

PRIORITY PRACTICES GROUNDWATER MANAGEMENT PRACTICE IMPLEMENTATION REPORT (MPIR)

1 PRIORITY PRACTICES

1.1 TESTING AND ACCOUNTING FOR NITROGEN IN IRRIGATION WATER

1.1.1 Answer the following questions regarding irrigation water nitrogen testing practices:				
Management Practice	Implemented	Plan to Implement	Does Not Apply	Request More Info
ALL irrigation wells sampled and analyzed for nitrogen at least once every three years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Only select wells are sampled and analyzed for nitrogen at least once every three years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Surface/district water sources are sampled and analyzed for nitrogen at least once every three years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Irrigation water quality information obtained from water districts (e.g. annual reports, previous published water quality testing data)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Select the testing/analysis methods used to test for irrigation water nitrogen:				
<i>Analytical laboratory</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Nitrate test strips</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>On farm nitrate meters</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Other (please specify):</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nitrogen fertilizer rates are adjusted based on irrigation water nitrogen tests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Agricultural irrigation water suitability tests analyzed by an agricultural laboratory. <i>These tests typically analyze for pH, salt, alkalinity, boron, chloride, nitrate, other cations, anions, etc.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Click the following link for a list of agricultural laboratories in the area for soil, water, tissue, and amendment testing:
<http://cecentralsierra.ucanr.org/files/115331.pdf>

1.1.2 If you do not test for irrigation water nitrogen, what are the main barriers to adoption?	
Check all that apply.	
Does not apply	<input type="checkbox"/>
Not important / no benefit	<input type="checkbox"/>
Labor: Takes too much time and/or effort	<input type="checkbox"/>
Risk to yield or quality	<input type="checkbox"/>
Cost	<input type="checkbox"/>
Technical knowledge and understanding on how to use the information	<input type="checkbox"/>
Insufficiently developed technology or more research needed	<input type="checkbox"/>
Other (please specify): _____	<input type="checkbox"/>



1.2 IRRIGATION WELLS

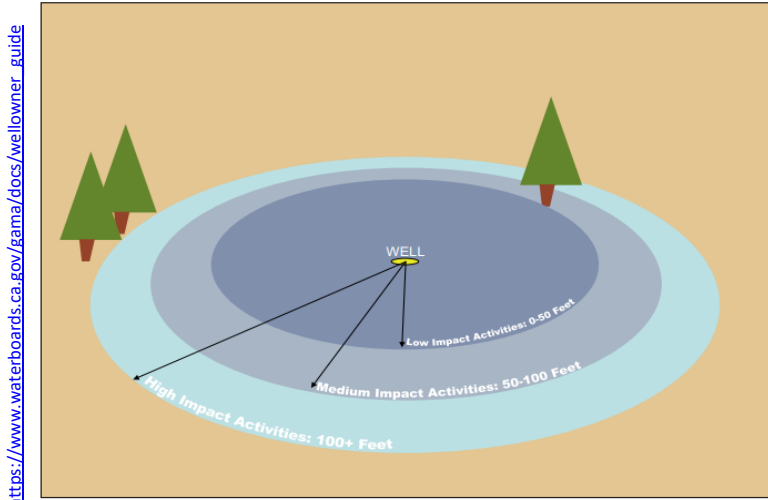
1.2.1 Do you have active irrigation wells located on your property?		<input type="checkbox"/> Yes	<input type="checkbox"/> No (skip to question 1.1.5)
Well ID (Unique name of your choice)	Base slopes away from well casing for at least 2 feet in all directions, from the outside of the well boring	Not feasible to maintain 2 feet slope away from the wellhead, but diversions or berms are used to prevent standing water	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
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	<input type="checkbox"/>	<input type="checkbox"/>	

1.2.2 Select the following “good housekeeping practices” that are used for each well:	
Well ID (Unique name of your choice)	Excess vegetation removed from the wellhead location
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
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	<input type="checkbox"/>

1.2.3 Select the following “Regular Wellhead Maintenance” practices that are utilized for each well:

Well ID (Unique name of your choice)	Well casing and concrete pad free of holes and cracks (inspected at least once per year)	Watertight caps and plugs maintained at all openings	Top seal of casing is regularly checked for damages and disturbances	Watertight seal or gasket between the pump discharge head and discharge line is maintained	Pump test, service, or adjustment performed at least once every 5 years	Pump performance and specific-capacity test conducted annually
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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https://www.waterboards.ca.gov/eama/docs/wellowner_guide

Figure 6. A suggested zone of protection around a well. (Source: EPA)

- Low Impact Activities
 - Recreation area
 - House
 - Outdoor furniture and play areas
- Medium Impact Activities
 - Garage
 - Boat
 - City Sewer lines
- High Impact Activities
 - Chemical storage
 - Animal enclosures
 - Manure/compost piles
 - Machine/auto repair
 - Septic system

1.2.4 Select the following high impact activities that occur within 100 feet of each well:

Well ID (Unique name of your choice)	Storage, mixing, or application of fertilizer, pesticide, or other ag chemicals	If fertilizer and/or pesticide storage occurs within 100 feet of well, is a concrete pad or curb used for containment?	Storage of fuel or hazardous cleaning products	Bulk fertilizer and fuel storage tanks are upgraded, retrofitted, or maintained to prevent leaks or spills	Machine/auto repair	Manure/compost pile(s)	Animal Enclosures	Septic system
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



1.2.5 For wells that have been inactive or out of commission for one year or more and not yet properly abandoned, select the following practices that apply:

Well ID (Unique name of your choice)	Cover provided over top of well, or well casing is secured to prevent unauthorized access	Watertight cover over top of well casing (pump motor, angle drive, or other surface feature of the well suffice as cover)	Well visibly marked and easily to identify and locate as a well	Maintain proper wellhead maintenance practices (clear of brush, standing water, debris, etc.)
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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