TENNESSEE CURRICULUM STANDARDS

6th—8th grade Science

6.ESS3: Earth and Human Activity
1) Differentiate between renewable and nonrenewable resources by asking questions about their availability and sustainability.

2) Investigate and compare existing and developing technologies that utilize renewable and alternative energy resources.

3) Assess the impacts of human activities on the biosphere including conservation, habitat management, species endangerment, and extinction.

EVSC.ESS3: Earth and Human Activity
4) Gather, organize, analyze, and present data on current land use trends by humans. Based on analysis, predict future trends.

5) Plan and carry out an investigation examining best management practices in water usage, agriculture, forestry, urban/suburban development, mining, or fishing and communicate findings.

Writing

11-12.W.TTP.2 Write informative/explanatory texts to analyze, synthesize, and convey complex ideas, concepts, and information clearly and accurately through the effective selection and organization of content.

6.W.TP.2 Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.

OVERVIEW

- Founded by Congress and approved by President Franklin Roosevelt in 1933, the Tennessee Valley Authority (TVA) was established to control flooding and navigation along the Tennessee Valley. TVA also provided inexpensive electric power to residents in the area by establishing dozens of dams, power plants, and coal-fired steam plants. While many jobs were created, the landscape of Tennessee and bordering states was forever changed. By 1946, TVA had removed over 72,000 people from their homes and acquired 1.1 million acres. By analyzing primary sources from the Farm Security Administration/Office of War Information Color Photographs Collection on the Library of Congress Web site, students will have the opportunity to distinguish between the intended benefits and the unintended consequences of the Tennessee Valley Authority.

GRADE LEVELS & SUBJECTS

Science 6th and high school

LESSON ACTIVITY: Benefits and Consequences of the Tennessee Valley Authority

Transmission towers in the switchyard of TVA's Chickamauga Dam, near Chattanooga, Tenn. [1942]
**Activity**

1. For each of the twelve primary sources shown in this activity, click on the image to view a larger, higher-resolution version of the photograph. Download and print out these images, enough sets for each small group to use a copy of each.

2. Provide students with a background on the Tennessee Valley Authority using the overview on Page 1. Students may also read the [Tennessee Valley Authority entry](#) in *The Tennessee Encyclopedia of History and Culture*.

3. Distribute the printed primary sources and remind students that these photographs were taken in Tennessee between 1939 and 1943. Using the prompt questions on the [primary source analysis teacher’s guide](#), instruct students to analyze the images, either individually or in small groups.

4. To address the economic consequences of TVA in Tennessee, play the [audio clip from 1977 of a woman speaking about being displaced from her land because of TVA](#). This resource is available through the American English Dialect Recordings: The Center for Applied Linguistics Collection.

5. In their notes, instruct students to create two columns when discussing these images: benefits and consequences. As you facilitate a discussion about each photograph, allow students time to take notes. Emphasize the importance of taking notes during this discussion, as this brainstorming session will help them organize their essays at the end of class.

6. Distribute copies of the [Writing Exercise: “Benefits versus Consequences”](#) worksheet (pages 1 and 2) and ask students to read the directions. Instruct students to pay particular attention to the rubric below the directions, which explains how the short essay will be evaluated.

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**Extension**

- Allow students access to [TVA’s history](#) through the Tennessee Valley Authority Web site. Divide your students into groups to read and summarize sections of this timeline (for example, one group reads and summarizes the sections on the 1930s and 1940s). Each group will present their summary in chronological order to create a succinct timeline of the history of TVA.

- If students have access to computers, direct them to the [Farm Security Administration/Office of War Information Color Photographs Collection](#) on the Library of Congress Web site. Here, students may find more images of the influence of TVA in Tennessee.
Tightening a nut on a guide vane operating seromotor in TVA's hydroelectric plant, Watts Bar Dam, Tennessee. [1942]

Insulators and transmission wires in the switchyard of the TVA's Chickamauga Dam, located near Chattanooga, 471 miles above the mouth of the Tennessee River. [1942]

Two women workers are shown capping and inspecting tubing which goes into the manufacture of the "Vengeance" (A-31) dive bomber made at Vultee's Nashville division, Tennessee. [1943]

Planting corn along a river in Tennessee. [1940]

Early stages of construction work at the TVA's Douglas Dam, Tenn. [1942]

Switchyard at TVA's Wilson Dam hydroelectric plant, vicinity of Sheffield, Ala., 260 miles above the mouth of the Tennessee River [1942]

Above the construction work, the aggregate storage pile which provides crushed stone and sand, Fort Loudon [i.e., Loudoun] Dam, Tenn. [1942]

Welder at work on Douglas Dam, Tenn. (TVA) [1942]

Copper mining and sulfuric acid plant, Copperhill, Tenn. [1939]
Benefits and Consequences of the Tennessee Valley Authority
Writing Exercise: “Benefits versus Consequences”

Name: _____________________________________________    Date: _______________________

Writing Prompt: What benefits did TVA bring to the region, according to what you have learned in class? What do the images show as benefits? What were some of the unintended consequences of the Tennessee Valley Authority (environmental, economic, etc)? Write one paragraph about the benefits of TVA and one paragraph about the consequences of TVA. Cite specific examples from images, recordings, and topics discussed in class. The following rubric will be used to grade your essay:

| 90—100 | Essay has 2 paragraphs, addresses both the benefits and consequences of TVA, and cites specific examples from images and topics discussed in class. |
| 80—89  | Essay has 2 paragraphs, addresses either the benefits or consequences of TVA, and cites specific examples from images and topics discussed in class. |
| 70—79  | Essay has 1 paragraph, addresses one benefit or consequence of TVA, and does not cite examples from images and topics discussed in class. |
| 69—0   | Essay has 1 paragraph, is off topic, and does not cite examples discussed in class. |

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