



The King David
High School
For Excellence in Education



Learning Links

Public Health in 19th Century Manchester

Water Supply

Teacher's Notes

King David High School History Department worked with Manchester Archives and Local Studies in 2008 to produce resources using the archives for Key Stage 3 History teachers to use in class. The project was funded by Museums, Libraries and Archives (MLA) North West.

This resource sheet uses digitised archive sources to investigate the politics of water supply in a time of growing demand. It is intended as an introduction to the archives and the ways in which they can be used in class, both to convey the content of the sources and to analyse their reliability. Please feel free to copy or modify the notes for educational use. All of the images can be downloaded from the website.

Teachers should call 0161 832 5284 or email archiveslocalstudies@manchester.gov.uk to arrange class visits to the archives, for access to more digitised sources, or for more information.

Water Supply

It was common in poorer areas of Manchester for whole streets to share one source of water. Some streets had water pumps or fountains, which supplied drinking water from wells or small reservoirs nearby. These street taps led to problems of storage and cleanliness. The ignorance of the public, many of whom did not know the dangers of contaminated water, was also a problem. The Longdendale Reservoir was situated 18 miles east of Manchester in the Pennines. It was one of the first of its kind in the country when it first opened in 1851. By 1875, however, it was obvious that the city's growing population would need even more water, and plans were drawn up to build a reservoir in the Lake District.

Look at these images of a water pump and a water fountain. The cartoon on the left is from the magazine *Fun* in 1866, while the photograph on the right is of a child drinking from a fountain near London Road in 1895:



Fun, 18 Aug 1866



m48586

- How has the cartoonist shown the dangers of the fountain?
- How many other people do you think will drink from the cup on the chain each day?
- What do you notice about the cobbles at the boy's feet? Why might this be a problem?
- Imagine you are a householder in 1860. This is your only source of water. How do you get it to your house? How do you store it in your house? What could you do to remove any impurities in the water?

The Thirlmere Water Scheme, which first delivered water in 1894, was seen as a great engineering success. It solved Manchester's water supply problems by linking the city with a large supply of clean water almost 100 miles away in the Lake District. But there was much opposition to the scheme from people who were concerned about the physical impact the scheme would have on the beautiful local scenery. This is the first page of a report published by the Thirlmere Defence Association, a pressure group which argued the case against the scheme:

The Corporation of Manchester has decided to apply to Parliament, in the Session of 1878, for power to convert one of the most beautiful of the English Lakes into a Reservoir.

It is almost a trite remark that the one mountain region in England is in a very high sense the property of all Englishmen; any injury to that beauty in which its value consists, is a greater and more irreparable loss to the nation, as a whole, than it is to the landowners in the district. To the nation it is a gift coming direct from the hand of God, and, if this gift be marred by men incapable of appreciating its value, no effort of human power or skill can ever restore what has been lost. All who value an inheritance so precious, should unite in jealously guarding it from attacks destructive of its charm and power, from whomsoever they may come.

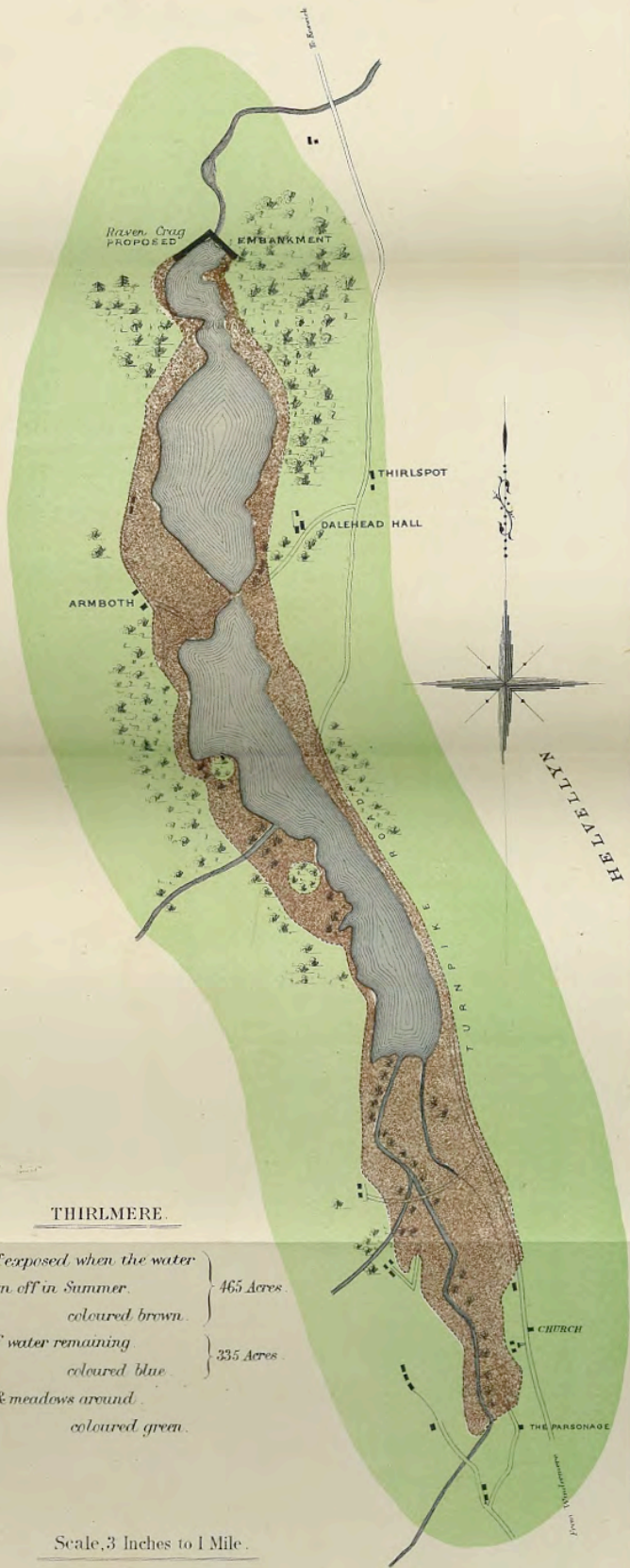
It is quite clear, from the statements already put forth by the Manchester Engineers, that the proposed works at Thirlmere will seriously and indeed disastrously affect the beauty of the lake and valley, whilst no real necessity can be shewn for such a sacrifice on sanitary or economic grounds.

628.1 T1

- How can you tell that the author is against the scheme? What kind of language does he use?
- What are the arguments on each side of the debate? Who benefits? Who suffers?
- Imagine you are a housewife in 1870 living near Deansgate, and you have to travel each day the length of the street to collect water in buckets. Do you think the scheme should go ahead? Why?
- What environmental or construction issues nowadays can you compare with the Thirlmere Scheme?

THIRLMERE.

Plan reduced from Ordnance Survey shewing the manner in which the shores of the Lake will be affected by the proposed works of the Corporation of Manchester when the impounded water is drawn off in summer.



This is a map of the lake from the Thirlmere Defence Association's pamphlet. It shows the original size of the lake (in brown) and the size of the lake after the water has been drained in the summer (in blue).

- Imagine you live at Armbboth, on the left hand side of the lake. How do you feel about the scheme? How will it affect your life?
- Imagine you have a hotel nearby. How will your guests react to the change in scenery?
- How does the artist use the colour brown to dramatise the map? Why do you think the artist has done this?
- Do you think this pamphlet is a trustworthy historical source? What do we have to bear in mind when using it to study the history of Manchester?



This is a similar map produced by the Manchester Corporation Waterworks. The red areas show the extent of the reservoir with the water level raised by 20 feet. The blue areas show the size of the reservoir with the water level raised by 50 feet.

- What do the red and blue areas represent on this map?
- What do you notice about the surrounding countryside in this map? How is it different from the Thirlmere Defence Association's map?
- Why do you think that Manchester Corporation Waterworks has chosen not to draw attention to the landscape around the lake?

The Thirlmere Defence Association also included newspaper and magazine coverage of the proposed scheme in their pamphlet. Here are three extracts from publications at the time:

‘Such objections have tenfold force when it is remembered that Thirlmere is one of the fairest spots of the one district of lake and mountain which England possesses; a district, too, with associations so precious and so famous that it may be said the whole world has an interest in keeping it in its primitive state of nature.’— *Times*, August, 1877.

‘To destroy one of the fairest valleys in the Lake District is to do a very great injury to the public — an injury which will be greater and more keenly felt as population becomes more dense, and opportunities of getting away from man and man’s work more appreciated.’ — *Saturday Review*, 25th Aug., 1877.

‘For our own parts, we have always held that one of the most precious inheritances of the people of England is the mountain-scenery of England, and we believe that even very great sacrifices should be made to keep its beauty intact, more even for the sake of the toiling millions of our great cities than for the benefit of the country-side specially threatened. England, with its lake-scenery placed at the cruel mercy of such improvers as these, would be a country with its heart of rest and peace cut out of it. Parliament, we hope, may see this as clearly as it will see the sanitary side of the question. Indeed, what is more truly sanitary to a busy people than the solitude and loveliness of the few natural gardens in which they can forget the thick atmosphere and incessant noise of city life?’ — *Spectator*, 8th Sept., 1877.

628.1 T1

- Are these extracts for or against the scheme? How can you tell?
- Why do you think that the Defence Association included them in their pamphlet?

This list is from a petition to parliament against the scheme:

Name of Petitioner.	Profession.	Street, &c.	City or Town.
John Richards	Jeweller	52, Swan Street	Manchester
Thomas Barlow	Secretary	Piccadilly	Manchester
James Gillbanks	Farmer	Dale Head	Wythburn
Fletcher Harrison	Farmer	Grasmere	
Albert Nicholson	Merchant	62, Fountain Street	Manchester
John King, jun., J.P.	Alderman	Chepstow Street	Manchester
Samuel Ogden, J.P.	Merchant	10, West Mosley Street	Manchester
Richard Haworth, J.P.	Merchant	28, High Street	Manchester
George Milner	Manager to School Board	Mosley Street	Manchester
M. Curtis, J.P.	Alderman	Chapel Street	Manchester
Thomas Wrigley, J.P.	Paper Maker	John Dalton Street	Manchester
J. M. H. Todhunter	Merchant	28, Bridge Street	Manchester
Theodore Crowdon	Merchant	22, Brown Street	Manchester
Frederick Baxter	Merchant	11, George Street	Manchester
G. Mammion	Merchant	10, Cumberland Street	Manchester
John Evans	Merchant	17, Brazennose Street	Manchester
Joseph Race Horner	Solicitor	3, Clarence Street	Manchester
Coddington & Co.	Manufacturers	77, Fountain Street	Manchester
Adolph Samelson, M.D.	Physician	15, St. John Street	Manchester
Thos. Nain, M.A., Oxon.	Barrister	5, St. James' Square	Manchester
J. Russell Scard	Silk Manufacturer	29, Fountain Street	Manchester
Malcolm Ross, J.P.	Merchant	Cromford Court	Manchester
Ernest Swanwick	Merchant	1, Norfolk Street	Manchester
Chas. Pooley	Cotton Spinner	Bradford Road	Manchester
Francis Nicholson	Merchant	Fountain Street	Manchester
James Ryder	Property Owner	37, Spring Gardens	Manchester
James Howard Ryder	Property Owner	89, Clarence Street	Manchester
Geo. Spafford	Merchant	32, Brown Street	Manchester
John S. Mayson, J.P.		5, St. James' Square	Manchester
Thomas Coleby	Commission Agent	Back Square	Manchester

M231/2/2

- What do you notice about the job titles of most of these men?
- Do you think the poor people of Manchester would have been for or against the scheme?
- On the source evidence you have seen, do you think the reservoir should have been built? Why?
- Is the issue of water supply still relevant to us in the 21st century? Where in the world? Are the issues still the same?

Glossary

Contaminate (verb) *to make impure or unsuitable by contact or mixture with something unclean, bad, etc. (e.g. to contaminate drinking water with dirt)*

Feet (noun plural) *an Imperial measurement of length: one foot equals 30.5 cm.*

Lake District (noun) *an area of outstanding beauty in the North West of England which includes England's largest National Park, highest mountain and deepest lake.*

Pamphlet (noun) *a short, easily published, leaflet. Often political in content.*

Parliament (noun) *a national assembly of political representatives.*

Pennines (noun plural) *a low-rising mountain range in northern England and southern Scotland. They separate the North West of England from Yorkshire and the North East.*

Petition (noun) *a request, often signed by a number of people, to change something, for example local or national government policy.*

Pressure group (noun) *a group of people with similar interests that tries to influence policy and especially governmental legislation, regarding its particular concerns and priorities.*

Reservoir (noun) *a natural or artificial place where water is collected and stored for use, especially water for supplying a community, irrigating land, producing power, etc.*

Further reading

Bateman, John, *History and Description of the Manchester Waterworks*, 1884 (628.1)

Harwood, J. J., *History and Description of the Thirlmere Water Scheme*, 1895 (628 1 H1)

Quayle, Tom, *Reservoirs in the Hills*, 1988 (q628.132QU)

Thirlmere Defence Association, *Manchester and Thirlmere Water Scheme*, 1877 (628.1)

The Manchester Corporation Waterworks Undertaking – A Short History and Description, 1930 (628 1 Ma(660))

[M126](#) Manchester and Salford Sanitary Association, 1848-1924

[M231](#) Manchester and Salford Waterworks Co., 1836-1841, Manchester Corporation Waterworks, 1848-1966

Museum of Science & Industry: 'Underground Manchester' Gallery
<http://www.msim.org.uk/media/1186658/waterandwasteteacherspdf.pdf>

Teacher feedback form

Name of Teacher:

Date:

School name and address:

Postcode:

Phone number:

Email:

What year group do you teach?

(Mixed year? Please tick all that apply)

Pre 5 <input type="checkbox"/>	Reception <input type="checkbox"/>	Year 1 <input type="checkbox"/>	Year 2 <input type="checkbox"/>
Year 3 <input type="checkbox"/>	Year 4 <input type="checkbox"/>	Year 5 <input type="checkbox"/>	Year 6 <input type="checkbox"/>
Year 7 <input type="checkbox"/>	Year 8 <input type="checkbox"/>	Year 9 <input type="checkbox"/>	Year 10 <input type="checkbox"/>
Year 11 <input type="checkbox"/>	Year 12 <input type="checkbox"/>		

Service provided

Did you find the resource sheet useful? Very Moderately No

Please explain why:

.....
.....

Which part of the resource worked best?

.....
.....

Which part did not work for you?

.....
.....

How did you use the resource with your class?

.....
.....

What could we do to improve the resource?

.....
.....

Curriculum Covered

(Cross Curriculum? Please tick all that apply)

Citizenship <input type="checkbox"/>	History <input type="checkbox"/>
Geography <input type="checkbox"/>	Personal, Social, Health Education <input type="checkbox"/>
Science <input type="checkbox"/>	

Funding for activity

The School / Organisation <input type="checkbox"/>	Museum/Archive Core funding <input type="checkbox"/>
Strategic Commissioning <input type="checkbox"/>	Renaissance Funding <input type="checkbox"/>
MLA Regional Agency <input type="checkbox"/>	Arts Council England <input type="checkbox"/>
Heritage Lottery Fund <input type="checkbox"/>	Local Heritage Initiative (HLF) <input type="checkbox"/>
Big Lottery <input type="checkbox"/>	Other <input type="checkbox"/>

Please name:

Thank you

Please return this form to archiveslocalstudies@manchester.gov.uk or to Greater Manchester County Record Office (with Manchester Archives), 56 Marshall St., Manchester, M4 5FU