|--|--|
| Adademy (APN: 309-180-43S) | TRUCK, NURSERY AND BERRY CROPS | Asian | 8 | Drip | 0 | 0 | | ✗ | | |
| Indianola/Clinton (APN: 309-061-07) | TRUCK, NURSERY AND BERRY CROPS | Asian | 13 | Drip | 0 | 0 | | ✗ | | |
| Del Rey (APN: 309-061-40) | TRUCK, NURSERY AND BERRY CROPS | Asian | 17 | Drip | 0 | 0 | | ✗ | | |
| Clinton Farm (APN: 309-191-20) | TRUCK, NURSERY AND BERRY CROPS | Asian | 3 | Drip | 0 | 0 | | ✗ | | |
| Indianola West (APN: 309-140-56) | TRUCK, NURSERY AND BERRY CROPS | Asian | 13 | Drip | 0 | 0 | | ✗ | | |
| Greenwood (APN: 309-192-01) | TRUCK, NURSERY AND BERRY CROPS | Asian | 18 | Drip | 0 | 0 | | ✗ | | |

LISTING OF FIELDS FROM FES

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+ ADD NMP SUMMARY

Export to Excel

| Field Name | Crop Type | Crop Variety | Field Acreage | Primary Irriga... | A (lbs/acre) | A |
|------------------------------------|-----------------------------------|--------------|---------------|-------------------|--------------|---|
| Adademy (APN: 309-180-435) | TRUCK, NURSERY AND BERRY CROPS | Asian | 8 | Drip | 0 | 0 |
| Indianola/Canton (APN: 309-061-07) | TRUCK, NURSERY AND BERRY CROPS | Asian | 13 | Drip | 0 | 0 |
| Del Rey (APN: 309-061-40) | TRUCK, NURSERY AND BERRY CROPS | Asian | 17 | Drip | 0 | 0 |
| Clinton Farm (APN: 309-191-20) | TRUCK, NURSERY AND BERRY CROPS | Asian | 3 | Drip | 0 | 0 |
| Indianola West (APN: 309-140-56) | TRUCK, NURSERY AND BERRY CROPS | Asian | 13 | Drip | 0 | 0 |
| Greenwood (APN: 309-192-01) | TRUCK, NURSERY | Asian | 18 | Drip | 0 | 0 |

NITROGEN SUMMARY REPORT

New NMP Summary Entry Form

-- Select A Field -- Site Location ▼

Crop Type

Crop Variety

Total Acres

0

Crop Description(optional)

Input the sum of Total Available N Applied + N in Irrigation Water = Total N
Applied, A (lbs/acre)

$A \div \text{Actual Per Acre Yield}, Y$

☐ Non Bearing
☐ No Yield

Select Unit ▼

Unit Value in Lbs

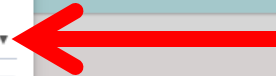
0

Calculated Yield

Based on the above input, your fields calculated Yield (lbs/acre) is:

Please Verify this with your current records

CANCEL
SAVE



NITROGEN SUMMARY REPORT

New NMP Summary Entry Form

Site Location
Adademy (APN: 309-180-435)

Crop Type: TRUCK, NURSERY AND BERRY CROPS Crop Variety: Asian

Total Acres: 8

Crop Description(optional)

Input the sum of Total Available N Applied + N in Irrigation Water = Total N Applied, A (lbs/acre)

A ÷ Actual Per Acre Yield, Y

☐ Non Bearing ☐ No Yield

Carton

- 1/2-bushel carton (28 lbs)
- 1/2-bushel carton (30 lbs)
- 2 Layer Carton (22 lbs)
- 2/3 Carton (30 lbs)
- Carton (100 lbs)
- Carton (13 lbs)
- Carton (18 lbs)

CANCEL SAVE

Amount of Nitrogen
Applied in pounds per acre

A:Y Ratio
 $\text{Applied Nitrogen} \div \text{Yield}$

Units of Production

- How you measured your yield
- Tons, Pounds, Bins, Cartons, etc.

COMMON UNITS OF PRODUCTION

- **Tons**
- **Pounds**
- **Bale**
- **Bin (pounds)**
- **Lug/Tote Box (pounds)**
- **Crate (pounds)**
- **Carton (pounds)**

COMMON ISSUES ON SUBMITTED REPORTS

Farm Evaluations

- Not listing your Member ID and/or Name on any page
- Not listing Crops and/or APNs on Part C of the Farm Evaluation Survey
- Not including all of the Member IDs represented on the Farm Evaluation Survey

Nitrogen Summary Report

- Missing Crops, Crop Year, APNs, Member ID, Production Units
- Please don't send in your worksheets in place of the summary report