

State ranking questions required for PY2015 AgWRAP water supply wells

1. What is the percent of the water use demand of the operation provided by the proposed well? *Response = percent*

- a. Determine water needs of the operation. Use the Water Needs Assessment Tool for NC. Download from: <http://www.ncagr.gov/SWC/tech/onlinedesigntools.html>
Under **Water Balance** heading

How to calculate:

- Enter crops and/or animals and watershed information if applicable. Result will be in acre-feet.
- Go to summary sheet, convert required storage to gallons: 1 acre foot = 325 851.429 gallons

There are a variety of online tools that will help with the conversion:

- <http://www.convertunits.com/from/acre-feet/to/gallons>
- [http://www.kylesconverter.com/volume/acre--feet-to-gallons-\(u.s.-fluid\)](http://www.kylesconverter.com/volume/acre--feet-to-gallons-(u.s.-fluid))

- b. Total the existing water sources used on the operation. Obtain this data from discussing the current animal watering or irrigation sources and timing and/or amount used by the cooperator. This will be an estimate based on best professional judgment unless the cooperator is using water meters.
- c. Subtract: item a – item b = amount of water needed from proposed well
- d. Determine what the typical well rate (gallons) is in the proposed location. This data can be found by contacting certified well contractors or referring to Division of Water Resources data: <http://www.ncwater.org/?page=525> Total for the year.
- e. Divide: item c/item d (deficit/amount of water provided by well)
- f. Multiply: item e * 100
- g. Multiply: item f * 50 to obtain points. Note the maximum available for this question is 50 – so if the proposed well will provide more than 100% of the water use demand needed, the points for this parameter will be 50.

2. Does the operation currently use a public water system? *Response = yes or no*

- a. Determine when discussing item 1b with the cooperator.
- i. Yes = 25 points
 - ii. No = 0 points

3. Will the proposed well be located in a groundwater drinking water assessment area? *Response = yes or no*

- a. Go to the following website: <http://149.168.87.14/pws/>
- b. Enter proposed latitude and longitude
- c. Results table will indicate if the location is in a groundwater drinking water assessment area.
 - i. If project IS located within a groundwater drinking water assessment area, response = Yes = subtract 15 points
 - ii. If project in NOT located within a groundwater drinking water assessment area, response = No = 0 points

4. For Projects in the Coastal Plain ONLY: Will well be located in the Black Creek or Upper Cape Fear Aquifers?* Response = yes or no

- a. Go to the following website <http://www.ncwater.org/?page=350>
- b. Enter proposed latitude and longitude
- c. Enter typical well depth in your county. If you are not sure, contact your certified well driller, provide the approximate location, and they can provide an estimate.
- d. Enter typical top of screen depth or top of open hole depth in your county (generally 10 feet less than well depth). If you are not sure, contact your certified well driller, provide the approximate location, and they can provide an estimate.
- e. Submit Request
 - i. If the bottom of your well IS in the Black Creek or Upper Cape Fear layers = Yes response = subtract 35 points.
 - ii. If the bottom of your well is NOT in the Black Creek or Upper Cape Fear layers = No response = 0 points.

5. For Projects in the Coastal Plain ONLY: Will well be located in a strongly confined aquifer?*

Response = yes or no

- a. Go to the following website <http://www.ncwater.org/?page=350>
- b. Enter proposed latitude and longitude
- c. Enter typical well depth in your county. If you are not sure, contact your certified well driller, provide the approximate location, and they can provide an estimate.
- d. Enter typical top of screen depth or top of open hole depth in your county (generally 10 feet less than well depth). If you are not sure, contact your certified well driller, provide the approximate location, and they can provide an estimate.
- e. Submit Request
 - i. If the bottom of your well IS below two dark gray layers = Yes response = subtract 25 points.
 - ii. If the bottom of your well is NOT below two dark gray layers = No response = 0 points.

***Projects will only receive points for 4 OR 5 – not both!**

6. Cooperator has already installed water conservation measures on their operation.

Please complete for all practices that the cooperator has already adopted on the operation. The maximum point total for this section is 10 points.

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| _____ Acreage under no-till (3 pts) | _____ Acreage receiving soil amendments or mulch to add organic matter (3 pts) |
| _____ Acreage under cover crops (3 pts) | <input type="checkbox"/> Water meter used to track water use (3 pts) |
| _____ Acreage under contour farming (3 pts) | <input type="checkbox"/> Follows a pre-existing written irrigation management plan (5 pts) |
| _____ Acreage under sod based rotation(3 pts) | <input type="checkbox"/> Have a completed water usage audit (5 pts) |
| _____ Acreage under strip-cropping (3 pts) | <input type="checkbox"/> Reduce flushing of ponds between harvesting fish and receiving new fish (aquaculture operations only) (10 pts) |
| _____ Acreage under micro-irrigation / drip irrigation (15 pts) | <input type="checkbox"/> Transfer water to emptied ponds instead of discharging (10 pts) |
| _____ Acreage irrigated at night (5 pts) | _____ Please list number of all waterers and the number of ball waterers on the management unit. (3 pts) |
| _____ Acreage under end gun shut-off systems (4 pts) | |
| _____ Acreage under plasticulture (10 pts) | |
| _____ Acreage under low pressure irrigation system (not micro or drip) (4 pts) | |

7. Current water source will not meet the requirements under the Food Safety Modernization Act. *More details will be available and posted in the coming weeks. If you have a board meeting scheduled before this guidance is issued, please give the application 0 points for this question..*

8. Applicant has a suitable pond site, but would prefer a well. *Subtract 10 points*

9. Applicant does not have a suitable pond site. *Add 20 points*

DISTRICT RANKING QUESTIONS