

## PREFACE

The SRP National Interpretation Guideline (NIG) for the United States (U.S.) was developed by Winrock International with grant support from the United States Department of Agriculture (USDA) and Entergy Foundation. The development process followed ISEAL best practices, was overseen by an 11-member Steering Committee formed in 2016 and included a public consultation, stakeholder outreach and piloting. The development process and benchmarking exercise is described in a separate document submitted to the SRP Secretariat. As part of the NIG development process, a comparison of the SRP Standard v.2.0 with U.S. federal and state law and agency oversight was conducted. The comparison showed extensive overlap in the priorities of U.S. environmental, agricultural and labor agencies and their respective regulations with the SRP.

A side by side comparison (log) of each question (text and points) in the SRP Standard v.2.0 and the SRP NIG for the U.S. was compiled. Where changes were made in the SRP NIG for the U.S., the log provides an explanation of need for the change, provides relevant context for the U.S. production system and any references. **PLEASE REFER TO THE COMPARISON LOG TOGETHER WITH THIS DOCUMENT.**

(file name: 4a\_SRP-NIG-US Deviations Summary\_2020.01.31.pdf).

26 (of 41) SRP Standard v.2.0 questions are deemed adequately addressed by U.S. federal or state law, or regulatory agency oversight in the U.S and therefore do not appear in the questionnaire instrument of the SRP NIG for the U.S. These questions are automatically answered for all U.S. rice producers based on the law and are listed in the table below. As allowed by the Protocol for Developing National Interpretation Guidelines, several additional requirements are included for U.S. producers (farmers) ONLY and are clearly marked and tracked separately by U.S. participants and users. These are listed in the table below.

SRP questions automatically answered for all U.S. producers (farmers) because they are addressed by U.S. federal or state law, or regulatory agency oversight.	4, 6, 7, 9, 13, 17, 19, 20, 21, 22, 23, 26, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41
Remaining SRP questions answered by U.S. producers (farmers) in the questionnaire	1, 2, 3, 5, 8, 10, 11, 12, 14, 15, 16, 18, 24, 25, 27
U.S. ONLY questions. Tracked separately and do not impact SRP score.	42, 43, 44, 45, 46

The presence of a law or agency policy on its own may not be enough to meet requirements in the SRP Standard v.2.0. In instances where U.S. federal or state law or agency oversight was deemed to adequately address the action or intent of the SRP Standard v.2.0 question, the following conditions also are met.

- Enforcement with legal or financial consequences is present via the governing agency;
- There is data indicating that occurrence of a violation or the contrary action by a producer (farmer) is rare or unlikely;
- The respondent (U.S. rice producer/farmer) legally attests to knowledge of and compliance with the law. All producers that complete the questionnaire must sign. (See part D of the questionnaire instrument for SRP NIG for the U.S.)

The above listed information is provided in the Comparison Log document (file name: 4a\_SRP-NIG-US Deviations Summary\_2020.01.31.pdf) for each question addressed by U.S. federal or state law or agency oversight. The specific law or regulation, its origins, enforcing agency and other documentation is provided.

Attestations are common legal instruments used for various purposes in the U.S. and false statements carry legal penalties. Any U.S. producer who completes the questionnaire will recognize this as a binding legal document once signed.

This document is divided into 4 parts that a U.S. producer (farmer) would complete:

- A- **BASIC INFORMATION** – identifies the producer by name and provides information about the operation. Much of this information can be used as a cross-check to responses or as another check on compliance with the law to facilitate verification. For example: chemical applicator's license number, water source, SRP training date and USDA NRCS program number contracts.
- B- **NRCS ENROLLED FIELDS** – specific ID numbers referring to the specific fields on his/her property where the responses in this questionnaire are valid. The ID numbers are assigned by the USDA-NRCS and applicable across the entire country. The department within the USDA that provides support to farmers in the areas of conservation and sustainability is called the Natural Resources Conservation Service (NRCS). The NRCS defines specific practices such as Alternate Wetting and Drying (449) or Land Leveling (462 or 464) and through payments to farmers incentivizes adoption<sup>1</sup>. The NRCS provides technical support and requires ex post monitoring to ensure practices were completed to their standards each year. The NRCS has created an ID system for every agricultural field in the U.S., so even if a farmer does not participate in the incentive programs, his/her fields will have ID #s that are used for tax purposes and for the national agricultural census. Coordinates are attached to each field NRCS ID to facilitate access through Google Earth, Landsat or other remote imagery products.
- C- **QUESTIONNAIRE** – responses by producers (farmers) to the SRP Standard v.2.0 questions not deemed to be adequately addressed by U.S. federal or state law or agency oversight. The corresponding NRCS incentive program number is listed for each question where present. Participation by rice farmers is high relative to other commodity crop producers in the U.S. Producers (farmers) will immediately recognize these numbers/actions and reporting required by NRCS can facilitate verification.
- D- **ATTESTATION** – producer (farmer) legally attests to knowledge and compliance with various laws, licenses and requirements as well as to filing taxes for the previous year as an agricultural operator.
- E- **WATER QUALITY RISK ASSESSMENT**

<sup>1</sup> Example for Arkansas: [https://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs142p2\\_034097.pdf](https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_034097.pdf)

More than 99% of rice produced in the U.S. is produced in six states: Arkansas, California, Louisiana, Mississippi, Missouri and Texas. Each state has their own laws in addition to federal law and often in the case of California, the state law has stronger requirements. The Comparison Log document (file name: 4a\_Deviations Summary.pdf) references state law or requirements where applicable.

Each state makes publicly available a “State Rice Handbook”<sup>2</sup> that defines best practice in every aspect of production for the state. The Handbooks are a compilation of the best available science, tools, and recommendations accounting for regulation, regional climate, rotations, pests and soils. Producers (farmers) are universally aware of and familiar with the content of the Handbook. In addition to the State Rice Handbooks, producer/farmers have available to them technical assistance from the USDA NRCS, certified crop consultants and the University Extension Offices (who produce the Handbooks). Much of the information or common practice referred to in this document and Comparison Log document (file name: 4a\_SRP-NIG-US Deviations Summary\_2020.01.31.pdf) can be found in the State Rice Handbooks or through the USDA NRCS website<sup>3</sup>. Comparison Log document (file name: 4a\_Deviations Summary.pdf) includes references.

<sup>2</sup> Example for Arkansas: <https://www.uaex.edu/publications/pdf/MP192/MP192.pdf>

<sup>3</sup> <https://www.nrcs.usda.gov/wps/portal/nrcs/site/national/home/>

## PART A: BASIC INFORMATION

Name			
County		State	
Date that Producer Received SRP Training			

Name of Chemical Applicator (Company)			
License Number		License State	

Work with a Certified Crop Consultant/Advisor?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Consultant Name		
Date of SRP Training Consultant/Advisor		

Participate in USDA NRCS Programs in 2019? (Check all that apply)	<input type="checkbox"/> EQIP	<input type="checkbox"/> CSP	<input type="checkbox"/> Other
Please list NRCS enrolled fields in Part B			

2019 Acres in Rice		<input type="checkbox"/> Continuous rice
2019 Variety (ies)		<input type="checkbox"/> Rice in soy rotation
2019 Average Yield		<input type="checkbox"/> Rice in other rotation

Harvested rice is stored on farm?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Harvested rice is dried on farm?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Water Source	<input type="checkbox"/> Ground Only	<input type="checkbox"/> Surface Only	<input type="checkbox"/> Both
Water Deliveries from State, Irrigation District or Other Entity	<input type="checkbox"/> Yes	<input type="checkbox"/> No	

## PART B: NRCS Enrolled Fields

Complete the table below for all NRCS enrolled fields OR attach your own table/list with the information below.

	Farm Number	Track Number	Field Number	Field Size (ac)
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

## PART C: QUESTIONNAIRE

<h1>1</h1>	<b>Record Keeping – Dates (Crop Calendar)</b>		
	<p>A crop calendar is a written, digital or otherwise recorded plan of the expected dates of field activities AND shows records of actual dates of implementation of those activities. Activities include:</p> <ol style="list-style-type: none"> <li>1. Dates of major operations (i.e., land preparation, planting, harvest).</li> <li>2. Dates of major fertilization (i.e., split plan) and water management activities (i.e., irrigation).</li> <li>3. Dates of major pest management activities (i.e., scouting, damage and treatment if needed).</li> <li>4. Dates for labor and/or contracted services (i.e., if not captured in 1-3).</li> </ol> <p><i>Expected</i> dates of field activities are readily available to ALL U.S. producers via use of growth model programs such as DD50, recommendations from the state agriculture office (State Rice Handbooks), University extension, a crop consultant or based on in field weather station temperature data in conjunction with a growth model.</p> <p>Please respond based on your EX-POST record keeping.</p>		
↓ CHECK ONE			
<input type="checkbox"/>	<b>A</b>	3	Records of the actual dates when the activity occurred are recorded for ALL listed topics.
<input type="checkbox"/>	<b>B</b>	2	Records of the actual dates when the activity occurred are recorded for activity 1 and 2, only.
<input type="checkbox"/>	<b>C</b>	1*	Records of the actual dates when the activity occurred are recorded for activity 1 only.
<input type="checkbox"/>	<b>D</b>	0	None of the above.

### Applicable NRCS Conservation Programs:

☐ None

<div style="font-size: 48px; font-weight: bold;">2</div> <div style="text-align: center; margin-top: 100px;">  CHECK ONE         </div>	<h3>Record Keeping</h3> <p>Records are kept annually (written or digital) on as many topics as possible in the list below. Record keeping at higher levels of sophistication (INTERMEDIATE LEVEL) is encouraged. Topics include:</p> <ol style="list-style-type: none"> <li>1. Seed variety (name/vendor/quantity)</li> <li>2. Yield</li> <li>3. Pesticide use (product /quantity/application method ground or air)</li> <li>4. Fertilizer use (product/ /quantity/application method ground or air)</li> <li>5. Measured or calculated water use (quantity per acre, per bushel, per field or average for irrigation type and region)</li> <li>6. Machinery operations on farm (equipment type, purpose, fuel use)</li> <li>7. Results of IPM scouting</li> <li>8. A water quality risk assessment has been completed (see PART E)</li> <li>9. GHG emission measurements mg CO<sub>2</sub>e flux/ha/yr.</li> </ol> <p>Data Collection Techniques and Levels</p> <p><b><u>INTERMEDIATE</u></b></p> <p>Data collection system is considered INTERMEDIATE if any of the following is true:</p> <ul style="list-style-type: none"> <li>• Data is collected, analyzed and maintained by digital means (e.g. use of equipment software such as MyJohnDeere, use of spreadsheet or accounting software such as Excel or QuickBooks)</li> <li>• Applicable metrics above are tracked on a per yield basis</li> <li>• Applicable metrics above are tracked on a field or sub-field level</li> </ul> <p><b><u>BASIC</u></b></p> <p>Data collection system is considered BASIC if:</p> <ul style="list-style-type: none"> <li>• Farmer keeps handwritten maps or notebooks (field or aggregated level)</li> </ul>		
	<input type="checkbox"/>	A	3
<input type="checkbox"/>	B	2	Records are kept of at least 5 topics using a mix of basic and intermediate techniques.
<input type="checkbox"/>	C	1*	Records are kept of at least 5 applicable topics using basic techniques
<input type="checkbox"/>	D	0	None of the above.

### Applicable NRCS Conservation Programs:

☐ None

3			<b>Training</b> <p>Farmer training, information, and support needs are assessed for all topics in the SRP Standard.</p> <p>Farmer receives needed training, information, and support. SRP-authorized training providers are the preferred external partners or professional sources for training on SRP. SRP also recognizes information exchange with other farmers or within farmer organizations.</p> <p>Farmer demonstrates that relevant content is applied.</p>
			↓ CHECK ONE
<input type="checkbox"/>	A	3	In the last 5 years, producer training, information, and support needs have been assessed; the producer received needed training from an SRP-authorized training provider; and demonstrates that content is applied.
<input type="checkbox"/>	B	2	In the last 5 years, producer training, information, and support needs have been assessed; the producer received needed training; and demonstrates that content is applied.
<input type="checkbox"/>	C	1*	In the last 5 years, producer training, information, and support needs have been assessed; and producer received needed training.
<input type="checkbox"/>	D	0	In the last 5 years, producer training, information, and support needs have not been assessed.

#### Applicable NRCS Conservation Programs:

☐ None



5	<b>Salinity</b>	
	<p>Salinity problems are regularly scouted for and effectively and quickly managed at first detection according to expert advice (crop advisor, University Extension guidance, State Rice Handbooks). Examples of mitigation/adaptation measures for salinity include:</p> <ul style="list-style-type: none"> <li>⦿ Selection of salinity-tolerant varieties if needed.</li> <li>⦿ Monitoring of salinity in well water.</li> <li>⦿ Scouting for early signs of damage in plants and scouting for signs of accumulation in fields</li> <li>⦿ Management of inflow/outflow in quantity and timing to minimize salinity (flushing and flood time).</li> <li>⦿ Tissue sampling</li> </ul>	
↓ CHECK ONE		
<input type="checkbox"/>	<b>A</b>	<p>3</p> <p>Producer does/did one of the following:</p> <ul style="list-style-type: none"> <li>o Tested the well (any time, any frequency)</li> <li>o At least annually tests irrigation water for salts</li> <li>o At least annually conducts a tissue analysis for salt in the plant</li> </ul>
<input type="checkbox"/>	<b>B</b>	<p>2</p> <p>Producer regularly scouts for damage and follows expert advice on salinity detection and management. IF/WHEN a problem is detected, producer follows expert advice for mitigation options.</p>
<input type="checkbox"/>	<b>C</b>	<p>1*</p> <p>Farmer completes risk assessment (Part E) and implements mitigation measures when needed (i.e. history of salinity problems on farm or in region).</p>
<input type="checkbox"/>	<b>D</b>	<p>0</p> <p>None of the above.</p>

Applicable NRCS Conservation Programs:

None

<b>8</b>		<b>Leveling</b>	
		Land is leveled and managed in a manner that minimizes erosion. Two scenarios are present in the U.S., Flat Land or Sloping (includes straight and contour levees).	
↓ CHECK ONE			
FLAT LAND			
<input type="checkbox"/>	<b>A</b>	5	Land has been leveled to (zero grade) and is maintained at zero grade.
<input type="checkbox"/>	<b>B</b>	3	Land has been leveled to zero grade but is not maintained as such.
<input type="checkbox"/>	<b>C</b>	2*	Land has been leveled.
<input type="checkbox"/>	<b>D</b>	0	Land has not been leveled.
SLOPING LAND (Straight-precision grade Levees and Contour Levees)			
<input type="checkbox"/>	<b>E</b>	4	Land has been precision leveled (straight levees, single directional grade)
<input type="checkbox"/>	<b>F</b>	3	Some leveling has taken place and contour levees are used
<input type="checkbox"/>	<b>G</b>	2*	No leveling has taken place and contour levees are used or other erosion controls measures
<input type="checkbox"/>	<b>H</b>	0	None of the above

**Applicable NRCS Conservation Programs:**

- ☐ 462 Precision Land Forming
- ☐ 464 Irrigation Land Leveling
- ☐ 460 Land Clearing

10		<b>Water Management</b>					
		<p>All U.S. rice production meets the definition of the SRP irrigation system category for “Irrigated, Not Flood Prone”. Measures are in place to enhance water-use efficiency in this system category.</p> <p>** See scoring key for mapping of combinations to SRP points</p>					
<b>Leveling and Plastic Pipe</b> choose 1 in this column ↓				<b>Dry Downs</b> Choose the number of dry downs within the leveling choice			
<input type="checkbox"/>	A	4	Rice fields are leveled (no levees); no plastic pipe	<input type="checkbox"/>	A	2	Multiple dry down events
				<input type="checkbox"/>	B	1*	One dry down event (*)
				<input type="checkbox"/>	C	0	None
<input type="checkbox"/>	B	3	Rice fields have straight levees; and plastic pipe	<input type="checkbox"/>	A	2	Multiple dry down events
				<input type="checkbox"/>	B	1*	One dry down event (*)
				<input type="checkbox"/>	C	0	None
<input type="checkbox"/>	C	2	Rice fields have straight levees and no plastic pipe	<input type="checkbox"/>	A	2	Multiple dry down events
				<input type="checkbox"/>	B	1*	One dry down event(*)
				<input type="checkbox"/>	C	0	None
<input type="checkbox"/>	D	1*	Rice fields have contour levees; and plastic pipe (*)				
<input type="checkbox"/>	E	0	Rice fields have contour levees and no plastic pipe				

Applicable NRCS Conservation Programs:

- ☐ 462 Precision Land Forming
- ☐ 464 Irrigation Land Leveling
- ☐ 449 Irrigation Water Management (AWD enhancement option)
- ☐ 118 Irrigation Water Management Plan
- ☐ 430 Irrigation Water Conveyance Pipeline

- ☐ 443 Irrigation System, Surface and Subsurface (surge valves in row rice)
- ☐ 533 Pumping Plant
- ☐ 587 Structure for Water Control (flow meters)

11			<b>Irrigation System - Capacity and Maintenance</b>
			The farm irrigation system has sufficient pipes, canals, sluices and dikes to ensure proper irrigation and drainage for all fields. The farm irrigation system is regularly inspected and maintained by a private company, and NRCS project or the landowner.
↓ CHECK ONE			
<input type="checkbox"/>	<b>A</b>	3*	Producer receives water deliveries from the state, irrigation district or other entity; Producer is not in control of community irrigation infrastructure; the system provides adequate delivery and drainage of water to each field; Producer reports any malfunction or degraded service immediately.
<input type="checkbox"/>	<b>B</b>	3*	Producer has control of his own well and/or associated irrigation system on farm; the system provides adequate delivery and drainage of water to each field; the system is inspected regularly, and conditions well maintained by a private company and/or NRCS project.
<input type="checkbox"/>	<b>C</b>	3*	Producer has control of his own well and/or associated irrigation system on farm; the system provides adequate delivery and drainage of water to each field; producer (or land owner) is responsible for all maintenance and regular inspections.
<input type="checkbox"/>	<b>D</b>	0	None of the above

#### Applicable NRCS Conservation Programs:

- ☐ 320 Irrigation Canal or Lateral
- ☐ 326 Clearing and Snagging
- ☐ 410 Grade Stabilization
- ☐ 412 Grassed Waterways
- ☐ 430 Irrigation Pipeline
- ☐ 580 Streambank and Shoreline Protection
- ☐ 582 Open Channel
- ☐ 584 Channel Bed Stabilization
- ☐ 587 Structure for Water Control
- ☐ 607 Surface Drain Field Ditch
- ☐ 608 Surface Drain Main or Lateral

<h1>12</h1>				<b>Inbound Water Quality (Answer 12.1 <u>or</u> 12.2)</b>  Inbound water is obtained from clean sources that are free of metals, salts, biological and industrial contamination
12.1  Well  <input type="checkbox"/>	<input type="checkbox"/>	A	3	Have tested (producer or hired third party) for salinity and heavy metals (within last 3 years, see Resources in PART E)
	<input type="checkbox"/>	B	2	Federal, state or local requirements for inbound testing apply in my region or to my farm due to concerns for well water quality in my region (producer tests or government entity routinely tests)
	<input type="checkbox"/>	C	1*	Have completed a risk assessment within last 5 years (see Part E) and implemented control measures if risk is present
	<input type="checkbox"/>	D	0	None of the above

Applicable NRCS Conservation Programs:

☐ State dependent

<h1>12</h1>			<b>Inbound Water Quality (Answer 12.1 or 12.2)</b>  Inbound water is obtained from clean sources that are free of metals, salts, biological and industrial contamination	
<b>12.2</b> <b>Surface</b> <input type="checkbox"/> Name: _____	<input type="checkbox"/>	A	3	Have tested (producer or hired third party) for ALL of the following (within last 5 years): <ul style="list-style-type: none"> <li>• Heavy metals</li> <li>• Pesticide or herbicide residues</li> <li>• Phosphorous and nitrogen</li> <li>• Turbidity</li> </ul>
	<input type="checkbox"/>	B	2	Federal, state or local requirements for inbound testing apply in my region or to my farm due to concerns for surface water quality in my region (producer tests or government entity routinely tests)
	<input type="checkbox"/>	C	1*	Have completed a risk assessment within last 5 years (see Part E) and implemented control measures if risk is present
	<input type="checkbox"/>	D	0	None of the above

Applicable NRCS Conservation Programs:

☐ None

14			<b>Drainage</b>  Agrochemical runoff can negatively impact biodiversity or surroundings waterways. Intentional surface (sideways) drainage after surface application of agrochemicals is sufficiently delayed via water holding to avoid contamination from agrochemical runoff.
<input type="checkbox"/>	A	3	There is no use of agrochemicals
CALIFORNIA			
<input type="checkbox"/>	B	3	Farm complies with the Irrigated Lands Regulatory Program (ILRP). Producer also follows all water holding requirements on agrochemical labels (if different than ILRP).
AR, LA, MO, MS or TX			
<input type="checkbox"/>	C	3	Water is managed on all rice fields to allow for AT LEAST 1-2 inches of free board in case of rain from initial flood until draining for harvest. Management ensures that water remains on the field.
<input type="checkbox"/>	D	2*	Freeboard is not always maintained but delayed drainage is ensured at least 4 days for fertilizers and 14 days for pesticides or according to agrochemical labels (if different).
<input type="checkbox"/>	E	1	Drainage is delayed after surface application of agrochemicals, but for fewer days than required or recommended due to unexpected conditions and need to protect crops (e.g. heavy rains).
<input type="checkbox"/>	F	0	None of the above

### Applicable NRCS Conservation Programs:

- ☐ 554 Drainage Water Management



15	<b>Nutrient Management</b>		
	<p>Efficient and site-specific nutrient management is applied and documented.</p> <p>Measures for efficient nutrient management include:</p> <ul style="list-style-type: none"> <li>⦿ Timing of fertilizer (inorganic and/or organic; N, P, and/or K) application is according to plant needs, and according to label or University, NRCS or County recommendations and using grid sampling and variable rate applications</li> <li>⦿ Amount of fertilizer (inorganic and/or organic; N, P, and/or K) applied is based on knowledge of soil fertility and expected yield, and according to University recommendations.</li> <li>⦿ Natural systems of soil fertility enhancement (e.g., crop rotation, intercropping, and/or non-invasive cover cropping) are used.</li> </ul>		
↓ CHECK ONE			
<input type="checkbox"/>	<b>A</b>	<b>6</b>	Producer uses all three measures listed for efficient nutrient management.
<input type="checkbox"/>	<b>B</b>	<b>4*</b>	Producer uses any two measures listed for efficient nutrient management.
<input type="checkbox"/>	<b>C</b>	<b>2</b>	Producer uses any one measure listed for efficient nutrient management.
<input type="checkbox"/>	<b>D</b>	<b>0</b>	None of the above.

#### Applicable NRCS Conservation Programs:

- ☐ 590 Nutrient Management

16			<b>Organic Fertilizer Choice</b>  Organic material (e.g., animal manure, green manure, mulch, rice straw) is used as fertilizer where synthetic fertilizer would otherwise be used ONLY IF: <ol style="list-style-type: none"> <li>1. It can be applied in composted or de-composted state in non-flooded fields OR there is sufficient time for its decomposition prior to flooding;</li> <li>2. It is available locally and in sufficient quantity; AND</li> <li>3. It is a comparable or economical choice relative to other options</li> </ol>
			↓ CHECK ONE
<input type="checkbox"/>	<b>A</b>	3	Producer uses organic material as fertilizer and ALL three conditions are met.
<input type="checkbox"/>	<b>B</b>	2*	Producer does not use organic material as fertilizer because one or more of the listed conditions cannot be met.
<input type="checkbox"/>	<b>C</b>	0	None of the above.

Applicable NRCS Conservation Programs:

- ☐ 590 Nutrient Management

<div style="text-align: center; font-size: 2em; font-weight: bold;">18</div>	<p><b>Integrated Pest Management (IPM)</b></p> <p>Principles of IPM include:</p> <ul style="list-style-type: none"> <li>o Evaluating pest threat and damage levels regularly (scouting).</li> <li>O Evaluating all available pest control options deemed appropriate by the University extension.</li> <li>O Using action thresholds recommended by U.S. Land Grant University Cooperative extension experts.</li> <li>O Using the crop protection method recommended by the University extension.</li> </ul> <p>Recommended IPM methods in the United States are based on the latest research and relevant pests in the region; have been developed according to regulations that ensure human and food safety; are generally considered economically viable under current market conditions and minimize environmental impact and/or comply with environmental regulations.</p> <p>IPM combines non-chemical control methods and rational pesticide use. This includes biodiversity-based integrated pest management as part of crop protection activities. In the United States, IPM is generally understood to mean that chemicals are ONLY applied once a threshold has been reached and when applied, they are applied by a licensed professional that follows regulations in the amount of chemical applied and the frequency of application. Scientific research underscores the crop and state specific recommendations provided by the University extensions in each state or by the <a href="#">USDA NRCS</a> for IPM contracts. Producers typically work with a licensed pest management specialist and chemical applicator who will rigidly follow the recommendations for the state.</p>				
	<p>Recommended Non-Chemical Options:</p>	<p><b>WEEDS:</b></p> <ul style="list-style-type: none"> <li>⦿ Good land preparation</li> <li>⦿ Proper flooding</li> <li>⦿ Mechanical weeding</li> <li>⦿ Biological control</li> </ul>	<p><b>INSECTS:</b></p> <ul style="list-style-type: none"> <li>⦿ Synchronized planting</li> <li>⦿ Tolerant/Resistant varieties</li> <li>⦿ Promotion of natural predators (habitat diversity)</li> <li>⦿ Crop rotation or extended fallow</li> <li>⦿ No over-application of nitrogen</li> <li>⦿ Biological control agents (non-lethal chemicals)</li> </ul>	<p><b>DISEASE:</b></p> <ul style="list-style-type: none"> <li>⦿ Synchronized planting</li> <li>⦿ Tolerant/Resistant varieties</li> <li>⦿ Removal of host plants</li> <li>⦿ Moisture management</li> <li>⦿ Planting at appropriate density</li> <li>⦿ No over-application of nitrogen</li> <li>⦿ Biological control agents (non-lethal chemicals)</li> </ul>	<p><b>OTHER (Birds, Rats, Invertebrates):</b></p> <ul style="list-style-type: none"> <li>⦿ Synchronized planting</li> <li>⦿ Physical control (i.e. destruction of egg masses)</li> <li>⦿ Promotion of predators</li> <li>⦿ Crop rotation or extended fallow</li> <li>⦿ Trapping, hunting</li> <li>⦿ Coordinated community management plan</li> <li>⦿ Scare/deterrent devices</li> <li>⦿ Biological control agents (non-lethal chemicals)</li> </ul>
	<p style="text-align: center;">↓ CHECK ONE</p>				
<input type="checkbox"/>	<p><b>A</b></p>	<p>18</p>	<p>Producer has a USDA NRCS IPM contract</p>		
<input type="checkbox"/>	<p><b>B</b></p>	<p>18</p>	<p>Producer (and/or crop consultant) does ALL of the following:</p> <ul style="list-style-type: none"> <li>• Follows University extension recommendations for pest management in region</li> <li>• Regularly scouts for all relevant pests in region</li> <li>• Applies chemicals ONLY after thresholds as determined by University extension have been reached</li> <li>• Uses a licensed chemical applicator</li> </ul>		

**SRP National Interpretation Guideline for the  
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Sustainable Rice Cultivation v.2.0**



			List any non-chemical pest control measures employed (optional): _____
<input type="checkbox"/>	<b>C</b>	11*	Producer (and/or crop consultant) does ALL of the following: <ul style="list-style-type: none"> <li>• Regularly scouts for all relevant pests in region</li> <li>• Uses at least two non-chemical pest control strategies</li> <li>• Uses a licensed chemical applicator</li> </ul> List any non-chemical pest control measures employed (optional): _____
<input type="checkbox"/>	<b>D</b>	0	None of the above

**Applicable NRCS Conservation Programs:**

- ☐ 595 Integrated Pest Management

24			<b>Rice Stubble</b>
			Rice stubble is not burned and is managed in a sustainable way to mitigate greenhouse gas emissions, minimize environmental impacts, and retain or improve soil quality. <sup>4,5</sup>
↓ CHECK ONE			
<input type="checkbox"/>	<b>A</b>	3	Stubble is not burned, and not plowed under, with time (at least 3 weeks) to allow aerobic decomposition before wetting.
<input type="checkbox"/>	<b>B</b>	2	Stubble is not burned, and is plowed under while the soil is dry, with time (at least 3 weeks) to allow aerobic decomposition before wetting.
<input type="checkbox"/>	<b>C</b>	1*	Stubble is not burned, and is plowed under while the soil is flooded, without time (at least 3 weeks) to allow for aerobic decomposition.
<input type="checkbox"/>	<b>D</b>	0	Stubble is burned

#### Applicable NRCS Conservation Programs:

- ☐ 329 Residue Management, No-Till, Strip-Till (TILL)
- ☐ 646 Shallow Water Development and Management (HABITAT)
- ☐ 338 Prescribed Burning (BURN)
- ☐ 344 Residue Management, Seasonal (TILL) ☐ 345 Residue Management Mulch Till (TILL)

<sup>4</sup> As stated in the SRP Standard v.2.0. research has identified the minimum tillage system with stubble left on the field after grazing by livestock as a sustainable practice of treating rice stubble. SRP National Interpretation Guidelines may identify methods that are at an equivalent level of sustainability even if grazing by livestock or minimum tillage is not practiced.

<sup>5</sup> In the U.S. production system, livestock or crawfish grazing as a rotation is limited. No-tillage and minimum tillage are strongly incentivized by the USDA due to declining soil quality and are widely practiced. In areas where minimum tillage and no tillage are practiced together with winter flooding of rice fields for waterfowl (a practice also strongly incentivized by the USDA due to near total loss of waterfowl habitat in the U.S.), methane emissions will be significant in the absence of burning. In large (1000+ ha) mechanized operations, significant amounts of fuel are combusted to adequately plow stubble. There is a trade-off among the environmental benefits of air quality, GHG emissions, soil quality and habitat.

25			<b>Rice Straw</b>  Rice straw managed in a sustainable way to mitigate greenhouse gas emissions, minimize environmental impacts, and retain or improve soil quality. <sup>6,7</sup>  Rice straw is: 1. Not burned. 2. Allowed sufficient time (at least 2 weeks) for aerobic decomposition if rice straw is left on the field or plowed under. 3. Collected, used a livestock feed or composted, and returned to the field.
			<div>↓ CHECK ONE</div>
<input type="checkbox"/>	<b>A</b>	3	Producer meets criteria 1 and 3.
<input type="checkbox"/>	<b>B</b>	2	Producer meets criteria 1 and 2 only
<input type="checkbox"/>	<b>C</b>	1*	Producer meets criteria 1 only
<input type="checkbox"/>	<b>D</b>	0	Producer burns rice straw

#### Applicable NRCS Conservation Programs:

- ☐ 329 Residue Management, No-Till, Strip-Till (TILL)
- ☐ 646 Shallow Water Development and Management (HABITAT)
- ☐ 338 Prescribed Burning (BURN)
- ☐ 344 Residue Management, Seasonal (TILL)
- ☐ 345 Residue Management Mulch Till (TILL)

<sup>6</sup> As stated in the SRP Standard v.2.0. research has identified the minimum tillage system with stubble left on the field after grazing by livestock as a sustainable practice of treating rice stubble. SRP National Interpretation Guidelines may identify methods that are at an equivalent level of sustainability even if grazing by livestock or minimum tillage is not practiced.

<sup>7</sup> In the U.S. production system, livestock or crawfish grazing as a rotation is limited. No-tillage and minimum tillage are strongly incentivized by the USDA due to declining soil quality and are widely practiced. In areas where minimum tillage and no tillage are practiced together with winter flooding of rice fields for waterfowl (a practice also strongly incentivized by the USDA due to near total loss of waterfowl habitat in the U.S.), methane emissions will be significant in the absence of burning. In large (1000+ ha) mechanized operations, significant amounts of fuel are combusted to adequately plow stubble. There is a trade-off among the environmental benefits of air quality, GHG emissions, soil quality and habitat.

<h1>27</h1>			<b>Tools and Equipment</b>	
↓ CHECK ONE			Tools and equipment for farm operations and postharvest processes are inspected and maintained and calibrated as per manufacturer recommendations.	
<input type="checkbox"/>	<b>A</b>	2	Farm equipment is inspected every year prior to use and maintained and calibrated as required by the manufacturer.	
<input type="checkbox"/>	<b>B*</b>	1	Farm equipment is not inspected, calibrated and maintained as required by the manufacturer but is inspected (not annually) and maintained as issues arise.	
<input type="checkbox"/>	<b>C</b>	0	No calibration and maintenance within the past 2 years.	

Applicable NRCS Conservation Programs:

☐ None

6e	<b>Biodiversity Elements</b>  Producer maintains and protects the following elements for habitat and/or biodiversity: <ul style="list-style-type: none"> <li>• any in-field habitat or refuge</li> <li>• field margins</li> <li>• non-cropped area</li> <li>• beneficial species on farm such as trees</li> </ul>	<input type="checkbox"/> Yes (+1)	<input type="checkbox"/> No
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Applicable NRCS Conservation Programs:

- ☐ 327 Conservation Cover

26e	<b>Annual Safety Instruction Training</b>  Producer provides <u>annual</u> safety training/instructions to workers including household members working in the rice operation (includes office related work)	<input type="checkbox"/> Yes (+1)	<input type="checkbox"/> No
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Applicable NRCS Conservation Programs:

- ☐ None



32e	<b>Re-entry time Signage</b>  Producer places warning signs in field or at field edge indicating the re-entry time following pesticide use (48 hours or product label)	<input type="checkbox"/> <b>Yes (+1)</b>	<input type="checkbox"/> <b>No</b>
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Applicable NRCS Conservation Programs:

☐ None

<b>US ONLY 12e</b>			<b>Outbound Water Quality</b>  Outbound water quality is monitored.
<input type="checkbox"/>	A	4	Have tested (producer or hired third party) for ALL of the following within last 3 years: <ul style="list-style-type: none"> <li>• Heavy metals</li> <li>• Pesticide or herbicide residues</li> <li>• Phosphorous and nitrogen</li> <li>• Turbidity</li> </ul>
<input type="checkbox"/>	B	3	Have tested (producer or hired third party) for at least TWO of the following within last 3 years: <ul style="list-style-type: none"> <li>• Heavy metals</li> <li>• Pesticide or herbicide residues</li> <li>• Phosphorous and nitrogen</li> <li>• Turbidity</li> </ul>
<input type="checkbox"/>	C	2	Have completed a risk assessment within last 3 years (see Part E):
<input type="checkbox"/>	D	1	Federal, state or local requirements for outbound testing apply in my region or to my farm due to concerns for water quality in my region (producer tests or government entity routinely tests) AND/OR Federal, state or local requirements for reducing loads of area source pollutants apply in my region or to my farm due to concerns for water quality in my region.
<input type="checkbox"/>	E	0	I am not aware of requirements to monitor water leaving my farm OR to reduce loads of specified area source pollutants due to concerns for water quality in my region.

**Applicable NRCS Conservation Programs:**

- ☐ 412 Grassed Waterways

<b>US ONLY</b>  <b>42</b>			<b>Wildlife Habitat</b>  Producers have preserved, restored or enhanced Wildlife Habitat (i.e. Grassland, Wetland, Bottomland Hardwood Forest, or Upland Forest) on their property.  This does NOT include flooding for waterfowl (see Q 24/25). This does NOT require removing land from production. These can be degraded lands or other areas on property that were never suitable for cultivation but can be conserved through easement, improved per NRCS or other programs or restored to better foster wildlife.
			↓ CHECK ONE
<input type="checkbox"/>	<b>A</b>	<b>2</b>	>5% of total planted acreage has been restored, preserved or enhanced.
<input type="checkbox"/>	<b>B</b>	<b>1</b>	< 5% (but > 0%), of total planted acreage has been restored, preserved or enhanced
<input type="checkbox"/>	<b>C</b>	<b>0</b>	No habitat restoration, preservation or enhancement

Applicable NRCS Conservation Programs:

- ☐ 390 Riparian Herbaceous Cover
- ☐ 395 Stream Habitat Improvement and Management
- ☐ 575 Animal Trails and Walkways
- ☐ 644 Wetland Wildlife Habitat Management
- ☐ 645 Upland Wildlife Habitat Management
- ☐ 657 Wetland Restoration
- ☐ 659 Wetland Enhancement
- ☐ 646 Shallow Water Management

<b>US ONLY</b>  <b>43</b>  ↓ CHECK ONE			<b>Waterfowl</b>  Rice fields are flooded for waterfowl and water birds during winter months (zero grade, precision level or contour levees). Water control structures are closed, and/or interior levees are pulled shut to capture rainfall.
<input type="checkbox"/>	<b>A</b>	<b>2</b>	> 50% of rice fields are managed to capture rainfall for winter waterfowl.
<input type="checkbox"/>	<b>B</b>	<b>1</b>	1% - 49% of rice fields are managed to capture rainfall for winter waterfowl.
<input type="checkbox"/>	<b>C</b>	<b>0</b>	None of the above.

Applicable NRCS Conservation Programs:

- ☐ 646 Shallow Water Development and Management
- ☐ 554 Drainage Water Management

<b>US ONLY</b>  <b>44</b>			<b>Buffer Zones and Filter Strips</b>	
			<p>Producers have implemented conservation measures to enhance wildlife habitat, reduce soil erosion and increase water quality.</p> <ul style="list-style-type: none"> <li>Established or extended riparian buffer or filter strips including grass turn rows</li> <li>Established diverse native vegetation and controlling invasive species in stream side cover</li> </ul>	
↓ CHECK ONE				
<input type="checkbox"/>	<b>A</b>	<b>1</b>	Establish one of the listed elements	
<input type="checkbox"/>	<b>B</b>	<b>0</b>	Establish none of the listed elements	

Applicable NRCS Conservation Programs:

- ☐ 386 Field Border
- ☐ 332 Contour Buffer
- ☐ 601 Vegetative Barrier
- ☐ 327 Conservation Cover

<b>US ONLY</b>  <b>45</b>			<b>Other Water Efficiency Technologies</b>
			<p>Water Efficiency technologies (in addition to those addressed in questions 8 and 10, are used. These include:</p> <ul style="list-style-type: none"> <li>• Water recycling (tailwater recovery)</li> <li>• Water level indicator devices</li> <li>• Metering of pump at beginning and end of season</li> <li>• Continuous flow metering</li> <li>• Automated pump shutoff and water delivery</li> <li>• Plastic pipe on non-zero grade fields</li> <li>• Soil moisture sensors</li> <li>• Other: _____</li> </ul>
<p>↓ CHECK ONE</p>			
<input type="checkbox"/>	<b>A</b>	<b>4</b>	Producer uses at least four of the water efficiency measures listed Please list: _____
<input type="checkbox"/>	<b>B</b>	<b>3</b>	Producer uses at least three water efficiency measure listed Please list: _____
<input type="checkbox"/>	<b>C</b>	<b>2</b>	Producer uses at least two water efficiency measures listed Please list: _____
<input type="checkbox"/>	<b>D</b>	<b>1</b>	Producer uses at least one of the water efficiency measures listed Please list: _____
<input type="checkbox"/>	<b>E</b>	<b>0</b>	None of the above

Applicable NRCS Conservation Programs:

- ☐ 449 Irrigation Water Management
- ☐ 436 Irrigation Reservoir
- ☐ 447 Irrigation Tailwater Recovery

<b>US ONLY</b>  <b>46</b>			<b>Pumping plant efficiency</b>  Producer has implemented any of the following to conserve fuel or electricity: <ul style="list-style-type: none"> <li>• Switch to electric from diesel pumps or equipment</li> <li>• Switch to natural gas from diesel or equipment</li> <li>• Fuel or equipment metering</li> <li>• Fuel or equipment automation</li> <li>• Other: _____</li> </ul>
			<div>↓ CHECK ONE</div>
<input type="checkbox"/>	<b>A</b>	<b>2</b>	Producer implemented at least 2 of the above fuel efficiency measures  Please list: _____
<input type="checkbox"/>	<b>B</b>	<b>1</b>	Producer implemented at least 1 of the above fuel efficiency measures  Please list: _____
<input type="checkbox"/>	<b>C</b>	<b>0</b>	None of the above

Applicable NRCS Conservation Programs:

- ☐ 374 Farmstead Energy Improvement

<input type="checkbox"/> <b>Self-Assess</b>	<input type="checkbox"/> <b><u>Report</u></b>
<p>I am completing this questionnaire for my own information. I do not wish to share my results, or any information captured on this questionnaire.</p>	<p>I would like to share my results with the following other parties:</p> <ol style="list-style-type: none"> <li>1. SRP Secretariat and GLOBAL GAP</li> <li>2. _____</li> <li>3. _____</li> </ol> <p>The parties listed above have disclosed to me how my questionnaire responses will be used and with whom they will be shared.</p>



**PART D: Attestation**

<input type="checkbox"/> YES	<input type="checkbox"/> N/A	<p>I am aware of and fully comply with federal and state labor laws that apply to agricultural operations:</p> <ul style="list-style-type: none"> <li>⦿ Fair Labor Standards Act</li> <li>⦿ Migrant and Seasonal Agricultural Worker Protection Act</li> <li>⦿ Labor Provisions of the H-2A Visa Program</li> <li>⦿ Occupational Safety and Health Act of 1970 including Agriculture (29 CFR 1928), General Industry (29 CFR 1910), and the General Duty Clause.</li> <li>⦿ Field sanitation provisions of the OSHA Act of 1970</li> <li>⦿ All laws enforced via the Equal Employment Opportunity Act (title VII of the Civil Rights Act of 1964; Workforce Investment)</li> <li>⦿ Compulsory School Attendance Laws (state)</li> <li>⦿ Wage (state)</li> </ul>
<input type="checkbox"/> YES	<input type="checkbox"/> N/A	I hold legal right to surface or ground water used on my property
<input type="checkbox"/> YES	<input type="checkbox"/> N/A	I am aware of advice and information for best practices in rice production from: University Extension, USDA and State Agriculture agencies.
<input type="checkbox"/> YES	<input type="checkbox"/> N/A	I am a licensed chemical applicator and sometimes apply chemicals on my farm (either in lieu of a third-party licensed applicator or in addition to a third-party licensed applicator). I obey all legal requirements for application and requirements of my license when applying chemicals. I follow all label instructions.
<input type="checkbox"/> YES	<input type="checkbox"/> N/A	(CALIFORNIA ONLY) I am aware of and meet requirements of the Irrigated Lands Regulatory Program (ILRP)
<input type="checkbox"/> YES	<input type="checkbox"/> N/A	I filed taxes and reported farming income to the U.S. government in 2019
<input type="checkbox"/> YES	<input type="checkbox"/> N/A	Responses to this questionnaire are true to the best of my knowledge for the year 2020

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

## PART E: WATER QUALITY RISK ASSESSMENT

The water and soil quality risk checklist shall be used in conjunction with the Standard and is referenced in questions 2, 5, 12 and 12e. This checklist assesses risks to water and soil quality when regular water quality (inbound surface, outbound surface and/or well) testing and/or soil or tissue sampling is not conducted. This checklist can be completed once every 5 years. Recommendations and resources for water and soil testing in each rice growing state are listed in the Resources section of Part E.

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. Under the CWA, EPA has implemented pollution control programs such as setting wastewater standards for industry. EPA has also developed national water quality criteria recommendations for pollutants in surface waters. Non-point source pollution (NPS) is the leading remaining cause of water quality problems in the U.S. and agriculture is classified as an NPS. NPS pollution is managed at the state level and each rice growing state has an NPS Management Plan that details monitoring and mitigation strategies that impact individual farms. NPS Management Plans for each rice growing state are listed in the Resources section of Part E.

### **DIRECTIONS:**

For each question, place a mark in either column A or B.

For any question marked “B”, also place a mark in either C or D.

Count all marks in Column A, B and C.

The farm is considered LOW RISK if:

- All answers are marked A
- Or
- (SUM Column B) – (SUM Column C) = zero

		A	B		C	D
	SCREENING QUESTION	If answer NO, proceed to next question ↓	If answer YES, answer question at right →	ACTION TAKEN IF RISK PRESENT		
		NO	YES		YES	NO
1	To your knowledge, has any portion of the fields where rice is grown been used for the following within the last 50 years?  <ul style="list-style-type: none"> <li>- Sewage sludge application</li> <li>- Industrial waste disposal</li> <li>- Artisanal or industrial mining</li> <li>- Mine drainage</li> <li>- Battery recycling</li> </ul>			IF YES, have you taken the following recommended actions: <ul style="list-style-type: none"> <li>- Learn about the history and type of waste applied</li> <li>- Contacted your states office of environmental quality to request soil testing or guidance on soil testing, OR</li> <li>- Had the soil tested for cadmium, mercury, arsenic, lead and persistent organic pollutants?</li> </ul>		

		A	B		C	D
	SCREENING QUESTION	If answer NO, proceed to next question ↓	If answer YES, answer question at right →	ACTION TAKEN IF RISK PRESENT		
		NO	YES		YES	NO
				<ul style="list-style-type: none"> <li>- Routinely tested (every 5 years) even after no contamination has been found.</li> </ul>		
2	Are any fields where rice is grown adjacent (within 100 ft) to a major highway or expressway?			<p>IF YES, have you taken the following recommended actions:</p> <ul style="list-style-type: none"> <li>- Contacted your states office of environmental quality to request soil testing or guidance on soil testing, OR</li> <li>- Had the soil tested for cadmium, mercury, arsenic, lead and persistent organic pollutants?</li> <li>- Routinely tested (every 5 years) even after no contamination has been found.</li> </ul>		
3	Are any fields where rice is grown downwind of a coal fired power plant (within 3 miles)?			<p>IF YES, have you taken the following recommended actions:</p> <ul style="list-style-type: none"> <li>- Contacted your states office of environmental quality to request soil testing or guidance on soil testing, OR</li> <li>- Had the soil tested for cadmium, mercury, arsenic, lead and persistent organic pollutants?</li> <li>- Routinely tested (every 5 years) even after no contamination has been found.</li> </ul>		
4	Are any fields where rice is grown located downstream from an active or former (to your knowledge) waste water treatment plant, livestock, poultry or fisheries operation (within 25 miles)?			<p>IF YES, have you taken the following recommended actions:</p> <ul style="list-style-type: none"> <li>- Contacted your states office of environmental quality to request testing of irrigation water or guidance on irrigation water testing OR</li> <li>- Had the irrigation water tested for biological contaminants?</li> <li>- Routinely tested (every 5 years) even after no</li> </ul>		

		A	B		C	D
	SCREENING QUESTION	If answer NO, proceed to next question ↓	If answer YES, answer question at right →	ACTION TAKEN IF RISK PRESENT		
		NO	YES		YES	NO
				contamination has been found.		
5	To your knowledge, have any of the following products been used on your land within the last 50 years? <ul style="list-style-type: none"> <li>○ Cadmium containing fungicides (cadmium carbonate, cadmium chloride, cadmium succinate, cadmium sebacate, etc.)</li> <li>○ Mercury containing fungicides (e.g. phenyl mercuric acetate, calomel chloride, mercury chloride, etc.)</li> <li>○ Arsenic-containing pesticides (e.g. arsenic acid, arsenic trioxide, arsonate, arsenite, aresonic acid, etc.)</li> <li>○ Phosphate fertilizer from a high cadmium source</li> </ul>			IF YES, have you taken the following recommended actions: <ul style="list-style-type: none"> <li>- Learn about the history and type of products applied</li> <li>- Contacted your states office of environmental quality to request soil testing or guidance on soil testing, OR</li> <li>- Had the soil tested for cadmium, mercury, arsenic, lead and persistent organic pollutants?</li> <li>- Routinely tested (every 5 years) even after no contamination has been found.</li> </ul>		
6	Is your irrigation water obtained from a water body listed on the 303D list?			If YES, have you contacted your state office of environmental quality, crop advisor, conservation district or NRCS office to understand any testing being conducted by your state, testing requirements by property owner or other requirements or recommendations in accordance with the state non-point source pollution management plan.		
7	To your knowledge, have there been any reports in your watershed (or water system) of surface irrigation water testing positive for industrial, biological (including pathogens and bacteria) or metal contamination including high levels of nitrates or pesticides?			IF YES, have you taken the following recommended actions: <ul style="list-style-type: none"> <li>- Learned about the time, location and nature of these reports</li> <li>- Contacted your states office of environmental quality to request soil or irrigation water testing or guidance on soil and irrigation water testing, OR</li> </ul>		

		A	B		C	D
	SCREENING QUESTION	If answer NO, proceed to next question ↓	If answer YES, answer question at right →	ACTION TAKEN IF RISK PRESENT		
		NO	YES		YES	NO
				<ul style="list-style-type: none"> <li>- Had the soil or irrigation water tested for industrial, biological or metal contamination?</li> <li>- Routinely tested (every 5 years) even after no contamination has been found.</li> </ul>		
8	To your knowledge, has your well or wells in your community ever tested positive for industrial, biological (including pathogens and bacteria) or metal contamination including high levels of nitrates or pesticides?			<p>IF YES, have you taken the following recommended actions:</p> <ul style="list-style-type: none"> <li>- Learned about the time, location and nature of these reports</li> <li>- Contacted your states office of environmental quality to request soil or irrigation water testing or guidance on soil and irrigation water testing, OR</li> <li>- Had the soil or irrigation water tested for industrial, biological or metal contamination?</li> </ul> <p>Routinely tested (every 5 years) even after no contamination has been found.</p>		
9	To your knowledge, has irrigation water on your property ever tested outside acceptable limits for any industrial, biological (including pathogens and bacteria) or metal contamination including high levels of nitrates or pesticides?			<p>IF YES, have you taken the following recommended actions:</p> <ul style="list-style-type: none"> <li>- Learned about the time, location and nature of these results</li> <li>- Contacted your states office of environmental quality to request soil or irrigation water testing or guidance on soil and irrigation water testing, OR</li> <li>- Had the soil or irrigation water tested for industrial, biological or metal contamination?</li> <li>- Routinely tested (every 5 years) even after no contamination has been found.</li> </ul>		

		A	B		C	D
	SCREENING QUESTION	If answer NO, proceed to next question ↓	If answer YES, answer question at right →	ACTION TAKEN IF RISK PRESENT		
		NO	YES		YES	NO
10	Do you notice erosion or sediment on your property from: <ul style="list-style-type: none"> <li>Irrigation</li> <li>Stormwater</li> <li>Pasture or Range</li> </ul>			IF YES, have you taken the following recommended actions: <ul style="list-style-type: none"> <li>Contacted NRCS for recommended practices?</li> </ul>		
11	Do you notice streambank erosion or murky water in on-farm or adjacent ditches or streams?			IF YES, have you taken the following recommended actions: <ul style="list-style-type: none"> <li>Contacted NRCS for recommended practices?</li> </ul>		
	Do you notice sides of streams or ditches are eroding?					
	Water in ditches or streams or other water bodies is muddy or looks like chocolate milk?					
	Water in ditches or streams may be clear, but silt has settled on the bottom?					
12	Is there a noticeable greenish color in your ditches/streams/ponds?			IF YES, have you taken the following recommended actions: <ul style="list-style-type: none"> <li>Contacted NRCS for recommended practices?</li> </ul>		
	Do you notice algae, plants or mosses in your waterways?					
13	Have you noticed signs of high nitrates in irrigation water?			IF YES, have you taken the following recommended actions: <ul style="list-style-type: none"> <li>Contacted NRCS for recommended practices?</li> </ul>		
14	Do you notice fish kills or erratic behavior of aquatic species in nearby streams?			IF YES, have you taken the following recommended actions: <ul style="list-style-type: none"> <li>Contacted NRCS for recommended practices?</li> </ul>		
15	Have you noticed or heard of water temperature increases in streams in your watershed?			IF YES, have you taken the following recommended actions: <ul style="list-style-type: none"> <li>Contacted NRCS for recommended practices?</li> </ul>		
16	Has your irrigation source ever had high salinity levels?			IF YES, have you taken the following recommended actions: <ul style="list-style-type: none"> <li>Seek expert advice from crop advisor, NRCS or University Extension on mitigation options</li> <li>Follow government mandates and recommendations for your area</li> </ul>		

		A	B		C	D
	SCREENING QUESTION	If answer NO, proceed to next question ↓	If answer YES, answer question at right →	ACTION TAKEN IF RISK PRESENT		
		NO	YES		YES	NO
				<ul style="list-style-type: none"> <li>- Regularly test soil and irrigation water, especially towards end of year</li> <li>- Regularly scout for salt related damage</li> </ul>		
17	Have you ever noticed any damage from salt or indications of high salinity in irrigation water?			IF YES, have you taken the following recommended actions: <ul style="list-style-type: none"> <li>- Seek expert advice from crop advisor, NRCS or University Extension on mitigation options</li> <li>- Follow government mandates and recommendations for your area</li> <li>- Regularly test soil and irrigation water, especially towards end of year</li> <li>- Regularly scout for salt related damage</li> </ul>		
18	Is your land located within 3 km of a body of salt water?			IF YES, have you taken the following recommended actions: <ul style="list-style-type: none"> <li>- Follow government mandates and recommendations for your area</li> <li>- Regularly test soil and irrigation water, especially towards end of year</li> <li>- Regularly scout for salt related damage</li> </ul>		
19	Has your land received direct salt water intrusion within the past 5 years? (e.g., flood, hurricane waves, tsunami, etc.)			IF YES, have you taken the following recommended actions: <ul style="list-style-type: none"> <li>- Seek expert advice from crop advisor, NRCS or University Extension on mitigation options</li> <li>- Follow government mandates and recommendations for your area</li> <li>- Regularly test soil and irrigation water, especially towards end of year</li> <li>- Regularly scout for salt related damage</li> </ul>		

		A	B		C	D
	SCREENING QUESTION	If answer NO, proceed to next question ↓	If answer YES, answer question at right →	ACTION TAKEN IF RISK PRESENT		
		NO	YES		YES	NO
20	Does your land experience tide- related changes in water table?			IF YES, have you taken the following recommended actions: <ul style="list-style-type: none"> <li>- Seek expert advice from crop advisor, NRCS or University Extension on mitigation options</li> <li>- Follow government mandates and recommendations for your area</li> <li>- Regularly test soil and irrigation water, especially towards end of year</li> <li>- Regularly scout for salt related damage</li> </ul>		
21	Does your water table depth change by more than 10 cm between seasons?			IF YES, have you taken the following recommended actions: <ul style="list-style-type: none"> <li>- Seek expert advice from crop advisor, NRCS or University Extension on mitigation options</li> <li>- Follow government mandates and recommendations for your area</li> <li>- Regularly test soil and irrigation water, especially towards end of year</li> <li>- Regularly scout for salt related damage</li> </ul>		
22	Have there been any government or community warnings in your area about soil or water salinization?			IF YES, have you taken the following recommended actions: <ul style="list-style-type: none"> <li>- Seek expert advice from crop advisor, NRCS or University Extension on mitigation options</li> <li>- Follow government mandates and recommendations for your area</li> <li>- Regularly test soil and irrigation water, especially towards end of year</li> <li>- Regularly scout for salt related damage</li> </ul>		
23	Does your irrigation source get depleted towards the end of the dry season?			IF YES, have you taken the following recommended actions:		



		A	B		C	D
	SCREENING QUESTION	If answer NO, proceed to next question ↓	If answer YES, answer question at right →	ACTION TAKEN IF RISK PRESENT		
		NO	YES		YES	NO
				<ul style="list-style-type: none"> <li>- Seek expert advice from crop advisor, NRCS or University Extension on mitigation options</li> <li>- Follow government mandates and recommendations for your area</li> <li>- Regularly test soil and irrigation water, especially towards end of year</li> <li>- Regularly scout for salt related damage</li> </ul>		

SUM Column A	
SUM Column B	
SUM Column C	
B - C	

## Water and Soil Testing Resources

<b>AR</b>	<u>GENERAL GUIDANCE</u>	<ul style="list-style-type: none"> <li>• <a href="https://arkansas-water-center.uark.edu/publications/factsheets/FS-2017-03-Irrigation-Analytical-Package-How-to-Collect-Sample-and-Interpret-Results-2.pdf">https://arkansas-water-center.uark.edu/publications/factsheets/FS-2017-03-Irrigation-Analytical-Package-How-to-Collect-Sample-and-Interpret-Results-2.pdf</a></li> <li>• </li> </ul>
	<u>LABORATORIES</u>	<ul style="list-style-type: none"> <li>• <a href="https://www.uaex.edu/farm-ranch/special-programs/aquaculture/diagnostic-services.aspx">https://www.uaex.edu/farm-ranch/special-programs/aquaculture/diagnostic-services.aspx</a></li> </ul>
<b>CA</b>	<u>GENERAL GUIDANCE</u>	<ul style="list-style-type: none"> <li>• <a href="https://www.nrcs.usda.gov/wps/portal/nrcs/detail/ca/water/?cid=stelprdb1248443">https://www.nrcs.usda.gov/wps/portal/nrcs/detail/ca/water/?cid=stelprdb1248443</a></li> <li>• <a href="https://prod.nrcs.usda.gov/wps/PA_NRCSCConsumption/download?cid=stelprdb1248580&amp;ext=pdf">https://prod.nrcs.usda.gov/wps/PA_NRCSCConsumption/download?cid=stelprdb1248580&amp;ext=pdf</a></li> <li>• <a href="https://www.waterboards.ca.gov/water_issues/programs/agriculture/">https://www.waterboards.ca.gov/water_issues/programs/agriculture/</a></li> </ul>
	<u>LABORATORIES</u>	<ul style="list-style-type: none"> <li>• <a href="http://cecentralsierra.ucanr.org/files/115331.pdf">http://cecentralsierra.ucanr.org/files/115331.pdf</a></li> </ul>
<b>LA</b>	<u>GENERAL GUIDANCE</u>	<ul style="list-style-type: none"> <li>• <a href="https://www.lsu.edu/agriculture/plant/extension/hcpl-publications/1_Pub.3441-AgriculturalWater-BestPracticestoEnsureOn-FarmFoodSafety.pdf">https://www.lsu.edu/agriculture/plant/extension/hcpl-publications/1_Pub.3441-AgriculturalWater-BestPracticestoEnsureOn-FarmFoodSafety.pdf</a></li> </ul>
	<u>LABORATORIES</u>	<ul style="list-style-type: none"> <li>• <a href="https://www.lsuagcenter.com/portals/our_offices/departments/spess/service-labs/soil_testing_lab">https://www.lsuagcenter.com/portals/our_offices/departments/spess/service-labs/soil_testing_lab</a></li> </ul>
<b>MS</b>	<u>GENERAL GUIDANCE</u>	<ul style="list-style-type: none"> <li>• <a href="http://extension.msstate.edu/publications/soil-testing-for-the-farmer">http://extension.msstate.edu/publications/soil-testing-for-the-farmer</a></li> </ul>
	<u>LABORATORIES</u>	<ul style="list-style-type: none"> <li>• <a href="http://extension.msstate.edu/content/contact-soil-testing">http://extension.msstate.edu/content/contact-soil-testing</a></li> </ul>
<b>MO</b>	<u>GENERAL GUIDANCE</u>	<ul style="list-style-type: none"> <li>• <a href="http://soilplantlab.missouri.edu/soil/water.aspx">http://soilplantlab.missouri.edu/soil/water.aspx</a></li> <li>• <a href="http://soilplantlab.missouri.edu/soil/recommendations.aspx">http://soilplantlab.missouri.edu/soil/recommendations.aspx</a></li> </ul>
	<u>LABORATORIES</u>	<ul style="list-style-type: none"> <li>• <a href="http://soilplantlab.missouri.edu/soil/?_ga=2.2642229.44928609.1556737122-103188437.1556737122">http://soilplantlab.missouri.edu/soil/?_ga=2.2642229.44928609.1556737122-103188437.1556737122</a></li> </ul>
<b>TX</b>	<u>GENERAL GUIDANCE</u>	<ul style="list-style-type: none"> <li>• </li> </ul>
	<u>LABORATORIES</u>	<ul style="list-style-type: none"> <li>• <a href="http://soiltesting.tamu.edu/">http://soiltesting.tamu.edu/</a> <a href="https://www.noble.org/ag/services/testing/water-testing/">https://www.noble.org/ag/services/testing/water-testing/</a></li> </ul>

## State NPS Management Plans

<b>AR</b>	<a href="https://static.ark.org/eeuploads/anrc/Pages_from_2018-2023_NPS_Pollution_Management_Plan.compressed_(1).pdf">https://static.ark.org/eeuploads/anrc/Pages_from_2018-2023_NPS_Pollution_Management_Plan.compressed_(1).pdf</a>
<b>CA</b>	<a href="https://www.waterboards.ca.gov/water_issues/programs/nps/docs/plans_policies/sip_2014to2020.pdf">https://www.waterboards.ca.gov/water_issues/programs/nps/docs/plans_policies/sip_2014to2020.pdf</a>
<b>LA</b>	<a href="https://deq.louisiana.gov/assets/docs/Water/NPS_Management_Plan_1.pdf">https://deq.louisiana.gov/assets/docs/Water/NPS_Management_Plan_1.pdf</a>
<b>MS</b>	<a href="https://www.mdeq.ms.gov/wp-content/uploads/2017/05/FINAL_NPS_Management_Plan_Update_2014.pdf">https://www.mdeq.ms.gov/wp-content/uploads/2017/05/FINAL_NPS_Management_Plan_Update_2014.pdf</a>
<b>MO</b>	<a href="https://dnr.mo.gov/env/swcp/nps/mgmtplan/docs/missouri-nonpoint-source-management-plan-042215-final.pdf">https://dnr.mo.gov/env/swcp/nps/mgmtplan/docs/missouri-nonpoint-source-management-plan-042215-final.pdf</a>
<b>TX</b>	<a href="https://www.tceq.texas.gov/assets/public/waterquality/nps/mgmt-plan/2017_NPSManagementProgram.pdf">https://www.tceq.texas.gov/assets/public/waterquality/nps/mgmt-plan/2017_NPSManagementProgram.pdf</a>

## State Rice Production Handbooks

<b>AR</b>	<a href="https://www.uaex.edu/publications/pdf/MP192/MP192.pdf">https://www.uaex.edu/publications/pdf/MP192/MP192.pdf</a>
<b>CA</b>	<a href="http://rice.ucanr.edu/Reports-Publications/Rice_Production_Workshop_Manual/">http://rice.ucanr.edu/Reports-Publications/Rice_Production_Workshop_Manual/</a>
<b>LA</b>	<a href="https://www.lsuagcenter.com/portals/communications/publications/publications_catalog/crops_livestock_production-handbook1">https://www.lsuagcenter.com/portals/communications/publications/publications_catalog/crops_livestock_production-handbook1</a>
<b>MS</b>	<a href="https://extension.msstate.edu/sites/default/files/publications/publications/p2255.pdf">https://extension.msstate.edu/sites/default/files/publications/publications/p2255.pdf</a>
<b>MO</b>	<a href="http://agebb.missouri.edu/murice/research/99/pg5.php">http://agebb.missouri.edu/murice/research/99/pg5.php</a>
<b>TX</b>	<a href="https://beaumont.tamu.edu/eLibrary/Bulletins/2012_Rice_Production_Guidelines.pdf">https://beaumont.tamu.edu/eLibrary/Bulletins/2012_Rice_Production_Guidelines.pdf</a>

Table 1: Comparison of Points and Critical Minimums for SRP 2.0 and NIG for the U.S.

Question Number	Question Name	SRP 2.0 Max Points	SRP 2.0 Critical Min Points	SRP 2.0 Critical Min Selection	SRP NIG for U.S. Max Points	SRP NIG for U.S. Critical Min Points	SRP NIG for U.S. Critical Min Selection	Covered by US Regulation or Agency	Response for all U.S. Producers	Notes
1	Crop Calendar	3	1	C	3	1	C	N		
2	Record Keeping	3	1	C	3	1	C	N		
3	Training	3	1	C	3	1	C	N		
4	Heavy Metals	3	2	C	3	2	B	Y	B	
5	Salinity	3	1	C	3	1	C	N		
6	Land Conversion and Biodiversity	3	1	C	3	1	C	Y	C	Respondents have option to answer B or A. See 6e.
7	Invasive Species	3	3	A	3	3	A	Y	A	
8	Leveling	3	2	B/D	3	2	C/G	N		
9	Pure Quality Seeds	3	2	C	3	2	C	Y	A	
10	Water Management	3	1	C	3	1	C	N		See table Q10.
11	Irrigation System at Community Level	3	2	C	3	3	C	N		
12	Inbound Water Quality	3	1	D	3	1	C	N		
13	Groundwater Extraction	3	2	C	3	2	C	Y	B	
14	Drainage	3	2	D	3	2	D	N		
15	Nutrient Management (Inorganic and/or Organic)	6	4	B	6	4	B	N		
16	Organic Fertilizer Choice	3	2	C	3	2	B	N		
17	Inorganic Fertilizer Choice	3	3	B	3	3	B	Y	B	
18	Pest Management	18	11	Various	18	11	C	N		
19	Timing of Harvest	3	2	B	3	2	B	Y	A	
20	Harvest Equipment	3	3	B	3	3	B	Y	B	
21	Drying Time	3	2	C	3	2	C	Y	B	
22	Drying Technique	3	2	C	3	2	C	Y	B	
23	Rice Storage	3	1	D	3	1	D	Y	B	

Question Number	Question Name	SRP 2.0 Max Points	SRP 2.0 Critical Min Points	SRP 2.0 Critical Min Selection	SRP NIG for U.S. Max Points	SRP NIG for U.S. Critical Min Points	SRP NIG for U.S. Critical Min Selection	Covered by US Regulation or Agency	Response for all U.S. Producers	Notes
24	Rice Stubble	3	1	C	3	1	C	N		
25	Rice Straw	3	1	C	3	1	C	N		
26	Safety Instructions and First Aid	2	1	B	2	1	B	Y	B	Respondents have option to answer A. See 26e.
27	Tools and Equipment	2	1	B	2	1	B	N		
28	Training of Pesticide Applicators	2	1	C	2	1	C	Y	B	
29	Personal Protective Equipment (PPE)	2	1	D	2	1	D	Y	B	
30	Washing and Changing	2	1	C	2	1	C	Y	B	
31	Applicator Restrictions	2	2	B	2	2	B	Y	B	
32	Re-entry Time	2	1	C	2	1	C	Y	C	Respondents have option to answer B or A. See 32e.
33	Pesticide and Chemical Storage	2	1	C	2	1	C	Y	B	
34	Pesticide Disposal	2	1	C	2	1	C	Y	B	
35	Child Labor	3	3	B	3	3	B	Y	B	
36	Hazardous Work	3	3	B	3	3	B	Y	B	
37	Education	3	1	D	3	1	D	Y	B	
38	Forced Labor	3	3	B	3	3	B	Y	B	
39	Discrimination	3	3	B	3	3	B	Y	B	
40	Freedom of Association	3	3	B	3	3	B	Y	B	
41	Wages	3	3	B	3	3	B	Y	B	
	TOTAL	132			132					

10		All U.S. rice production meets the definition of the SRP irrigation system category for “Irrigated, Not Flood Prone”. Measures are in place to enhance water-use efficiency, in this system category.			
A	4	Rice fields are leveled (no levees); no plastic pipe	A	2	Multiple dry down events
B	3	Rice fields have straight levees; and plastic pipe	B	1	One dry down event (*)
C	2	Rice fields have straight levees and no plastic pipe	C	0	None
D	2	Rice fields have contour levees; and plastic pipe (*)			
E	0	Rice fields have contour levees and no plastic pipe			

COMBINATIONS				MAP TO SRP 2.0		
LEVELING		DRYING		SRP-RESULT	US ONLY	NOTES
A	4	A	2	3	1	Precision or zero grade leveling + multiple dry down events; more water savings than option A in SRP 2.0
A	4	B	1	3	0	Equivalent to Option A in SRP 2.0
A	4	C	0	0	0	Equivalent to Option D in SRP 2.0 (no dry down events)
B	3	A	2	3	1	Precision delivery + multiple dry down events; more water savings than option A in SRP 2.0
B	3	B	1	3	0	Equivalent to Option A in SRP 2.0
B	3	C	0	0	0	Equivalent to Option D in SRP 2.0 (no dry down events)
C	2	A	2	3	0	Equivalent to Option A in SRP 2.0
C	2	B	1	3	0	Equivalent to Option A in SRP 2.0
C	2	C	0	0	0	Equivalent to Option D in SRP 2.0 (no dry down events)
D	1	A	2	2	0	Equivalent to Option B in SRP 2.0
D	1	B	1	1*	0	Equivalent to Option C in SRP 2.0
D	1	C	0	0	0	Equivalent to Option D in SRP 2.0 (no dry down events)
E	0	A	2	2	0	Equivalent to Option B in SRP 2.0
E	0	B	1	1	0	Equivalent to Option C in SRP 2.0
E	0	C	0	0	0	Equivalent to Option D in SRP 2.0 (no dry down events)

