### Supporting Learning Targets

<table>
<thead>
<tr>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• End of Unit 1 Assessment</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I can identify the argument and specific claims in the text “Water in Agriculture: Improving Resource Management.”</td>
</tr>
<tr>
<td>• I can evaluate the argument and specific claims in the text “Water in Agriculture: Improving Resource Management.”</td>
</tr>
<tr>
<td>• I can outline the argument and specific claims in the video “Corporations Need to Pay More Attention to Water: Charles Fishman.”</td>
</tr>
<tr>
<td>• I can evaluate the argument and specific claims in the video “Corporations Need to Pay More Attention to Water: Charles Fishman.”</td>
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</table>
# Agenda

<table>
<thead>
<tr>
<th>1. Opening</th>
<th>Teaching Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Entry Task: Evaluating an Argument I Have, Who Has? (5 minutes)</td>
<td>• In this lesson, students independently complete a Tracing an Argument note-catcher for both a text and a video in an end of unit assessment. This task calls upon students to employ the task of tracing an argument that they have been practicing in the last four lessons.</td>
</tr>
<tr>
<td>B. Reviewing the Learning Targets (3 minutes)</td>
<td>• In advance: Cue up the video, “Corporations Need to Pay More Attention to Water: Charles Fishman” (<a href="http://www.youtube.com/watch?v=8uWzIDMuM_U">http://www.youtube.com/watch?v=8uWzIDMuM_U</a>)</td>
</tr>
<tr>
<td>C. Introducing End of Unit 1 Assessment (2 minutes)</td>
<td>• Please bear in mind that Youtube, social media video sites, and other website links may incorporate inappropriate content via comment banks and ads. While some lessons include these links as the most efficient means to view content in preparation for the lesson, be sure to preview links, and/or use a filter service, such as <a href="http://www.safeshare.tv">www.safeshare.tv</a>, for actually viewing these links in the classroom.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Work Time</th>
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<tbody>
<tr>
<td>A. End of Unit 1 Assessment (30 minutes)</td>
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<table>
<thead>
<tr>
<th>3. Closing and Assessment</th>
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<tbody>
<tr>
<td>A. Thinking Log (5 minutes)</td>
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</table>

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<tr>
<th>4. Homework</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>A. Reread “Water Is Life” and complete the Tracing an Argument note-catcher.</td>
<td></td>
</tr>
</tbody>
</table>
### Lesson Vocabulary
- consummate, commodities, diverted, seepage, harbored, cultivation, ecosystems, biodiversity, reclamation, eutrophication, depletion

### Materials
- Evaluating an Argument I Have, Who Has? set of 6 (one set per triad)
- End of Unit 1 Assessment: We Need to Pay More Attention to Water: Tracing and Evaluating Arguments in Text and Video (one per student)
- Video: “Corporations Need to Pay More Attention to Water: Charles Fishman”
- “Agriculture and Environment: Cotton” (one per student)
- End of Unit 1 Assessment: We Need to Pay More Attention to Water: Tracing and Evaluating Arguments in Text and Video (answers, for teacher reference)
- “Water Is Life” (from Lesson 1; one per student)
- Thinking Logs for Lesson 10
- Tracing an Argument note-catcher (from Lesson 7; one new blank copy per student)
- Tracing an Argument Note-catcher on “Water is Life,” Teacher’s Guide (for Teacher Reference)
### Opening

**A. Entry Task: Evaluating an Argument I Have, Who Has (5 minutes)**
- Group students in triads and hand out two cards from the set of *Evaluating an Argument I Have, Who Has* to each student. Make sure each group has a full set of six cards. Ask students to stand facing their group with their cards in hand. Tell them that the student whose card starts with “I have the first card” will read aloud that card first, and then whoever has the “answer” to the first card will read theirs next, continuing until the last card. Then ask students to return to their seats.

**Meeting Students’ Needs**
- Taking time to ask for students’ ideas about other tasks they can complete while their classmates are working can greatly enhance student buy-in for setting clear expectations for focused work time.

**B. Reviewing the Learning Targets (3 minutes)**
- Share the learning targets:
  * “I can identify the argument and specific claims in the text ‘Water in Agriculture: Improving Resource Management.’”
  * “I can evaluate the argument and specific claims in the text ‘Water in Agriculture: Improving Resource Management.’”
  * “I can outline the argument and specific claims in the video ‘Corporations Need to Pay More Attention to Water: Charles Fishman.’”
  * “I can evaluate the argument and specific claims in the video ‘Corporations Need to Pay More Attention to Water: Charles Fishman.’”
- Ask students to turn to a partner and take turns sharing one strategy that they use to evaluate an argument. Cold call students to share their strategy.

**Meeting Students’ Needs**
- Checking in with learning targets helps students self-assess their learning. This research-based strategy supports struggling learners most.
- Allowing students to discuss with a partner before writing or sharing with the whole class is a low-stress strategy to help them process in a risk-free situation.

**C. Introducing the End of Unit 1 Assessment (2 minutes)**
- Tell students that today they get to demonstrate their progress on these learning targets in the end of unit assessment.
- Write on the board, “If you finish early, you can ...” and prompt students to suggest appropriate silent activities that they can complete. This list should include rereading the “Water Is Life” article and reading The Big Thirst. This list could also include: “Complete homework for other classes” or “Continue reading your independent reading book.”
### Work Time

**A. End of Unit 1 Assessment (30 minutes)**
- Distribute the *End of Unit 1 Assessment: We Need to Pay More Attention to Water: Tracing and Evaluating Arguments in Text and Video*.
- To complete Part 1, play the video: "Corporations Need to Pay More Attention to Water" once, allow time for students to respond, and then play it two more times.
- After students have completed Part 1, hand out the text “Water in Agriculture: Improving Resource Management.” Point out that some of the vocabulary words are defined for them and are in italics in the article. Ask students to read the article and then complete Part II.
- Instruct students to remain silent until all classmates are finished with their work, and prompt students to begin.
- If they complete their assessment, encourage students to stay seated and complete one of the tasks listed on the board.
- Collect students’ assessments.

### Closing and Assessment

**A. Thinking Log (5 minutes)**
- Direct students to add to their *Thinking Logs* for Lesson 10:
  - “How did today’s reading and video help clarify your thinking about the issue of water sustainability?”
- Distribute the *Tracing an Argument note-catcher* and explain that for homework, students will reread “Water is Life” and fill in the note-catcher based on Kingsolver’s argument.

### Homework

- Reread “*Water Is Life*” by Barbara Kingsolver and complete the Tracing an Argument note-catcher.
## Entry Task: Evaluating an Argument I Have, Who Has?

<table>
<thead>
<tr>
<th>I have the first card ...</th>
<th>I have a claim.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who has a statement in an argument that something is true?</td>
<td>Who has evidence that relates to the claim, proves the point, and supports an argument?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>I have relevant evidence.</th>
<th>I have assess whether it is strong and successful at proving its claim.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who has how to evaluate an argument?</td>
<td>Who has enough evidence to prove the claim?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>I have sufficient evidence.</th>
<th>I have sound reasoning.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who has reasoning that makes sense and is logical?</td>
<td>Who has the first card?</td>
</tr>
</tbody>
</table>
End of Unit 1 Assessment: We Need to Pay More Attention to Water: Tracing and Evaluating Arguments in Text and Video

Name: ____________________________________________

Date: ____________________________________________

Part I: Delineating and Evaluating a Speaker’s Argument

1. Watch the video two times and checkmark any interesting details it mentions.
   - Even if corporations try to save water, it won’t make much of a difference.
   - Water is a huge risk to the operation of a corporation.
   - Corporations rely on water more than they realize.
   - Corporations need to help their employees use less water.
   - The smartest companies are trying to use less water.
   - When corporations use less water, they use less energy.
   - Until agriculture uses less water, little can be done.
   - Saving water gives corporations a competitive advantage.
   - Water problems are solvable.
   - Companies must plan for smart water use now.

2. Watch the video again and write the central claim that you think the author is trying to make and support with evidence.

Claim: _________________________________
End of Unit 1 Assessment: We Need to Pay More Attention to Water: Tracing and Evaluating Arguments in Text and Video

3. Write three pieces of evidence the author uses. Then respond to whether that particular piece of evidence is relevant to the claim and why or why not.

<table>
<thead>
<tr>
<th>Supporting Evidence 1</th>
<th>Supporting Evidence 2</th>
<th>Supporting Evidence 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Evidence 1 relevant? Why or Why not?

Evidence 2 relevant? Why or Why not?

Evidence 3 relevant? Why or Why not?
End of Unit 1 Assessment: We Need to Pay More Attention to Water: Tracing and Evaluating Arguments in Text and Video

4. Does the author provide sufficient evidence? Explain why or why not.

5. Was the reasoning sound? Explain why or why not.

Part II: Delineating and Evaluating a Writer’s Argument
Text: “Agriculture and Environment: Cotton” by Jason Clay

6. Read and think closely about the text. Then, mark the central claim that you think the author is trying to make and support with evidence.
   - People should not wear clothes made of cotton.
   - Growing cotton is not a sustainable use of water.
   - Growing cotton ruins the soil so nothing else can grow.
   - In countries that grow cotton, there is not enough water for drinking.
End of Unit 1 Assessment: We Need to Pay More Attention to Water: Tracing and Evaluating Arguments in Text and Video

7. Write three pieces of evidence the author uses to support his claim and tell whether the evidence is relevant and sufficient and whether the argument is sound.

<table>
<thead>
<tr>
<th>Supporting Evidence 1</th>
<th>Supporting Evidence 2</th>
<th>Supporting Evidence 3</th>
</tr>
</thead>
</table>

Evidence 1 relevant? Why or Why not? | Evidence 2 relevant? Why or Why not? | Evidence 3 relevant? Why or Why not?
End of Unit 1 Assessment: We Need to Pay More Attention to Water: Tracing and Evaluating Arguments in Text and Video

8. Does the author provide sufficient evidence? Explain why or why not.

9. Was the reasoning sound? Explain why or why not.
Cotton uses a tremendous amount of water both to produce and process.

Cotton production requires 550 to 950 litres per square meter of area planted. Put another way, 7,000 to 29,000 litres of water are required for each kilogram of cotton produced (Soth 1999).

A consumate consumer of water
Some estimates indicate that it is the largest user of water among all agricultural commodities. Estimates indicate that cotton represents more than half of the irrigated agricultural land in the world. Cotton production and processing are also a major source of pollution of freshwater (Soth 1999).

Inefficient water management
In many cotton-producing areas, surface waters are diverted to irrigate cotton. Most cotton irrigation systems rely on traditional flooding techniques. Freshwater is taken from its source (e.g., river, lake, reservoir, or underground) and transported via a series of even smaller, open canals to the area to be irrigated.

Freshwater losses occur through evaporation, seepage, and inefficient water management. Globally, irrigation efficiency of all types is lower than 40 percent (Gleick 1993). This means that 60 percent of the water used in irrigation never makes it to the targeted plant.

Substantial damages in the Aral Sea basin
The continuous cultivation of cotton in the Aral Sea basin of Uzbekistan has caused a tremendous decrease in the surface area of the sea—it has shrunk by almost half. The reason is that two of the rivers that formerly fed the Aral Sea (the Amu Darya River and Syr Darya River) were diverted for cotton production.

Once the world's fourth largest lake, the Aral Sea formerly harboured many fish; today there are few. In addition, some 20 of its 24 native fish species are now extinct there, including the sturgeon that produced world-famous caviar. In China's Yellow River Valley, where cotton is grown under both irrigated and rain-fed conditions, a shortage of irrigation water due to falling water tables has also been reported (Gillham 1995).
Wide ranging impacts
The main activities associated with cotton production that affect freshwater ecosystems\(^7\) and biodiversity\(^8\) include runoff from fields, drainage, pesticide application, water withdrawal for irrigation, extensive irrigation, dam construction, and land reclamation\(^9\). These activities result in a range of impacts from eutrophication\(^10\) and pollution to loss of soil and other biodiversity.

Groundwater depletion\(^11\)
Groundwater depletion\(^11\) is another environmental problem associated with cotton cultivation\(^5\). In many areas groundwater is pumped to irrigate cotton. In essence this water is mined from underground reserves. In ossified aquifers, which are aquifers with solid caps that do not allow the water to be replenished from surface runoff, water is a non-renewable resource. Even in other types of aquifers, groundwater systems can take hundreds or even thousands of years to be refilled once they have been drained.

According to a recent World Wildlife Fund report on cotton (Soth 1999), the impact of cotton on total freshwater supplies is probably much greater than the irrigation data shows. Even with irrigated cotton, some 60 percent of water demand is provided by rainfall (Klohn 1998). The total global freshwater demand for cotton production is between 50 and 210 cubic kilometers per year. This is between 1 percent and 6 percent of total global freshwater withdrawal (Soth 1999).

Vocabulary list:
1. consummate: perfect; complete
2. commodities: products that are bought and sold
3. diverted: turned away from something; made something go in a different direction
4. seepage: leakage; leaking from something
5. cultivation: making the land so it can grow plants
6. harboured: provided shelter or safety
7. ecosystems: communities of living things, together with their environment
8. biodiversity: the different types of life forms
9. reclamation: making poor-quality land useful again
10. eutrophication: when a body of water has too many nutrients and too many plants grow; this causes all the animals in the water to die
11. depletion: to make less
Part I: Delineating and Evaluating a Speaker’s Argument

1. Watch the video two times and checkmark any interesting details it mentions.
   - Even if corporations try to save water, it won’t make much of a difference.
   - Water is a huge risk to the operation of a corporation.
   - Corporations rely on water more than they realize.
   - Corporations need to help their employees use less water.
   - The smartest companies are trying to use less water.
   - When corporations use less water, they use less energy.
   - Until agriculture uses less water, little can be done.
   - Saving water gives corporations a competitive advantage.
   - Water problems are solvable.
   - Companies must plan for smart water use now.

2. Watch the video again and write the central claim that you think the author is trying to make and support with evidence.

Claim:
Corporations need to pay more attention to water.
End of Unit 1 Assessment: We Need to Pay More Attention to Water:
Tracing and Evaluating Arguments in Text and Video
(Answers, for Teacher Reference)

3. Write three pieces of evidence the author uses. Then respond to whether that particular piece of evidence is relevant to the claim and why or why not. (For teacher reference, there are more than three below, but any three are correct.)

<table>
<thead>
<tr>
<th>Supporting Evidence 1</th>
<th>Supporting Evidence 2</th>
<th>Supporting Evidence 3</th>
<th>Supporting Evidence 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>It takes a lot of water to do even little things (Google search).</td>
<td>Smart businesses are already thinking about water risk and trying to use less water.</td>
<td>Saving money on water means you also are saving energy and electricity.</td>
<td>Being creative about water use gives a competitive advantage.</td>
</tr>
</tbody>
</table>

Evidence 1 relevant? Why or why not?
Yes, because most people, or corporations, don’t realize how much water they use, so it is wasted.

Evidence 2 relevant? Why or why not?
Yes, because most companies want to be smart companies.

Evidence 3 relevant? Why or why not?
Yes, because corporations want to save money on water and anything else they can if it doesn’t hurt their product.

Evidence 4 relevant? Why or why not?
Yes, because most companies want to have a competitive advantage.

4. Does the author provide sufficient evidence? Explain why or why not.
Yes. There could be more, but in this short clip and for his purpose (to get corporations’ attention), there are several pieces of evidence that are high quality.

5. Was the reasoning sound? Explain why or why not.
Yes, he convinced me. His reasons and evidence were logical and, when you look at the argument overall, it was supported and made sense.
End of Unit 1 Assessment: We Need to Pay More Attention to Water:
Tracing and Evaluating Arguments in Text and Video
(Answers, for Teacher Reference)

Part II: Delineating and Evaluating a Writer’s Argument
Text: “Agriculture and Environment: Cotton” by Jason Clay

6. Read and think closely about the text. Then, mark the central claim that you think the author is trying to make and support with evidence.

- People should not wear clothes made of cotton.
- **Growing cotton is not a sustainable use of water.**
- Growing cotton ruins the soil so nothing else can grow.
- In countries that grow cotton, there is not enough water for drinking.

7. Write three pieces of evidence the author uses to support his claim and tell whether the evidence is relevant and sufficient and whether the argument is sound. (For teacher reference, there are more than three below, but any three are correct.)

<table>
<thead>
<tr>
<th>Supporting Evidence</th>
<th>Supporting Evidence</th>
<th>Supporting Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cotton uses a lot of water to produce—550–950 liters per square meter.</td>
<td>Cotton is the largest user of water among all agricultural commodities.</td>
<td>Cotton represents more than half the irrigated agricultural land of the world.</td>
</tr>
<tr>
<td>Cotton production and processing are also a major source of freshwater pollution.</td>
<td>Many times, surface waters are diverted to irrigate cotton—the land is flooded.</td>
<td>Water often leaks from the pipes as it is diverted.</td>
</tr>
<tr>
<td>Growing cotton has decreased the size of the Aral Sea because two rivers that fed the sea have been diverted to cotton fields.</td>
<td>Often, groundwater is being depleted because water is pumped from underground to irrigate the cotton.</td>
<td></td>
</tr>
</tbody>
</table>
End of Unit 1 Assessment: We Need to Pay More Attention to Water: Tracing and Evaluating Arguments in Text and Video (Answers, for Teacher Reference)

8. Does the author provide sufficient evidence? Explain why or why not.
The author uses lots of evidence, especially facts and statistics to support each of his reasons, so his evidence is sufficient.

9. Was the reasoning sound? Explain why or why not.
Yes, he does. The author claims that cotton used a lot of water. Then he lists reasons he believes that (like inefficient water management) and backs up his reasons with evidence. It’s easy to see the connections between the evidence, the reasons and the claim, so his reasoning is sound.
<table>
<thead>
<tr>
<th>Name of Text/Excerpt/Clip:</th>
<th>“Water is Life”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author/ Speaker’s Name:</td>
<td>Barbara Kingsolver</td>
</tr>
<tr>
<td>Claim:</td>
<td>We need to use water more sustainably</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Supporting Evidence 1</th>
<th>Supporting Evidence 2</th>
<th>Supporting Evidence 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>“But such is the human inclination to take water as a birthright that public fountains still may bubble in Arizona’s town squares and farmers there raise thirsty crops.”</td>
<td>“We’ve lately raised the Earth’s average temperature by .74°C (1.3°F), a number that sounds inconsequential. But these words do not: flood, drought, hurricane, rising sea levels, bursting levees.”</td>
<td>“The results are in plain sight along pummeled coasts from Louisiana to the Philippines as superwarmed air above the ocean brews superstorms, the likes of which we have never known. In arid places the same physics amplify evaporation and drought, visible in the dust-dry farms of the Murray-Darling River Basin in Australia.”</td>
</tr>
</tbody>
</table>
### Is this evidence relevant?

<table>
<thead>
<tr>
<th>Evidence</th>
<th>Relevant?</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>This evidence shows how people are currently using water in an unsustainable way—fountains and green lawns don’t make sense in the desert.</td>
<td>Yes</td>
<td>This evidence is relevant to the claim.</td>
</tr>
<tr>
<td>This evidence shows another side to humans acting in an unsustainable way. Climate change, brought on by humans, has also caused changes to water, including horrible natural disasters like floods, droughts and hurricanes.</td>
<td>Yes</td>
<td>This evidence is relevant to the claim.</td>
</tr>
<tr>
<td>This evidence shows that the whole world, from Louisiana to the Philippines to Australia is suffering from the changes to water.</td>
<td>Yes</td>
<td>This evidence is relevant to the claim.</td>
</tr>
</tbody>
</table>

### Supporting Evidence 4

“Their husbands were digging a well nearby. They worked with hand trowels, a plywood form for lining the shaft with concrete, inch by inch, and a sturdy hand-built crank for lowering a man to the bottom and sending up buckets of sand. A dozen hopeful men in stained straw hats stood back to let me inspect their work, which so far had yielded only a mountain of exhumed sand, dry as dust.”

### Supporting Evidence 5

“Forty percent of the households in sub-Saharan Africa are more than a half hour from the nearest water, and that distance is growing.”

### Supporting Evidence 6

“Agreeing to self-imposed limits instead, unthinkable at first, will become the right thing to do. While our laws imply that morality is fixed, Hardin made the point that “the morality of an act is a function of the state of the system at the time it is performed.” Surely it was no sin, once upon a time, to shoot and make pies of passenger pigeons.”
### Tracing an Argument Note-catcher on “Water is Life”
#### Teacher’s Guide (for Teacher Reference)

<table>
<thead>
<tr>
<th>Is this evidence relevant?</th>
<th>Is this evidence relevant?</th>
<th>Is this evidence relevant?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes / No</td>
<td>Yes / No</td>
<td>Yes / No</td>
</tr>
</tbody>
</table>

**Explain why this evidence is or is not relevant to the claim:**

<table>
<thead>
<tr>
<th>This evidence shows that some people already have a difficult time getting water. If arid places are getting drier, then the people of Bajo Piura will have even more trouble accessing water.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Again, this is another piece of evidence that shows that many people struggle to get water every day and that will only get worse if we don’t use water more sustainably.</td>
</tr>
<tr>
<td>This evidence shows that just like humans over-hunted passenger pigeons into extinction, if we abuse our water supply, we’ll run out of that too.</td>
</tr>
</tbody>
</table>

**Did the author provide sufficient evidence? Explain why or why not.**

Yes, the author used lots of different kinds of evidence and she used evidence in every paragraph. The evidence that she used supported her claim well.

**Was the reasoning sound? Explain why or why not.**

Yes, the reasoning was sound. Kingsolver made clear connections between the evidence and what the evidence shows. For instance, when she says “Agreeing to self-imposed limits instead, unthinkable at first, will become the right thing to do. While our laws imply that morality is fixed, Hardin made the point that “the morality of an act is a function of the state of the system at the time it is performed.” Surely it was no sin, once upon a time, to shoot and make pies of passenger pigeons,” it is logical to make that comparison. Since we over-used a natural resource before, we can do it again. So we should make sure to avoid making the same mistake.

**Overall, does the author successfully prove the claim? Why or why not? Refer to what you wrote above about relevant and sufficient evidence and sound reasoning.**

Yes, she successfully proves her claim by using relevant, sufficient evidence and using logical reasoning. It is easy to see why humans should use water more sustainably now.