

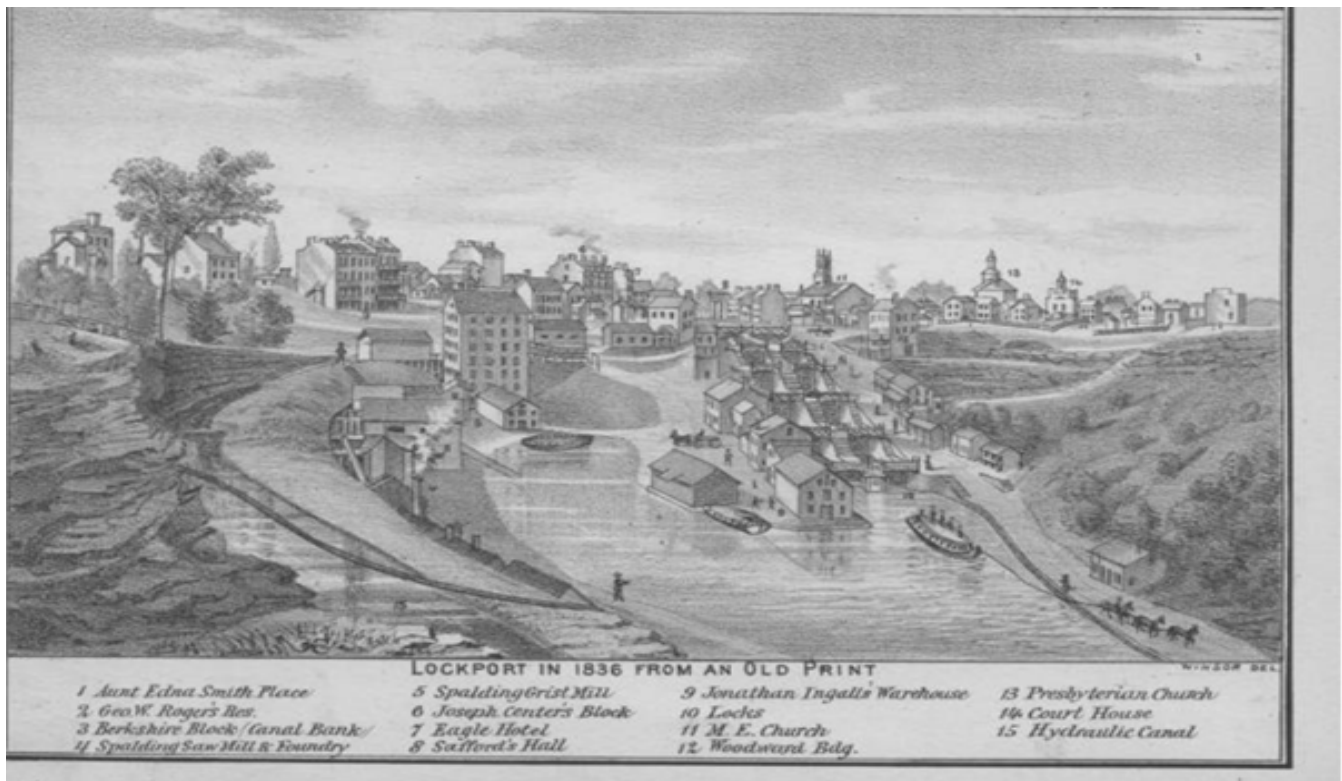


## 4th Grade

# How Did the Erie Canal Impact Natural Resources and Economic Activities in Lockport, New York?

## Supporting Questions

1. What natural resources could be found in the Lockport area, and what was their impact on economic development in New York?
2. What were typical occupations in Lockport before and after the Erie Canal was completed?
3. How did the Lockport economy change as a result of the economic activities associated with the area's natural resources and the Erie Canal?



Lockport from an old print, 1836, in History of Niagara County, N.Y., with illustrations descriptive of its scenery, private residences, public buildings, fine blocks and important manufactories and portraits of old pioneers and prominent residents, 1878 in New York Heritage:

<https://cdm16694.contentdm.oclc.org/digital/collection/VVN001/id/840>



## 4th Grade Westward Movement and the Need for Improved Transportation

# How Did the Erie Canal Impact Natural Resources and Economic Activities in Lockport, New York?

<p><b>New York State Social Studies Framework Key Idea &amp; Practices</b></p>	<p>4.6 INDUSTRIALIZATION, IMMIGRATION, AND GROWTH: FROM THE EARLY 1800S TO THE PRESENT: Economic activities in New York State are varied and have changed over time. Various individuals and groups have contributed to the growth and development of New York State. (Standards 1, 3, 4; Themes: MOV, TCC, GEO, ECO, TECH)</p> <p>4.6d Farming, mining, lumbering, and finance are important economic activities associated with New York State. Students will examine New York State’s key agricultural products during the 1800s and compare these to the key agricultural products of today.</p> <p>Students will examine land use maps to compare farming regions of the 1800s to farming regions of today noting changes. <b>Alt: Students will examine how economic development in relation to natural resources in New York was impacted by the Erie Canal.</b></p> <p>Students will explore what resources were extracted in New York State over time, the location of those resources, and the economic activities associated with those resources.</p> <ul style="list-style-type: none"> <li>✔ Chronological Reasoning and Causation</li> <li>✔ Gathering, Interpreting, and Using Evidence</li> <li>✔ Comparison and Contextualization.</li> </ul>
<p><b>Staging the Question</b></p>	<p>Participate in a discussion about how the internet and web have changed the way people do business, including kinds of jobs, businesses and terms used now and in the past. Explore what natural resources today might be developed and marketed for economic development that would utilize the Erie Canal.</p>

Supporting Question 1
<p>What natural resources could be found in the Lockport area, and what was their impact on economic development in New York?</p>
Formative Performance Task
<p>Identify key natural resources that could be found in the vicinity of the Erie Canal near Lockport, or could have been easily moved along the Erie Canal in the 19th and early 20<sup>th</sup> centuries.</p>
Featured Sources

Supporting Question 2
<p>What were typical occupations in Lockport before and after the Erie Canal was completed?</p>
Formative Performance Task
<p>Identify key industries and related occupations in Lockport before and after the Erie Canal, and discuss any changes.</p>
Featured Sources

Supporting Question 3
<p>How did the Lockport economy change as a result of the economic activities associated with the area’s natural resources and the Erie Canal?</p>
Formative Performance Task
<p>Explain changes in key businesses and industries in Lockport between 1820-1850. Describe how these changes may have impacted the way people worked and lived.</p>
Featured Sources

**Source A:**

Men working at W. W. Whitmore quarry, Lockport NY c. 1900  
Niagara County Historical Society



(click the image to enlarge)

**Source B:**

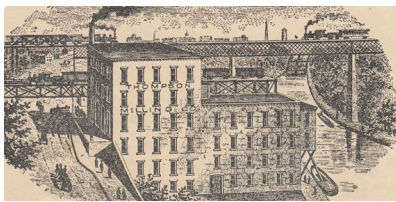
Getting apples ready for shipment on the Erie Canal, Lockport NY early 20th century  
Niagara County Historical Society



(click the image to enlarge)

**Source C:**

image of the Thompson Flour Mill showing the Erie Canal with the locks in the background, the old NY Central Railroad Bridge and horse-drawn conveyances on the road.  
Niagara County Historical Society



(click the image to enlarge)

**Source A:**

A cart of staves ready to be turned into barrels at cooper shop, Lockport NY  
Niagara County Historical Society



(click the image to enlarge)

History of Niagara County, N.Y., with illustrations descriptive of its scenery, private residences, public buildings, fine blocks and important manufactories and portraits of old pioneers and prominent residents  
Page 181 – Stave Manufacturing

**THE STAVE MANUFACTURING INTEREST.**

Eighteen mile creek, was owned by Henry Thomson in 1875. It contains three run of staves. It does not run week clearly, and it will swell and open by Mr. Thomson.

The manufacture of staves at Lockport constitutes an important feature in the industrial resources of the place. It formed an item of much importance at a very early period in the settlement of the country, for even at that time they were manufactured for exportation as well as for home use. At first they were made entirely from oak timber, none other being considered suitable. The white oak was used to make barrels and larger vessels for holding spirits, and the red or black oak for these barrels. The staves were often or split from the blocks of timber by hand, and this labor was principally done by farmers engaged in clearing up their land. Part of the staves were purchased by the cooper, to make up into barrels or supply the home market, and the remainder were shipped to various cities. Oak timber was scarce elsewhere, and the same trade gave the farmers employment through the long winters, and at the same time it enabled them to utilize a fair compensation for valuable timber which they were obliged to cut down in clearing their land. It was also at a time when other means for turning the timber to good account were not only unimagined but impracticable. In a few years, however, white oak became more profitable for use in other ways, and the manufacture of that class of staves which had been made chiefly for exportation almost ceased.

Upon oak staves, and in a long time after they began to use those of the same kind put up in barrels of iron oak staves with a slight angle in the notch that put up in barrels manufactured from the staves. Time and their changes, together with improvements for their adaptation, showed objection. Since the cutting process was first brought into use, improvements have been made upon it, until it has an air of present state of perfection. The staves are no longer from blocks or blocks of timber sawed the full length. These blocks are put into staves, six and three six or seven lower, then taken out and conveyed to cutting machines, which is propelled with machinery as to cut one hundred and twenty staves per minute, sufficiently dry they are stacked and packed in boxes of fifty each, ready for shipping. For some years after the manufacture of staves by cutting, the staves from the surrounding country delivered the best the market. By this means they were enabled to reach considerable amounts from the site timber, which plentiful, and kilns had been constructed in other places with cutting mill.

Heading saw staves out in the same way that a crew and the practice continued for some ten or twelve years after the mode of cutting staves had been adopted. They are now made out of blocks, and the process is now turned by machinery ready for packing.

During the war, and several years after, the business was carried on very extensively, making such home as to make the large quantities of it were brought Canada to supply the demand. Timber such as one brought in another time in the history of the business.

<https://cdm16694.contentdm.oclc.org/digital/collection/VVNO01/id/858/rec/1>

**Source B:**

N. Lerch and Son Cold Storage, ca 1910



<https://cdm16694.contentdm.oclc.org/digital/collection/p15004coll9/id/386/rec/1>

**Source A:** Jeddo-Highland Coal Aristocrat of Anthracite. Charles J. Lawton Burt, N.Y. with a calendar for February and March of 1929. Image of an aristocratic woman wearing a wig, holding a fan, seated in a chair, with green background.



<https://cdm16694.contentdm.oclc.org/digital/collection/p16694coll2/id/808/rec/267>

**Source B:**

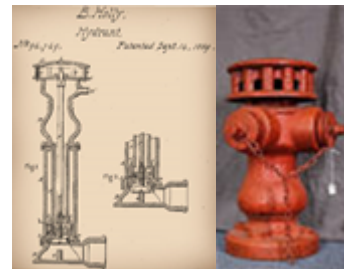
Spraying Pumps, Well Pumps, Force Pumps, Nozzles, and Spraying Machines. Field Force Pump Company. Lockport, N.Y., USA. Illustrated catalogue of the latest improved outfits for spraying tree and vines by hand, horse, and steam power.



<https://cdm16694.contentdm.oclc.org/digital/collection/p16694coll2/id/910/rec/15>

**Source C:**

Double Valve Fire Hydrant invented and manufactured by Holly Manufacturing Co. in Lockport, N.Y.



**Source D:**

**Lumber boat on Erie Canal**



[https://www.eriecanal.org/boats/lumber\\_boat-1898.jpg](https://www.eriecanal.org/boats/lumber_boat-1898.jpg)

**Source C:**

Niagara Textile Mill located on the Erie Canal in Lockport, founded 1899, photo c. 1950s. Niagara County Historical Society



(click the image to enlarge)

**Source D:**

Ira Bronson Carriage Co, Lockport, c. 1860. Original factory at Park and Hawley St. in former Presbyterian Church. Niagara County Historical Society



<https://cdm16694.contentdm.oclc.org/digital/collection/p16694coll2/id/110/rec/77>

Birdsill Holly patent for a fire hydrant (1869)

<https://pdfpiw.uspto.gov/.piw?Docid=94749&idkey=NONE&homeurl=http%3A%252F%252Fpatft.uspto.gov%252Fnehtahml%252FPTO%252Fpatimg.htm>

**Source D:**

Lockport as a busy, vibrant city in the late 19th century as a result of the economic advantages brought by the Erie Canal. Niagara County Historical Society



<b>Summative Performance Task</b>	<b>ARGUMENT</b> Students make a claim about how the Erie Canal improved access and movement of natural resources beyond Lockport, New York, and changed the ways people lived and worked.
	<b>EXTENSION</b> Make a comparison between past and present use of the Erie Canal for economic activity and movement of natural resources.
<b>Taking Informed Action</b>	<p><b>UNDERSTAND</b> Collect data about how greater access to markets enhances economic growth with natural resources available today along the Erie Canal</p> <p><b>ASSESS</b> Brainstorm ideas about how to “market” the Erie Canal today in New York and the nation</p> <p><b>ACT</b> Create a public service announcement to promote the importance of the Erie Canal and the surrounding natural resources to people in New York</p>

