

Jicarilla Apache and Water Conservation

Unit # 1 Lesson # 4 Fourth Grade

Lesson Overview:

The story “Ducklings Told to Protect the Lake” by Jicarilla Apache historian and elder Dr. Veronica E. Velarde Tiller teaches respect, conservation and protection of water for the benefit of everyone. As we learned in Lesson 2, the Rio Grande and the Arkansas, Canadian and Pecos Rivers are held in reverence to the Jicarilla Apache. As we learned in Lesson 1, the role of water in the Origin Story is significant, as is the relationship between the Jicarilla people and water in their beliefs and way of life. While their ancestral lands are bordered by the waters of these four rivers, the Jicarilla Apache today live on a reservation in the high desert and mountains of northern New Mexico where there are limited water resources. A symbiotic relationship with the earth and its gifts has encouraged the Jicarilla people to be protectors of the water by honoring its uses while making it available to all. The Jicarilla Apache relationship to water is highlighted through “Ducklings Told to Protect the Lake,” a bilingual story told by youth Jicarilla Apache tribal member Anthony James, as written by his grandmother, Dr. Tiller.

Inquiry Questions:

1. Why is water important to life and to people? What are the different uses for water? What uses are necessary? What uses are optional?
2. What does the story of the ducklings mean to you? What is the main idea? Why does the mother duck teach her ducklings to respect the lake and its visitors?
3. In what ways can Jicarilla Apache beliefs about water and conservation contribute to our understanding of the future of natural resources?

Colorado Academic Standards:

CO State Geography Standard SS09-GR.4-S.4-GLE.1. Analyze and debate multiple perspectives on an issue.

CO State History Standard SS09-GR.4-S.1-GLE.1-EO.c. Cause and effect relationships in the interactions among people and cultures that have lived in or migrated to Colorado (e.g. Japanese-Americans (internment), German-Americans, German-Russians, Mexican-Americans, Hispanos, Native Americans, African Americans)

CO State Reading and Writing C Standard 2.2: Reading for All Purposes EO.a. - Use Key Ideas and Details to: ii. Determine the main idea of a text and explain how it is supported by key details

Materials:

- Video Lesson: Ducklings Told to Protect the Lake (Naa'eelé Mi zháá kóó Ya ch' íi shí) by Dr. Veronica E. Velarde Tiller as read by Anthony James <https://www.youtube.com/watch?v=g7bDI1rFiis>
- Paper and pencil for calculating math problems about water

Source Materials:

- First source interviews and transcripts from the Jicarilla Apache Nation

Background Knowledge/Contextual Paragraph for Teachers:

Lesson 4 teaches us through a story about animals that water conservation is practiced for the benefit of everyone. Students can read the bilingual transcript and absorb the written Jicarilla Apache language. Encourage them to talk about how they think of water today. Are there family, local or government restrictions on water use? How do families use and also conserve water? Guide students to think about conservation of water in relation to other natural resources such as trees, plants, and the animals that rely on water. How much water does one student's household use in a day? Are there ways students can identify water uses in their own home or community that support and/or contrast the respect for water illustrated in this story?

Building Background Knowledge for the Student:

Students discover how to conserve natural resources through the lens of respect for the earth and its beings. Research average water usage with students and ways to reduce water usage, either on the computer or in books in the library. Learn about how much water an individual student uses through careful research of daily habits. Are there opportunities to conserve? What other natural resources can we conserve and how?

Instructional Procedures and Strategies:

Begin by sharing the Video Lesson: Ducklings Told to Protect the Lake (Naa'eelé Mi zháá kóó Ya ch' íi shí) by Veronica E. Velarde Tiller as read by Anthony James. Encourage discussion afterwards. Why did the animals behave the way they did? Why is conservation important? Discuss the value of water with youth including all of the ways they use it daily. Suggest they monitor and learn how much water they

use through active measuring and calculations from the Environmental Protection Agency (EPA) website. Have students look up average water usage charts and information, and compare their own use.

Review Tribal perspective on water conservation and the Colorado River Indian Tribes Water Resiliency Act, which became federal law in 2023. Research water rights within the Rio Grande and Colorado River. Learn about who has the rights to water in Colorado, and what this means for our collective future. Have class discussion of differing views.

Water Usage Activity

1. Review water usage on EPA website “Water Sense.”
2. Students measure the water they use for a period of one day.
3. Students estimate use over 5 days, and total household use.
4. Students compare individual usage with estimated EPA usage and make a chart showing the difference.
5. Students consider, research and suggest ways to reduce the amount of water they use daily. Using this reflection as a foundation, students can identify other natural resources they utilize and conservation activities that can support care of the Earth.

Critical Content:

Learn different perspectives about water and its value for different cultures and people.

Learn the value of water to all people and living things.

Learn about conservation of all natural resources.

Key Skills:

Research information about water usage, water rights, and different cultural beliefs about water.

Compare differing ideas and positions about how to use and conserve water.

Learn to conserve other natural resources.

Critical Language (vocabulary in English):

Natural resources, conservation, stewardship

Variations/Extensions:

Have students identify a waterway or water source within Colorado, and research what this water is now used for within the state. Students can share what they learn in a class project or discussion. Or, take on a classroom conservation project related to water, a stream, river, water falls, or other body of water that students can use as a focus of water conservation activities, such as participating in an annual river clean-up or visiting a local stabilization pond.

Formative Assessment Options:

Monitor/grade student projects and discussions within activities to identify individual comprehension of main ideas.

Texts for Independent Reading or for Class Read Aloud to Support the Content:

DUCKLINGS TOLD TO PROTECT THE LAKE

Naa'eelé Mi zháá kóó Ya ch'í shí

Veronica E. Tiller (07-15-23)

1. *One sunny day, there was a mother duck swimming with her two ducklings.*

Joonái aí goo, naa'eelé mi zháá nakíí yit na'itko

2. *Mother duck was teaching her two ducklings about the lake and how to swim.*

Naa'eel'ee tee mi zháá náaki yit k'é ná goo t'ai ha t'ao kóó sitká ai na'itko.

3. *It was very hot but the little ducks were happy and having fun playing in the water.*

Ta goosdo'é, éenta naa'eelé mi zháá mit ta góozhoo, ashi mit ta' got kaa Kóó ye náá da de'é.

4. *She told her ducklings that they are not the only ones that live in the water and swim in it.*

Naa'eelé mi zháá ai yeł ni, "too ta na hii na kóó ye nakai ashíí nata'atko".

5. *"If you look down into the lake there are many frogs, some are green, and others are brown," she said to them.*

"Taa taa í goo kóó ye yé, ch'ałdee táłáne, le daat'íije goo, lai goo dinizhi" mii ni na.

6. *They jump into the lake. At night they sit on the shoreline and sing*
Kóó ye yé nas 'tsií' t'í. T'è goh kóó bayé ta tas bií go, ha' taa ti aí.

7. *"Looking down into the lake," she said to them, "you will see many kinds of fish."*

Kóó ye yé tees'ísh ii goo, gołni na, łogee táłáne.

8. *"The lake is home to the fish."*

"Łogee kóó ye yé mii gha."

9. *"Once in a while, sheep and horses come to water. And even cats come to water" she explained to them."*

"Dáshin'ishdinéé, dibé shíí łii, égó kóó na kaí. Ta mooshan ta kóó na kai," mił ni na.

10. *"They all come to water. That is why, everybody has to take care of the water."*

"Da aaltsoo kai na kai. Áíkah, kóó ma ch'íi shí."