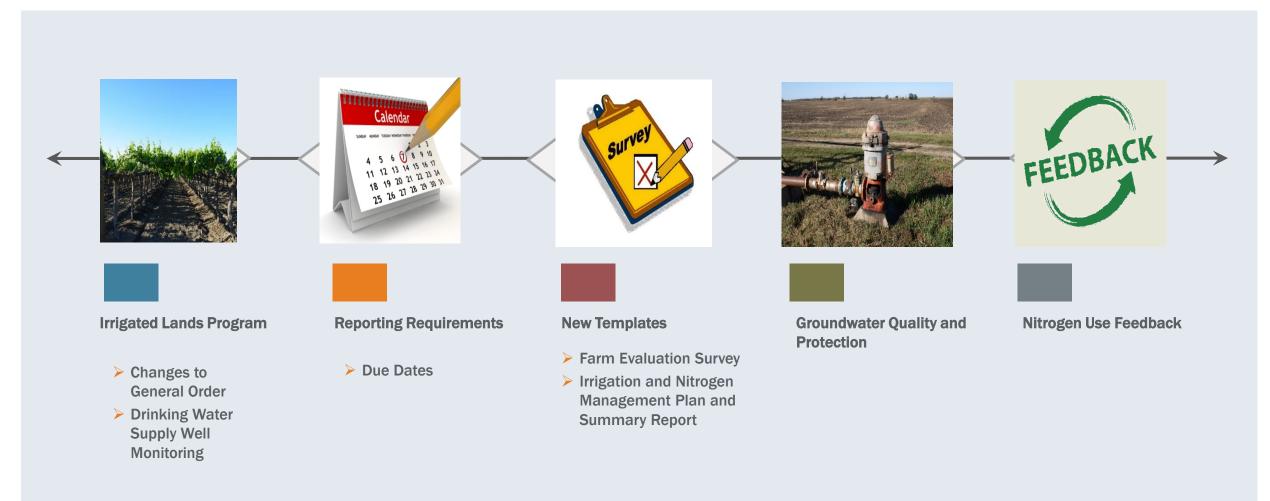


# MEMBER COMPLIANCE ASSISTANCE WORKSHOP

Kings River Water Quality Coalition Hanford December 3, 2019

# **TODAY'S AGENDA**



# **TODAY'S AGENDA**

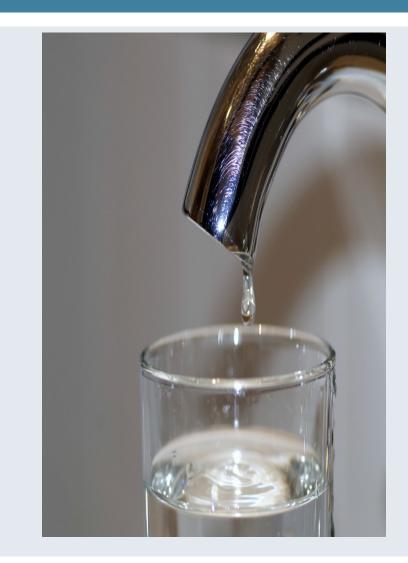


# CHANGES TO THE GENERAL ORDER



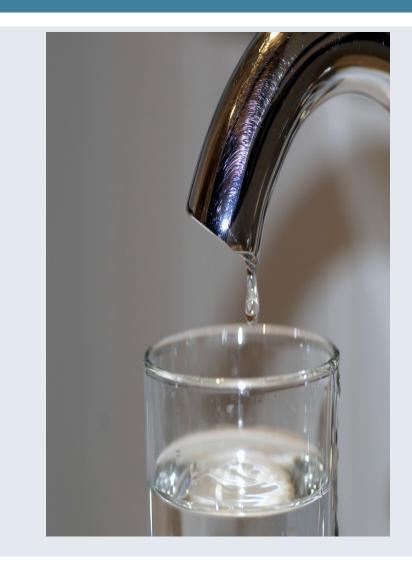
- ALL members must participate in an outreach event annually
- Nitrogen Management Plans and Summary Reports will now include Irrigation and Nitrogen Management Questions (now called the INMP)
  - All Growers Report Irrigation and Nitrogen Summary Data in 2021
  - Growers in low vulnerability areas <u>may</u> be required to have INMPs certified
- Farm Evaluation requirement reduced to every Five years

# DRINKING WATER SUPPLY WELL MONITORING



- Any Well used for Human Consumption is subject to this requirement
- Testing for Nitrate + Nitrite-N levels only
- Must be Analyzed by Certified Laboratory
  - List of local labs mailed to all members
- Results reported by lab to State Water Resources Control Board's GeoTracker database
  - Reporting costs part of Lab Fee

# DRINKING WATER SUPPLY WELL MONITORING



### Frequency of Testing

- 0-8 ppm: Test every year for 3 years, then once every 5
- 8-10 ppm: Test every year
- > 10 ppm: No further testing, well cannot be used for Human Consumption
  - Users must be notified
  - Replacement Water may be necessary
- Supply wells must be sampled by end of 2020
- Data upload is slow process
- We Recommend early testing
- Not a Coalition Program

# **TODAY'S AGENDA**



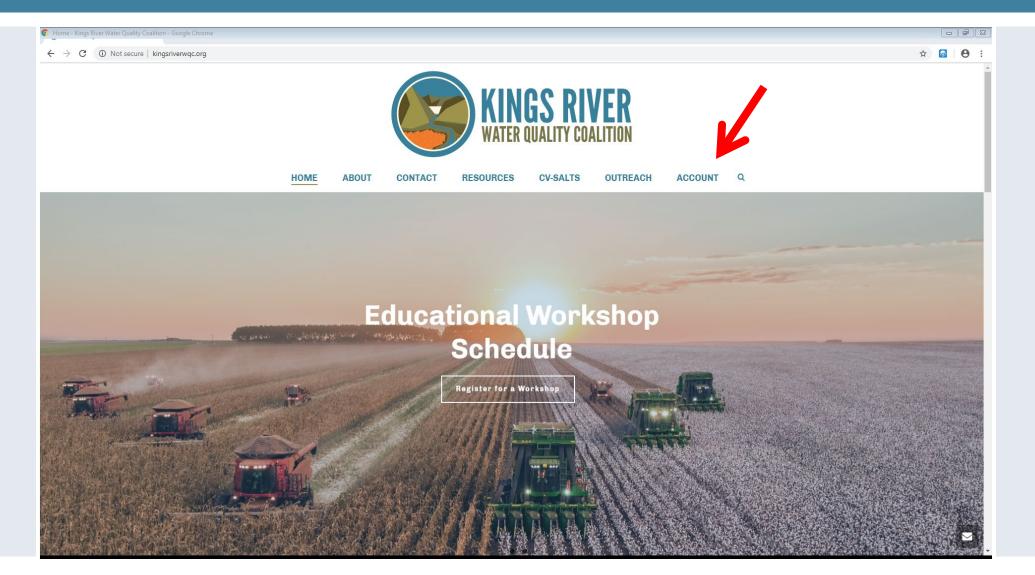
# **DUE DATES**



## Due to Coalition by March 1, 2020

- Nitrogen Summary Reports (old template)
  - For Harvests Completed in 2019
- Farm Evaluation Surveys (HV Parcels)
- Online Reporting is Preferred
  - Paper copies accepted
- Grower by March 1, 2020
  - Completion of Irrigation and Nitrogen Management Plans (new template)
    - High Vulnerability Parcels require Certification
    - Current Self-Certifications Valid

# REPORTING ONLINE kingsriverwqc.org



# **ONLINE REPORTING**



## Click on Account to Login

- Select Report to Complete
  - Input Data and Save
- Need Help or New Password?
  - Contact Us at (559) 365-7958
  - We can walk you through process
  - Office Visits Are Available
    - Please Schedule in Advance
- Current Account Status Available
  - Contact Info
  - Parcels/Acreage Enrolled
  - Payment Status



## Nitrogen Summary Reports

- Missing Crops, Crop Year, APNs, Member ID, Production Units
- Reporting Gross Yield rather than Yield/Acre
- Reporting Gross N Applied rather than N/ac
- Incorrect Calculation of A/Y (Applied N/ac divided by Yield/ac)



## Farm Evaluation Surveys

- Not Listing Member ID or Name on Pages
- Not Listing Current Crops/APNs on Part C (check against Invoice)
- Please Double-check CCA/Third party Submission Information



## Part B: Wells

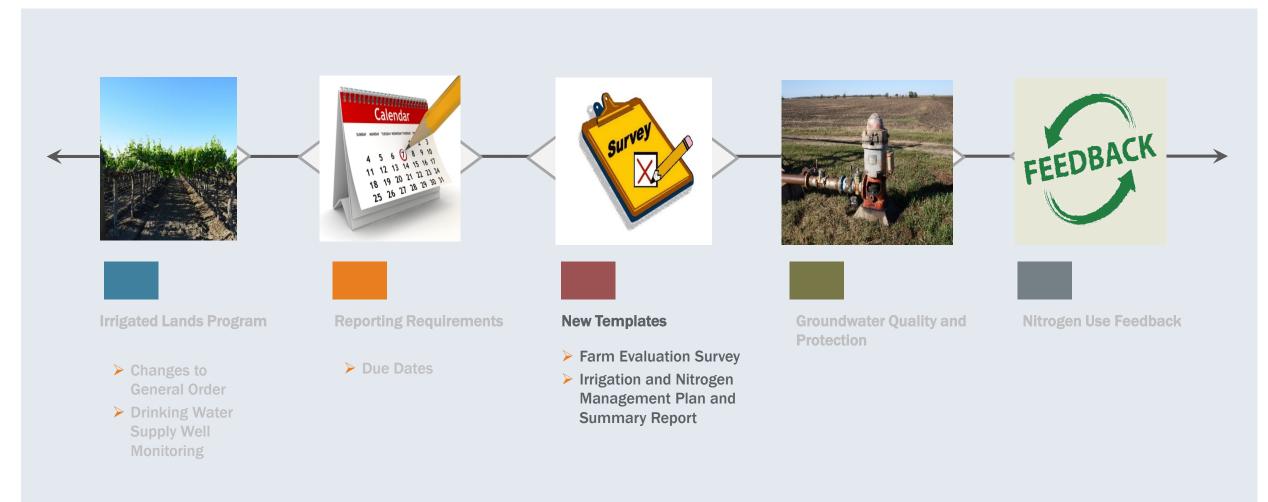
- Confusion over Active, Inactive, and Destroyed
- Active: Well In Use
- Inactive: Well not used, but could be
- Destroyed: Well cannot be used
  - Need to Hire Professional to Properly Destroy Well



## Payments

- Multiple Payments on Same Account
- Unsigned Checks
- Incomplete Checks
- Incorrect Amounts
- If in doubt, Please Call
- Overpayments to be processed after March 1, 2020
  - Duplicate Credit Card payments will be processed immediately

# **TODAY'S AGENDA**



# **TEMPLATE CHANGES**

lan Summary Report	
Submittal Date:	03/01/18
Member Name (3):	John Smith
A/Y Total	
rres Total Available N Applied (20+23) al Yield (11	tu <sup>(7)</sup>
	10-2010-000
20.00 8.00	Tons
	+
0.00 #DIV/0!	0
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1. Pestic	ide Application Practices: (Check all th	at appl	y)
Г	County Permit Followed	Г	Monitor Wind Conditions
	Follow Label Restrictions	Г	Use Appropriate Buffer Zones
Г	Sensitive Areas Mapped	E	Use Vegetated Drain Ditches
Г	Attend Trainings	Г	Monitor Rain Forecasts
Г	End of Row Shutoff When Spraying	E	Use PCA Recommendations
E	Avoid Surface Water When Spraying	L	Chemigation
E	Reapply Rinsate to Treated Field	L	No Pesticides Applied
E	Target Sensing Sprayer used	Ľ	Other
L	Use Drift Control Agents	E	Other
2. Who	assists with the development of your in	rrigatio	n and crop fertility plan? (Check all that apply
	Certified Crop Adviser (CCA)		Certified Professional Agronomist (CPAg)
п	Pest Control Adviser (PCA)	Ľ	Independently Prepared by Member

- Pest Control Adviser (PCA)
- □ NRCS Technical Service Provider (TSP) Certified Professional Soil Scientist (CPSS)

No

- L UCCE Farm Advisor Certified Agricultural Irrigation Specialist
- C Other

#### 3. Does your farm have the potential to discharge sediment to off-farm surface waters?

#### Circle One: Yes

Note: Answering "yes" above will trigger the requirement of a Sediment and Erosion Control Plan for your membership. If Best Management Practices or control measures prevent sediment discharge, you should contact your Coalition to determine if you need a Sediment and Erosion Control Plan.

#### 4. Information on your on-farm drinking water supply wells located on enrolled parcels

Indicate the number of active drinking water supply wells on each of your enrolled parcels. NOTE: This section is for active drinking water wells only. If you have any abandoned or irrigation wells, you will need to complete Section 2.

#### Check this box if you have no active drinking water wells on your property.

Enrolled Parcel (APN)	# of Drinking Water Wells

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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.

Date

#### Section 2 – Irrigation Well and Abandoned Well

#### Information

	k an "X" undei	the practices		dividual well. Mar	ill in the table b	
	1,7 7		have no irrigati		our parcel(s	).
		v	Vellhead Protec	tion Practices		
Well ID (A unique name of your choice)	Ground Sloped Away from Wellhead	Standing water avoided around wellhead	Good Housekeeping Practices*	Air Gap (for non- pressurized systems)	Backflow Preventive / Check Valve	Cement Pad

2			
	2		

\*Good housekeeping practices include keeping the area surrounding the wellhead clean of trash, debris and any empty containers.

Comments:

2. Abandoned Wells: Create a unique Well ID for each abandoned well. Mark the location of your wells on the provided Farm Map(s) or your own farm map using the unique Well ID. Indicate the year the well was abandoned (write "UNK" if the year is unknown; approximation is okay) and mark how the well was destroyed with an "X" under the appropriate practice.

	Check this box i	f you have no aba	ndoned wells o	n your parcel(s)
Well ID		Abandoned W	ell Practices	
(A unique name of your choice)	lf abandoned, γear abandoned	Destroyed – certified by county	Destroyed by licensed professional	Destroyed - Unknown method

Comments:

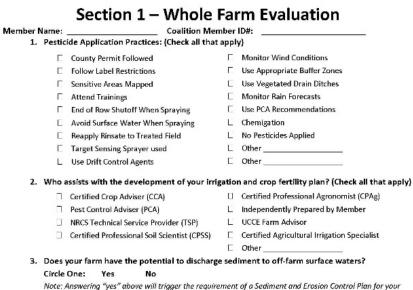
17

Farm Evaluation Template - Section 1

Printed Name

Signature

Page 3



membership. If Best Management Practices or control measures prevent sediment discharge, you should contact your Coalition to determine if you need a Sediment and Erosion Control Plan.

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Check this box if you have no active drinking water wells on your property. # of Drinking Water Wells Enrolled Parcel (APN)

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#### Section 2 – Irrigation Well and Abandoned Well

#### Information

1. Irrigation Well Well ID and mar			r each irrigation we that apply to the inc			
			map using the uniqu		V-	
	Uneck this	Contraction of the second	have no irrigati Vellhead Protec			}•
Well ID (A unique name of your choice)	Ground Sloped Away from Wellhead	Standing water avoided around wellhead	Good Housekeeping Practicos*	Air Gap (for non- pressurized systems)	Backflow Preventive / Check Valve	Cemen Pad

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Comments:

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	Check this box i	f you have no aba	ndoned wells o	n your parcel(s)
Well ID		Abandoned W	ell Practices	
(A unique name of your choice)	lf abandoned, γear abandoned	Destroyed – certified by county	Destroyed by licensed professional	Destroyed - Unknown methor

Comments:

18

Farm Evaluation Template – Section 1

Printed Name

Signature

Page 3

1. Pestic	ide Application Practices: (Check all th	at appl	y)
E	County Permit Followed	Г	Monitor Wind Conditions
E	Follow Label Restrictions	Г	Use Appropriate Buffer Zones
Г	Sensitive Areas Mapped	E	Use Vegetated Drain Ditches
Г	Attend Trainings	Г	Monitor Rain Forecasts
Б	End of Row Shutoff When Spraying	E	Use PCA Recommendations
E	Avoid Surface Water When Spraying	L	Chemigation
E	Reapply Rinsate to Treated Field	L	No Pesticides Applied
E	Target Sensing Sprayer used	Ľ	Other
L	Use Drift Control Agents	Ľ	Other
2. Who	assists with the development of your in	rrigatio	n and crop fertility plan? (Check all that apply)
	Certified Crop Adviser (CCA)		Certified Professional Agronomist (CPAg)
	Pest Control Adviser (PCA)	Ľ	Independently Prepared by Member

- Pest Control Adviser (PCA)
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No

- L UCCE Farm Advisor Certified Agricultural Irrigation Specialist
- C Other

#### 3. Does your farm have the potential to discharge sediment to off-farm surface waters?

#### Circle One: Yes

1

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#### Check this box if you have no active drinking water wells on your property.

Enrolled Parcel (APN)	# of Drinking Water Wells

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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.

Date

#### Section 2 – Irrigation Well and Abandoned Well

#### Information

		Coalitic	on Member ID#:		
k an "X" under	the practices	that apply to the ind	dividual well. Mar		
Check this	box if you	have no irrigati	on wells on y	our parcel(s	).
	v	Vellhead Protec	tion Practices		
Ground Sloped Away from Wellhead	Standing water avoided around wellhead	Good Housekeeping Practicos*	Air Gap (for non- pressurized systems)	Backflow Preventive / Check Valve	Cement Pad
	k an "X" under m Map(s) or y Check this Ground Sloped Away from	k an "X" under the practices m Map(s) or your own farm Check this box if you V Ground Sloped Away from avoided around	s: Create a unique Well ID for each irrigation we k an "X" under the practices that apply to the inx m Map(s) or your own farm map using the uniqu Check this box if you have no irrigati Wellhead Protect Ground Stending Away Away avoided From Practices*	s: Create a unique Well ID for each irrigation well. For each well, f k an "X" under the practices that apply to the individual well. Mar m Map(s) or your own farm map using the unique Well ID. Check this box if you have no irrigation wells on your Wellhead Protection Practices Ground Sloped Away Away avoided from Practices*	Check this box if you have no irrigation wells on your parcel(s Wellhead Protection Practices

\*Good housekeeping practices include keeping the area surrounding the wellhead clean of trash, debris and any empty containers.

Comments:

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	Check this box i	f you have no aba	ndoned wells o	n your parcel(s)
Well ID		Abandoned W	ell Practices	
(A unique name of your choice)	lf abandoned, γear abandoned	Destroyed – certified by county	Destroyed by licensed professional	Destroyed - Unknown method

Comments:

Farm Evaluation Template - Section 1

Printed Name

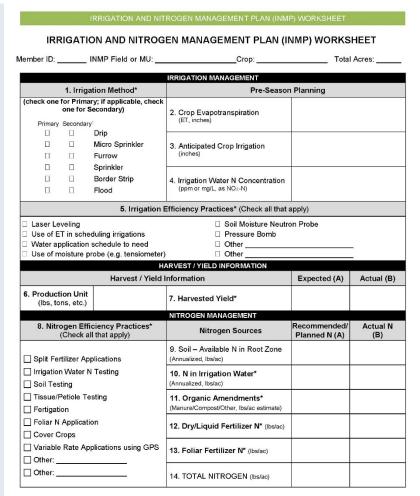
Signature

Page 3



- Irrigation and Nitrogen Management questions moved to Irrigation and Nitrogen Management Plan
  - This data now reported yearly
- Reporting Reduced to Every 5 years for all Members
- New Report Due in 2021 for 2020 Crop Year (all growers)

## NEW FORMS – IRRIGATION AND NITROGEN MANAGEMENT PLAN (INMP) AND SUMMARY REPORT



#### <sup>1</sup> A secondary irrigation system could be used for crop germination, frost protection, crop cooling, etc.

\*(Bold Text) Data to be reported to the Coalition on the INMP Summary Report, based on Actual Yield and Actual N.

Plan Certifier Initials

#### RRIGATION AND NITROGEN MANAGEMENT PLAN (INMP) SUMMARY REPORT

#### IRRIGATION AND NITROGEN MANAGEMENT PLAN (INMP) SUMMARY REPORT

Refer to your Irrigation and Nitrogen Management Plan (INMP) Worksheet and Parcel Inventory for information to complete an INMP Summary. Report for each field or Management Unit.

STEP 1: GENERAL INFORMATION	STEP 2: OUTLIER NOTIFICATION RECEIPT	STEP 3: INMP CERTIFICATION METHOD
Member ID:	On (Date), the Coalition provided information about this membership's nitrogen efficiency for the previous crop year and identified management units that were	Certified INMP Specialist (e.g. certified crop adviser who has completed the CDFA training program)
Completed By:	considered outliers compared to other Coalition members growing the same crop.	Self-Certified (CDFA training program)
(Harvested):	Please check the box below if you were identified as an outlier by the Coalition.	<ul> <li>Self-Certified (follows NRCS or UC Cooperative Extension site-specific recommendations)</li> </ul>
Submittal Date:		Self-Certified (No fertilizers applied)

#### STEP 4: INMP SUMMARY REPORT Complete the table below for each field or management unit for this membership. All values should be on a per acre basis

Complete	e the table bei	ow for each	i neia or ne	anagement u	in for this mem	beramp. An	alues should	be on a per e	cre basi	
Field or Management Unit	Сгор	Crop Age	Total Irrigated Acres			Applied /acre		Yield	Prod. Unit	Yield Info*
Refer to Parcel Inventory		Perennial only (years)	(acres)	N in Irrigation Water (Ibs/acre)	Organic Amendments (Ibs/acre)	Dry/Liquid Fertilizers (Ibs/acre)	Foliar Fertilizers (Ibs/acre)	Harvested Yield (Ibs/acre or tons/acre)	(Ibs or tons)	

contact your Coalition

#### IRRIGATION AND NITROGEN MANAGEMENT PLAN (INMP) SUMMARY REPORT

#### **IRRIGATION & NITROGEN MANAGEMENT PRACTICES**

Use this column to provide information about yield i.e. Complete the following tables for each field or Management Unit (refer to ILRP Parcel and Field Inventory Sheet).

		Prima		ation M ct one)	ethod			Second		gation M t one)	lethod	
Field or MU	Drip	Micro Sprinkler	Furrow	Sprinkler	Border Strip	Flood	Drip	Micro Sprinkler	Furrow	Sprinkler	Border Strip	Flood

		Irrigati	on Efficiency	/ Practices (Che	ck all that	apply)	
Field or MU	Laser Leveling	Use of ET in scheduling irrigations	Water application scheduled to need	Use of moisture probe (e.g. tensiometer)	Soil Moisture Neutron Probe	Pressure Bornb	Other
Field of Mo							
	H	- H					

		Nitroge	n Effic	iency F	ractices	(Check al	I that a	apply)	/
	Split Fertilizer Applications	Irrigation Water N Testing	Soil Testing	Tissue/ Petiole Testing	Fertigation	Foliar N Application	Cover Crops	Variable Rate Applications using GPS	Other
Field or MU									

- Grouped by Field or Management Unit
- Max acreage per field = 640 ac
- Integration of Irrigation Practice Questions from Farm Evaluation
- Estimated Irrigation Demands
  - Applied Water
  - Crop Usage
- Nitrate-N Levels in Irrigation Water
- Conversion of Nitrate-N (ppm) to lbs/ac available at agmpep.com
- Planning Portion requires Certification in HV areas

#### IRRIGATION AND NITROGEN MANAGEMENT PLAN (INMP) WORKSHEET

#### **IRRIGATION AND NITROGEN MANAGEMENT PLAN (INMP) WORKSHEET**

ember ID: INMP Field or MU:		INMP Field or MU:	Crop:	Total Acres:	
			IRRIGATION MANAGEMENT		
	1. Irrig	ation Method*	Pre-Seasor	n Planning	
		ary; if applicable, check Secondary) y <sup>1</sup>	2. Crop Evapotranspiration (ET, inches)		
		Drip Micro Sprinkler Furrow	3. Anticipated Crop Irrigation (inches)		
		Sprinkler Border Strip Flood	4. Irrigation Water N Concentration (ppm or mg/L, as NO <sub>8</sub> -N)		
		5. Irrigation E	Efficiency Practices* (Check all that a	apply)	
Water ap	T in sche plication	eduling irrigations schedule to need probe (e.g. tensiometer)	Soil Moisture Neutro Soil Moisture Neutro Pressure Bomb Other Other Other		-
		Harvest / Yield I	nformation	Expected (A)	Actual (B)
6. Product (lbs, to	ion Unit ns, etc.)		nformation 7. Harvested Yield*	Expected (A)	Actual (B)
				Expected (A)	Actual (B)
(lbs, to 8. Nitro	ns, etc.) ogen Eff		7. Harvested Yield*	Expected (A) Recommended/ Planned N (A)	Actual (B) Actual N (B)
(lbs, to 8. Nitro	ns, etc.) ogen Eff (Check a	īciency Practices* III that apply)	7. Harvested Yield* NITROGEN MANAGEMENT	Recommended/	Actual N
(lbs, to 8. Nitro	ns, etc.) ogen Eff (Check a tilizer Ap n Water I	īcienc <b>y Practices*</b> III that apply) oplications	<ul> <li>7. Harvested Yield*</li> <li>NITROGEN MANAGEMENT</li> <li>Nitrogen Sources</li> <li>9. Soil – Available N in Root Zone</li> </ul>	Recommended/	Actual N
(lbs, to 8. Nitro	ns, etc.) ogen Eff (Check a tillizer Ap n Water I ting Petiole Te	iciency Practices* III that apply) oplications N Testing	7. Harvested Yield* NITROGEN MANAGEMENT Nitrogen Sources 9. Soil – Available N in Root Zone (Annualized, Ibs/ac) 10. N in Irrigation Water*	Recommended/	Actual N
(lbs, to 8. Nitro Split Fer Irrigation Soil Tes Tissue/F Fertigati Foliar N	ns, etc.) ogen Eff (Check a tilizer Ap n Water I ting Petiole Te on Applicat	iciency Practices* all that apply) oplications N Testing esting	7. Harvested Yield* NITROGEN MANAGEMENT Nitrogen Sources 9. Soil – Available N in Root Zone (Annualized, Ibs/ac) 10. N in Irrigation Water* (Annualized, Ibs/ac) 11. Organic Amendments*	Recommended/	Actual N
(lbs, to 8. Nitro Split Fer Irrigation Soil Tes Tissue/F Fertigati Foliar N Cover C Variable	ns, etc.) ogen Eff (Check a tilizer Ap n Water I ting Petiole Te on Applicat crops Rate Ap	iciency Practices* all that apply) oplications N Testing esting	7. Harvested Yield* NITROGEN MANAGEMENT Nitrogen Sources 9. Soil – Available N in Root Zone (Annualized, Ibs/ac) 10. N in Irrigation Water* (Annualized, Ibs/ac) 11. Organic Amendments* (Manure/Compost/Other, Ibs/ac estimate)	Recommended/	Actual N

<sup>1</sup> A secondary irrigation system could be used for crop germination, frost protection, crop cooling, etc.

- Grouped by Field or Management Unit
- Max acreage per field = 640 ac
- Integration of Irrigation Practice Questions from Farm Evaluation
- Estimated Irrigation Demands
  - Applied Water
  - Crop Usage
- Nitrate-N Levels in Irrigation Water
- Conversion of Nitrate-N (ppm) to lbs/ac available at agmpep.com
- Planning Portion requires Certification in HV areas

#### IRRIGATION AND NITROGEN MANAGEMENT PLAN (INMP) WORKSHEET

#### **IRRIGATION AND NITROGEN MANAGEMENT PLAN (INMP) WORKSHEET**

N	lember ID: _		NMP Field or MU:	Crop:	Total	Acres:
1				IRRIGATION MANAGEMENT		
		1 Irriga	tion Method*	Pre-Season	Planning	
		for Prima	ry; if applicable, check secondary)			
(			Drip Micro Sprinkler Furrow	3. Anticipated Crop Irrigation (inches)		
			Sprinkler Border Strip Flood	4. Irrigation Water N Concentration (ppm or mg/L, as NO₃-N)		
			5. Irrigation I	Efficiency Practices* (Check all that a	apply)	
$\langle$	🗆 Waterap	T in sche	duling irrigations schedule to need robe (e.g. tensiometer)		on Probe	- 1
				ARVEST / YIELD INFORMATION		
			Harvest / Yield	Information	Expected (A)	Actual (B)
	6. Product (lbs, to	ion Unit ns, etc.)		7. Harvested Yield*		
				NITROGEN MANAGEMENT		
	8 Nitro	ogen Effi (Check al	ciency Practices* Il that apply)	Nitrogen Sources	Recommended/ Planned N (A)	Actual N (B)
	Split Fer	tilizer Ap	plications	9. Soil – Available N in Root Zone (Annualized, Ibs/ac)		
	☐ Irrigation ☐ Soil Tes		Testing	<b>10. N in Irrigation Water*</b> (Annualized, lbs/ac)		
	☐ Tissue/F ☐ Fertigati		sting	11. Organic Amendments* (Manure/Compost/Other, lbs/ac estimate)		
	☐ Foliar N ☐ Cover C	• •	on	12. Dry/Liquid Fertilizer N* (lbs/ac)		
	U Variable		plications using GPS	13. Foliar Fertilizer N* (lbs/ac)		
	Other:			14. TOTAL NITROGEN (lbs/ac)		

<sup>1</sup> A secondary impation system could be used for crop germination, frost protection, crop cooling, etc.

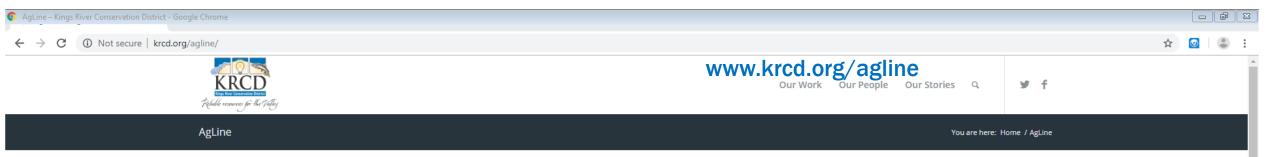
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#### IRRIGATION AND NITROGEN MANAGEMENT PLAN (INMP) WORKSHEET

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Member ID: I	NMP Field or MU:	Crop:	Total Acres:	
		IRRIGATION MANAGEMENT		
1. Irriga	tion Method*	Pre-Seasor	n Planning	
one for S Primary Secondary	Contract of the second s	2. Crop Evapotranspiration (ET, inches)		
	Drip Micro Sprinkler Furrow	3. Anticipated Crop Irrigation (inches)		
	Sprinkler Border Strip Flood	4. Irrigation Water N Concentration (ppm or mg/L, as NO <sub>8</sub> -N)		
	5. Irrigation E	Efficiency Practices* (Check all that a	apply)	
<ul> <li>Laser Leveling</li> <li>Use of ET in sched</li> <li>Water application s</li> <li>Use of moisture pr</li> </ul>	schedule to need obe (e.g. tensiometer)			-1
	L1/	ARVEST / YIELD INFORMATION		
				an a secondar
	Harvest / Yield I		Expected (A)	Actual (B)
6. Production Unit (lbs, tons, etc.)			Expected (A)	Actual (B)
(lbs, tons, etc.)	Harvest / Yield I	nformation	Expected (A)	Actual (B)
(lbs, tons, etc.) 8. Nitrogen Effic		nformation 7. Harvested Yield*	Expected (A) Recommended/ Planned N (A)	Actual (B) Actual N (B)
(lbs, tons, etc.) 8. Nitrogen Effic	Harvest / Yield I ciency Practices* I that apply)	nformation 7. Harvested Yield* NITROGEN MANAGEMENT	Recommended/	Actual N
(lbs, tons, etc.) 8. Nitrogen Effic (Check al	Harvest / Yield I ciency Practices* I that apply)	nformation 7. Harvested Yield* <u>NITROGEN MANAGEMENT</u> <u>Nitrogen Sources</u> 9. Soil – Available N in Root Zone	Recommended/	Actual N
(Ibs, tons, etc.) 8. Nitrogen Effic (Check all Split Fertilizer App	Harvest / Yield I ciency Practices* I that apply) plications Testing	nformation 7. Harvested Yield* NITROGEN MANAGEMENT Nitrogen Sources 9. Soil – Available N in Root Zone (Annualized, Ibs/ac) 10. N in Irrigation Water*	Recommended/	Actual N
(Ibs, tons, etc.)  8. Nitrogen Effic (Check all  Split Fertilizer App Irrigation Water N Soil Testing Tissue/Petiole Test Fertigation Foliar N Application	Harvest / Yield I	nformation 7. Harvested Yield* NITROGEN MANAGEMENT Nitrogen Sources 9. Soil – Available N in Root Zone (Annualized, Ibs/ac) 10. N in Irrigation Water* (Annualized, Ibs/ac) 11. Organic Amendments*	Recommended/	Actual N
(Ibs, tons, etc.)  8. Nitrogen Effic (Check all  Split Fertilizer App Irrigation Water N  Soil Testing  Tissue/Petiole Testing  Fertigation	Harvest / Yield I	Information         7. Harvested Yield*         NITROGEN MANAGEMENT         Nitrogen Sources         9. Soil – Available N in Root Zone (Annualized, Ibs/ac)         10. N in Irrigation Water* (Annualized, Ibs/ac)         11. Organic Amendments* (Manure/Compost/Other, Ibs/ac estimate)	Recommended/	Actual N

<sup>1</sup> A secondary irrigation system could be used for crop germination, frost protection, crop cooling, etc.



#### AgLine Crop Water Use

The AgLine information system provides crop water use information for the Kings River service area. Information provided for each crop includes:

- Crop water use for the past 7 days
- Predicted water use for the next 7 days
- Total crop water use season to date

These numbers, updated weekly, can be used to assist growers in irrigation management decisions. AgLine includes crop water use data for 31 cropping cases.

Click the tabs below to view specific crop water use information.

Field	and	Row	Crops	Water	Use
riciu	anu	11000	CIOPS	vvacci	030

Tree and Vine Water Use

🕂 Alfalfa
April Beans
Hay Beans
June Beans
Corn
Early April Cotton
Hid April Cotton
🗄 Early May Cotton

Early Almonds
Late Almonds
Citrus
Olives
Grapes, Single Wire
Grapes, 4 ft Crossarm
Kiwis
Pistachios

- Grouped by Field or Management Unit
- Max acreage per field = 640 ac
- Integration of Irrigation Practice Questions from Farm Evaluation
- Estimated Irrigation Demands
  - Applied Water
  - Crop Usage
- Nitrate-N Levels in Irrigation Water
- Conversion of Nitrate-N (ppm) to lbs/ac available at agmpep.com
- Planning Portion requires Certification in HV areas

#### IRRIGATION AND NITROGEN MANAGEMENT PLAN (INMP) WORKSHEET

#### **IRRIGATION AND NITROGEN MANAGEMENT PLAN (INMP) WORKSHEET**

ember ID: _		INMP Field or MU:	Crop:	Total	Acres:
			IRRIGATION MANAGEMENT		
	1. Irriga	ation Method*	Pre-Seasor	1 Planning	
		ry; if applicable, check Secondary)	2. Crop Evapotranspiration (ET, inches)		
		Drip		-	
		Micro Sprinkler	3. Anticipated Crop Irrigation		
		Furrow	(inches)		
		Sprinkler			
		Border Strip	4. Irrigation Water N Concentration		
		Flood	(ppm or mg/L, as NO3-N)		
		5 Irrigation	Efficiency Practices* (Check all that a	apply)	
Water ap	oplication	duling irrigations schedule to need robe (e.g. tensiometer	Pressure Bomb     Other )     Other		-
		ŀ	ARVEST / YIELD INFORMATION		
		Harvest / Yield	Information	Expected (A)	Actual (B)
6. Product (lbs, to	tion Unit	Harvest / Yield	Information 7. Harvested Yield*	Expected (A)	Actual (B)
		Harvest / Yield		Expected (A)	Actual (B)
(lbs, to 8. Nitre	ons, etc.) ogen Effi	Harvest / Yield	7. Harvested Yield*	Expected (A) Recommended/ Planned N (A)	Actual (B) Actual N (B)
(lbs, to 8. Nitre	ons, etc.) ogen Effi (Check a	ciency Practices* Il that apply)	7. Harvested Yield* NITROGEN MANAGEMENT	Recommended/	Actual N
(lbs, to 8. Nitro	ons, etc.) ogen Effi (Check a rtilizer Ap n Water N	iciency Practices* Il that apply) plications	7. Harvested Yield* NITROGEN MANAGEMENT Nitrogen Sources 9. Soil – Available N in Root Zone (Annualized, Ibs/ac) 10. N in Irrigation Water*	Recommended/	Actual N
(lbs, to 8. Nitro Split Fe Irrigation Soil Tes Tissue/f	ons, etc.) ogen Effi (Check a rtilizer Ap n Water N sting Petiole Te	ciency Practices* Il that apply) plications I Testing	7. Harvested Yield* NITROGEN MANAGEMENT Nitrogen Sources 9. Soil – Available N in Root Zone (Annualized, Ibs/ac) 10. N in Irrigation Water* (Annualized, Ibs/ac) 11. Organic Amendments*	Recommended/	Actual N
(lbs, to 8. Nitra Split Fe Irrigation Soil Tes Soil Tes Tissue/F Fertigat	ons, etc.) ogen Effi (Check a rtilizer Ap n Water N sting Petiole Te ion Applicati	iciency Practices* Il that apply) plications I Testing esting	7. Harvested Yield* NITROGEN MANAGEMENT Nitrogen Sources 9. Soil – Available N in Root Zone (Annualized, Ibs/ac) 10. N in Irrigation Water* (Annualized, Ibs/ac)	Recommended/	Actual N
(lbs, to 8. Nitra Split Fe Irrigation Soil Tes Soil Tes Fertigat Fertigat Cover C	ons, etc.) ogen Effii (Check a rtilizer Ap n Water N sting Petiole Te ion Applicati Crops	iciency Practices* Il that apply) plications I Testing esting	7. Harvested Yield* NITROGEN MANAGEMENT Nitrogen Sources 9. Soil – Available N in Root Zone (Annualized, Ibs/ac) 10. N in Irrigation Water* (Annualized, Ibs/ac) 11. Organic Amendments* (Manure/Compost/Other, Ibs/ac estimate) 12. Dry/Liquid Fertilizer N* (Ibs/ac)	Recommended/	Actual N
(lbs, to 8. Nitra Split Fer Irrigation Soil Tes Soil Tes Fertigat Fertigat Cover C Variable	ons, etc.) ogen Effi (Check a rtilizer Ap n Water N sting Petiole Te ion Applicati Crops e Rate Ap	plications Testing on	7. Harvested Yield* NITROGEN MANAGEMENT Nitrogen Sources 9. Soil – Available N in Root Zone (Annualized, Ibs/ac) 10. N in Irrigation Water* (Annualized, Ibs/ac) 11. Organic Amendments* (Manure/Compost/Other, Ibs/ac estimate)	Recommended/	Actual N

<sup>1</sup> A secondary irrigation system could be used for crop germination, frost protection, crop cooling, etc.

- Grouped by Field or Management Unit
- Max acreage per field = 640 ac
- Integration of Irrigation Practice Questions from Farm Evaluation
- Estimated Irrigation Demands
  - Applied Water
  - Crop Usage
- Nitrate-N Levels in Irrigation Water
- Conversion of Nitrate-N (ppm) to lbs/ac available at agmpep.com
- Planning Portion requires Certification in HV areas

#### IRRIGATION AND NITROGEN MANAGEMENT PLAN (INMP) WORKSHEET

#### **IRRIGATION AND NITROGEN MANAGEMENT PLAN (INMP) WORKSHEET**

			Crop:	lotal	Total Acres:	
	_	_	IRRIGATION MANAGEMENT			
	1. Irrig	gation Method*		Season	Planning	
		- nary; if applicable, cheo r Secondary) arv <sup>1</sup>	2. Crop Evapotranspiration (ET, inches)			
		Drip				
		Micro Sprinkler	3. Anticipated Crop Irrigation			
		Furrow	(inches)			
		Sprinkler				
		Border Strip	4. Irrigation Water N Concern	tration		
		Flood				
				nat a	apply)	
Use of r	noisture	probe (e	First Alert	_		-
(lbs, to	ons, etc.) rogen Ef		Inmediate Results" DRINKING WATER TEST KIT Protect your family from tarmful dements that might be in your drinking water. With the tarmful dements that might be in your drinking water. Tests To EPA Stadards		Expected (A) Recommended/ Planned N (A)	Actual (B) Actual N (B)
(lbs, to 8. Nitr	rogen Ef (Check ertilizer A on Water	fficiency all that a	DRINKING WATER         Test Kit         Protect your family from         harmful elements that might         be nour drinking water.         two protect your family from         harmful elements that might         be nour drinking water.         two protect your family from         be nour drinking water.         two protect your family from         Description         Description         Description         Description         Pasticides         Name         Description         Pasticides         Restrictes         Pasticides         Pasticides	e	Recommended/	Actual N
8. Nitr	ons, etc.) rogen Ef (Check ertilizer A on Water sting Petiole 1	fficiency all that a pplicatio N Testin	Protect your family from harmful elements that might be in our drinking water.	e 	Recommended/	Actual N
(lbs, to 8. Nitr Split Fe Irrigatio Soil Tes Tissue/	ons, etc.) rogen Ef (Check ertilizer A on Water sting Petiole 1 tion	fficiency all that a opplicatio N Testin Festing	<section-header></section-header>	-	Recommended/	Actual N
(lbs, to 8. Nitr Split Fe Irrigatio Soil Tes Soil Tes Fertigat Fertigat	ons, etc.) rogen Ef (Check ertilizer A on Water sting Petiole 1 tion N Applica Crops e Rate A	fficiency all that a pplicatio N Testin Festing ation	PRINKING WATER Protect your family from harmful demants that might be in your drinkling water.	=)	Recommended/	Actual N

<sup>1</sup> A secondary irrigation system could be used for crop germination, frost protection, crop cooling, etc. **\*(Bold Text)** Data to be reported to the Coalition on the INMP Summary Report, based on Actual Yield and Actual N.

- Grouped by Field or Management Unit
- Max acreage per field = 640 ac
- Integration of Irrigation Practice Questions from Farm Evaluation
- Estimated Irrigation Demands
  - Applied Water
  - Crop Usage
- Nitrate-N Levels in Irrigation Water
- Conversion of Nitrate-N (ppm) to lbs/ac available at agmpep.com
- Planning Portion requires Certification in HV areas

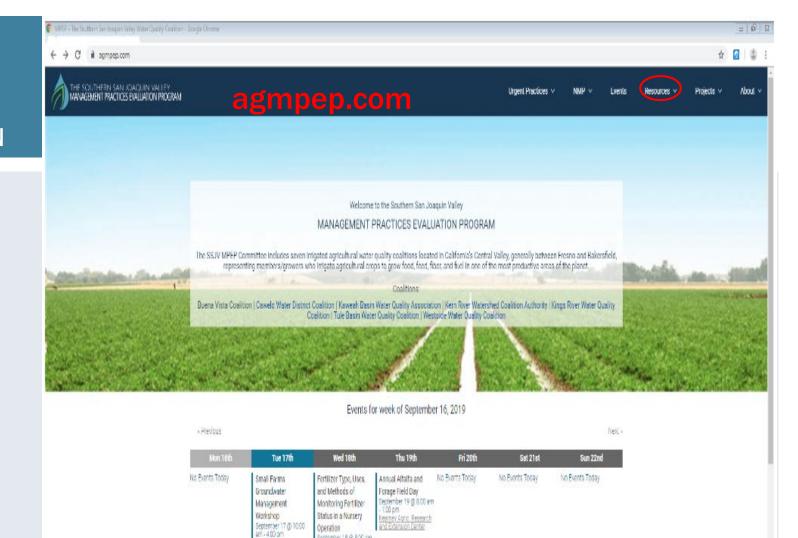
#### IRRIGATION AND NITROGEN MANAGEMENT PLAN (INMP) WORKSHEET

#### **IRRIGATION AND NITROGEN MANAGEMENT PLAN (INMP) WORKSHEET**

lember ID: INMP Field or MU:			Crop:	Total Acres:	
			IRRIGATION MANAGEMENT		
	1. Irriga	tion Method*	Pre-Seasor	n Planning	
		ry; if applicable, check econdary)	2. Crop Evapotranspiration (ET, inches)		
		Drip			
		Micro Sprinkler	3. Anticipated Crop Irrigation		
		Furrow	(inches)		
		Sprinkler			
		Border Strip	4. Irrigation Water N Concentration		
		Flood	(ppm or mg/L, as NO <sub>3</sub> -N		
		5 Irrigation F	Efficiency Practices* (Check all that a		
□ Waterap	T in sche	duling irrigations schedule to need robe (e.g. tensiometer)	Pressure Bomb     Other     Other     Other		-
		H/	ARVEST / YIELD INFORMATION		_
Harvest / Yield I					
		Harvest / Yield I	nformation	Expected (A)	Actual (B)
6. Product (lbs, to	ion Unit ns, etc.)	Harvest / Yield I	nformation 7. Harvested Yield*	Expected (A)	Actual (B)
		Harvest / Yield I		Expected (A)	Actual (B)
(lbs, to 8. Nitre	ons, etc.) ogen Effi	Harvest / Yield I ciency Practices* I that apply)	7. Harvested Yield*	Expected (A) Recommended/ Planned N (A)	Actual (B) Actual N (B)
(lbs, to 8. Nitre	ons, etc.) ogen Effi (Check al	ciency Practices* I that apply)	7. Harvested Yield* NITROGEN MANAGEMENT	Recommended/	Actual N
(lbs, to 8. Nitro	ns, etc.) ogen Effi (Check al rtilizer App n Water N	ciency Practices* I that apply) plications	<ul> <li>7. Harvested Yield*</li> <li>NITROGEN MANAGEMENT</li> <li>Nitrogen Sources</li> <li>9. Soil – Available N in Root Zone</li> </ul>	Recommended/	Actual N
(lbs, to 8. Nitro Split Fer Irrigation Soil Tes	ns, etc.) ogen Effi (Check al rtilizer App n Water N ting Petiole Te	ciency Practices* I that apply) plications Testing	<ul> <li>7. Harvested Yield*</li> <li>NITROGEN MANAGEMENT Nitrogen Sources</li> <li>9. Soil – Available N in Root Zone (Annualized, Ibs/ac)</li> <li>10. N in Irrigation Water*</li> </ul>	Recommended/	Actual N
(lbs, to 8. Nitro Split Fer Irrigation Soil Tes Soil Tes Tissue/F Fertigati	ns, etc.) ogen Effi (Check al ntilizer App n Water N ting Petiole Te ion Applicatio	ciency Practices* I that apply) plications Testing sting	<ul> <li>7. Harvested Yield*</li> <li>NITROGEN MANAGEMENT <ul> <li>Nitrogen Sources</li> </ul> </li> <li>9. Soil – Available N in Root Zone <ul> <li>(Annualized, Ibs/ac)</li> </ul> </li> <li>10. N in Irrigation Water* <ul> <li>(Annualized, Ibs/ac)</li> </ul> </li> <li>11. Organic Amendments*</li> </ul>	Recommended/	Actual N
(lbs, to 8. Nitro Split Fer Irrigation Soil Tes Soil Tes Tissue/F Fertigati Foliar N Cover C	ns, etc.) ogen Effi (Check al rtilizer App n Water N ting Petiole Te ion Applicatio crops a Rate App	ciency Practices* I that apply) plications Testing sting on plications using GPS	7. Harvested Yield* NITROGEN MANAGEMENT Nitrogen Sources 9. Soil – Available N in Root Zone (Annualized, Ibs/ac) 10. N in Irrigation Water* (Annualized, Ibs/ac) 11. Organic Amendments* (Manure/Compost/Other, Ibs/ac estimate)	Recommended/	Actual N

<sup>1</sup> A secondary irrigation system could be used for crop germination, frost protection, crop cooling, etc.

- Grouped by Field or Management Unit
- Max acreage per field = 640 ac
- Integration of Irrigation **Practice Questions from Farm Evaluation**
- **Estimated Irrigation** Demands
  - **Applied Water** ٠
  - Crop Usage
- Nitrate-N Levels in **Irrigation Water**
- **Conversion of Nitrate-N** • (ppm) to lbs/ac available at agmpep.com
- **Planning Portion requires Certification in HV areas**



September 18 (\$ 8:00 am

- 5:00 pm Tercet Specially Products

Agronomy Online Courses September 18 @ 800 cm

Fertilizers: Types, Use, and Methods of

Monitoring Fertilizer Status in a Nursery

areat Specially Products

Operation September 18 (8 8:00 am - 5.00 pm

Kem/ invo Room, U

MPEP Irrigation Water Nitrogen Contribution Calculator - Google Chrome		
← → C ■ agmpep.com/calc-irrn/	⊕ ☆	<b>⊙ ⊖</b> :
MPEP Calculator Irrigation Water	🗘 Start	MPEP Home Over
Single (Irrigation)		
O Multiple (e.g., Surface Water and Groundwater)		
2 > Enter Irrigation Water Nitrogen Concentration (mg/L, same as ppm):		
Water Source 1 (e.g., Surface Water)		
Nitrate:         0         ● (NO <sub>3</sub> )-N         ● (NO <sub>3</sub> )         □ Other N in Water €		
Mineral N in Water (mg/L):		
3 > Calculate Applied Water: 9		
Water Source 1		
A > Specify your delivery information: ④		
Volume		
B > Enter Inputs (disabled inputs are auto-calculated):		
Volume (acre-feet) 0		
Area Irrigated (acres): 0		
Applied Water (depth, inches)		
4 > Enter Estimated Irrigation % Efficiency: 4		
Water Source 1		
% of Applied Water: 100		
Zalculation Result:		
N (pounds of N per acre) in Applied Water (as input in Step 3):		

- Grouped by Field or Management Unit
- Max acreage per field = 640 ac
- Integration of Irrigation Practice Questions from Farm Evaluation
- Estimated Irrigation Demands
  - Applied Water
  - Crop Usage
- Nitrate-N Levels in Irrigation Water
- Conversion of Nitrate-N (ppm) to lbs/ac available at agmpep.com
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#### IRRIGATION AND NITROGEN MANAGEMENT PLAN (INMP) WORKSHEET

#### **IRRIGATION AND NITROGEN MANAGEMENT PLAN (INMP) WORKSHEET**

		INMP Field or MU:	Crop:	Total	_ Total Acres:	
			IRRIGATION MANAGEMENT			
	1. Irrig	ation Method*	Pre-Season	ı Planning		
		ary; if applicable, check Secondary) y <sup>1</sup>	2. Crop Evapotranspiration (ET, inches)			
		Drip				
		Micro Sprinkler	3. Anticipated Crop Irrigation			
		Furrow	(inches)			
		Sprinkler				
		Border Strip	4. Irrigation Water N Concentration			
		Flood	(ppm or mg/L, as NO₃-N)			
		5. Irrigation E	Efficiency Practices* (Check all that a	apply)		
🗆 Water ap	plication	eduling irrigations schedule to need probe (e.g. tensiometer) H/	Pressure Bomb     Other     Other     Other		-	
		Harvest / Yield I		Expected (A)	Actual (B)	
	6. Production Unit (lbs, tons, etc.)					
	ns, etc.)		7. Harvested Yield*			
	ns, etc.)		7. Harvested Yield* NITROGEN MANAGEMENT			
	ogen Eff			Recommended/ Planned N (A)	Actual N (B)	
	ogen Eff (Check a	iciency Practices* all that apply)	NITROGEN MANAGEMENT			
Split Fer	ogen Eff (Check a tilizer Ap Water I	Ticiency Practices* all that apply) oplications	NITROGEN MANAGEMENT Nitrogen Sources 9. Soil – Available N in Root Zone (Annualized, Ibs/ac) 10. N in Irrigation Water*			
Split Fer	ogen Eff (Check a tilizer Ap Water I ting	ficiency Practices* all that apply) oplications N Testing	NITROGEN MANAGEMENT Nitrogen Sources 9. Soil – Available N in Root Zone (Annualized, Ibs/ac)			
Split Fer	ogen Eff (Check a tilizer Ap NVater I ting Petiole To	ficiency Practices* all that apply) oplications N Testing	NITROGEN MANAGEMENT Nitrogen Sources 9. Soil – Available N in Root Zone (Annualized, Ibs/ac) 10. N in Irrigation Water* (Annualized, Ibs/ac)			
Split Fer Irrigation Soil Test Tissue/F Fertigation Foliar N	ogen Eff (Check a tilizer Ap Water I ting Petiole To on Applicat	Ticiency Practices* all that apply) oplications N Testing esting	NITROGEN MANAGEMENT Nitrogen Sources 9. Soil – Available N in Root Zone (Annualized, Ibs/ac) 10. N in Irrigation Water* (Annualized, Ibs/ac) 11. Organic Amendments*			
Split Fer Irrigation Soil Test Tissue/F Fertigatio Foliar N Cover C	ogen Eff (Check a tilizer Ap Water I ting Petiole To on Applicat rops Rate Ap	Ticiency Practices* all that apply) oplications N Testing esting	NITROGEN MANAGEMENT         Nitrogen Sources         9. Soil – Available N in Root Zone (Annualized, Ibs/ac)         10. N in Irrigation Water* (Annualized, Ibs/ac)         11. Organic Amendments* (Manure/Compost/Other, Ibs/ac estimate)			

<sup>1</sup> A secondary irrigation system could be used for crop germination, frost protection, crop cooling, etc.
\*(Bold Text) Data to be reported to the Coalition on the INMP Summary Report, based on Actual Yield and Actual N.

Plan Certifier Initia

#### **IRRIGATION & NITROGEN MANAGEMENT PRACTICES**

Complete the following tables for each field or Management Unit (refer to ILRP Parcel and Field Inventory Sheet).

	Primary Irrigation Method (Select one)						Secondary Irrigation Method (Select one)					
Field or MU	Drip	Micro Sprinkler	Furrow	Sprinkler	Border Strip	Flood	Drip	Micro Sprinkler	Furrow	Sprinkler	Border Strip	Flood

		Irrigation Efficiency Practices (Check all that apply)									
Field or MU	Laser Leveling	Use of ET in scheduling irrigations	Water application scheduled to need	Use of moisture probe (e.g. tensiometer)	Soil Moisture Neutron Probe	Pressure Bomb	Other				

		Nitrogen Efficiency Practices (Check all that apply)							
	Split Fertilizer Applications	Irrigation Water N Testing	Soil Testing	Tissue/ Petiole Testing	Fertigation	Foliar N Application	Cover Crops	Variable Rate Applications using GPS	Other
Field or MU		_		_	_		_	_	

#### IRRIGATION AND NITROGEN MANAGEMENT PLAN (INMP) SUMMARY REPORT

#### IRRIGATION AND NITROGEN MANAGEMENT PLAN (INMP) SUMMARY REPORT

Refer to your Irrigation and Nitrogen Management Plan (INMP) Worksheet and Parcel Inventory for information to complete an INMP Summary. Report for each field or Management Unit.

STEP 1: GENERAL INFORMATION	STEP 2: OUTLIER NOTIFICATION RECEIPT	STEP 3: INMP CERTIFICATION METHOD
Member ID:	On (Date), the Coalition provided information about this membership's	Certified INMP Specialist (e.g. certified crop adviser who has completed the CDFA
Forms Completed By:	nitrogen efficiency for the previous crop year and identified management units that were	training program)
	considered outliers compared to other Coalition members growing the same crop.	Self-Certified (CDFA training program)
Crop Year		Self-Certified (follows NRCS or UC
(Harvested):	Please check the box below if you were identified as an outlier by the Coalition.	Cooperative Extension site-specific recommendations)
		Self-Certified (No fertilizers applied)

#### STEP 4: INMP SUMMARY REPORT

Complete the table below for each field or management unit for this membership. All values should be on a per acre basis.

Field or Management Unit	Сгор	Crop Age	Total Irrigated Acres			Applied acre		Yield	Prod. Unit	Yield Info*
Refer to Parcel Inventory		Perennial only ( (years)	(acres)	N in Irrigation Water (Ibs/acre)	Organic Amendments (Ibs/acre)	Dry/Liquid Fertilizers (Ibs/acre)	Foliar Fertilizers (lbs/acre)	Harvested Yield (Ibs or (Ibs/acre or tons) tons/acre)		

"Use this column to provide information about yield i.e. nonbearing; crop not harvested; type of harvest (e.g. silage, grain). If you harvest straw, pi contact your Coalition.

- Report by Field (640 ac limit) or Management Unit
- Report Date the Coalition Provided Nitrogen Efficiency Feedback and if Identified as Outlier
- Note <u>Changes</u> in Reported Data
  - N in Irrigation Water
  - Organic Amendments
  - Dry/Liquid Fertilizers
  - Foliar Fertilizers
  - YIELD
- ALL DATA ON PER ACRE BASIS
- N Applied in lbs/ac

### **IRRIGATION AND NITROGEN MANAGEMENT PLAN (INMP) SUMMARY REPORT**

Refer to your Irrigation and Nitrogen Management Plan (INMP) Worksheet and Parcel Inventory for information to complete an INMP Summary. Report for each field or Management Unit.

STEP 1: GENERAL INFORMATION	STEP 2: OUTLIER NOTIFICATION RECEIPT	STEP 3: INMP CERTIFICATION METHOD
Member ID: Forms Completed By: Crop Year (Harvested): Submittal Date:	On (Date), the Coalition provided information about this membership's nitrogen efficiency for the previous crop year and identified management units that were considered outliers compared to other Coalition members growing the same crop. Please check the box below if you were identified as an outlier by the Coalition.	Certified INMP Specialist (e.g. certified crop adviser who has completed the CDFA training program)     Self-Certified (CDFA training program)     Self-Certified (follows NRCS or UC Cooperative Extension site-specific recommendations)     Self-Certified (No fertilizers applied)

#### STEP 4: INMP SUMMARY REPORT

Complete the table below for each field or management unit for this membership. All values should be on a per acre basis.

Field or Management Unit	Сгор	Crop Age	Total Irrigated Acres			Applied acre		Yield	Prod. Unit	Yield Info*
Refer to Parcel Inventory	Perennial only (acre (years)	(acres)	N in Irrigation Water (Ibs/acre)	Organic Amendments (Ibs/acre)	Dry/Liquid Fertilizers (Ibs/acre)	Foliar Fertilizers (lbs/acre)	Harvested Yield (Ibs/acre or tons/acre)	(Ibs or tons)		
						8				

\*Use this column to provide information about yield i.e. nonbearing; crop not harvested; type of harvest (e.g. silage, grain). If you harvest straw, please contact your Coalition.

- Report by Field (640 ac limit) or Management Unit
- Report Date the Coalition Provided Nitrogen Efficiency Feedback and if Identified as Outlier
- Note <u>Changes</u> in Reported Data
  - N in Irrigation Water
  - Organic Amendments
  - Dry/Liquid Fertilizers
  - Foliar Fertilizers
  - YIELD
- ALL DATA ON PER ACRE BASIS
- N Applied in lbs/ac

### **IRRIGATION AND NITROGEN MANAGEMENT PLAN (INMP) SUMMARY REPORT**

Refer to your Irrigation and Nitrogen Management Plan (INMP) Worksheet and Parcel Inventory for information to complete an INMP Summary. Report for each field or Management Unit.

STEP 1: GENERAL INFORMATION	STEP 2: OUTLIER NOTIFICATION RECEIPT	STEP 3: INMP CERTIFICATION METHOD
Member ID:	On (Date), the Coalition provided information about this membership's	Certified INMP Specialist (e.g. certified crop adviser who has completed the CDFA
Forms	nitrogen efficiency for the previous crop year and identified management units that were	training program)
Completed By:	considered outliers compared to other	Self-Certified (CDFA training program)
Crop Year	Coalition members growing the same crop.	Self-Certified (follows NRCS or UC
(Harvested):	Please check the box below if you were identified as an outlier by the Coalition.	Cooperative Extension site-specific
Submittal Date:	identified as an outlier by the Coalition.	recommendations)
		Self-Certified (No fertilizers applied)

#### STEP 4: INMP SUMMARY REPORT

Complete the table below for each field or management unit for this membership. All values should be on a per acre basis.

Field or Management Unit Refer to Parcel Inventory	Сгор	Crop Age	Total Irrigated Acres		Yield	Prod. Unit	Yield Info*			
	Perennial only (years)	(acres)	N in Irrigation Water (Ibs/acre)	Organic Amendments (Ibs/acre)	Dry/Liquid Fertilizers (Ibs/acre)	Foliar Fertilizers (lbs/acre)	Harvested Yield (Ibs/acre or tons/acre)	(Ibs or tons)		
			8			8				

\*Use this column to provide information about yield i.e. nonbearing; crop not harvested; type of harvest (e.g. silage, grain). If you harvest straw, please contact your Coalition.

- Report by Field (640 ac limit) or Management Unit
- Report Date the Coalition Provided Nitrogen Efficiency Feedback and if Identified as Outlier
- Note <u>Changes</u> in Reported Data
  - N in Irrigation Water
  - Organic Amendments
  - Dry/Liquid Fertilizers
  - Foliar Fertilizers
  - YIELD
- ALL DATA ON PER ACRE BASIS
- N Applied in lbs/ac

### **IRRIGATION AND NITROGEN MANAGEMENT PLAN (INMP) SUMMARY REPORT**

Refer to your Irrigation and Nitrogen Management Plan (INMP) Worksheet and Parcel Inventory for information to complete an INMP Summary. Report for each field or Management Unit.

STEP 1: GENERAL INFORMATION	STEP 2: OUTLIER NOTIFICATION RECEIPT	STEP 3: INMP CERTIFICATION METHOD
Member ID: Forms Completed By: Crop Year (Harvested): Submittal Date:	On (Date), the Coalition provided information about this membership's nitrogen efficiency for the previous crop year and identified management units that were considered outliers compared to other Coalition members growing the same crop. Please check the box below if you were identified as an outlier by the Coalition.	<ul> <li>Certified INMP Specialist (e.g. certified crop adviser who has completed the CDFA training program)</li> <li>Self-Certified (CDFA training program)</li> <li>Self-Certified (follows NRCS or UC Cooperative Extension site-specific recommendations)</li> <li>Self-Certified (No fertilizers applied)</li> </ul>

#### STEP 4: INMP SUMMARY REPORT

Complete the table below for each field or management unit for this membership. All values should be on a per acre basis.

Field or Management Unit	Сгор	Crop Age	Total Irrigated Acres		Yield	Prod. Unit	Yield Info*			
Refer to Parcel Inventory	only	Perennial only (years)	(acres)	N in Irrigation Water (Ibs/acre)	Organic Amendments (Ibs/acre)	Dry/Liquid Fertilizers (Ibs/acre)	Foliar Fertilizers (lbs/acre)	Harvested Yield (Ibs/acre or tons/acre)	(Ibs or tons)	
			-							
las Hela astrono de ser										

\*Use this column to provide information about yield i.e. nonbearing; crop not harvested; type of harvest (e.g. silage, grain). If you harvest straw, please contact your Coalition.

- Practices Used in each Field or Management Unit
- Information requested:
  - Irrigation Method
  - Irrigation Efficiency
  - Nitrogen Efficiency
- Updated and Reported
  Yearly

#### **IRRIGATION & NITROGEN MANAGEMENT PRACTICES**

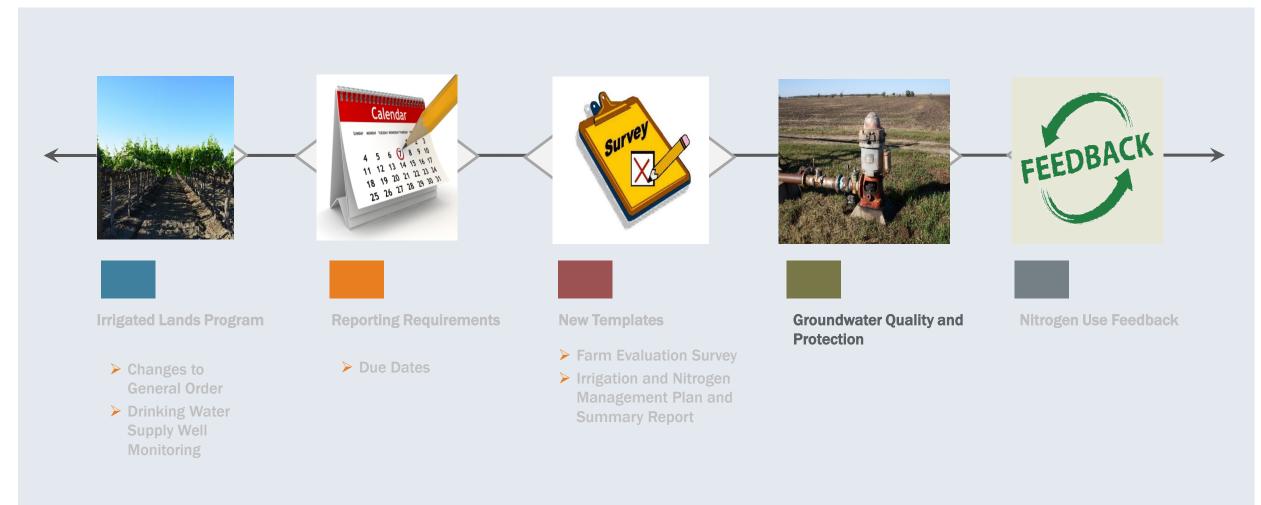
Complete the following tables for each field or Management Unit (refer to ILRP Parcel and Field Inventory Sheet).

	Primary Irrigation Method (Select one)							Secondary Irrigation Method (Select one)					
Field or MU	Drip	Micro Sprinkler	Furrow	Sprinkler	Border Strip	Flood	Drip	Micro Sprinkler	Furrow	Sprinkler	Border Strip	Flood	
]													
<u></u>													

		Irrigation Efficiency Practices (Check all that apply)									
Field or MU	Laser Leveling	Use of ET in scheduling irrigations	Water application scheduled to need	Use of moisture probe (e.g. tensiometer)	Soil Moisture Neutron Probe	Pressure Bomb	Other				

	Nitrogen Efficiency Practices (Check all that apply)									
	Split Fertilizer Applications	Irrigation Water N Testing	Soil Testing	Tissue/ Petiole Testing	Fertigation	Foliar N Application	Cover Crops	Variable Rate Applications using GPS	Other	
Field or MU			~	2011 C			1	-		

### **TODAY'S AGENDA**



### **GROUNDWATER QUALITY MONITORING**





#### A9F0093

Groundwater Program 2018 - 2019 Groundwater Program 2018 - 2019

#### Certificate of Analysis

Sample ID: A9F0093-23 Sampled By: Eric Athorp Sample Description: TM14S22E02 // KRWQC00023 Sample Date - Time: 06/27/19 - 10:05 Matrix: Ground Water Sample Type: Grab

#### BSK Associates Laboratory Fresno

General Chemistry

Analyte	Method	Result	MDL	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
Bicarbonate as CaCO3	SM 2320 B	70		3.0	mg/L	1	A909153	06/28/19	06/28/19	
Carbonate as CaCO3	SM 2320 B	ND		3.0	mg/L	1	A909153	06/28/19	06/28/19	
Nitrate as N	EPA 300.0	2.2	0.099	0.23	mg/L	1	A909190	06/28/19 20:06	06/28/19	
Total Dissolved Solids	SM 2540C	150		5.0	mg/L	1	A909371	07/03/19	07/09/19	

Metals

Analyte	Method	Result	MDL	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
Boron	EPA 200.7	ND	0.046	0.10	mg/L	1	A909289	07/02/19	07/03/19	
Calcium	EPA 200.7	14	0.046	0.10	mg/L	1	A909289	07/02/19	07/03/19	
Magnesium	EPA 200.7	10	0.046	0.10	mg/L	1	A909289	07/02/19	07/03/19	
Potassium	EPA 200.7	1.7	0.91	2.0	mg/L	. 1	A909289	07/02/19	07/03/19	J
Sodium	EPA 200.7	13	0.45	1.0	mg/L	1	A909289	07/02/19	07/03/19	



### **GROUNDWATER QUALITY MONITORING**

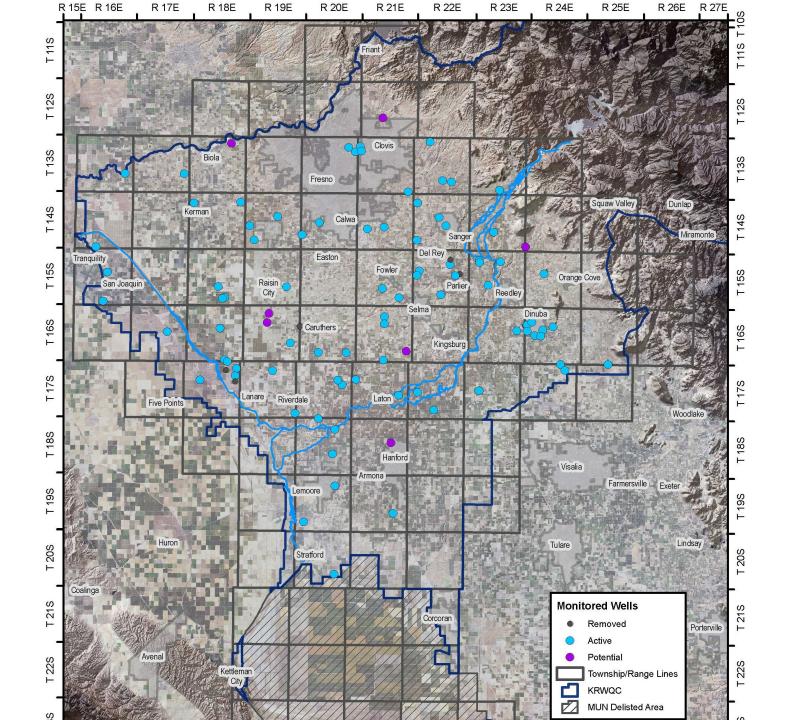


- Two Separate Groundwater Monitoring Requirements now in effect
  - 1: Domestic Drinking Water Well Testing
  - 2: Groundwater Trend Monitoring Plan
  - Testing of Irrigation Wells within the High Vulnerability Area is recommended

### **GROUNDWATER QUALITY TREND MONITORING**



- Annual Survey of Groundwater Quality
  - Mid-Late June Survey Period
- Mix of <u>Shallow</u> Ag, Domestic, and Public Wells
- Test Results are Available to Participating Growers/Agencies
- Must have Well Construction Data
- Long Term Tracking of Water Quality in Uppermost portion of Aquifer
- Still some Gaps in Desired Coverage

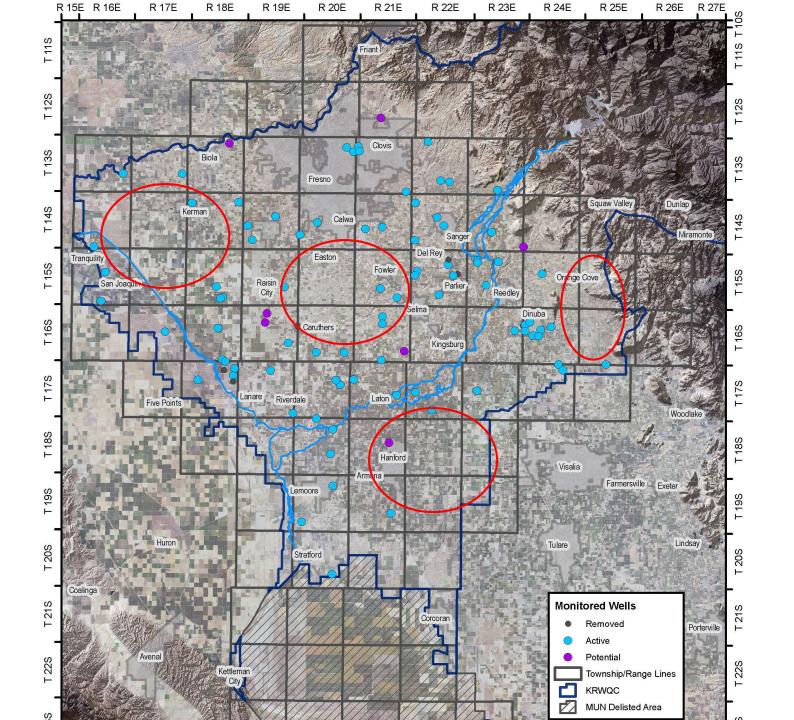


### GROUNDWATER TREND MONITORING NETWORK

-Used to develop water quality trends over time

-Need to resolve spatially

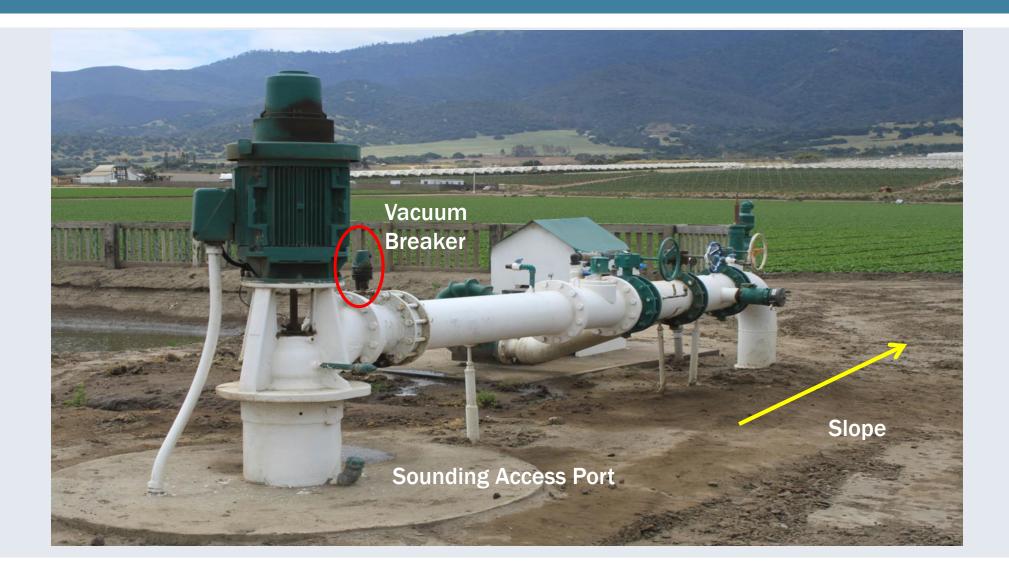
-Sampling will take place in late June/early July



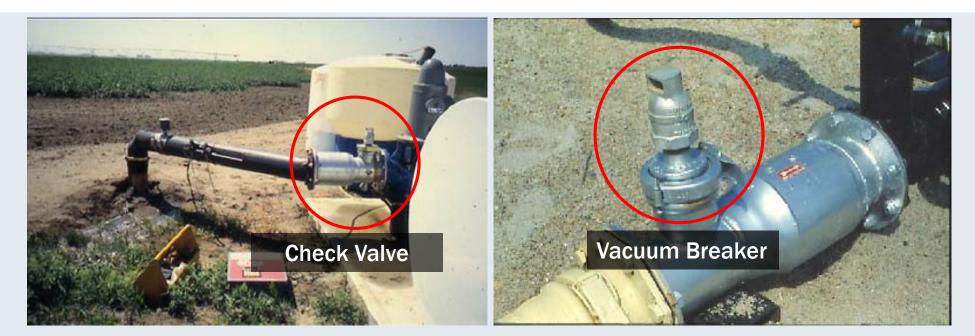
### GROUNDWATER TREND MONITORING NETWORK

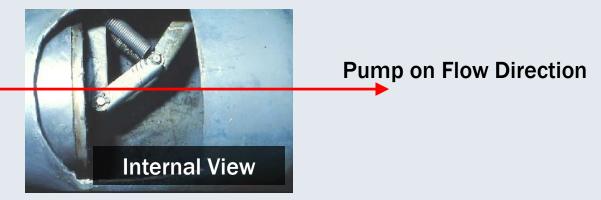
#### -Areas of Interest

### WELLHEAD PROTECTION



### WELLHEAD PROTECTION





## WELLHEAD PROTECTION



## **ADDITIONAL RESOURCES**



#### www.kingsriverwqc.org

- Informational Resources
- Outreach Schedule
- Other Programs related to Water Quality
- Reporting Forms

#### www.krcd.org/agline

- Uses locally generated reference data and applied crop coefficients to provide
- Last 7 days water use
- Next 7 days predicted water use
- Season to Date

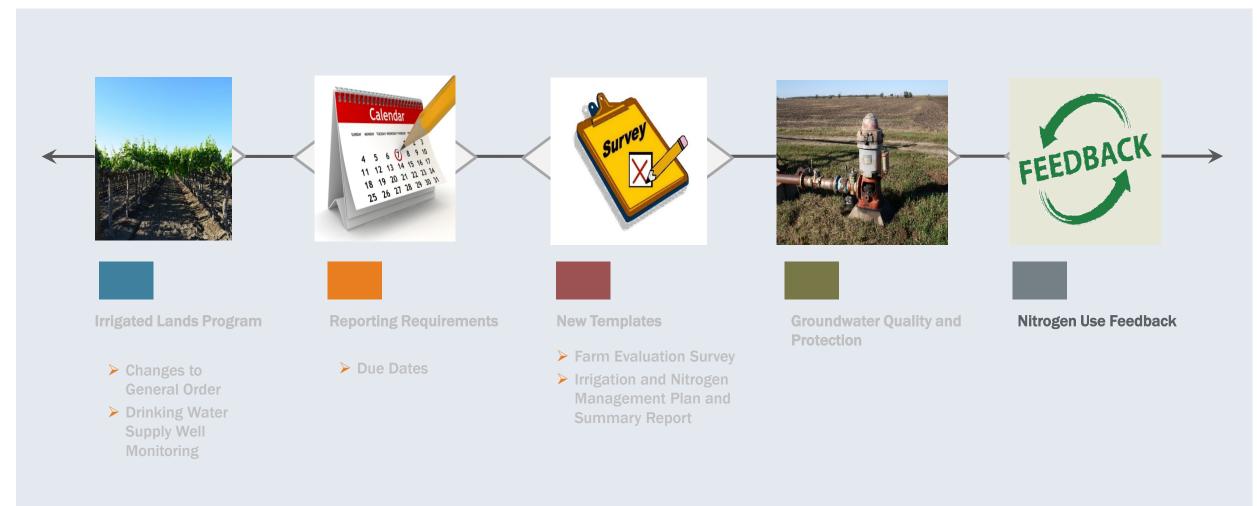
#### agmpep.com

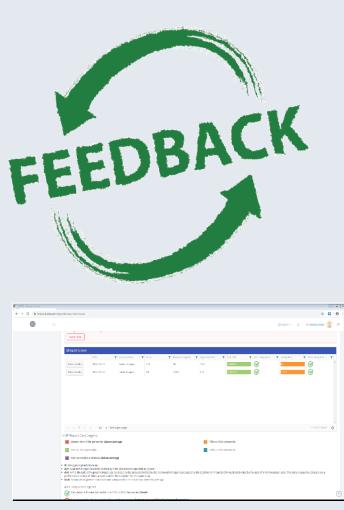
- Detailed Resources on
  - Nitrogen and Crop Management
  - Useful Calculators
  - Future Events of Interest

### Drinking Water Well Testing

https://www.waterboards.ca.gov/centralvalley/ water\_issues/irrigated\_lands/drinking\_water

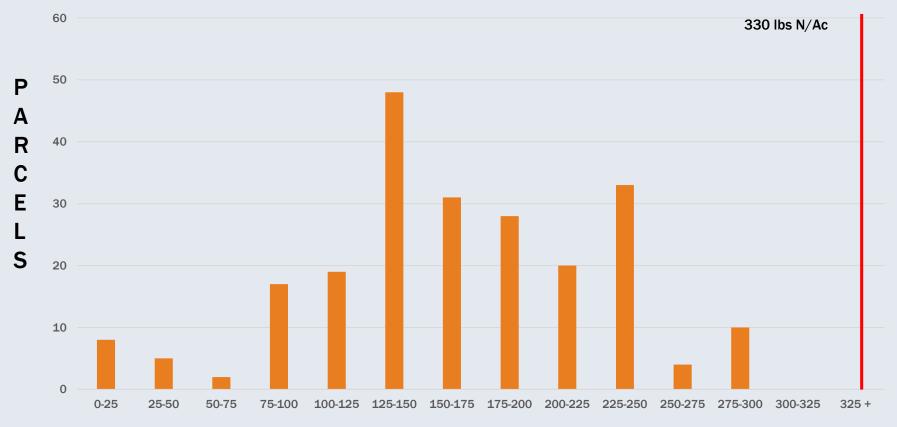
### **TODAY'S AGENDA**





- Coalitions are Required to Analyze and Discuss Nitrogen Application Trends
- How Growers Compare to Others within a Township
  - If Applied/Removed (A/R) is beyond a calculated value (based on data received), parcel would be designated an "outlier"
    - Any metric can be used
  - May or May Not require corrective action on part of grower, depending on conditions
  - Consistently being Identified as an Outlier can trigger increased regulatory inquiry
  - May require Certification of INMP if Outlier in Low Vulnerability Area

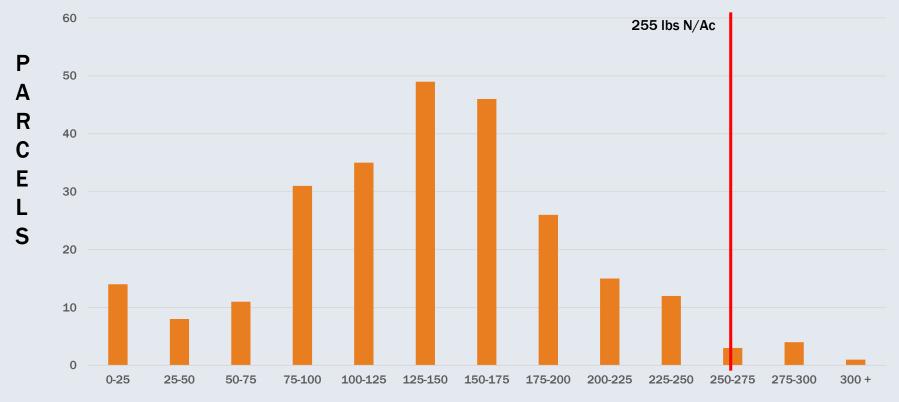
2018 Almonds: N Applied



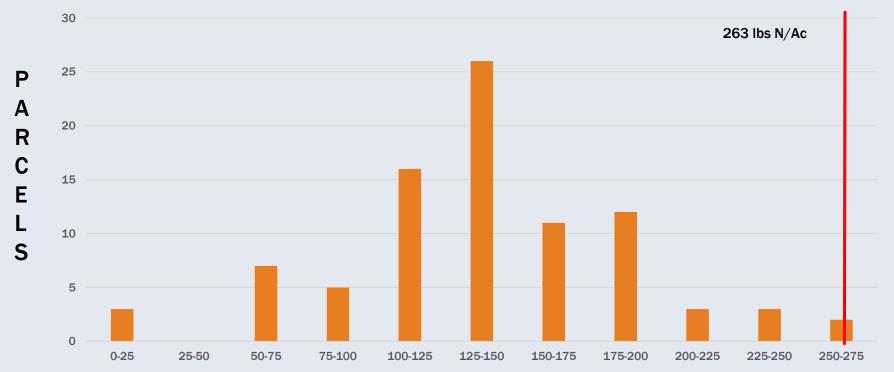
2018 Cotton: N Applied



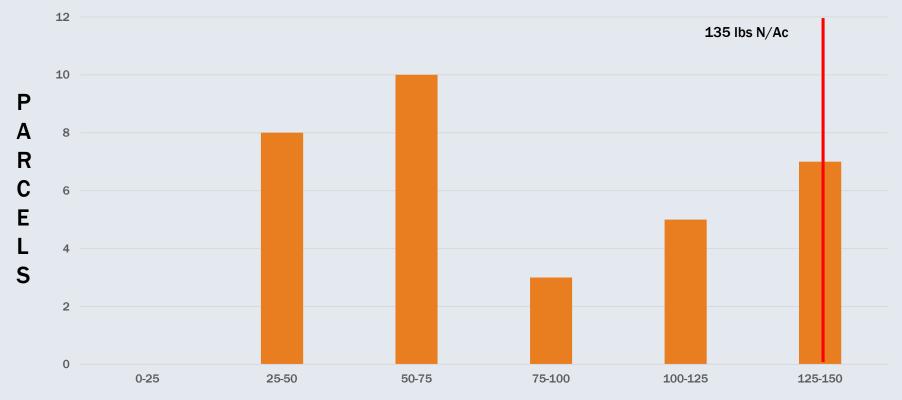
2018 Walnuts: N Applied



**2018** Pistachios: N Applied



2018 Wine Grapes: N Applied



# QUESTIONS





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