

Grade 7: Module 4B: Unit 2: Lesson 13
Forming a Research-Based Claim: Stakeholder
Chart on Better Agricultural Water Management





Forming a Research-Based Claim:

Stakeholder Chart on Better Agricultural Water Management

Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can write arguments to support claims with clear reasons and relevant evidence. (W.7.1)

I can select evidence from literary or informational texts to support analysis, reflection, and research. (W.7.9)

I can use my experience and knowledge of language and logic to address problems and advocate persuasively. (RI.7.9a, SL.7.2a)

Supporting Learning Targets	Ongoing Assessment
 I can create a Stakeholder chart based on agricultural management of water, using my Cascading Consequences chart for agricultural management of water and researcher's notebook. 	Stakeholder chart for industrial management of water (from homework)
 I can use my knowledge of industrial and agricultural management of water to advocate persuasively for one side or another. I can practice the skills and expectations of a Fishbowl discussion. 	Stakeholder chart for agricultural management of water Industrial/Agricultural Fishbowl graphic organizer



Forming a Research-Based Claim:

Agenda	Teaching Notes
 Opening A. Sharing Stakeholder Charts for Industrial	 In this lesson, students complete the series of lessons that have helped them prepare their research for both a Fishbowl discussion (in Lessons 14 and 15) and the eventual position paper/essay in Unit 3 in which they will answer this prompt: "Which category of water management would be a good place to begin to make the way we manage water more sustainable?" If you have not done so already, preview Unit 3 to be more oriented to this culminating task. The Fishbowl serves as the first half of the End of Unit 2 Assessment; the second half of the assessment
Management of Water (15 minutes)	is the preparation of a visual aid (during Lessons 16 and 17) based on the students' research and Fishbowl discussion.
B. Position Power-Talk: World Cafe (20 minutes)3. Closing and Assessment	• Students will create the final Stakeholder chart independently but will have an opportunity to share and add knowledge once the chart is complete.
A. Debrief (3 minutes) 4. Homework	• Based on your preference, you may collect the Stakeholder chart for agricultural management of water as an additional assessment, but this is not required. If collecting as an assessment, do so in Lesson 15, so students can use the Stakeholder charts to prepare for the Fishbowl discussion.
A. Prepare the graphic organizer for the agriculture/industry Fishbowl discussion in the next lesson.	See the Teaching Note at the end of this lesson about assigning students to groups for the Fishbowl discussion.
	• Stakeholder charts and Fishbowl discussions require an intimate understanding of position and opinion; as much as possible, encourage students to imagine themselves "in the shoes" of the stakeholders in industry and agriculture. To that end, in this lesson and those following, consider using props, costume pieces, or simple signs that indicate to the students what "role" they are taking at any given point. For example, during the World Café, as students talk through questions that relate to the agricultural management of water, they might put on a farmer's straw hat or cap, or prop up a sign with agricultural graphics or pictures on their desks.
	 Students should be familiar with and move fairly quickly through the World Café protocol; however, based on the needs of your students, this lesson may take more than 45 minutes. Consider breaking the lesson across two days (splitting it between Rounds II and III of the World Café protocol) or reducing the number of rounds.

Forming a Research-Based Claim:

Agenda	Teaching Notes (continued)
	 Encourage students to return to their original texts at any point for any clarification they require. Returning to the text consistently is a "habit of mind" that should be emphasized. In advance: set up the materials for the World Café.
	 In advance: create Recording Charts: on chart paper; one per group of four, labeled "Recording Chart #1, 2, 3, 4, etc., depending on the number of groups you have when students are divided into fours). Post: Learning targets.

Lesson Vocabulary	Materials
	Cascading Consequences chart for agricultural management of water (from Lesson 11; one per student)
	Researcher's notebook (begun in Lesson 3; one per student)
	Stakeholder chart for agricultural management of water (from Lesson 12; one per student)
	Stakeholder chart tips (one to display)
	Document camera
	• Unit 3 essay prompt (from Lesson 11; one to display)
	Recording charts (Markers - one per group of four)
	Table cards (one per group of four)
	Discussion protocols (one per group of four)
	World Café protocol directions (one to display; see Appendix)
	Sample Stakeholder chart for agricultural management of water (for teacher reference)
	Industrial/Agricultural Fishbowl graphic organizer, Parts I and II (one per student)

Forming a Research-Based Claim:

Opening	Meeting Students' Needs
A. Sharing Stakeholder Charts for Industrial Management of Water from Homework; Reviewing Learning Targets (7 minutes)	
• Have students work with a partner to compare and contrast their Stakeholder charts for industrial management of water from homework. Have pairs ask each other:	
* "What is your strongest stakeholder row—the one you feel the most confident about?"	
* "Do you have any questions about what you wrote last night?"	
• Students should copy their partner's strongest stakeholder onto their own chart. Circulate during this discussion and provide answers if needed.	
Have students read the learning targets aloud with you:	
* "I can create a Stakeholder chart based on agricultural management of water, using my Cascading Consequences chart for agricultural management of water and researcher's notebook."	
* "I can use my knowledge of industrial and agricultural management of water to advocate persuasively for one side or another."	
* "I can practice the skills and expectations of a Fishbowl discussion."	
• Note that the targets indicate that today's lesson is going to be full, but active. Let students know that today they are in the home stretch and will begin preparations for the End of Unit 2 Assessment in Lessons 14–17. Congratulate them for their hard work up to this point.	
• Ask them to turn to an elbow partner and discuss briefly how the last two learning targets will help them prepare for the end of unit assessment. Listen for: "We're going to practice our speaking and listening skills today," "We're going to get a chance to prepare our thoughts for the Fishbowl discussion," and "We get to try out our ideas before we're assessed."	

Forming a Research-Based Claim:

Stakeholder Chart on Better Agricultural Water Management

Work Time Meeting Students' Needs

A. Creating Stakeholder Chart for Agricultural Management of Water (15 minutes)

- Have students take out their Cascading Consequences chart for agricultural management of water and their researcher's notebook.
- Distribute the Stakeholder chart for agricultural management of water.
- Explain that students will independently create their Stakeholder chart for agricultural management of water based on their corresponding Cascading Consequences chart.
- Display the **Stakeholder chart tips** under the **document camera**:
 - 1. Remember to use your Stakeholder chart for industrial management of water as a model.
 - 2. Go back to your researcher's notebook for further clarification and ideas.
 - 3. Remember to put yourself in the shoes of the stakeholders.
- Circulate as students work silently and independently.
- With 5 minutes left in the Work Time, have students get up for a quick 30-second stretch.
- Ask students to find a new partner to compare and contrast their Stakeholder chart and discuss these questions:
 - * "What is your strongest stakeholder row—the one you feel the most confident about?"
 - * "Do you have any questions about what you wrote just now?"
- Students should copy their partner's strongest stakeholder onto their own chart. They should also attempt to clarify any questions their partners came across while doing the homework. Circulate during this discussion and provide answers if needed. (See **Sample Stakeholder chart for agricultural management of water (for teacher reference)**).

- When possible, have students who need physical activity take on the active roles of managing and writing on charts or handing out materials.
- After lengthy stretches of writing or reading in which students are remaining still or seated, provide a "stretch" or "brain" break before continuing on to the next activity (for example, between Work Time A and Work Time B). Research indicates that these breaks are necessary for retention of information, especially for boys, who need multiple breaks away from the material to maximize their learning.
- Consider doing a "mop-up model" in the middle of this Work Time, should students demonstrate that they need extra assistance. Follow the think-aloud model used in Lesson 12, substituting the agricultural charts for the industrial charts.



Forming a Research-Based Claim:

Work Time (continued)	Meeting Students' Needs
	• Keep in mind that this lesson requires visual comparison and written transferral of information. If students are visually or physically challenged, this process might be modified for them ahead of time so they are not unnecessarily impeded in categorizing and analyzing the evidence. Possible modifications include partially filled-in Stakeholder charts; creating a Stakeholder chart on chart paper and/or lined paper; or giving the students items from the research notes on sticky notes to physically sort on the Stakeholder charts.
	• The lesson hinges on the accurate and full completion of the Cascading Consequences charts. Think ahead to whether any previous modifications to these materials for students with special needs should be replicated here. Also, if a student has struggled with gathering the information on the Cascading Consequences charts, consider pairing him or her with a proficient student or giving examples from the text on sticky notes.

Forming a Research-Based Claim:

Stakeholder Chart on Better Agricultural Water Management

Work Time (continued)

B. Position Power-Talk: World Café (20 minutes)

- Make sure students have both of their Stakeholder charts and a writing utensil.
- Refer them back to the **Unit 3 essay prompt**: "Which category of water management would be a good place to begin to make the way we manage water more sustainable?" Let them know that they will now participate in a discussion activity that will help them decide what the answer to that question should be.
- Arrange students into groups of four, with each quad sitting at a table with materials for the World Café: **recording chart**, a **marker**, a **table card**, and **discussion protocols**.
- · Students must bring their charts and writing utensils with them through the World Café.
- The four table cards will pose the following four questions, one on each card:
 - "Who are the most important stakeholders in the *agricultural* management of water, and why?"
 - "Who are the most important stakeholders in the *industrial* management of water, and why?"
 - "Discuss the *positive* consequences listed on your Stakeholder charts for both agricultural and industrial management of water. Which ones do you feel are the most powerful, and why?"
 - "Discuss the most *negative* consequence listed on your Stakeholder charts for both agricultural and industrial management of water. How could this strengthen an argument? How could this weaken an argument?"
- Display the World Café protocol directions on the document camera or on a chart. Briefly review the protocol directions.
- Remind students that they may have done this protocol once before, in Module 2A. Remind them that it will feel fast-paced at first, because it's designed to give every student a chance to think for a bit about each question. Caution students that you will interrupt their conversations, but they will have a chance to keep working with their ideas at the end of the activity. Review the simple signal you will use to indicate when each round is done (e.g., raising hands, clapping).
- Note that this is also an activity in which students will practice conducting civil, respectful conversations with one another about the subject material. Refer back to the second and third learning targets:
 - * "I can use my knowledge of industrial and agricultural management of water to advocate persuasively for one side or another."
 - $^{\ast}\,\,$ "I can practice the skills and expectations of the Fishbowl discussion."

Meeting Students' Needs

- Use of protocols (like World Café) allows for total participation of students. It encourages critical thinking, collaboration, mixed-level groups, and social construction of knowledge. It also helps students practice their speaking and listening skills.
- If necessary, to accommodate the size of your classes, either eliminate or add a round to the World Café. Note that if you must add a round, you also need to develop an additional table card discussion question. Note also that if you eliminate a round, the other table card questions may need to be adjusted to ensure that students have an equal opportunity to discuss both Stakeholder charts.
- Students may have engaged in the World Café protocol before, in Module 2A. If not, consider how you might need to adapt this Work Time to introduce the World Café as a new activity.



Forming a Research-Based Claim:

Work Time (continued)	Meeting Students' Needs
• Round I:	
• Ask each quad to choose a student to be the "Recorder" for the first round. The Recorder will write down ideas from the group's conversation on the recording chart at the table. Ask all groups to have their Recorder raise his or her hand.	
• Remind students to use both of their Stakeholder charts to support their discussions.	
• Focus the class on the discussion protocols. State that these are the same protocols for which they will be assessed in the next lesson's Fishbowl. Ask students to read the discussion protocols aloud:	
 Present your claim in a focused, coherent manner. 	
 Incorporate relevant facts, descriptions, details, and examples to support your claim. 	
 Present evidence in a logical and convincing manner. 	
 Use appropriate eye contact. 	
 Use adequate volume. 	
 Use clear pronunciation. 	
 Use formal English. 	
 Take notes on what your classmates are saying when it is not your turn to speak. 	
• Focus groups on the question on their table card prompts. Ask them to read the question aloud and then discuss that question. Ask the Recorder to take notes on the table's recording chart. Remind Recorders to make their letters about 1 inch high so that their writing will be visible when posted at the end of the activity.	
• After 3 minutes, use the signal to get students' attention. Explain the transition that they will do momentarily:	
 The Recorders will stay seated at the table where they have been working. 	
 The other students in each quad will stand and rotate together to the table in the next section with different table card prompts. 	
Signal students to transition quickly and quietly.	
• Round II:	
• Give specific positive praise for strong discussions—e.g., text-based, focused on the question, building on each other's ideas, asking each other questions, and following the discussion protocols.	



Forming a Research-Based Claim:

Work Time (continued)	Meeting Students' Needs
• Be sure that the Round I Recorder has remained at his/her original table. Tell the class the following three steps, then prompt them to begin:	
 The Round I Recorder summarizes the conversation that happened at that table during Round I. 	
 Choose a new Round II Recorder from the new students at the table. 	
 The new group reads the discussion protocols and the question on their table card prompt, then begins a discussion about that question. 	
• Remind students to use their charts to support their discussions. Prompt the Round II Recorder to take notes on the table's recording chart. Remind Recorders to make their letters about 1 inch high so that their writing will be visible when posted at the end of the activity.	
• After 3 minutes, use the signal to get students' attention. Remind them of the transition:	
 Round II Recorders will stay seated at the table where they have been working. 	
 The other students in each quad will stand and rotate together to the table in the next section with different table card prompts. 	
Signal the transition to Round III.	
• Round III:	
• Give specific positive praise for strong discussions—e.g., text-based, focused on the question, building on each other's ideas, asking each other questions, and following the discussion protocols.	
Repeat the process from Round II.	
• Be sure that the Round II Recorder has remained at his/her Round II table. Review the three steps, then prompt them to begin:	
 The Round II Recorder summarizes the conversation that happened at that table during Round II. 	
 Choose a new Round III Recorder from the new students at the table. 	
 The new group reads the question on their table card prompt, then begins a discussion about that question. 	
• Remind them to use their charts to support their discussions. Prompt the new Recorder to take notes on the table's recording chart. Remind Recorders to make their letters about 1 inch high so that their writing will be visible when posted at the end of the activity.	



Forming a Research-Based Claim:

Work Time (continued)	Meeting Students' Needs
• After 3 minutes, use the signal to get students' attention. Remind them of the transition:	
 Round III Recorders will stay seated at the table where they have been working. 	
 The other students in each quad will stand and rotate together to the table in the next section with different table card prompts. 	
Signal the transition to Round IV.	
• Round IV:	
• Give specific positive praise for strong discussions—e.g., text-based, focused on the question, building on each other's ideas, asking each other questions, and following the discussion protocols.	
• Repeat the process from Round III.	
• Be sure that the Round III Recorder has remained at his/her Round III table. Review the three steps, then prompt them to begin:	
 The Round III Recorder summarizes the conversation that happened at that table during Round III. 	
 Choose a new Round IV Recorder from the new students at the table. 	
 The new group reads the discussion protocols and the question on their table card prompt, then begins a discussion about that question. 	
• After 3 minutes, use the signal to get students' attention. At this point, students should have discussed each of the questions on the table card prompts. Thank them for their participation and collaboration during the World Café. Point out several specific things you noticed about how they used the protocol more effectively this time than the first time.	
• Ask all Round IV Recorders to bring their recording charts to the front of the room and post them so that they are visible to all.	



Forming a Research-Based Claim:

Closing and Assessment	Meeting Students' Needs
 A. Debrief (3 minutes) Refer students back to the learning targets: "I can create a Stakeholder chart based on agricultural management of water, using my agricultural management of water Cascading Consequences chart and researcher's notebook." "I can use my knowledge of industrial and agricultural management of water to advocate persuasively for one side or another." "I can practice the skills and expectations of a Fishbowl discussion." Ask students to think of one thing they saw or heard today that helped make discussions effective. When they have thought of one, they should raise their hands. When more than half the class has a hand up, cold call several students to share their 	Consider selecting students ahead of time for cold calls. Those who need practice in oral response or extended processing time can be told the prompt before class begins to prepare for their participation. This also allows for a public experience of academic success for students who may struggle with ondemand questioning, or for struggling students in general.
 thinking. Have students do a Heads Down, Hands Up closing activity. Ask them to put their heads down on their desks and raise their hands when you say the sentence that best applies to them: * "I am ready for the Fishbowl discussion." 	
 * "I am going to need to review my notes and discussion skills a bit before the Fishbowl discussion." * "I need some significant practice at home before the Fishbowl discussion." 	
• Distribute the Industrial/Agricultural Fishbowl graphic organizer , Parts I and II . Remind students that they should take all their charts and the researcher's notebook home tonight to help them complete the graphic organizer.	



Forming a Research-Based Claim:

Homework	Meeting Students' Needs
Complete the Industrial/Agricultural Fishbowl graphic organizer.	
Notes: Before Lesson 14, assign each student to one of two groups: those arguing that water reform should begin with agriculture, and those arguing that water reform should begin with industry. One group will participate in a Fishbowl discussion in Lesson 14 while the other listens and takes notes; the groups will "flip" for Lesson 15. Do not inform students ahead of time which group they have been assigned to. Students are expected to complete activities and homework relating to both agricultural and industrial management of water.	
Also see Lesson 14's Teaching Notes and Work Time A to prepare accordingly to model the speaking techniques students will be asked to use during the Fishbowl discussion.	



Grade 7: Module 4B: Unit 2: Lesson 13 Supporting Materials





	Stakeholder Chart Tips
Name:	
Date:	

Remember to use your Stakeholder chart for industrial management of water as a model. Go back to your researcher's notebook for further clarification and ideas. Remember to put yourself in the shoes of the stakeholders.





	Table Cards
	Name:
	Date:
Who are the most important stakeholders i and why?	n the <i>agricultural</i> management of water,
Who are the most important stakeholders i and why?	n the <i>industrial</i> management of water,
Discuss the <i>positive</i> consequences listed on agricultural and industrial management of most powerful, and why?	•
Discuss the most <i>negative</i> consequence list agricultural and industrial management of argument? How could this weaken an argument?	water. How could this strengthen an



Discussion Protocols

Review Your Discussion Protocols

- Present your claim and evidence in a focused, logical, coherent manner.
- Incorporate relevant facts, descriptions, details, and examples to support your claim.
- Use appropriate eye contact.
- Use adequate volume.
- Use clear pronunciation.
- Use formal English.
- Take notes on what your classmates are saying when it is not your turn to speak.



Sample	Stakeho	lder	Chart
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For Agricultural Management of Water For Teacher Reference

Name:	
Date:	

What is the option being considered?

To begin reforming our water management with agricultural management of water.

Stakeholder	What way will this stakeholder be affected?	Is this an intended or unintended consequence?	Is this a positive or negative consequence?	If the consequence is negative, do you feel it is offset by greater good elsewhere?	How important to you are the interests of this stakeholder? 1-very 2-somewhat 3-not so much
farmers	will need to radically revise methods of growing, or possibly get out of the business altogether	Former: intended. Latter: unintended.	Globally positive, but possibly personally negative.	Yes	1
Consumers of product (ex: rice)	Prices may go up if more expensive production is required, or product becomes scarcer	unintended	negative	Yes	1
Consumers of water	Water will be treated and conserved more sustainably	intended	positive	Yes	1



Name:



you hear in this space.

Industrial/Agricultural Fishbowl Graphic Organizer: Part I

Claim: We should begin to manage water better by addressing water use in industry instead of griculture.			
Ev	idence		
Who are the most important stakeholders in industrial water use?	What positive consequences are there for addressing water use in industry?		
What can be done to change the negative consequences of addressing water use in industry?	Using the information in the three other boxes, summarize here why industry's use of water should be addressed before agriculture.		





Industrial/Agricultural Fishbowl

Graphic Organizer: Part II

Ev	idence
Who are the most important stakeholders in agricultural water use?	What positive consequences are there for addressing water use in agriculture?
What can be done to change the negative consequences of addressing water use in agriculture?	Using the information in the three other boxes, summarize here why agriculture's use of water should be addressed before industry.
If you are a listener instead of a participant in the you hear in this space.	ne Fishbowl discussion today, take notes on what

Name:

Date: