# Albany Water Works, 1835-1851

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### Abstract:

This collection of ten documents, comprising eight pamphlets, a manuscript and a detailed map, on supplying the city of Albany, New York with water is a narrative about 19<sup>th</sup> century municipal water supply. The documents are dated from 1842 to 1850 but an earlier history of water supply for Albany is reflected within the documents. In an earlier era, the city of Albany's water was supplied by a private company, named the Albany Water Works Co. as well as individual sources. In 1850 by an act of the Legislature of the State of New York, the city of Albany acquired appointed Water Commissioners who became responsible for the decisions regarding the water supply expansion under the direction of William J. McAlpine, a well-known civil engineer of the time.

The collection was acquired by Lehigh University Special Collections in Autumn 2008.

### **Contact Information:**

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### **Creator:**

City of Albany, New York

**Title:** Albany (New York) Water Supply (1842-1850)

## **Restrictions to Access**

This collection is open for research.

# **Preferred Citation**

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# **Historical Note:**

Albany, New York is located at the confluence of the Mohawk and Hudson rivers. The city of Albany became New York's state capital in 1797 when it was the state's second largest city after New York City. Albany in the mid-nineteenth century was a center for transportation. It had prominent port facilities on the Hudson River as well as being a hub for the Mohawk and Hudson Rail Road which built the Albany and Schenectady Rail Road (later to become part of the New York Central Rail Road through noted Albany industrialist, Erastus Corning), the Schenectady and Great Western Turnpike and the Erie Canal.

Prior to 1850, a private company, the Albany Waterworks Company, tapped a number of water sources to supply the city's water supply from various creeks of the Mohawk and Hudson rivers supplying water by iron pipes and reservoirs within the city environs to individual properties. During the 1830s and 1840s there is expressed by the citizenry a desire for a reliable larger quantity and purer quality of water. The Common Council of Albany presents the matter to the Albany Water Works Company who in turn hires a series of engineers to study the matter to determine a reliable, clean and economic water source. For a number of years this matter is under discussion by the private company and the Albany city council. Several sources of water were considered: the Hudson River (but pumps would be needed to raise the water to the city's level), the Mohawk River (conduits and aqueducts to carry the water into the city) as well as private wells.

In 1850 by an act of Legislature, the State of New York appoints Water Commissioners for the City of Albany to deal with the requests for an expanded water supply for the growing population of Albany. It is this group of Water Commissioners that has the authority to appoint William J. McAlpine, a prominent civil engineer and designer of the Brooklyn Water Works, to analyze the situation. His analysis of the various findings of previous engineers causes a detailed map of the neighboring environs of Albany to be made. McAlpine's plan determines the most reliable water head, purity of water and economical building plan to be damming the Patroon Creek forming Rensselaer Lake. The Water Commissioners secure water rights from Stephen van Rensselaer, owner of the land along Patroon Creek as well as his use of this water to power his woolen mills to build a reservoir. The Six-Mile Waterworks construction begins in 1851 with the damming of Patroon Creek, creating Rensselaer Lake, a reservoir for supplying the city of Albany with a steady source of water. At this time the city of Albany takes control of its own municipal water supply.

### **Scope and Content Note:**

This collection of recorded history of the City of Albany's water supply covers a period from 1835 to 1851. It contains eight printed pamphlets, one bound handwritten manuscript containing numerous pasted-in newspaper clippings, and a map in good condition. It is apparent that all the ephemera at one time had been bound together in a larger volume faced with blue paper. The various signatures still bearing remnants of blue facing paper are of uniform size 5 1/2" by 8 3/4" (14 cm x 22 cm). The bound volume aspect is further apparent by consecutively penciled numbered pages on the upper corners of the right sided pages beginning with page 387 to 710 with unmarked pages on the left side pages as well as some unnumbered title pages occurring among the numbered pages. An excellent map of the neighboring environs of Albany, New York, attributed to William J. McAlpine, a prominent civil engineer, is included with one of the pamphlets but is unnumbered in the sequence. Four pamphlets are printed by different Albany printers. The handwritten manuscript is attributed to the private Albany Water Works Company apparently as committee meeting notes interspersed with newspaper articles from the Albany Evening Journal. The newspaper articles compliment the notes with public opinion comments expressed about the water situation in Albany at the time. The engineering representatives of the private company conduct an exchange of comments with the Albany citizens regarding the water supply situation in the meeting notes and the newspaper articles. The four other printed pamphlets have no named printer and one pamphlet is a duplicate of an earlier penciled numbered signature. The subject matter of these pamphlets deals with the articles of agreement and specifications for contractors involved with the expansion of the water supply for the City of Albany, New York from 1835 to 1851.

### **Organization of the Content:**

The Albany (New York) Water Supply collection, as originally acquired, consists of eight printed pamphlets, one beautifully detailed map supervised by William J. McAlpine, and one handwritten manuscript with pasted-in newspaper articles. The disbound signatures apparently were at one time bound together in a single volume based on evidence of fragments of blue facing paper still attached to the signatures and penciled continuous page numbers on the upper right corner of the

right page of nine items of the collection beginning with penciled pages 387 to 710. Four dated pamphlets are each published by a different printer. The sequence of the first two earliest pamphlets dated 1842 and 1846 (penciled pages 387 to 435) are followed by the undated handwritten manuscript containing pasted-in newspaper articles. The last dated pamphlet by William J. McAlpine is dated August 1, 1850 along with a map also dated August 1850. Following this 1850 pamphlet are four pamphlets (one dated April 1850) outlining the articles of agreement and specifications for bidding contractors for an additional water supply for Albany. Two of these four pamphlets are duplicates except for a grey paper addendum from the Water Commissioners' Office regarding Sealed Proposals attached to the earlier penciled numbered duplicate Articles of Agreement (page 641). The last pamphlet in this collection outlines the Specifications of the Manner of Construction.

### **Online Catalog Terms:**

Water-supply -- New York (State) - Albany

Albany (N.Y.). Water Commissioners' Office Albany (N.Y.) Water Works Albany and Schenectady Rail Road. Albany Evening Journal. Mohawk and Hudson Railroad Company.

Albany (N.Y.) Erie Canal (N.Y.) Hudson River (N.Y. and N.J.) Mohawk River (N.Y.) Rensselaer Lake (N.Y.) Patroon Creek (N.Y.)

Carpenter, George W. Cushman, W. McClelland. Douglass, D. B. McAlpine, William J. Corning, Erastus, 1794-1982. Van Rensselaer, Stephen, 1764-1839. Meads, John.

### **Detailed Description of Collection:**

Eight pamphlets, one handwritten manuscript with pasted in newspaper articles, one detailed map.

### 0154.01.01

Reports to the Committee of the Common Council on the Aqueduct, etc for Supplying the City of Albany with Water from the Mohawk River and from the Hudson River by W. M'Clelland Cushman; Albany: Printed by W. and A. White and Visscher. 1842. 30 p. (Consists of two reports by W. Cushman to the Common Council dealing with costs, materials and hydraulic challenges to get water from Mohawk and Hudson rivers into Albany. First report is dated Nov. 1841 and second report dated Jan. 1842.) (penciled pagination 387-413)

# 0154.01.02

Report of the Special Committee, appointed by the Common Council of the City of Albany, to submit A Plan and Estimate for Supplying the City with Water. Presented and Ordered Printed March 23, 1846. Albany: Printed by Weed and Parsons, 75 State-street, 3rd story. 1846. 24 p. (Consists of two reports bound together: First is from the Committee: H. B. Haswell, Jno. McKnight, Samuel Wescott, Philander Coley, Robt. McCollom, Albany, March 23, 1846 which deals with complaints to lack of sufficient water urging an expansion of water supply outlining the population, stores, taverns, breweries, iron works, manufacturing entities requirements and the potential financial gain to be realized from charging for use of a steady water supply; second report is by Maj. D. B. Douglass to Alderman Haswell, Chairman at the request of the alderman, Albany, March 19, 1846. The report is made based on population census from 1790 to 1845 regarding quantity of water required and topography of the named streets of Albany allowing for water flow. Patroon Creek is considered first choice as a suitable source for steady water supply. (This signature has some penciled marginalia.) (penciled pagination 414-435)

# 0154.01.03

**Albany Water Work's Co. Additional Supply of Water**. Albany, 1846. 91 p. (handwritten manuscript which appears to be minutes of meetings describing meetings of the Trustees of the Albany Water Works company (a private company supplying water to Albany). The first date mentioned is Mar. 16. 1846 as a report by the President (John Meads) of the company to the Trustees of the company about measures taken to supply water.

Subsequent exchanges of handwritten comments are made between O. Meads, Sec. of A.W.W. and George W. Carpenter, City Surveyor and members of Albany's Common Council discussing drawing water from Patroon Creek to supply water. In contemplation of the growing population's need for an adequate supply of clean and reliable water source considering the topography of Albany and the cost of pumping water from a lower level to an upper level, the city representatives suggest to the private company to draw water from Patroon Creek. The land along Patroon Creek is owned by Stephen van Rensselaer, a woolen mill industrialist and a negotiation for water rights must be made with him. Within this manuscript are included pasted-in newspaper articles from citizens expressing their observations and concerns about Albany's water supply and possible additional water sources. The newspaper articles which appear to be from the *Albany Evening Journal* have dates extending the manuscript date from the earliest handwritten date of March 1846 to news print as late as 1849. Exchanges are made between various citizens, the city surveyor, George W. Carpenter and the officers of the private water company, as to pros and cons for various water sources taking into account droughts from 1840 which is when the Patroon Creek source first came into question). (some penciled editing is evident among the handwritten manuscript) (penciled pagination 437-527)

### 0154.01.04

**Report of the Water Commissioners, to the Hon. The Mayor and Common Council of the City of Albany, Relative to Supplying the City with Water. Albany, September 20<sup>th</sup>, 1850. Albany: Joel Munsell, Printer, 1850.** 16p. (This report states that the Water Commissioners (Jas. Stevenson, Erastus Corning, John Taylor, John Townsend, R. E. Temple) are appointed by an act of the Legislature of the State of New York, passed April 9, 1850, as "An act for a supply of water in the city of Albany" and in compliance with that act enter on their duties on the 12<sup>th</sup> day of April.

On May 1<sup>st</sup>, 1850, the Water Commissioners appoint William J. McAlpine, Chief Engineer and outline his duties. Among the duties are examination of all the previous engineering reports. Details as to amount of water, costs involved, planning of hydraulic facilities, locations are presented with the final selection being Patroon Creek and the negotiations with Stephen van Rensselaer, owner of the land and water rights to Patroon Creek. Much of this material is presented in itemized Schedules in tabular format). (some water staining) (penciled pagination 528-541)

# 0154.01.05

# Report made to the Water Commissioners of the City of Albany, August 1, 1850, on the Proposed Projects for Supplying the City with Water. By William J. McAlpine, Civil Engineer. Albany: H. H. Van Dyck, Printer. 1850. 100 p.

(This report is addressed to James Stevenson, Erastus Corning, John Townsend, John Taylor and Robert E. Temple, Esq'rs, Water Commissioners of the City of Albany. McAlpine itemizes the material he examined specifically naming the early report from W. M. Cushman (1<sup>st</sup> pamphlet in this collection), along with the report from Maj. D. B. Douglass (2<sup>nd</sup> pamphlet in this collection), and another report from 1849 by George Carpenter (not included in this collection). McAlpine includes summations of data in eight tables and ends with estimation of costs involved from the various proposed sources. A **Supplementary Report. Albany**,

**August 3, 1850** occurs at the end of this pamphlet in which McAlpine acting on the direction of the Water Commissioners presents his plan to reduce the work and expenditures as well as addresses the citizenry objections to the Albany Water Works Company water supply sources. The final plan is selection of Patroon Creek). (some penciled remarks on the printed pages) (penciled pagination 543-639)

# 0154.01.06

Map of the Neighborhood of the City of Albany Showing the Routes of the Proposed Plans For Furnishing a Supply of Water. August 1850. W. J. McAlpine. Chief Engr. Drawn by F. W. Birmingham. Scale. – Two Inches to a Mile. Lith. Of Rich.d H. Pease. Albany. Folded Map 20 ½" x 30 ½" (52 cm x 77 cm) (Detailed map showing the Erie Canal, Mohawk and Hudson Rail Road Line, Great Western Turnpike, Schenectady Turnpike, Normans Kill, Crommie Kill, Block House Creek, Kaikout Kill, Patroon Creek, Maiselandt Creek, Water Works Company's Pipes, Hudson River, Van Rensselaer Mansion, Sand Creek, Shakers, Lishus Kill, Lansing Pond, Rensselaer Lake, 7 Mile House, Log Tavern, Follands Tavern, Case's Tavern, Sloan's Tavern, Jackson's Tavern, Dave's Tavern, Wilson's Tavern, Widow Truax, Hungerkill, Gate's Creek, Waterliet Lake, Rensselaer Lake and details of the city of Albany)

# 0154.01.07

# Albany Water Works. Articles of Agreement. 1850. 9 p.

This pamphlet presents the basic provisions for contractors who entertain an intent to offer bids on the project of supplying additional water for the city of Albany. These articles of agreement are made with the Water Commissioners of the City of Albany. At the end of the pamphlet without pagination notation is a separate grey sheet of paper titled **Albany Water Works. Water Commissioners' Office, corner of State and Green streets, Albany, Aug. 22, 1850. Sealed Proposals** This flyer outlines the conditions controlling the contractor's proposal. (penciled pagination 641-651)

# 0154.01.08

# An Act To provide for a supply of Water in the city of Albany. 11 p.

This Act is dated April 9, 1850 and relates the action of the State of New York's Senate and Assembly which appoint James Stevenson, Erastus Corning, John Townsend, John Taylor and Robert E. Temple as water commissioners of the city of Albany. Included in the Act are the conditions of service for the appointment, their duties and authorizations, and responsibility to the Common Council of the city of Albany. The Act is signed by A. G. Johnson, Dep. Secretary of State for New York, April 11, 1850. The Act proclaims that it takes effect immediately. (penciled underlining in text) (penciled pagination 653-673)

# 0154.01.09

Albany Water Works. Articles of Agreement. 1850. 9 p.

(This pamphlet is a duplicate of the one with penciled page numbers 641-651 except that this pamphlet does not have the grey paper flyer attachment regarding sealed proposals). (penciled pagination 675-683)

# 0154.01.10

a. Albany Water Works. August, 1850. 28 p.

**b.** Specifications Of the manner of constructing the Conduit, Culverts, etc., and Grading for the same. (12p)

c. Specifications Of the manner of constructing the Retentive Reservoir. (4p.)

d. Specifications Of the manner of constructing the Receiving Reservoir. (4p.)

e. Specifications For furnishing Brick for the Conduit, etc. (2p.)

**f.** Specifications Of the manner of constructing the Gate Chambers and Waste Weirs. (4p.)

(Collectively this pamphlet contains five sets of Specifications governing the building of the additional water supply for the city of Albany in detail. Bound in following the five specifications is a two page document titled **Proposal for Constructing the Albany Water Works. As Advertised by the Commissioners August 23d, 1850**. This last document in this collection contains a schedule for description for work proposed for: per acre. per cubic yard. per M. feet, per pound, per house. Printed on the back of this schedule is an example of the legal Agreement a contractor would have to sign. This document is addressed To the Water Commissioners Of the City of Albany. Proposal for Water Works.) (some water staining on back flyleaf) (penciled pagination of the text is 685-710).