

Floods to Floodwalls in Newport, Kentucky
1884-1951

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FLOODS TO FLOODWALLS IN NEWPORT, KENTUCKY
1884 - 1951

Introduction

Donald R. Bauer
November, 1988

Floods to Floodwalls in Newport, Kentucky
1884 - 1951

Remarks:

The Great Floods of 1884, 1913 and 1937 were industrial-urban floods in Newport, Kentucky. Floods after 1884 were no longer just an inconvenience of nature. Industrial development, advanced machinery, and labor's workplace demanded new awareness and attitudes.

Awareness came and attitudes changed concerning river floods. The construction of the floodwall, reforestation, and river flow control have done much to protect and prevent new flooding.

The city of Newport, Kentucky is no longer the industrial-urban center. The threat of flood has been reduced. The lessons learned from the industrial-urban floods hopefully will not be forgotten as the river floodplain's image changes again. This city of the river must never forget its relationship to the floodplain.

A thank you is given to those persons who consented to be interviewed for this paper and for their sharing of the past.

Respectfully,

The Author

FLOODS TO FLOODWALLS IN NEWPORT, KENTUCKY
1884 - 1951

Introduction

Floods are news items. Flood headlines and flood reports can be found often in the local, national, and international news media. Most flood reports tell of little damage and loss and are soon replaced by other newsworthy items. Most floods, large or small, are forgotten except by those persons and families directly affected; or from time to time we are reminded when life styles are altered by floods.

Flood news items at times concern major disasters involving destruction, displacement, hardship, suffering, disease, and loss of life. In a span of 50 years, the City of Newport, Kentucky experienced major newsworthy flooding. The Great Floods of 1884, 1913, and 1937 with sweeping destructive forces left their mark on the land and people of the area.

Today, as the people in this city look at long flood walls and many river dams, there is a sense of security from the past flood hazard. But, according to Roy Ward, an authority on floods,¹ there is clear evidence that the flood situation is getting worse in terms of the damage that can be caused by flooding. Despite massive expenditures on flood control, flood losses continue to rise in many countries around the world. Protective measures are, in fact, often counter productive, since, by encouraging a false sense of security, they may result in even higher damages than would otherwise have occurred. Mr. Ward went on to state:

this relationship between flood protection and flood damage brings into focus a characteristic of the flood problem floods are

¹Roy Ward, Floods A Geographical Perspective (New York: John Wiley & Sons, 1978), p. 2.

not natural disasters. Although this term is commonly used it should be made clear that floods are natural phenomena and form part of the normally occurring range of stream-flow conditions (just as does drought, at the other end of the scale). Since stream channels can carry only a fraction of peak floodflows, part of the excess must flow through and over, or be stored on, the floodplain. In flood conditions, therefore, channels and their adjacent floodplains are complementary and inseparable and together form the proper conveyance for the transmission of floodwaters. However, flood disasters are man-made in that man has put himself at risk by developing floodplains for settlement, agriculture and industry and by building roads, bridges, and railway lines in floodable positions. Such intrusions into the floodway may result from ignorance or for economic reasons (that is, the risk is worth taking or worth safeguarding against). Either way, man's affinity for floodplains has a long history and now affects a substantial proportion of the world population.²

The City of Newport has roots firmly planted in the soil of the Licking River and Ohio River floodplains. From ignorance and for economic reasons the city has grown from the floodplain. Two hundred years ago General James Taylor for his services in the American Revolutionary War received a land grant of 1500 acres from the Commonwealth of Virginia. In reading E.C. Perkin's, The Borning of a Town Newport, "Cantuckee",³ we are told to imagine the general's immediate reaction when he finally discovered that his land grant lay on the Kentucky side of the Ohio River directly across from the settlement of Losantiville (1788) and the protection of Fort Washington. The land grant was centered on the floodplain area of what is Newport, Kentucky! The rivers were to set the economic growth pattern as settlers began to arrive in the area. At first there were stores of agricultural goods along the river banks--corn, and flour awaiting shipment.⁴ Next came the demands of the steamboats, and the iron and steel works arose with

²Ibid.

³E. C. Perkins, The Borning of a Town - Newport, "Cantuckee" (Newport, Kentucky: Wendling Printing, 1963), p.5.

⁴Charles Henry Ambler, A History of Transportation in the Ohio Valley (Westport, Connecticut: Greenwood Press, Publishers, 1929), p. 373.

the saw mills; thus the economic life. The area grew from the swirling river's availability and demands.

Floods became an almost yearly event in Newport. The first truly documented Ohio River Valley Flood was the Great Flood of 1884. John L. Vance published an account of the relief work and sold many copies of his flood views. (Writers were to do the same sort of writing for profit in the future 1913 and 1937 floods.) Briefly let us look at Mr. Vance's 1884 report of the flooding in Newport:

While the cold wave yesterday brought glad tidings to the people that it would check the rise in the river, it only added to the suffering. The increased demand was truly wonderful, and it has only partly commenced, for after the water subsides, the suffering will be greater than now, and the committee are in a quandary as to how to supply the demands that will be made on them for fuel. No city or town on the Ohio River has suffered as much as Newport in proportion to her population. Here is a city with a population of twenty-five thousand people, and eighteen thousand of them are homeless, and are crying for aid to relieve them in their distressed condition. The condition of property in the submerged districts is indescribable.

Brick houses have caved in by their foundations being washed away, while frame cottages are twisted in every conceivable shape. A number of them have floated away, others have turned up on their ends, and nearly every street in the flooded district is blockaded by a house that has been washed away from its foundation. Fencing and outhouses have been carried out, and it is no trouble to find a fence in one part of the city that belongs half a mile up in the other part. In the event that the property is repaired, which is doubtful, it will require an army of men to work all summer, and then it is doubtful whether they can repair the damages, which in this city will amount to nearly \$1,000,000.⁵

Mr. Vance's report of doubt as to whether the city could repair the 1884 damages was wrong. The death report of this city was premature. The city repaired the damage, expanded with industry, grew with population, and then repeated the Great Flood of 1884 with the Great Flood of 1913 and the even Greater Flood of 1937!

⁵John L. Vance, The Great Flood of 1884 in the Ohio Valley, (Gallipolis, Ohio: The Bulletin Office, 1884), p. 1.

The Floods of 1913 and 1937 were "greater" in several ways. They were not floods of washed away outhouses, chicken coops, and fences. They were not floods to watch from the security of second floor retreats. They were not floods for only those directly in the muddy water's path. The Floods of 1913 and 1937 were floods for everyone living in Newport, and the surrounding area, because by this time the city and area had become modern, industrial-urban centers. Newport was an industrial-urban center with over 30,000 people living within the city limits and with thousands of workers who were dependent upon factories for their daily bread. Many more outside the city area in Fort Thomas, Southgate, and Highland Heights were dependent upon the city for gas and electric, telephone and telegraph, transportation including auto, train and trolley car, coal supply, medical services and food-water supplies. The city had truly become, as had many cities of America, the center of large urban networks from which utilities, transportation, health, food and water were distributed.

The Great Flood of 1913 was the first industrial-urban flood in Campbell County, Kentucky. It was followed less than 25 years later with the second industrial-urban flood. Floods could no longer be viewed as just an inconvenience of nature. Industrial development of the late 1800's and early 1900's with technologically advanced machinery and the demand for labor to be at its workplace changed awareness and attitudes toward floods. This new awareness-attitude after 1913 and 1937 was to include those persons not directly affected by the flooding. Included then in the call for flood protection and prevention were significant owners of businesses and factories, a significant number of workers and the massive federal government programs of the Great Depression; thus the change from earlier floods.

The Great Depression and World War II forced upon intellectuals, capitalists, and common people vast social and economic changes. The people in the City of

Newport were to reflect the nation as it coped with what appeared for a time to be the undermining of standards and values; if not the American Dream. Within a short period of time, the people faced the economic struggle, the force of nature's flood, and the demands of world war. They reached for protection through, as historian Charles Beard put it in 1935, the "subordination of personal ambition and greed to common plans and purposes."⁶ The programs of the New Deal provided order to the city during and after the chaos of the 1937 Flood. The demand for steel for the war effort, coupled with the Flood Control Act of 1936, produced the chain of events leading to the 1951 completion of the floodwalls.

The floodwall completion is at first seen as a significant victory for the mass of people so often ravaged by the flood waters. Upon a closer observation the significant number of people producing the floodwall is replaced by the efforts of a significant few. After the 1913 Flood and the transportation demands of World War I, there was produced the canalization of the Ohio River. The canal system supplemented the railroads for commercial and possible military transport. After the 1937 Flood, the support for the floodwall by business interests grew as the possibility of war appeared on the horizon. Leading this business group was the community steel interest as the military demand for steel increased. The examination of voter records, interviews with project participants, and recognition of steel and business support in passing the floodwall bond issue raised the spectre of this significant few bringing about this historical change.

This paper will examine the following to show the effects of the industrial-urban floods and the protective floodwalls.

⁶Robert S. McElvaine, The Great Depression - America 1929 -1941 (Toronto, Canada: Time Books, 1984), p. 205

Part I The Great Storms of 1884, 1913, and 1937

The great storms of 1884, 1913, and 1937 brought death and destruction from the southwest to the east. The huge rainfalls could not be contained.

Part II Newport - The Urban City of the Floodplain

Newport, Kentucky grew into an industrial-urban city from the 1870's to 1930's with expanded size, population and industry.

Part III The Great Floods of 1884, 1913, and 1937

The Great Floods of 1884, 1913, and 1937 brought to a standstill the industrial-urban system and produced a new awareness and attitude about flood protection and prevention.

Part IV Families of the Floodplain

Survivors of the storms and floods have stories to tell of coping and hopes for the future. Many placed great hope for future development in the floodwall protection.

Part V The Floodwalls

Great effort was expended in the development of the floodwall system. The economic crises of the Great Depression and the hardships of World War II made the struggle even more difficult.

This paper utilizes books and reports from the 1884 - 1951 era, books and technological papers dealing with flood and flood control, maps of rivers and cities, reprints of pictures and picture post cards, river and city histories, and personal interviews with individuals who lived through the raging floods and the completed floodwall.

The Great Storms of 1884, 1913, and 1937

Part I

THE GREAT STORMS OF 1884, 1913, AND 1937

PART I

The Great Storms of 1884, 1913 and 1937 followed historical patterns of eons ago as rain, wind, and hail moved from west to east over the Ohio River Basin. The Great Storm of 1913 is told in detail because it was the first huge storm to be tracked and recorded by the U.S. Department of Agriculture Weather Bureau. This storm pattern was used for comparison purposes for many years.

The Great Storm of February 1884 carried heavy rainfall into the upper Mississippi Valley and Ohio River Valley. When massive rain covers the Ohio River Basin (Exhibit #1), the outlet for the accumulated was and is the Ohio River flowing west to the Mississippi River. This is a result of the decline in land elevation as the river flows from Pittsburgh in the east to Cairo in the west 950 miles away (Exhibit #2).⁷ The rain water of 1913 was to follow this timeless path.

The storm or series of storms did not bring with it the destructive winds as in 1913. It is believed that rain measurements totaled those of the 1937 storm period and covered as large an area. Without the benefits of weather forecasting and specific storage of rain data, there is no readily available record of how large the storms were. It was a time of reaction to the natural elements. In the simplest of terms - - it rained and the river flooded.

The attitude toward the storms and flood was different from later urban-industrial floods. In 1884, floods happened and the people in them or influenced by them made the best of a very bad situation. The following excerpt, taken from the Kentucky State Journal even demonstrates some humor in the flooding:

⁷ Joyce Caulfield, The River Book: Cincinnati and the Ohio (Cincinnati: The Program for Cincinnati, 1981), p. 106.

Something More of the Flood

Again this city has assumed its normal condition as to land and water, but there is however, far more land now than there was two weeks ago, but the pesky addition is so soft that it can not be called Terra Firma, and those who have often sighed to become land owners are getting away with the nasty stuff as fast as possible.

The scene of desolation is not improved by the falling of the waters, as the damages are now visible, and fences and houses of all descriptions are down, and it will take a long time before this city will appear as it did before the flood.⁸

⁸Kentucky State Journal - Volume VII. Newport, Kentucky February 14, 1884

THE GREAT STORM OF 1913

The Great Storm of March 1913 brought death and destruction in mid-America from Omaha in the west to Pittsburgh in the east and from Nashville in the south to Detroit in the north.

Unlike 1884, two outstanding accounts of the storm of March 1913 have been found which give a better understanding of weather conditions that can occur in the Ohio Valley from December to June. Mr. C.W. Garrett of the Pennsylvania Lines⁹ and Mr. Alfred J. Henry of the U.S. Department of Agriculture Weather Bureau¹⁰ produced books about the storm and flood. The Pennsylvania Lines' account of storm and flood was written as a corporate history of the destruction of railroad property in the states of Pennsylvania, Ohio, Indiana, Illinois, and Missouri. The U.S. Department of Agriculture's account of the storm and flood was written to demonstrate the latest result of weather and flood forecasting as scientific advances. The information produced a detailed, historical record of the weather conditions.

The following is taken from C.W. Garrett's report of the storm:

The flood of March, 1913, was brought about by an unusual succession of weather conditions which may possibly never be repeated, but which may recur at any time, particularly in the spring season.

Preceding the heavy rains of March 23 to 27 there was a storm of moderate intensity on March 20 and 21, accompanied by winds as high as 60 to 70 miles an hour, which badly crippled telegraph service through the whole territory served by the Pennsylvania Lines west of Pittsburgh. There was a precipitation of one-half to one inch of rain through the valley of Ohio and its tributaries, which pretty thoroughly saturated the ground, so that

⁹ C. W. Garrett, Pennsylvania Lines West of Pittsburgh - A History of the Flood of March 1913 (Pittsburgh: Pennsylvania Railroad, 1913), p. 7.

¹⁰ Alfred J. Henry, The Floods of 1913 in the Rivers of the Ohio and Lower Mississippi Valleys (Bulletin Z, U.S. Department of Agriculture Weather Bureau: Washington, D.C., 1913), p. 11.

when the heavier rains came, they immediately ran off into the streams.

After this storm had passed off through the valley of St. Lawrence, a storm of great intensity developed in the southwest. On the morning of Easter Sunday, March 23, this storm was central over Colorado, and in advance of it, rain was falling in Illinois and Indiana. It moved northeastwardly during the day, and, increasing in force, was accompanied near its center by a number of tornadoes, several of them of high velocity. One of these tornadoes did great damage in the city of Omaha, Nebraska, on Sunday evening, and others were experienced along the path of the center of disturbance, which continued northeastwardly, being in the Sault Ste. Marie on Monday morning, the 24th. As the storm advanced, the area of low barometric pressure, with an atmosphere moisture laden, covered the great central basin. Cold winds from areas of relatively high barometric pressure precipitated this moisture, and on Sunday afternoon and night rain was falling over the entire northern and eastern quarter of the United States.¹¹

The meteorological maps of the U.S. Weather Bureau (Exhibit #3-5) report the conditions over the Ohio River Basin from Sunday, March 23, to Friday March 28, 1913.¹²

The following is taken from Alfred J. Henry's report of precipitation and floods in Ohio, March 1913:

The flood of March, 1913, was due to an excessive rain falling upon a surface that was already thoroughly saturated. There was no snow upon the ground, and the surface soil was not frozen, so that the usual winter flood conditions were absent; but the surface soil was very wet, and small streams and depressions were well filled by frequent precipitation during the first part of March.

On Sunday, March 23rd, rain began to fall in northwestern Ohio at about 8:00 a.m., and in central districts during the middle of the forenoon. The rainfall during Sunday was about 2 inches in the Maumee and Sandusky watersheds, in northwestern Ohio, and about 0.5 inch in central districts, but was very slight in southern counties. The rain ended by early evening in most of the State.

Rain began to fall again soon after midnight and fell almost continuously through the 24, 25, and 26. By the morning of the 24th the total 24-hour rainfall was about 3 inches in the Sandusky, Maumee, and upper Great Miami River Valleys, but less than 1 inch in the southeastern portions of Ohio.

¹¹C. W. Garrett, Pennsylvania Lines West of Pittsburgh - A History of the Flood of March 1913 (Pittsburgh: Pennsylvania Railroad, 1913), p. 7.

¹²Ibid. p. 8.

During the day, Monday, March 24th, the fall was heaviest in the upper Great Miami Valley and amounted to 3.7 inches at Piqua, Miami County.

The rainfall for the 24 hours ending the evening of the 24th averaged 1.9 inches in the Scioto Valley above Columbus, 1.9 inches in the Great Miami Valley above Dayton, 2.1 inches in the Little Miami Valley, 1.6 inches in the Sandusky Valley, and 1.3 inches in the Muskingum Valley above Zanesville. The greatest fall reported was 5.6 inches at Piqua.

The total rainfall from Sunday morning up to the evening of Monday the 24th averaged 3.6 inches in the Sandusky watershed, 3.1 inches in the Scioto above Columbus, 2.9 inches in the Great Miami Valley above Dayton, 2.4 inches in the Little Miami, and 1.9 inches in the Muskingum above Zanesville. In Hancock and Wyandot Counties it was over 4 inches, and in Miami County 6.6 inches.

The rainfall was very heavy during Monday night. At Bellefontaine, in Logan County, it was about 4.5 inches; in Richland County, 4 inches; Marion County, 3.6 inches; Shelby County, 3.5 inches; and in Seneca County, 3.3 inches.

The total rainfall up to the morning of the 25th was that rainfall which caused the flood waters in Indiana and western Ohio. Unfortunately not many of the observations are made in the morning. A chart shows a fall of 9 inches in Miami County, and 7 inches in Marion County, and 7.4 inches in Logan County. The fall was over 6 inches over a large portion of the north central part of Ohio.

The heaviest rainfall had moved eastward by the 25th, and the Muskingum Valley received more than the western watersheds. At Ashland County, the fall from 12:30 p.m. Monday, the 24th, until 12:30 p.m., Tuesday, was 5.96 inches. The rainfall for the 24 hours ending the evening of the 25th was more than 4 inches over a large part of the upper Muskingum watershed, as well as in the central Great Miami Valley and the upper Scioto.¹³

The Ohio River Watershed, Special Rainfall Chart for March 23-27, 1913

(Exhibit #8) reports the amount of rainfall in inches and tenths in the Ohio River Basin.¹⁴ They are a preview of the 1937 storm period.

For several days it rained heavily in Newport, but the city was to escape the storm death and destruction found in other mid-west areas (Exhibit #6-7).

Newspapers in 1913 played the primary role in reporting events of the day.

¹³ Alfred J. Henry, The Floods of 1913 in the Rivers of the Ohio and Lower Mississippi Valleys (Bulletin Z, U.S. Department of Agriculture Weather Bureau: Washington, D.C., 1913), p. 45.

¹⁴ Ibid. p. 46.

The headlines of the daily newspapers reveal the saga of the storm and flood as it progressed from Omaha, Nebraska to Dayton, Ohio and to the Ohio River Valley.

The Cincinnati Post reported the following statistics from the killer-tornadoes that swept through the midwest.

March 24, 1913
Omaha, Nebraska

"Killer Tornadoes"

| | Dead | Injured |
|------------------------|------|------------------|
| Omaha, Nebraska | 75 | 550 |
| Chicago, Illinois | 4 | 150 |
| Council Bluffs, Iowa | 12 | 20 |
| Flat Springs, Missouri | 5 | 50 |
| Terre Haute, Indiana | 18 | 75 |
| Boni, Florida | 3 | 22 ¹⁵ |

The Kentucky Edition Cincinnati Times-Star published the following news items:

- Omaha, Nebraska "Soldiers are Guarding the Smoldering Ruins in Path of a Tornado--That Killed over 200 and Injured Many"
- Washington, D.C. "New Storms Coming--Headed East"
- Newport, Kentucky "Miss Eileen Crawley Entertained with a Social Last Evening"¹⁶

The Cincinnati Times-Star reported the following news items:

- March 25, 1913
Cincinnati, Ohio "Storms Hit Central Indiana and Ohio"
- "Middletown-Hamilton-Dayton Hit Hard"
- "Cincinnati to Expect 40 Foot Ohio River"

Also in the newspaper the following advertisement appeared:

- Cincinnati, Ohio "Shillitos: Raincoats \$3.75-\$4.25
Umbrellas \$1.25 each"
- "Provident Bank: Save for a Rainy Day"¹⁷

¹⁵The Cincinnati Post, 24 March 1913.

¹⁶The Kentucky Times-Star, 24 March 1913.

¹⁷The Cincinnati Times-Star, 25 March 1913

The Cincinnati Post headlines read:

Newport, Kentucky "Heavy Rains Interrupt Car Service--Licking River Rising"
"Rain Causes Streets to Become Lakes--Evergreen Car Tracks Covered"
Mobile, Alabama "Storm Rages Over Gulf--Heads East"¹⁸

The Kentucky Times-Star headlines read:

Dayton, Ohio "Dayton Levee Breaks--Delaware Hit"
"Down River Valley to Cincinnati"¹⁹

The Kentucky Times-Star reports the Ohio River flood arriving in Newport:

Cincinnati, Ohio "Hundreds Made Idle By Flood--Mill Creek Plants--P & G--St. Bernard--Carthage--Ivorydale Close"
Newport, Kentucky "Enormous Rise in River--Floods Newport Streets--Isabella Impassable"²⁰

By March 27, 1913, the rain was stopping in the Ohio River Basin Area. Rain totals of 6.6 inches in Toledo, 10.16 in Marion County, 6.97 in Columbus, 7.87 in Delaware, and 8.94 in Dayton, Ohio were reported. The runoff water was making its way southwest into the valleys.²¹ It was the Licking and Ohio River's time to bring hardship to the industrial-urban city of Newport, Kentucky.

The Great Storm of 1937 was complicated by the melting snow in the mountains bordering the Ohio Valley, to the east and southeast of the city of Newport. Although over a hundred miles away the water runoff produced an Ohio River stage.

¹⁸The Cincinnati Post, 25 March 1913.

¹⁹The Kentucky Times-Star, 25 March 1913.

²⁰The Kentucky Times-Star, 26 March 1913.

²¹The Cincinnati Enquirer, 1 April 1913.

of nearly 45 feet by January 14. This was not unusual for the month of January, but coupled with 13 inches of rain in the next few days brought the Ohio River to 65 feet by January 16.²²

Once again the rain water found its historical path down the Ohio River Valley. Once again the river was to reclaim its place on the flood plain. The rain was to raise the Ohio River tributaries first. The Licking River west of Newport like the Mill Creek west of Cincinnati, normally, are hardly known to exist; but when such prolonged and phenomenal rains fall from the heavens, the overwhelmed Ohio River is unable to carry off the tributary excess waters and means flood for the cities.²³ Little did the writers of The 1913 Storm and Flood know that they were to see their observation repeated again in 1937. The scientific advances of weather and flood forecasting developed after 1913 did much to aid the victims of the Flood of 1937.

As in 1884 and 1913, the newspaper headlines were to tell the storm story as the flood conditions were to develop.

The Kentucky Post published the following news items:

January 14, 1937
Newport, Kentucky

"River 45 Feet"

"Fear of Flood Alloyed Here as River Falls with
Temperature" W.C. Devereaux, U.S. Meteorologist
"Assures"

January 15, 1937
Newport, Kentucky

"Hippodrome Showing - The Crime of Dr. Forbes with
Ken Maynard"

"Rain Forecast" ²⁴

²²Ida Kessler Siberstein, Cincinnati Then and Now (The Voters Service Education Fund, The League of Women Voters, 1981), p. 219.

²³Lowell Thomas, Hungry Waters - The Story of the Great Flood (Universal Book and Bible House, 1937), p. 25.

²⁴The Kentucky Post, 14-15 January, 1937.

The Cincinnati Times-Star published the following headlines:

January 17, 1937
Cincinnati, Ohio "Rain Totals 13 Inches"

January 19, 1937
Cincinnati, Ohio "Rain Record"

"60 Feet of Water"

"Refugees Given Shelter"

"Additional Rain Seen"²⁵

Leila Willis Poage in her 1938 thesis based on her service with the American National Red Cross in the Flood of 1937 described the rain from the storms as follows:

Excitement? Yes, there was some excitement. But for the most part people did not appear excited. Faces were serious but calm. The things that impressed one most vividly were the steady downpour of the rain, which seemed never to be going to cease, and the wan faces of men and women, all drenched to the skin. There was the splash of the oars of boatmen rowing in the dark, sometimes with a single lantern or flashlight; there were the drone and lights of airplanes overhead, and ever the awful sound of pouring rain.²⁶

From January 14th to January 24th, "Black Sunday," rain would continue flowing into the Ohio River Valley. As the rivers rose to wash into the City of Newport, headline space was taken for this story from Washington, D.C.:

"Better Days Ahead; F.D.R. Says"
"Takes Oath in Driving Rain"
"Promises New Steps to Aid Nation's Under Privileged"²⁷

and on the back page a story contained a report on the growing Nazi efforts in Germany to Germanize the Bible. The stories held for this moment in history little concern for the people of Newport. The rain and the river were the great

²⁵The Cincinnati Times-Star, 17 & 19 January, 1937

²⁶Leila Willis Poage - The Work of the American National Red Cross in Campbell County, Kentucky, in the Ohio Valley Flood of 1937. Lexington, Kentucky, 1938. University of Kentucky.

²⁷The Cincinnati Times-Star, 17 & 19 January, 1937

concern for the people of Newport. The rain and the river preoccupied their minds. Once again, the river city's efforts were called upon to preserve its industrial-urban systems threatened by the rising river - food, water, transportation, light and power, police and fire protection, and communications.

Newport - The Urban City of the Floodplains

Part II

NEWPORT - THE URBAN CITY OF THE FLOODPLAINS

PART II

From the 1880's to 1937, the City of Newport had grown in size, population, and industry. To better understand the Great Floods and their impact, it is necessary to view the city as it appeared (Exhibits #9-21).

The combined city area comprised the northern one-eighth of the Campbell County land area. The city was surrounded by rivers (Licking and Ohio) on three sides and a large creek (Taylor) ran through the middle. The valley floodplain had been developed with houses, business and industry side by side in integrated neighborhoods.

The city by 1937 was into the automobile and truck era of transportation. The trolley line was available for those in need of such transportation; but most living within the city walked to their destinations. The trolley lines followed a grid pattern of street development. The streets ran from the river banks (elevation 520 feet) to the surrounding hills (elevation 780 feet). From Newport the trolley lines and streets linked Bellevue, Dayton, the Newport suburb of Southgate, and the District of the Highlands, including Fort Thomas Military Post. (The trolley line would end with the 1937 Flood. It was replaced by diesel buses not dependent on steel tracks to carry its passengers.)

The population of the city was concentrated in the valley. (The hillside neighborhoods were to await the Post World War II Era and the massive use of the gasoline powered autos and diesel buses for development.) The following is a comparison of populations:

| | 1900 | 1910 | 1920 | 1960 | 1970 | 1980 |
|---------|--------|--------|--------|--------|--------|----------------------|
| Newport | 28,301 | 30,309 | 29,317 | 30,070 | 25,998 | 21,587 ²⁸ |

²⁸United States Bureau of the Census, U.S. Department of Commerce, Washington, D.C.

With the business and industrial growth of the city in the period of 1880 to 1937, the population moved away from the river banks. As many shop owners, businessmen, industrialists, and professionals moved from the west side of Newport to the east side and from the river banks to the hilltops, the space vacated, be it the second story flat or behind the store apartment, was filled with either new commercial interests or was turned into housing for the new industrial workers. Shanty town neighborhoods developed along the railroads, around the iron and steel works, along the river banks, and in the deserted barracks housing of the old Newport Army Barracks.

The descendents of the original English, German, and Irish settlers witnessed the arrival of Italians, Hungarians, Poles, Greeks, and Blacks. By 1937, the city was to see another change, the arrival of poor white Appalachians. This group in the Great Depression was often set apart from the older groups. They would be the last hired and the first fired. They would be the largest group participating in the Welfare Programs of the 1930's and beyond in proportion to their percentage in the total population. All were seeking and competing for employment, housing, city services, and education for their children. The city by 1937 boasted of having a public high school, a Catholic high school, six public elementary schools, a Catholic academy, four Catholic elementary schools, one black elementary school, and one Hebrew school.²⁹

The Mansion Hill Area in east Newport between the commercial-industrial area of the city and the Taylor Creek had by the 1890's developed on the last lands sold by General Taylor's family.³⁰ This area, during the Floods of 1913 and 1937, was to provide the bulk of relief within the city to flood victims through

²⁹ Northern Kentucky Review, Pictorial and Industrial Review of Northern Kentucky Kenton and Campbell Counties (Newport, Kentucky: Northern Kentucky Review, 1923), p. 63.

³⁰ Larry Stevenson, Walking Tour of Mansion Hill (Newport, Kentucky: Mansion Hill Neighborhood Association).

donations of food, clothing, money, and shelter. Mansion Hill became an isolated island of majestic houses almost surrounded by the flood waters.

The Mansion Hill Addition to the City of Newport derived its name from the area that was sold from the ground surrounding the General Taylor Mansion. Here lots were sold in the 1890's as typical home sites of 30' X 100' for \$1,375 to \$8,000 per site. It was a true suburb of its day and was served by gas and electric, trolley cars, running water, indoor plumbing, and contained green, grassy areas. The city directory of the era read like the city's "who's who."

Found living there were Clarence Davidson, commercial merchant; General Taylor's heirs, land developers; Samuel Bigstaff, banker-bridge developer; Joseph Cloud, insurance; George Weidemann, Jr., brewer; H. Veith, lumber merchant; Charles Willis, music sales; John Yungblut, drugs and dyestuff; John Tangemann, manufacturer; and the Andrews Family, iron and steel producers.³¹

The Mansion Hill Area stood above the floodplain in sharp contrast to the housing of the floodplain. The areas north, east, and west of the hill housed the industrial workers, river workmen, small shopkeepers, and tradespeople. Here they lived in rows of three and four room cottages of brick and wood. Many two, three, and four story flat buildings fronted on the streets leading to and from the mills and river banks. Workers could be found living in the dingy barrack-shanty houses or in the hundreds of flats above and behind the businesses, stores, and workshops.

Industry and commerce had spread throughout the City of Newport providing jobs and city services for the expanding population. Hundreds of persons were employed supplying goods and services to the urban population; while thousands of industrial workers were employed in the factories and small shops. Thousands

³¹Williams, Newport City Directory (Cincinnati: Williams & Co. Publishers, 1913).

crossed the bridges each day to Covington and Cincinnati. Transportation systems (trolley cars, railroads, autos, and buses); utility systems for electric, gas, and water; food distribution; school systems; police and fire departments; medical-health services; religious organizations and fraternal organizations; financial institutions (commercial banks and the neighborhood "Bav-verein"); and communication through newspaper and radio were by 1937 well in place. Four banks and fourteen building associations existed in various neighborhoods.³² The city's population's dependence upon the industrial manufacturers and commercial interests for livelihoods and city services for existence was well established. Newport, even with its diverse industry, suffered with the rest of the nation during the dark days of the 1930's Depression. The C.C.C., W.P.A., and P.W.A. actively recruited workers and promoted construction in the city.

The principle industries and commercial interests of Newport were as follow (Exhibits 12-16):³³

The Andrews Steel Company and the Newport Rolling Mill were the largest industrial companies employing at times twenty-eight hundred or more workers. The company's many buildings were found from Fourth Street along the Licking River south of the city limit and in the area of Wilder. There were found the blast furnaces and rolling mills of the industrial city. Andrews Steel was the successor to the older Swift Iron Company.

The George Weidemann Brewing Co., Inc. occupied three city blocks with production, livery, and warehousing. It employed several hundred persons. The

³² Ibid.

³³ Northern Kentucky Review, Pictorial and Industrial Review of Northern Kentucky Kenton and Campbell Counties (Newport, Kentucky: Northern Kentucky Review, 1923), pp. 67-105.

company was a city unto itself with its own electric generating plant and ice making machinery.

The Higgin Manufacturing Company located at Fourth and Washington Streets employed hundreds in the production and manufacturing of metal products for window screens and other metal products.

The Fletcher Manufacturing Co., producer of washing machines, and the Crowley Machine Co. were typical of the small manufacturing shops located in the west side of Newport. They employed less than one hundred persons.

The Fisher Brothers Storage was an example of the warehousing and storage done in the west side of Newport. Manufactured goods, raw materials, food stuffs, hay and grain, and coal were stored in this area of the city near river and rail transport.

The tailoring shops were once spread throughout the west side of Newport. Employment consisted of mostly women and children in part-time capacities. In 1913 there were 42 tailoring shops listed in the city directory, but by 1937 only a few existed. Machinery and the limited demand caused the decline.

Other industries and commercial interests existed in the city during this time and included a chewing gum factory, livery stables, transport, flour mill, dairies, lumber yards, a tile and sand company, and small machine shops.³⁴

The principle suppliers of transportation (trolley cars, auto service stations, and railroads); utility systems for electric, gas, and water; food distribution; and medical-health in Newport at this time were:³⁵

³⁴Williams, Newport City Directory (Cincinnati: Williams & Co. Publishers, 1913).

³⁵Northern Kentucky Review, Pictorial and Industrial Review of Northern Kentucky Kenton and Campbell Counties (Newport, Kentucky: Northern Kentucky Review, 1923), p. 54.

Transportation: The Cincinnati, Newport, and Covington Railway Co. was established in 1892. It succeeded the horse-drawn cars of the older Newport Street Railway Company of 1867. Between 1892 and 1937 the city was served by electric trolley cars on regular scheduled routes. Next to walking, the trolley car was the way to travel to work, to shop, and to the leisure of the Ohio River beaches in Bellevue and Dayton. Daily several thousand laborers and workers crossed the Ohio River bridges on the trolley cars to jobs in the factories, offices, and stores of Cincinnati, Ohio. (The ritual of crossing the Ohio River for jobs would become in the future a way of life for the majority of those employed, living in Northern Kentucky. Only in the late 1970's would employment patterns reverse with the majority of Northern Kentuckians working in Northern Kentucky.)

The trolley car company's production of electricity, when in surplus, was sold to The Union Light, Heat and Power Co. The electric power generation plant was located near the Licking River in west Newport.

The Chesapeake & Ohio Railroad opened their rail line through the city in 1888 to serve the demand for east-west transport. In doing so the city looked less to the Ohio River for commerce and more to the railroads. A station and many rail sidings existed in the city.³⁶

The Louisville & Nashville Railroad entered Newport in 1872 as a by-pass around the congested Covington, Kentucky railroad yards. The railroad would cut the city in half for over one hundred years. The railroad was the transporter of goods produced in the city, especially the steel products produced in the mills of the west side of Newport. It was the provider of employment to many. The L & N Railroad bridge over the Ohio River and the railroad bridge over the Licking River

³⁶Alfred F. Reekers, Centennial Dayton, Kentucky 1849 - 1949 (Newport, Kentucky: Michaels Printers, 1949), p. 28.

were vital economic links to Covington and Cincinnati.³⁷

Utility Systems for Electric, Gas, and Water: By 1900 these systems were in place and were supplying Newport citizens with these basic urban services. The gas from the coke process was used primarily in industry and in some lighting.

Electric was making its way into all industry, business, and homes. It was necessary for the running of industry's machinery from the motors of the steel mill to the sewing machines of the tailor shops. Electric powered the transportation system of the trolley car. It had by 1937 replaced the gas light and oil lamp fixtures in the home and business. Electricity had become the all-important ingredient of the industrial-urban city; but it was dependent upon a steady supply of coal brought by the railroads and river boats. The Union Light, Heat and Power Co. was formed in 1901 to serve the thousands of customers in all three cities.

The water supply was maintained by the Newport Water Works. By 1937 it was well managed and a model municipal service. The water distribution system was established in the 1870's. The urban areas were served by pipelines running through the valley areas and across the hills.³⁸

Food Distribution: Grocery stores, bakeries, and butcher shops were located in or near every neighborhood. The City of Newport never lacked in the distribution of food stuffs. The family-owned and family-operated businesses provided a supply of food without a need for rationing when supplies were low. With each family knowing its customers, the job of food distributions was made easier.³⁹

³⁷ Kincaid A. Herr, Louisville & Nashville Railroad (Louisville, Kentucky: Public Relations Department, L & N Railroad, 1964), pp. 247-248.

³⁸ Williams, Newport City Directory (Cincinnati: Williams & Co. Publishers, 1875-76).

³⁹ Marcella Enslin Feist, (Interview: Fort Thomas, Kentucky, 1987).

Medical and Health Services: Most doctors and nurses in the Campbell County area lived and had offices in either Bellevue, Dayton, or Newport. The county's only hospital in 1913 was Speers Memorial Hospital in Dayton located at Fifth and Main Streets. It was opened in 1897 with one hundred beds and in 1900 established a nurse's training school. Speers was the Campbell County, Kentucky medical-health center. It was to close in the 1913 and 1937 flooding.⁴⁰

Unfortunately for the people of Newport, the principle industries; commercial interest; transportation system (trolley cars, autos and railroad); systems for gas, electric, and water; food distribution and medical-health were located in the floodplain. All were to suffer damage and loss from the flooding. The floods produced disrupting effects upon the lives of those dependent upon the industrial-urban structures. With these disruptions came the popular call for efforts to prevent and protect from future flooding.

Fortunately for the people in the city, especially those made homeless by the floods, the educational systems and buildings suffered little damage; police and fire departments escaped damage and functioned; religious and fraternal organizations opened their doors and purses to the relief effort; and financial institutions survived to render reconstruction financing.

Now let us turn again to the Great Floods of 1884, 1913, and 1937 and follow as the day to day accounts reveal the challenges to the industrial-urban city structures, serve witness to personal hardships, and focus on the economic destruction and loss.

⁴⁰ Alfred F. Reekers, Centennial Dayton, Kentucky 1849 - 1949 (Newport, Kentucky: Michaels Printers, 1949), p. 27.

The Great Floods of 1884, 1913, and 1937

Part III

THE GREAT FLOODS OF 1884, 1913, AND 1937

PART III

The Great Flood of 1884 followed the water runoff. The water was to reach a crest of 71.7 feet on February 14, 1884 in the City of Newport. A look at John L. Vance's account of the flood reveals the conditions in the city on February 15, 1884.

A staff correspondent undertook a trip through Newport.

The boatman was such as are providentially plentiful among Newport born men, the sisters of many of whom could row in a way to shame the average bungler in the daily dangerous scramble on Vine and Walnut Streets. He knew every inch of the venerable old town, which stood where it now lies submerged before the first settler had set foot in Cincinnati. The route taken—it being remembered that it ran between rows of dwellings or little stores, some wholly under water and floating from their foundations; some tenantless, because the flood level had reached the second story, and others occupied only up stairs—will perhaps give a better idea of the extent of the calamity than could any map or illustration. The writer was rowed from the end of the bridge over the swollen Licking, to Bellevue Street, thence on Bellevue Street to Isabella Street, and then southward on Isabella six or seven squares, to Ringgold Street. At the head of Isabella Street dry land could be seen, but so could also the open commons beyond the city's limits. A look eastward on Ringgold showed the Central Avenue, parallel with Isabella, could not be rowed into, but westward, clear to the Licking, there was deep and unbroken water, and so it had been on every crossing of a street running east and west, while eastward as well, on those between Ringgold and the river, the flood stretched further and further, until on Taylor navigable water could be seen clear to the Methodist Church, which is just west of the Louisville & Nashville Bridge.

When Taylor Street was reached a westward course—toward the Licking—was taken for two blocks, and the rear gate of the Barracks entered. The trip over the old parade grounds, the scene of so many memorable and brilliant gatherings, social and military, was made on at least ten feet of water, the flood being over the porches of the barracks proper, up to the middle of the first story of the officers' quarters, half over the guard-house, and high up, playing at will in the rooms under the historic ball-room, while the melancholy-looking hospital at the convergence of the two rivers, stood ghost like against the back ground of blue sky and yellow waste of waters. Leaving the Barracks, over the fence of the Commandant's quarters, and keeping well over the sidewalk of Front Street, to avoid the fierce current, the journey was resumed eastward, or up the river, on a level with the second story windows of the residences of the best-to-do people of Newport. Without exception, the latter were cut off of communication to their lower

stories, and some few had been driven out altogether, or up to the third floor.

The above outline of an hour's voyage through Newport is given with a view to give the reader, if possible, a realizing sense of the extent of the flood in this one town, with reference only to the vast area, all covered with habitations--for even the few stores have residences above them--which has been inundated. The sights and incidents of such a trip would cover columns. Relief boats, flying the white flag of the different associations at their bows, were met constantly. Overturned houses and cottages floating from their foundations were common sights--in one place a whole row of one-story dwellings, floating in a confused heap. Hundreds of out-buildings, of almost uniform architectural structure, anchored singly or in groups, floated on every side, scarcely one being right side up, their number being surprising--even appalling, especially so when we consider that 20,000 people are homeless.⁴¹

Cincinnati in Ohio, Bellevue, Covington, Dayton, and Newport in Kentucky were to suffer heavily from the flooding. The people as before took it all as a part of living near and depending upon the river. The economic life of the City of Newport was dependent upon the river for transportation. With the completion of the Louisville & Nashville Railroad and the Chesapeake & Ohio Railroad lines the city's transport needs would shift from the river to rail.

As the city's industrial base of steel and iron expanded, future river flooding would become more and more an unwanted interference. Few knew or understood what a preview the 1884 Flood was of future flooding.

As the flood crests were reached on the rivers of the southwest Ohio and southern Indiana, the Ohio River and Licking River levels were on the rise in Newport. A record breaking rise was experienced in the Cincinnati and Northern Kentucky area.⁴² From March 25, 1913 to March 30, 1913 the Ohio River moved from 29.3 feet to 67.9 feet. At times the river was rising at a record setting rate of one foot an hour (Exhibits 18-21).

To form a vision of the magnitude of the water runoff from the storms of this

⁴¹ Commercial-Gazette, 15 February 1884

⁴² The Cincinnati Enquirer, 31 March 1913.

period and in 1937, it is necessary to review briefly the unprecedented conditions and the amounts of rain that fell over the states of Indiana, Kentucky, and Ohio.

Alfred J. Henry calls to mind in his The Floods of 1913 the mixture of the Ohio Basin and storm movements in the following excerpt:

The Ohio Basin - The Ohio Basin is second in size of the six great natural divisions of the Mississippi Basin, yet it ranks first in importance in the causation of damaging floods in the larger stream. The topography of the basin in the western and northern portions is generally flat and rolling, but between those portions and the eastern and southern boundaries of the basin almost all conditions of surface contour may be found. It should be remembered that the eastern and southern boundaries, for the most part, lie along the crest of the Alleghenies and related mountain ranges, and that down the rugged western slopes of these mountains flow the streams which form the southern tributaries of such rivers as the Monongahela, the Little Kanawha, the Great Kanawha, The Big Sandusky, the Kentucky, the Cumberland, and the Tennessee. On the headwaters of these rivers the slopes are steep, gradually becoming less as the lowlands are reached.

Contributing causes of the Ohio floods - The Ohio is preeminently one of the turbulent rivers of the United States among streams of its size and drainage area. There are several important reasons why this should be so. First in order of importance is the accident of geographic location considered with respect to the meteorological conditions which dominate the weather of the interior of the continent. The longer dimension of the basin extends in a southeast-northwest direction from northeastern Mississippi to southwestern New York, a distance of about 800 miles; its shorter dimension stretches from northern Indiana southwestward to northern Georgia, a distance of about 500 miles; its total area is 201,700 square miles, and practically all of this vast area lies wholly within the region of frequent and copious rainstorms which, particularly in the winter and spring, pass from Texas to New England, directly over the longer axis of the basin of the river. Moreover, the northern portion of the basin also lies within the area of rainfall produced by storms which pass across the continent from west to east over the Great Lakes. Owing to certain phases of storm development and movement not a present susceptible of satisfactory explanation, a storm passing eastward along or through the northern tier of States sometimes leaves an unsettled condition in its rear which may extend southwestward to the Gulf of Mexico, in which secondary storm centers are apt to develop and move northeastward through the lower Mississippi Valley, depositing heavy rains in both valleys. The northern portion of the Ohio Basin is, therefore, so located with respect to storm movement that it receives at times two downpours in quick succession. The torrential rains of March 23-27, 1913, illustrate this possibility, with the exception that the intervals between the passage of the two storms on those dates was so short that the

rainfall seemed to be, and was for all practical purposes, continuous.⁴³

The flood wave to hit in the Newport area came from the surge of water coming down the Great Miami River.⁴⁴ Where the river joins the Ohio River about 15 miles below Newport the wall of water caused the most extraordinary 24 hour rise in the river's history. From March 25th to March 26th, the Ohio River was to flow west to east on the huge surge of water. It was reported that the water force was so great, that the captain of a packet was obliged to steer almost directly into the current to prevent being carried onto the opposite bank of the river.

The second large flood discharge into the Ohio River came from the Scioto River Valley some 24 hours later than the surge of the Great Miami River.⁴⁵ For the City of Newport this delay of 24 hours produced a lower crest in the river. At the time the river reached flood stage at Cincinnati (the point of measurement) and Northern Kentucky, the principle flood wave from the east was upriver from Parkersburg about 286 miles upstream from Newport. The flood surge from the east took about three days to reach Newport and produced a flood crest six days after the river had attained a flood stage of 52 feet. In the meantime the vast amount of water from the Great Miami surge had passed downstream and the Ohio was flowing east to west in a normal pattern.

To better understand the flood period from the evening March 27 to April 4, it is necessary to examine each day's flood effects on the cities. The time is well recorded in the newspaper headlines and stories of that eventful week. The following resumes the day to day account of the Great Flood of 1913.

⁴³Alfred J. Henry, The Floods of 1913 in the Rivers of the Ohio and Lower Mississippi Valleys (Bulletin Z, U.S. Department of Agriculture Weather Bureau: Washington, D.C., 1913), p. 11.

⁴⁴Ibid. p. 26.

⁴⁵Ibid.

The Kentucky Times-Star reported the following headlines:

- March 27, 1913 "Unprecedented Rise in River Causes Alarm"
 "Mayors of Covington and Newport Orders Hundreds
 from Homes"
 "700 Houses in Newport--Flooded in 24 Hours"⁴⁶

The article states that the Weidemann Brewing Company trucks were used to move people and furnishings from flooded homes in Newport's west side. The Newport City Building (Exhibit #23) at Fourth and Columbia Streets, even as water approached, would be used as a shelter.

The Kentucky Times-Star reported the following about flood conditions:

- March 28, 1913 "Ohio River to Hit 70 Feet"
 "May Exceed 1884-Record"
 "Gas and Electric May Shut Down"
 "Provisions of Coal Decline"⁴⁷

By the evening of Friday, March 28th, the City of Newport was reporting 5,000 homeless with 1,500 houses flooded. Newport was to purchase potatoes to sell at cost to the hungry as the city jail was turned into a food dispensary.

As the victims of the flood were taken into care the economic impact of the flood was taking form.⁴⁸ By Friday evening the major employers were closing factories and shops or curtailing their operations. Andrews Steel with its mill buildings flooded and coal supply surrounded by water closed generators. Over 1,000 day wage earners from the steel mill and 800 workers from the rolling-mill were told not to report for work. The Newport Street and Rail trolley car barns

⁴⁶The Kentucky Times-Star, 27 March 1913.

⁴⁷The Kentucky Times-Star, 28 March 1913.

⁴⁸The Kentucky Times-Star, 29 March 1913.

and electric plant by the Licking River closed leaving 400 without jobs. Without raw materials and ample coal supply the Newport economy saw work stoppages at the Weidemann Brewing Company, Dorcel Flour Company, Higgins Manufacturing, and the many shops that were located in the west side.

March 29, 1913

The number of houses flooded and the number of homeless persons continued to mount:

| | Number of Houses Flooded | Number of Persons Homeless |
|---------|-----------------------------|-------------------------------|
| Newport | 1,600 | 6,400 ⁴⁹ |

The transportation systems both trolley car and railroad were strained to continue operating as the coal supply and electric production declined. The loss of transportation brought economic hardship upon the industrial worker, the office worker, and the owners of businesses of all kinds. The loss did not discriminate between those directly flooded or not. The dependency upon coal and electric, and the lack thereof, did much to bring the economic shut-down of the area. Unlike those living in the city during the Flood of 1884, these city dwellers lacked horses and river boats to replace the lost trolley cars and trains.

On March 29th, the Cincinnati Trolley Car Company warned thousands of Kentucky workers in Ohio to leave their work early.⁵⁰ The electric power for the trolley cars bound for Kentucky was to be out that afternoon.

Added to the transportation misery of workers and management was the closing of the Eleventh Street Bridge between Covington and Newport and the L & N Bridge between Cincinnati and Newport by the high water. (The Fourth Street Bridge to Covington and the Central Bridge to Cincinnati had closed earlier.) The L & N Railroad Bridge stayed open for foot traffic and a few trains between Cincinnati

⁴⁹ Ibid.

⁵⁰ Ibid.

and Newport.

The availability of the railroads to resupply the cities with coal, food, and industrial materials was hampered by the high water. Railroad lines north of Cincinnati had been severely damaged during the storms and flooding. The railroad yards locally were flooded and the coal company storage yards were either flooded or isolated (Exhibits #10-11).

March 31, 1913

On this day flood conditions would worsen. The City of Newport was now nearly isolated, only the railroad bridges to Covington and Cincinnati were open. With the trolley cars not running, gas and electric shut off, coal in short supply, and factories and shops closed, those homeless and those with homes were left to wait for the flood crest. During this waiting period many would seek service in relief work, providing protection, health care, and planning and doing cleanup.

Relief work in the various forms of clothing, food, and shelter were done primarily on a volunteer basis. The volunteers were aided and directed by the city officials and work crews. Although the Red Cross is recorded in the relief work done in Ohio, nothing of its work was found in the Campbell County area. Catholic and Protestant Churches and the Jewish Synagogue in Newport became relief centers. Religious and fraternal organizations throughout the area collected funds to aid flood victims. The city from its treasury provided funds for victims and for public repairs. Banks, the Bav-verein, and other businesses donated the relief effort.

Providing protection to flood victims and flooded properties was done by the local authorities in the city. Unlike in Cincinnati and other Ohio cities, the National Guard was not used to protect property. Looting was held to a minimum. Communications played an important part in keeping order. The telegraph lines were open to the newspapers. This continuing source of information coupled with

the ability of newspapers to be distributed lessened the chance of disorder and panic. Neighborhood association and city organizations held the populace together in their effort to cope with the flood.

Health care was not found to be a major problem during and after the flood. Low air temperatures kept bacteria counts down. The swift movement of the water washed much of the animal and human waste down river. Limited influenza cases, whooping cough, and other illnesses were reported. Warnings were issued by health officials to safeguard health and avert possible contamination. "Boil Drinking Water" was the most used warning.⁵¹

Planning for the eventual cleanup and a return to normal started with health care measures to be taken. The following is taken from the Cincinnati Post:

Boil Drinking Water!
Don't be afraid to use soap and water.
Scrub out the dirt and mud from houses, cellars, and yards.
Remove all water soaked rubbish.
Thoroughly cover with lime everything mud has touched.
Whitewash cellar walls and ceilings.
Open windows in cellars and houses and let the wind dry the walls.
Don't use water from cisterns or wells that have been flooded.
Boil water before drinking.
If ill, call physician at once.⁵²

Public areas such as streets would be cleaned by the city work crews. Homes and business for cleanup and repair were on their own. The home owner would be helped by drawing on savings or obtaining loans from the neighborhood bay-verin; while the businesses, manufacturers, and persons of means would use banks to finance their activities.

A brief look at the Cincinnati Enquirer, Kentucky Section for March 31, 1913, helps explain the conditions that existed.

⁵¹The Kentucky Post, 2 April 1913.

⁵²Ibid.

Newport, Kentucky--

CONDITIONS IN NEWPORT

Are Serious and Appeal is Made to
Fort Thomas--No Electric Lights

With the exception of a few gas lamps the City of Newport was in darkness last night, as the light company could not furnish any electricity. With each succeeding inch that the river rises conditions in the City of Newport become much worse. The water last night reached two sides of the City Building and is rapidly approaching the marks made by the Flood of 1884.

Acting Mayor Eimer last night called Colonel Crane, commanding the Ninth Infantry at Fort Thomas, and asked if the regulars could not be sent into the city to assist the police in the flooded district. Colonel Crane replied that he and other officers of the Ninth had been considering the proposition, and that Mayor Phillips, of Covington, had made the same request, but that he was powerless unless the War Department issued the orders after representations had been made by Governor McCreary that the state and city authorities were no longer able to cope with the situation.

Conditions in Newport are critical and the property loss is enormous. A trip through the streets in the lower end reveals many houses overturned, while frame buildings were floating about.

Washington, D.C.--

SECRETARY GARRISON

Advises Against Use of Troops in
Covington and Newport

Special Dispatch to the Enquirer

Washington, D.C., March 30.--A message from Secretary of War Garrison advising against the using of Government troops at Fort Thomas for police service in Covington, Kentucky, during the Ohio River flood was received at the White House to-night. The matter was brought to the attention of President by Senator Ollie M. James, of Kentucky, who had got out of a sickbed to go to the White House this afternoon.

The Senator found the President in bed, slightly indisposed, and their conference was held in the President's bedroom. Representative Arthur B. Rouse, of Burlington, Kentucky, also communicated with the White House on the matter to-day. James and Rouse had received the following telegram from Mayor George E. Phillips, of Covington, to-day.

"Town in total darkness to-night. Lights all off. Want soldiers from Fort Thomas. Order them to report to me."

James had been confined to his bed for two weeks, and he went to the White House to-day against the advice of his physician. He declared his own health was a secondary matter in such a case. After the conference, the President directed the wire to General

earlier flooding.⁵⁵ By 1937, the City of Newport had reached a population of over 32,000 and had its steel, iron, coal, utilities and transportation centered in the floodplain area.

The city at the time of the flood reflected the nation, that was deep in the Economic Depression of the 1930's. The Andrews Steel Company and the Newport Rolling Mill Company together employed at times twenty-three hundred people.⁵⁶ These employees for the most part were longtime residents of the City of Newport. Many who came to the city, especially those who came from the mountains, found no work, but remained to be placed on relief or on Works Progress Administration payrolls.⁵⁷ The "semi-employed" of the city were to suffer most when the flooding occurred.

Heavy rains were not uncommon in the Ohio Valley in winter, so in January, 1937 when the rains came, few people realized what was to happen (Exhibits 23-27).

The Kentucky Post headlines from January 14, to January 22, 1937 were as follows:

| | |
|------------------|---|
| January 14, 1937 | "Fear of Floods Alloyed Here - River Falls" |
| January 15, 1937 | "Rain Forecast" |
| | "Hippodrome Showing - The Crime of Dr. Forbes with Ken Maynard" |
| January 16, 1937 | "58 - 59 Feet Flood Predicted" |
| January 19, 1937 | "60 Feet of Water" |
| January 20, 1937 | "61 Foot Crest Seen" |

⁵⁵ Gilbert F. White, Papers on Flood Problems (Research Paper No. 70, Chicago: University of Chicago, 1961), p. 13.

⁵⁶ Leila Willis Poage - The Work of the American National Red Cross in Campbell County, Kentucky, in the Ohio Valley Flood of 1937. Lexington, Kentucky, 1938. University of Kentucky. p. 49.

⁵⁷ Henry H. Adams, Harry Hopkins A Biography (New York, New York: G.P. Putnam's Sons, 1977).

January 21, 1937 "River May Pass 66 Feet"
"Heavy Rain Continues"
January 22, 1937 "Flood Perils Light & Power"
"River Rises to 71 Feet"
"Greatest Flood Since 1884"⁵⁸

Leila Willis Poage in her account of the flood revealed the extent of the flood in her 1938 Paper.

Even when the muddy waters of the Ohio River on Friday, January 22, reached a flood stage of 70.4 feet, the majority of citizens has not thought of the impending disaster. On that day most schools were compelled to close in Greater Cincinnati. Transportation had become somewhat crippled, and Northern Kentucky was fast becoming isolated because all approaches to bridges connecting Kentucky and Ohio were becoming inundated. Although the air was tense with excitement, few people realized just what the crisis would mean.

There was much concern when the news was spread that a building on Broadway, near the river front in Cincinnati, had collapsed, and that twenty-seven persons narrowly escaped death; but still Northern Kentuckians were not frightened. A few hours later the Miami River overflowed the Beechmont levee and flooded Cincinnati's airport.

It was a tremendous flood, but the people felt there had been worse ones. However, on Saturday, January 23, when the river stage was reported at 72.8 feet and still rising, when reports were being broadcast over the radio warning people about the use of electricity, gas and water, when officials began to take command and to issue statements for the safety of lives, the citizens of Greater Cincinnati began really to be alarmed.

Almost at the same time at Pittsburgh, a city farther up the river, for several days, authorities had been preparing for a record breaking flood. The crest of the flood was reached at that city at one o'clock Saturday morning. Other points along the way experienced the disaster which came to be known as "The Great Flood Disaster of 1937". A little later many towns and cities in Ohio, West Virginia, Kentucky, Tennessee, Indiana and Illinois were affected. The story of Portsmouth, Ohio, is one of the most tragic of the history of floods. Then on to Cincinnati and Northern Kentucky cities came the most disastrous flood in a record of 31 during the past 54 years.

As early as January 15, it had been predicted by authorities that the water in the Cincinnati area would likely reach a crest of 52 feet, which is flood stage in that area. The following day the

⁵⁸The Kentucky Post, 14 - 22 January 1937.

river reached a crest of 51.66 feet and then dropped to 50.9 feet.

Then on January 18, a 58 foot flood was predicted. Thus every day a new figure so that when, with the dawn of January 22, news was spread of lives lost, property damaged, bridges closed and water and food supply in grave danger, and under a steady downpour of rain and snow, the Ohio, Miami and Licking Rivers still rising, it is no wonder that panic reigned. On Friday night of that day in Northern Kentucky, 4,500 families were driven from their homes. A building in Newport was swept away. Industry was at a standstill. One hospital was partially closed. Campbell County was isolated, her only connection with the outside world being the telephone and a Chesapeake and Ohio shuttle train between Cincinnati, Covington, Newport, Bellevue, and Dayton.⁵⁹

By January 23, 1937 the Cincinnati Enquirer called for a river crest of 73 1/2 feet! How much more would the City of Newport have to endure? At this time the water level had exceeded the level of 1913. As Franklin D. Roosevelt was sworn in for his second presidential term, the people of Newport were bracing themselves for even greater destruction and misery.

A Cincinnati newspaper reporter called Sunday, January 24, "Black Sunday." Rain fell all day Saturday and by Sunday morning the Ohio River had risen to a 75 foot stage and was still rising. The Greater Cincinnati power supply was in danger, water was put on a ration basis, fires swept through part of Cincinnati, buildings in Newport were swept away, and the Campbell County hospital was forced to close.⁶⁰

"Black Sunday" brought the urban-industrial city to a close. Electric power, transportation, and communication was limited. The electric power grid established in the 1920's to serve the area failed as power stations were flooded in Cincinnati and coal reserves could not be resupplied. The electric trolley cars stopped with the lose of power. Diesel buses were able to move only outside the

⁵⁹Leila Willis Poage - The Work of the American National Red Cross in Campbell County, Kentucky, in the Ohio Valley Flood o 1937. Lexington, Kentucky, 1938. University of Kentucky. pp. 57 - 63.

⁶⁰Ibid. pp. 59 - 60.

flooded areas. By "Black Sunday" a shuttle train was the lone carrier for Newport. The shuttle train carried a limited number of passengers, food supplies, and medical help to the 1,200 stricken families in Newport.⁶¹

Word of mouth communication as in early floods was now replaced by a steady supply of newspapers and radio broadcasts of news and weather reports. Radio Station WLW in Cincinnati, Ohio was in the forefront of supplying information and some entertainment relief for flood victims and workers. Later WLW was to add a meteorologist to its staff as the nation's first weatherman.⁶²

The period of January 23rd to January 27th would be the most severe river conditions in the City of Newport. The Kentucky Times-Star headlines read as follows:

| | |
|------------------|---|
| January 23, 1937 | "Slow River Rise" |
| | "Crest of 73 1/2 Foot Seen" |
| January 24, 1937 | "Shoot to Kill Order By Police Chief Warns Looters" |
| January 25, 1937 | "Cities Grip to Fight Disaster" |
| | "55% Newport Under Water" |
| January 26, 1937 | "Ohio River Stationary" |
| January 27, 1937 | "River to Continue Recession" |
| | "Loss in Campbell Co. 3.5 Million" |
| | "Newport - 1/2 City Under Water" |
| | "Steel and other Industry Closed" ⁶³ |

On Tuesday, January 26th, the Ohio River reached an all time high crest of 79.99 feet. On this day Newport along with her sister cities of Bellevue, Dayton,

⁶¹The Kentucky Post, 23 January 1937

⁶²Dick Perry, Not Just a Sound - The Story of WLW (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1971).

⁶³The Kentucky Times-Star, 23 - 27 January 1937

Covington, and Cincinnati felt the full impact of the flood. The local police and Red Cross were at full force. Streets were almost deserted on both sides of the Ohio River. Trolley cars were withdrawn from service, factories were closed, theatres were dark, schools closed, shops closed, department stores closed, and libraries closed. City people and suburban people carried containers to old springs and wells for water. Candles and coal oil lamps lighted the cold land for the next week.

On Wednesday, January 27th, the Ohio River began its fall. With the fall the weight of the destruction in Newport became evident. As with 1884 and 1913, the destruction totals began to mount. It was not until February 3, 1937 that water and electric was restored to the city. The city government, long suffering under the weight of the economic depression was hard pressed to meet the new demands for renewal and restoration. As many as 12,000 were made homeless, industry was idle, the city was forced to borrow \$50,000 for cleanup, and many looked to the hillsides for refuge from future floods.

But, for this flood, there was new help and hope. As in the past floods the numbers for homeless, hungry, lost jobs, closed businesses, and destruction were totaled. In each of those totals were individuals and families that once again had coped and survived the hardship and misfortune of the flooding. There was a recovery; but this time the recovery shifted to the federal level away from the local government and agencies. The Public Works Administration, The Flood Control Act of 1936, The Federal Housing Authority, and the Army Corp of Engineers were to unite with the people of Newport to change the face of the city of the floodplain forever. The urban-industrial basis of the city would stay intact for sometime to come after the floodwalls were built. The image of the city would change in the 1970's not by the forces of nature and its flooding, but by the forces of economics.

The conditions and solutions for Newport after the Great Flood of 1937 reflected Robert S. McElvaine's view of America. The period of 1884 to 1937 was a part of the industrialization of America. Newport shared the economic and social changes with the rest of the nation.

Preindustrial America was, in historian Robert Wiebe's apt phrase, a nation of "island communities". What was dominant in the lives of people of all classes was the local community. Each community was to a large extent self-contained, its significant contacts with the rest of the nation infrequent.

The rapid industrialization of the United States during the late nineteenth century upset this world. The development of national systems of transportation and communications, of highly concentrated industrial and financial systems, and of mass circulation newspapers and magazines, along with the explosion of urban populations, submerged the independence of the nation's separate local communities. In the useful concept developed by nineteenth century German sociologist Ferdinand Tonnies, *Gemeinschaft*--the small, personal community of the nineteenth century--was replaced by *Gesellschaft*, a large, anonymous society in which the importance of one's place and achievements in the local context nearly dissolved.⁶⁴

Newport was to move with the nation into the "new nation" that developed after the 1930's Depression, the 1937 Flood, and the 1940's War.

⁶⁴Robert S. McElvaine, The Great Depression America 1929 - 1941 (Toronto, Canada: Time Books, 1984), p. 8 - 9.

Families of the Floodplain

Part IV

FAMILIES OF THE FLOODPLAIN

PART IV

The people of Newport survived the Great Floods of 1884, 1913, and 1937. They witnessed by the 1937 Flood how dependent they had become upon the industrial-urban structures and systems. Their world was becoming more complex with technologically advanced machinery and with labor-management demands. The nearly romantic concept of the so called "river people" after 1884 did not apply with later floods. The people of Newport by 1913 had become "city people" with changed awareness and attitudes toward floods.

The 1884 Flood of these cities was in reality just the annual river flood. A bit higher than normal, but nevertheless a flood that would have predictable results on the people's lives and welfare.

Economic conditions then demanded a life by the river. Jobs and most factors of life drew existence from the river. The river was a source of trade and transport. The Swift Ironworks in Newport supplied boiler plates for the steam boats and the Victoria Cordage Company in nearby Dayton produced rope from the Ohio Valley River hemp.

When the flood of 1913 came people from years of experience knew what to do before, during, and after. It was a hard life, but predictable. Life was more complicated than in 1884. In 1884 coal or wood stoves needed no electric connections to work. Household furnishings on average were simple, few in number, and moved easily. Things were moved for home and business to the second floor to wait out the flood crest. No electric machinery, no light weight building materials, and no plumbing made flood life bearable.

By 1937 the city filled with industry had spread away from the rivers to the hill sides. Economic life, along with attitudes about the river were changing.

Economic conditions by 1937 no longer demanded a life by the river. The

railroad took much away from the river life. The Swift Ironworks evolved into the Andrews Steel Company and the Victoria Cordage Company buildings now housed the Wadsworth Watch Case Company. Many of the laborers in Newport and other cities were producing steel parts for the railroads, auto industry, and watches for the nation's workers. The river played a lesser role in the economic life. For many by 1937, the river was a hindrance to their economic well being as opposed to the giver of economic life in earlier times.

The completion of the floodwall in 1951 changed the City of Newport forever. For many years it shut the city off from the Ohio and Licking Rivers. Economic life in the city declined in the 1960's. Areas protected by the floodwall became deserted; while areas unprotected in nearby Covington's river area grew with new housing and interest. Only in the early 1980's was the city to look again at the river for new economic life and growth.

The following interviews reflect the flood awareness and attitudes of the people in Newport during the Great Floods and the completion of the floodwall.

INTERVIEWS

Mr. Louis E. Arnold

Mr. Louis E. Arnold, age 86, lives in Fort Thomas, Kentucky, practices law, and presides as president of a building and loan association.

Mr. Arnold was 13 years old at the time of the flood and lived at 521 East Fourth Street in Newport, Kentucky. His home was not directly in the flood area, but in the Mansion Hill area.

Mr. Arnold recalled, "Our family did not suffer much from the flood, but, I remember the homeless people.

"My father was the chief engineer at the Weidemann Brewing Company in Newport. He spent almost two weeks there. The brewery had its own water wells, electric

generators, and trucks at this time. It was a city by itself and survived the flooding quite well.

"We did not attend church. It was flooded (the Roman Catholic Immaculate Conception Church at Fifth and Columbia Streets, Newport.) My school at Ninth and Columbia was closed.

"We remained in Newport. Few people could afford to move away from jobs.

"Banks and building associations loaned money for repairs after the flood. There was no flood insurance.

"We always expected to see the spring floods, but my most vivid memory came after the flood. It was a family that move into the neighborhood from Hamilton, Ohio. They never returned to Hamilton. Too many memories of lost family members."

Mr. Odis W. Bertelsman

Mr. Odis W. Bertelsman, age 87, lives in Fort Thomas, Kentucky, practices law in Newport, Kentucky, and is a former Campbell County Judge.

Mr. Bertelsman was 14 years old at the time of the flood and lived in Southgate, Kentucky, south of Newport. His home was not directly flooded.

Mr. Bertelsman reflected on his father's employment during the flood.

"My father was a master-plasterer and worked in Cincinnati. My mother--I guess you would call her a homemaker--was at home. He (the father) had just gotten a raise in wages to \$5.00 a day. That was good money in those days. When the trolley cars stopped, my father could not get to work.

"We lived at the end of the trolley car line. When they stopped, many lost their jobs. Wagons with benches drawn by horses were used in Newport. Women and children were supposed to be the only ones to ride.

"My Southgate Elementary School was closed for several days. The teacher lived in Melbourne, Kentucky and came in by train and trolley car and couldn't get through. The Robinson Spring in Southgate was used for fresh water.

"My most vivid memory is Father not working and his lost pay.

"The river receded, schools opened, church was there. We wondered what happened to the Queen City Beach in Bellevue and the beach in Dayton.

"Now the Flood of 1937. Look at any picture of 1913 and add ten feet to the water level!"

Mr. Bertelsman was practicing law, during the flood in Newport.

"We had to enter our law office at Fourth and York Streets using wooden planks.

"The county had grown; so more people were without work. No trolleys to Cincinnati. The trolleys were flooded while still in the car barn on Eleventh Street."

Mr. Bertelsman was the Campbell County Fiscal Court Judge during the 1940's.
(This is the executive office of the county government.)

"Newport was the largest city. More people lived there than in the county.

"The floodwall bond issue took three attempts to get it passed. The 1930's were hard times. People as now didn't want more taxes."

When asked if the floodwall was worth the effort, Mr. Bertelsman stated:

"The steel plant needed it to continue operation. And it really saved people from continuing flooding and lost work."

As for the city's future, Mr. Bertelsman went on:

"The old west end is idle, but so was the riverfront a few years ago. It's protected land. It will be worth more someday."

(Mr. Bertelsman gave to the author excerpts from his journal kept during the flood, see Exhibits #24-25).

Mr. LeRoy Hoffman

Mr. LeRoy Hoffman lives in Newport, Kentucky. He was a city detective in Newport, Kentucky and is now retired.

Mr. Hoffman was born after the 1913 flood. His family told to him stories about the flood which he recalled during the interview. His aunt was an early photographer, and the family retained her photographs of the flooded west side of Newport.

"My family lived on West Ninth Street in Newport near the Andrews Rolling Mill.

"My father worked for the gas and electric company and was probably very busy. Mother may have worked part-time doing sewing.

"Folks talked about going out the Licking Pike south to Alexandria Pike to get water at Robinson Spring and to buy food. They got through the west side by boat.

"People talked about working in and for the tailor shops in Newport. Most were sweat shops and paid workers as piece goods were done--1 cent for button holes, 2 cents a pocket, and 3 cents a lapel. Shops had pot-belly stoves in winter and only the favorites got to sit next to the stoves. When the electric stopped, the work and jobs stopped. These jobs were the extra money to keep the family going.

"We would cleanup and move back in the house. It was a hard job.

"The churches were the relief centers. People took friends and relatives in.

"Being German, our family belonged to the neighborhood Bav-verin, the Princeton on Isabella Street. Banks were for rich people. The building association loaned money for many families to recover.

"People when they could moved to higher ground."

"Every spring there was a chance of a flood. We hoped it wouldn't be bad."

Mr. George Rosen

Mr. George Rosen, age 85, lives in Cincinnati, Ohio. He and his brother, Louis, operated an auto dealership in Newport, owned real estate, and managed properties. Now retired he still has an office in Newport, Kentucky.

Mr. Rosen was 11 years old at the time of the flood and lived at 12 East Front Street, between Mornmouth and York Streets, in Newport, Kentucky. The house faced the Ohio River. The back yard faced Second Street.

"My father was a horse trader at this time. The horses saw service during the flood.

"With seven kids, who would take us in? We moved to the second floor. Furniture to the attic, then we moved with friends.

"I remember the Kessler Food Store flooded. We kept a kosher kitchen and bought from them.

"The flood was hard, real hard, on business people. No insurance. Many were lucky to have savings to repair and fix up.

"My most vivid memory was cleanup. Mud and silt everywhere. The kids--all had to work.

"We expected a flood every year. It was a way of life. We always moved back. When we could afford it, we moved to higher ground.

"By 1937, I was living in Cincinnati, Ohio. The Jewish Community was only a few families in Newport. Many of the retail shops on Mornmouth Street were owned by Jewish families.

"In 1937 we were in the auto business in Newport and moved the cars as the water came up!

"I stayed with friends in Newport; crossed the L & N Bridge by using a boat to the bridge.

"The city was hard pressed for money after the flood. We stayed after the

flood and during the war.

"The floodwall was good. People kept their jobs and homes. Business was good after the wall.

"Foreign cars and steel forced the steel mill out of the city and not the floods." (1979 the steel mill and rolling mill closed its operations in Newport. In 1981, the Newport Steel Corporation was organized and purchased the mills where up to 3,000 worked, now 600 work.)

Was the wall worth the effort?

"Yes."

What about the future?

"The floodwall and the land are here. The big companies are gone. The new expressway ramps from Cincinnati will help the city's recovery.

"Look at the riverbanks and that new office building. It's not a mill, but it's something!"

Miss Lenora Bacon

Miss Lenora Bacon lives in South Newport. She is the Campbell County office manager of the Northern Kentucky Chamber of Commerce office in Newport. As a child she recalled the 1937 Flood. As a young woman she was working for the then Campbell County Chamber of Commerce when the floodwall was finished and dedicated.

"Our home was not flooded in 1937. But, oh the people without homes. There were thousands in Newport and thousands more could not get to their jobs. It was a real hardship.

"The floodwall was being completed when I started working."

When asked about the voting in 1940 for the floodwall bond issue, Miss Bacon remarked:

"The Chamber of Commerce and Newport businesses worked very hard for the

passage. The steel mill wanted it. Without the wall they couldn't stay in the city.

"The city prospered from the wall. The 1950's were good. Mormouth Street was as busy as any downtown street with shops, banks, and stores. It all changed in the 1960's."

Was the floodwall worth the effort?

"Yes, don't be silly. It was needed to protect businesses and people."

The Floodwall

Part V

THE FLOODWALL

PART V

Before examining the events that occurred after the Great Flood of 1937; it is necessary to look back at the changes taking place at the national level. These changes set the stage for the canalization of the Ohio River in the 1920's and the floodwalls of the 1940's. The federal government moved after World War I and the Great Depression into exercising its authority over streams and waterways. The floodplain upon which the City of Newport rested was to feel this exercise of authority.

The federal government derives its authority over streams from several sources. Federal authority over navigable waters is based on the Commerce Clause of the United States Constitution.⁶⁵ Navigable streams which cross state boundaries and all navigable streams which connect with the ocean are under federal control; thus the authority for the accomplishment of the canalization of the Ohio River. The Property Clause of the Constitution authorizes Congress to "dispose of and make all needful rules and regulations respecting property belonging to the United States"⁶⁶ This coupled with Congress' power to levy taxes and to appropriate funds for the "common defense"⁶⁷ influenced both the canal-dams on the Ohio River and Newport floodwalls.

Ray K. Linsley, a water resources engineering expert, called the power of the federal governments authority to "provide" for the general welfare" the leading authority to control and develop the nation's rivers. To underscore this view

⁶⁵U.S. Constitution. Article I Section 8, Para. 3.

⁶⁶U.S. Constitution. Article 4 Section 3, Para. 2.

⁶⁷U.S. Constitution. Article I Section 8, Para. 1.

Linsley called attention to the Supreme Court's statement,⁶⁸ "Thus the power of Congress to promote the general welfare through largescale projects for reclamation, irrigation, and other internal improvements, is now as clear and ample as its power to accomplish the same results indirectly through resort to strained interpretation of the power over navigation."⁶⁹

The Great Flood of 1913 and the Flood of 1937 are very similar in their destruction to the City of Newport. The reading of flood accounts of 1913 one has only to expand upon the floods effects to understand the 1937 flooding. The awareness of and attitudes toward the flooding, the suffering, and economic destruction would take separate paths after each flood, but ultimately toward the same goals.

In the aftermath of the Great Floods of 1884 and 1913 it did not take long for the City of Newport to return to normal. The economic conditions and dependencies within the city demanded just that--normalcy. The systems of the industrial-urban area were expected to deliver a normal supply of labor, management, goods, and services on which the city had become dependent. Normalcy was expected of the gas and electric supply, telephone and radio, railroads and trolley cars, coal supply, medical services, food and water supplies, finances, police and fire services, recreation, businesses, jobs, and the labor supply. For all of these were necessary to assure the continued motion of the industrial-urban city.

Awareness of and attitudes toward flooding and the suffering and economic destruction it produced in these cities changed after the 1913 Flood. This can be found in events shortly after the flood and events that occurred after careful

⁶⁸United States vs. Gerlach Live Stock Co., 339 U.S. 738.

⁶⁹Ray K. Linsley, Water -Resources Engineering (New York, New York: McGraw-Hill Book Company, 1964), p. 143.

thought and review of the flood was completed. Individuals and groups were to offer solutions and take action in the years after the flood in attempts to protect the area from future floods and prevent unnecessary flooding. The goal of protection and prevention was to be delayed by World War I.

Awareness of and attitudes toward flooding started in a Newport Board of Commissioners Meeting the night of April 5, 1913.⁷⁰ This was before the Ohio River and Licking River water had completely left the city. At this meeting was discussed a Dike Plan and Street Improvement Plan. The Dike Plan called for a 20-foot wall set back from the river bank to keep the water out. Streets would be raised in those areas flooded in the past. The floodwall would protect people and industry. The street raising would permit the continuous auto and trolley car transport during flooding. The plans were not to be approved and were abandoned. The city commission called the plans too costly. Without state and federal programs it would have been an almost impossible task to raise the necessary funds for construction on a local basis.

On the national front the awareness of the flooding was demonstrated in telegraphed stories, newspapers, and books written about the flood and its effects. One of the popular books about the 1913 Flood was written by Marshall Everett and was titled, Tragic Story of America's Greatest Disaster--Tornado, Flood and Fire in Ohio, Indiana, Nebraska and Mississippi Valley.⁷¹ Although this book undoubtedly stressed the suffering and tragedy of the times, it did much to inform the nation of flooding and its consequences (Exhibit #45). Lowell Thomas was to write in 1937 and publish a similar book titled, Hungry Waters

⁷⁰The Cincinnati Times-Star, 5 April 1913.

⁷¹Marshall Evertt, Tragic Story of Ameica's Greatest Disaster (Chicago: J.S. Ziegler Company, 1913), pp. 3,4,5.

The Story of the Great Flood.⁷²

Even the advertisement that appeared in the Sunday morning Cincinnati Enquirer on April 6, 1913 called attention to the flood and its economic impact on the flood sufferers' loss:

Speers'
N.E. Corner
Fifth & Central Avenue

Brighten Your Way to a New Home
3 Rooms Complete \$75.00
For the Benefit of all Worthy Flood Sufferers⁷³
No First Payment--Extra Easy Terms--Complete Dinner Set Free

It was almost chilling to read the news articles printed under the very simple, but large furniture advertisement. For in this article laid the seeds of future events that would delay protection and prevention from flooding in Newport (Exhibit #22).

The article read:

UNREST

Is Caused in England
Future Policy of National on Larger
Army and Navy Sites 'Em

Populace Believes County Would Have
to Accept Peace Conditions if it Lost
Supremacy of the Sea

Germany has unexpectedly declared her intention of straining all her efforts to prepare for a war which would come very soon, probably even before the end of the present year.⁷⁴

During the war years and the post-war period, protection of the industrial-urban City of Newport from flooding was to take second place to the pressure to develop the Ohio River as a modern military and commercial transporter

⁷²Lowell Thomas, Hungry Waters The Story of the Great Flood, 1937 (Philadelphia: Universal Books, 1937).

⁷³The Cincinnati Enquirer, 6 April 1913.

⁷⁴Ibid.

of goods and services in middle America. Funds that were available at the federal level were to go first to dams and river channeling, second to construction of water storage areas, and third to the protection of specific river installations. Charles Henry Ambler best explains the Ohio River improvement strategy that developed during World War I and was implemented in the 1920's.

Meanwhile annual appropriations for the improvement of rivers and harbors had fallen from fifty-two million dollars in 1910, a high water mark, to twelve million dollars in 1914, the Ohio suffering with others. More alarming still were the effects of a commercial decadence that had practically stripped the Ohio of traffic.

. . . the improvement of the Ohio had intrinsic merits . . . the World War came on, and railroads failed to meet the transportation needs of the country. As a result traffic again sought the Ohio in such quantities as again to renew demands for its improved navigation. It mattered not that the tonnage had shifted from coal, timber, and passengers to iron and steel.

It was under these conditions that improved inland waterways again found favor with Congress. Accordingly, in 1922, a "waterways bloc", disregarding the recommendations of the federal budget, appropriated a total of forty-two million dollars for the improvement of rivers and harbors, which was increased to fifty-six million the year following. To avoid the "pork barrel" Nemesis these amounts were turned over to the War Department to be allotted among individual projects according to their respective merits. Under this plan the belated improvement of the Ohio, formerly scheduled for completion in 1922, came in for liberal allowances that for 1923 reaching five and one-half million dollars, and its boosters raised the slogan "On to Cairo by 1929".

These anticipations were well founded. On schedule time, October 19-25, 1929, the Ohio Valley Improvement Association, together with numerous local chambers of commerce and other organizations, joined President Hoover, members of his cabinet and notables, among them the governors of Kentucky, Indiana, Ohio, and West Virginia, in the dedication of a system of locks and dams so constructed as to give the Ohio River, throughout its length and throughout the year, a uniform state of backwater of a minimum depth of nine feet. Although the total cost of this engineering feat aggregated almost one hundred twenty-five million dollars, or more than ten times the original estimate, all rejoiced in its completion, confident in its potentialities for many fond returns.

A feature of these ceremonies was the "Dedication Cruise" that left Pittsburgh, October 18, the flagship "Cincinnati" and her sister steamers, the "Greater Pittsburgh" and the "Queen City", leading the way. At Cincinnati, the President had participated in the dedication of a monument, located in Eden Park, Cincinnati, to commemorate the completion of the canalization of the Ohio and the memory of some of those most instrumental in effecting it. Thence the party proceeded to Louisville, where the President briefly outlined the history of internal improvements on the Ohio and the

policy of his administration respecting inland waterways in general. Here he left the dedicatory pageant, a part of which continued to Cairo.⁷⁵

In the rush of the 1920's to build the great Ohio River Valley's network of dams, channels, and reservoirs, the protection of cities and prevention of flooding in the valley was almost forgotten. Also, during this time there was no serious flooding on the Ohio River (Exhibit #44).⁷⁶ Forgotten were the personal hardships and economic loss of the Great Floods of 1884 and 1913 (Exhibit #44).⁷⁷

The "Dedication Cruise of 1929" can be remembered as the zenith of the Hoover Administration. The following is taken from the President's dedication speech delivered in Louisville, Kentucky. From it is derived a feeling of accomplishment and comfort.

"It has been a gigantic task, this transformation of the Ohio. It represents an expenditure and a labor half as great as the construction of the Panama Canal. Like many current problems, the development of our rivers is never a finished accomplishment; it must march with the progress of life and invention.

While I am proud to be the President who witnesses the apparent completion of its improvements, I have the belief that some day new inventions and new pressure of population will require its further development. In some generation to come they will perhaps look back at our triumph in building a channel nine feet in depth in the same way that we look at the triumph of our forefathers when, having cleared the snags and bars, they announced that a boat drawing two feet of water could pass safely from Pittsburgh to New Orleans. Yet for their times and means they, too, accomplished a great task. It is the river that is permanent; it is one of God's gifts to men, and with each succeeding generation we will advance in our appreciation and our use of it. And with each generation it will grow in the history and tradition of our Nation."

HERBERT HOOVER

From Dedication Address,

Louisville, Kentucky, October 23, 1929.⁷⁸

History and tradition of our Nation were to take a sharp turn in direction

⁷⁵ Charles Henry Ambler, A History of Transportation in the Ohio Valley (Westport, Connecticut: Greenwood Press Publishers, 1929), pp. 421-426.

⁷⁶ Gilbert F. White, Papers on Flood Problems (Research Paper No. 70, Chicago: University of Chicago, 1961), p. 13.

⁷⁷ Ibid.

⁷⁸ Charles Henry Ambler, A History of Transportation in the Ohio Valley (Westport, Connecticut: Greenwood Press Publishers, 1929), p. 418.

from the pathway charted by President Hoover. In the same month came the Stock Market Crash of 1929 and it ushered in the Great Depression of the 1930's.

The industrial-urban city of Newport, during the early days of the Depression, were concerned with feeding, clothing, and sheltering the unemployed. Little thought was given to floods on the Ohio River. Some recalled the relief efforts of the Great Flood of 1913 and the relief work of the Great World War. Systems of distribution in the city were staffed and patterned after these early efforts.

As stated earlier the destruction that resulted from the 1937 Flood exceeded that of the 1913 Flood. Newport in February 1937 was not only facing the reconstruction of flood damage, it was in the dark days of the Great Depression. For its immediate needs it turned to local banks for a \$50,000 loan to help with the cleanup of streets and water systems. For the great issues of rebuilding, flood protection, and flood control, the city was to turn to the federal programs for help.

Harry Hopkins and the Works Progress Administration (WPA) were to play the first role in the redevelopment of Newport after the flood. The WPA was to follow President Roosevelt's six basis requirements for public works relief:

- (1) The projects should be useful.
- (2) Projects shall be of a nature that a considerable proportion of the money spent will go into wages for labor.
- (3) Projects which promise ultimate return to the Federal Treasury of a considerable proportion of the costs will be sought.
- (4) Funds allotted for each project should be actually and promptly spent and not held over until later years.
- (5) In all cases projects must be of a character to give employment to those on the relief rolls.
- (6) Projects will be allocated to localities or relief areas in relation to the number of workers on relief rolls in those areas.⁷⁹

⁷⁹Henry H. Adams, Harry Hopkins A Biography (New York, New York: G.P. Putnam's Sons, 1977).

The headlines of the Kentucky Post were to reveal the actions of the WPA. In many ways the WPA cadre of works surpassed the activities of the local city government workers and the American Red Cross in the city.

January 27, 1937 "Survey to Be Made for Public Housing in Newport"

"WPA to Follow Flood in Cleanup"

February 1, 1937 "2,000 WPA Men Ready to Work in Kenton and Campbell Counties"

"2,532 Homes in Newport Under Water"

February 6, 1937 "Manager J.T. Reily to See Harry Hopkins"

"Federal Aid to Tear Down Area 20 City Blocks"

February 7, 1937 "Harry Hopkins WPA - Sees People Moved to Hilltops - From West End"

"WPA Cleans Up Damage"

"Newport City Commission Unable to Seek Funds for City to Reclaim Land Effectuated"⁸⁰

The WPA moved effectively to restore order in the city by cleaning streets, rebuilding walls, tearing down buildings, and removing debris.

At this time limited thought was given to the renewing of plans for a floodwall. The primary interest as in 1913 was restoring normalcy to the systems needed by an industrial city. The health of the people was the concern of the American Red Cross. It called for continual boiling of water until mid-February and administered inoculations against diseases. Transportation, auto, trains, and trolley cars was restored with the reopening of the bridges over the Ohio and Licking Rivers. This assured the workers a resumption of pay. (The trolley lines of Northern Kentucky were soon to be replaced by the Greenline Bus franchise with the diesel buses that could, if necessary, travel around the flood waters.) Electric, gas, and coal delivery was resumed. (Electric power plants in

⁸⁰The Kentucky Post, 27 January 1937 & 1,6,7 February 1937

Cincinnati were to be surrounded by high concrete floodwalls to prevent future loss of power production.) As in 1913 schools, fire departments, and police departments went untouched by the water. This eased the concerns for social control and order in the community. Looting and theft were kept to a minimum for both the individual home and business.

The City of Newport witnessed several plans for the west side of the city before the supporters of the floodwall took control of the flood protection issue and directed awareness and attitudes toward these goals. Two of the plans examined were the Greenbelt Town Program and the McDermott Airport Plan.⁸¹ Both plans were to be abandoned as too costly to the city in lost tax revenues and population.

Resettlement of the west side people into the county area between Fort Thomas and Alexandria was to resemble the Greenhills, Ohio Plan developed under the New Deal's Greenbelt Town Program. Inspired by Rexford G. Tugwell the communities were to be characterized by decent housing and a high level of social and educational services and were to be surrounded by a belt of open land. As Tugwell quoted in the Crabgrass Frontier, "My idea was to go just outside centers of population, pick up cheap land, build a whole community, and entice people into them. Then go back into the cities and tear down whole slums and make parks of them."⁸² For Newport the lack of funds resulted in the annexing of 400 acres south of the city and eventually the private construction of homes.) Part of the west side slum housing would be torn down after the construction of the floodwalls. Some of the people stayed for a while in the public housing project with few park areas and virtually no greenbelts! (The public housing would by the 1950's see

⁸¹The Kentucky Post, 25 February 1937

⁸²Kenneth T. Jackson, Crabgrass Frontier - The Suburbanization of the United States (New York: Oxford University Press, 1985).

an increase of white Appalachians and by the 1960's fifty percent of the housing would be rented units.)

Redevelopment on a grand scale was called for in the John McDermott Airport Plan.⁸³ The plan called for the rehabilitation of Newport's west end "bottoms" through the construction of an airport and recreation center. Called for were a recreation field, swimming pool, airport, restaurants, hotel facilities, offices, and gas and oil stations. The airport was to resemble the Lunken Airport in Cincinnati, Ohio. This plan called for the destruction of much of the west end housing and no floodwall (Exhibit #28). This plan was short lived and lost out to the floodwall, public housing, and steel mill protection. (In reading the plan in detail, it is interesting to contrast it with the current Ohio River development in Newport. Aside from the airport, McDermott's idea was 50 years before its time. Ironically, one of the public housing areas was named in his memory.)

The civic leadership of Newport soon turned to the federal government for flood control solutions. Already in place at the federal level were the necessary laws, regulations, and programs to solve the problems of flooding. By early 1938 the civic leadership decided on a floodwall approach to flood protection. The plans called for excising the city with concrete and dirt levees against the Licking and Ohio Rivers. They looked to Dayton, Ohio and its flood control system of design developed for the Miami River area after the Great Flood of 1913.⁸⁴ For the specific flood control policy they looked to the Flood Control Act of 1936 upon which to build. The Act declared the following:

It is recognized that destructive floods upon the rivers of the United States, upsetting orderly processes and causing loss of

⁸³ The Kentucky Post, 10 February 1937

⁸⁴ Sherman L. Frost, Ohio Water Firsts Vol. One. (Columbus, Ohio: Water Resources Foundation of Ohio, Inc., 1985). p. 45

life and property, including the erosion of lands, and impairing and obstructing navigation, highways, railroads, and other channels of commerce between the States, constitute a menace to national welfare; that it is the sense of Congress that flood control on navigable waters or their tributaries is a proper activity of the Federal Government in cooperation with States, their political subdivisions, and localities thereof; that investigations and improvements of rivers and other waterways, including watersheds thereof, for flood-control purposes are in the interest of the general welfare; that the Federal Government should improve or participate in the improvement of navigable waters or their tributaries, including watersheds thereof, for flood-control purposes if the benefits to whomsoever they may accrue are in excess of the estimated costs and if the lives and social security of people are otherwise adversely affected.⁸⁵

The Flood Control Act of 1936 would allow the Army Corp of Engineers to construct and maintain flood control walls and levees, but did not allow for the acquisition of land for construction. Municipal, county, and state government to participate in such control measures had to acquire the land for the construction right away. In Newport the city leadership headed by City Manager, J.B. Morlidge, estimated the land acquisition cost to the city to be \$350,000.

The leadership in 1938 launched a campaign to pass a city wide bond issue for this amount. The election of November 9, 1938 saw the bond issue and floodwall backers failing in their efforts. The issue required a two-thirds majority to pass. Many saw the loss as a result of limited education of the voters and limited support by the business community. In November, 1939 under the same leadership the Floodwall Bond Issue would go down to defeat again. The vote total was 5,877 yes to 5,484 no. The two-thirds vote was missed for a second time. The floodwall was to wait another two years for consideration.

⁸⁵United States Code 1982 Edition, Vol. Thirteen. The General and Permanent Laws of the United States in Force on January 14, 1983 (Washington: United States Government Printing Office, 1983).

Early in 1940 the supporters of the floodwall bond issue were reorganized under the guidance of the Chamber of Commerce of Campbell County headquartered in Newport, Kentucky. According to Lenora Bacon, a Flood Control Committee was established. The following persons assumed the leadership positions:

| | |
|---------------|-------------|
| Emil Krauss | Don Plummer |
| H. B. Skinner | Ted Vail |

The Flood Control Committee received financial support from the business community especially the Andrews Steel Company.⁸⁶ The interests of steel in Newport not only supported the floodwall bond issue with money, but its employees were requested to support the issue.⁸⁷ The support of the steel was in the opinion of Bertelsman and Bacon a strong factor in the eventual passage of the bond issue (Exhibits #29-34).

The voting on the Floodwall Bond Issue in November, 1940 was played against a growing national concern of the United States entry into the European War. During the summer of 1940 France had fallen to Nazi Germany, and sentiment for military aid to Great Britain was growing, the conscription bill had been passed by Congress, and the demand for steel was growing. With the growing military need for steel the nation could not afford the loss of heavy plate steel produced by Andrews Steel Company and processed in the Newport Rolling Mill (Exhibit #35).

To underscore the importance of the steel industry, Ray K. Linsley used this example of benefits from flood control:

Benefits from flood control may arise in activities which stem from use or processing of products and services directly affected by floods. For example, if a steel mill is loosed by a flood and steel reserves are short factories far removed from the

⁸⁶ Flood Control Committee Minutes, (Newport, Kentucky: November 12, 1940).

⁸⁷ Miss Lenora Bacon, (Interview: Newport, Kentucky, 1988).

flood area might have to close until steel production is again underway.⁸⁸

This statement could have been true of several cities from Pittsburgh, Pennsylvania and Ironton, Ohio to Newport, Kentucky. For Newport, it reflected the nation and city in the fall of 1940.

The Kentucky Post editorial of October 25, 1940 reflected the organization and work done by the Flood Control Committee:

Vote \$350,000 to Get \$2,000,000

If someone came to you and agreed to spend \$600 on your property if you would raise \$100 over a long period of time, it seems reasonable to believe that you would jump at the opportunity. Also the proposal would be doubly attractive if you could advance the \$100 and make the improvement without the project costing you one cent more in taxes.

That is exactly what the federal government is saying to the people of Newport, offering to make a \$2,000,000 improvement and enhance the value of the city if the voters of Newport will vote approval of a mere \$350,000 in bonds to pay for the city's share of rights-of-way for flood protection. And city officials have given assurance that the bond issue will not raise taxes.

There are so many reasons why the taxpayers of Newport should not only be willing to vote for the bonds, but go out and see that their neighbors vote for the \$350,000 issue on Nov. 5. A few of the reasons why voters should see to it that the bond issue is given a huge majority are contained in the resolution adopted by the Newport Rotary Club in indorsing the bond issue. They are:

ONE: Result in the establishment of new industrial plants which will present opportunities for steady employment and continued wages for labor.

TWO: Provide security against future flood hazards for industrial plants now established and operating, thus permitting the continuance of payrolls and wages.

THREE: Bring about increased property values and extensive improvements with the result that additional taxes—but not an increased tax rate—from such improvements should more than offset the cost of the bonds to provide the city's share of the work.

FOUR: Bring about the reclamation of property which has been non-productive of taxes for many years because of recurring floods, with this property being restored to the tax books and again becoming a source of tax revenue for city purposes.⁸⁹

⁸⁸ Ray K. Linsley, Water-Resources Engineering (New York: McGraw-Hill Book Company, 1964). p. 601.

⁸⁹ The Kentucky Post, 25 October 1940.

November 6, 1940 was a day of voting that still rings in the minds of many Newport citizens. The day saw F.D.R. re-elected for a third term; Chandler in Kentucky was elected to the Senate; Campbell County voted for Wendell Willkie and Newport, it appeared at first, defeated the Floodwall Bond Issue. The headlines of The Kentucky Post for a few days in November, 1940 told the story:

- November 6, 1940 "Flood Bonds Lose by 38; Plan Contest Hopes for Passage of \$350,000 Newport Issues Docked When Last Precinct was Counted"
- November 7, 1940 "Flood Bond Recount Agreed; To Check Missing Booklets Carl Ebert, Newport City Solicitor Predicts Victory"
- November 8, 1940 "Newport Flood Issue Wins! Margin of 39 Votes Shown Under Recount. Complete Figures Are 8,533 For and 4,247 Against"⁹⁰

Newport's \$350,000 Floodwall Bond Issue was carried by a margin of just 39 votes in a recount. There was at that time and still today those persons who questioned the vote total.

Odis W. Bertelman commented:

"That whenever there is a hotly contended issue with a close vote there are always sore losers."

The bond issue was passed, but once again the City of Newport was to wait. World War II spilled on the scene, delaying the start of the floodwall until April 6, 1946 and the finished floodwall until September 29, 1951.

The project accomplished much, but left many questions for the future. Was the floodwall a worthwhile investment? Did it produce the economic revitalization hoped for? Did it prolong or delay the transformation of the river's influence on the city?

⁹⁰The Kentucky Post, 6,7,8 November 1940

Storms, Floods and Floodwalls

Conclusion

Storms, Floods and Floodwalls

Conclusion

On September 29, 1951 the mayor and commissioners of the City of Newport cordially invited the community to attend the dedication of the Newport Flood Wall. It was a gala event with luncheons, motorcades, music, and ceremonies at the local high school stadium. City and county officials welcomed the Army Corp of Engineers, U.S. Congressman Brent Spence, and the Honorable Alben W. Barkley, Vice President of the United States. Looking at the Programs and newspaper clippings it all appeared to have been so simple, but fourteen years had passed since the Great Flood of 1937. Now the wall was finished (Exhibits #36-40).

By 1951, the price totaled over \$8,000,000. The earth levee measured 7,650 feet in length and was constructed with 700,000 cubic yards of earth. The concrete wall section was 2,800 feet long and included 13,000 cubic yards of concrete. The steel interlocking wall protecting the steel mill consisted of 12,800 tons of steel. 1,800,000 pounds of steel reinforcing was used in the work. To carry water and waste away from the wall, three pumping stations were constructed to pump 315,000 gallons per minute in time of flood.⁹¹

The Kentucky Times-Star editorial of September 29, 1951 rose above the celebration of the day and massing of statistics. It called attention to the struggle by the Chamber of Commerce to bring about this significant accomplishment:

Chamber Deserves Recognition

While compliments are being handed out on the occasion of the coming dedication of Newport's floodwall, it would be fitting if special recognition were given to the Campbell County Chamber of Commerce for its vigorous efforts in behalf of the bond issue which made this great project possible. Vincent W. Herold, who served as president of the chamber at the time, and Emil Krauss, who was campaign chairman, recall these early beginnings of the floodwall:

⁹¹ The Kentucky Post, 1 September 1951.

"After two unsuccessful attempts to pass the bond issue in Newport for \$350,000 to provide funds for the city to obtain rights of way for the floodwall, we were at last successful at the November election in 1940. A recount of the votes on Nov. 8, 1940, showed the bond issue had carried by the required two-thirds majority, the vote being 8,635 for and 4,247 against.

"Two years previously when the first bond issue was defeated the Chamber of Commerce took no part.

"During the second campaign, the Chamber of Commerce decided to conduct a "flash" campaign of about ten days duration. However, after this vote for the issue was lost, we decided on a campaign of education for the voters when the next campaign was conducted. So for more than a year our committee was engaged in making plans and preparations, which, with the aid of the newspapers and radio stations, as well as the schools and the churches, we carried our campaign to every section of the city.

Undismayed by two defeats at the polls, the chamber worked valiantly and hand-in-hand with the city administration to put across the history-making bond issue."⁹²

The storms, the floods, the destruction, were, with the completion of the floodwall, things of the past. In 1951, the City of Newport felt comfortable in its protection behind the wall. In the short-run the wall prolonged the life of the smokestack industry, including steel, in the city for 25 more years. In the long-run it can be questioned that perhaps the wall kept out economic change and produced stagnation in the city's economy (Exhibits #41-43).

As one looks today at Newport, most of the heavy industry to be protected by the floodwall is gone! The large industrial employers of 1913, 1937, and 1951 - - Andrews Steel Company, Newport Rolling Mill, Portland Cement, Weidemann Brewing Company, Higgin Manufacturing, the trolley electric power stations, the trolley lines, the railroad depot, and even the tailor shops are all gone. Technological changes, social changes, energy demands, and foreign imports have combined to bring an end to the industrial-urban base of the city.

Many of the people, as the city grew older, moved from the area to the "comforts" of the suburbs. Much of the once great Mansion Hill area of Newport

⁹² The Kentucky Times-Star, 29 September 1951.

has been reduced to decay with an occasional attempt at restoration.

The trolley car lines were gone in 1937--replaced by the gasoline car and diesel buses. The railroad no longer cuts the City of Newport in two sections; but now the Interstate Highway 471 cuts the city in two! The railroad station and the industrial sidings are gone. The Chesapeake and Ohio Railroad now the CSX Corporation has one set of tracks.

Where the factory laborers lived, worked, and played along the Licking River stands block after block of deteriorating public housing. Where the Newport Army Barracks stood, looking west to the Great American Frontier, automobile dealers sell their cars and children play in the parking lots.

But all has not gone to waste and destruction. The Ohio River, as all rivers have a habit of doing, has given economic birth again. In Newport north of the floodwall are found restaurants offering employment and enjoyment. Just south of the wall near the nearly completed interstate highway ramps, is rising an eight story office building. Hi-rise apartments are planned for the riverfront area where the river warfs existed in the 1880's.

The children of this new river birth must be aware and remember Roy Ward's warning that floods are not natural disaster, but man made in that man puts himself at risk by developing floodplains for settlement, agriculture, and industry.

But why does man put himself at risk? Some still say it is purely economic reasons or as a result of ignorance that man returns and stays along the rivers.

Then why stay? Nick Clooney, a native of Maysville, Kentucky tells the best reason why in The Fall and Rise of the River Town.

Then why stay? Because it is beautiful, and beauty is rare and worth a price. Because it always changes, and is always interesting. And because on an early summer morning, when the mist rises from the banks and the sun glints in intricate patterns on the water surface; when you are alone with an almost primeval

silence and are touched by the power of its broad, relentless sweep of the sea; then even for the canny old river-watchers, wise to its ways, suspicious of its intentions, and scarred by its excesses, even for him all is once more forgiven.⁹³

The City of Newport is no longer the industrial-urban center of 1884 - 1951. The threat of flood has been reduced to a minimum. Protection of lives and property from flooding has improved tremendously. The lessons learned from industrial-urban flooding hopefully will not be forgotten as the river floodplain's image changes again. The city and its new generations must never forget this relationship to the floodplains.

⁹³Joyce Caulfield, The River Book: Cincinnati and the Ohio (Cincinnati: The Program for Cincinnati, 1981), p. 216.

EXHIBITS

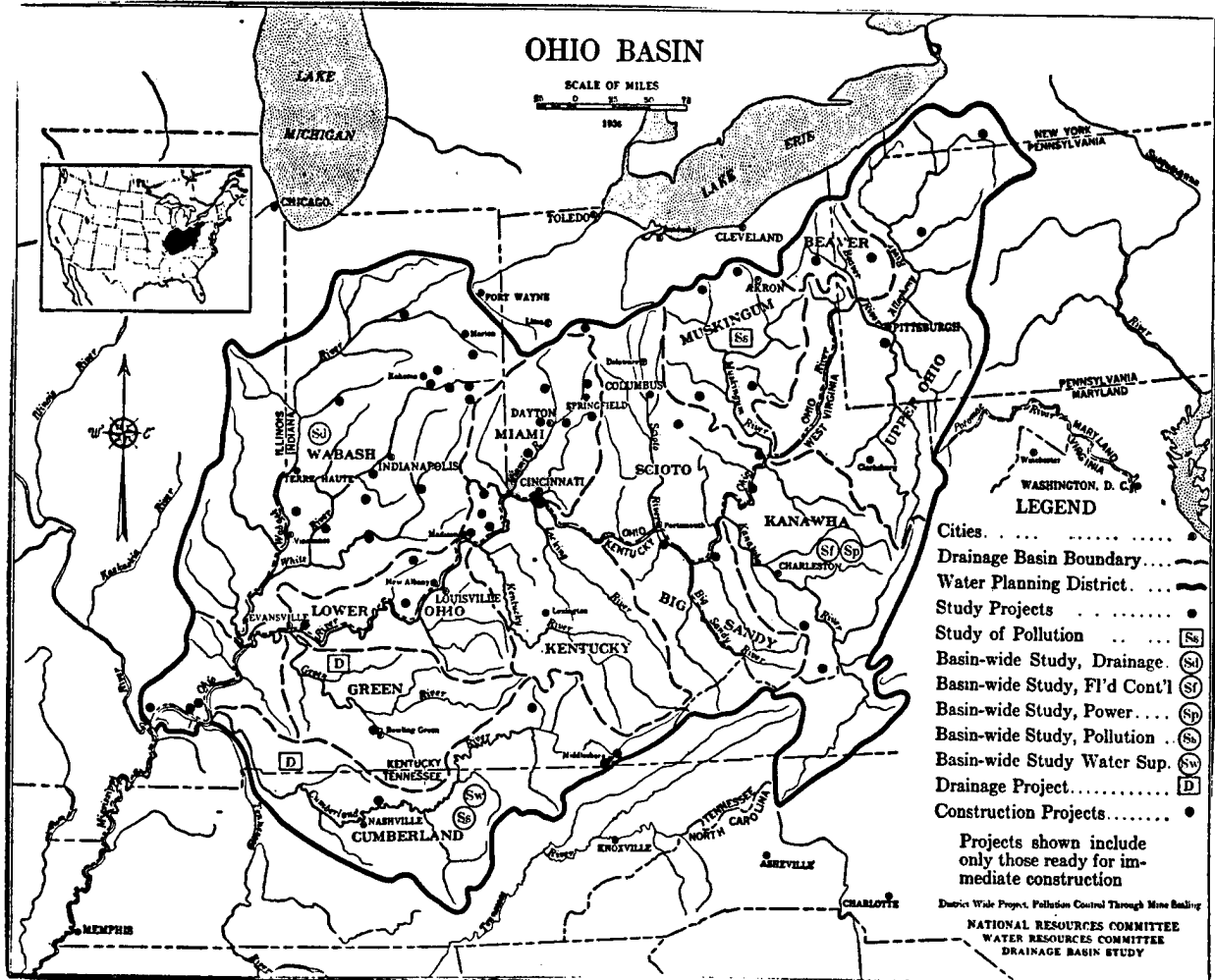
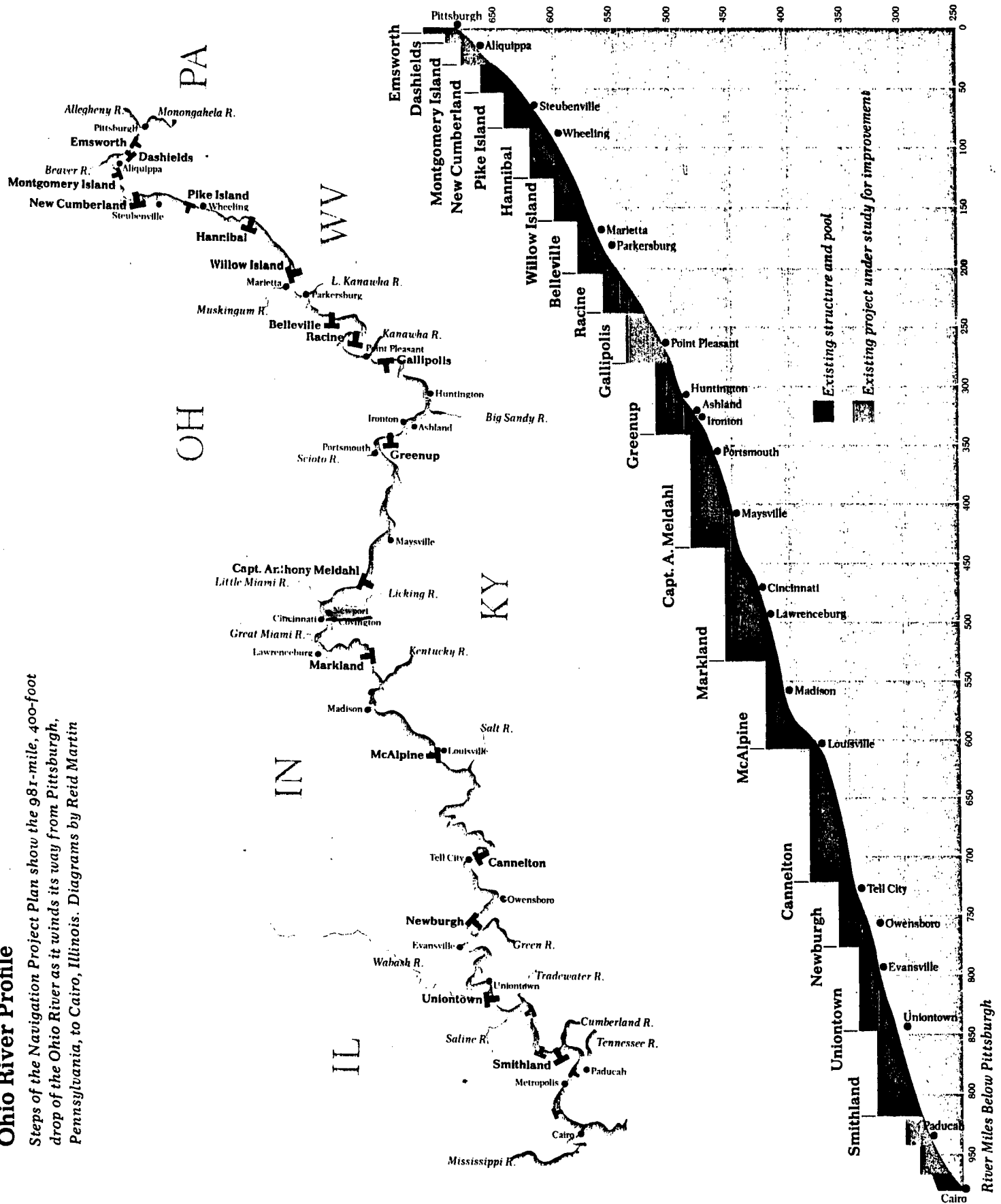


Exhibit 1. Ohio Drainage Basin. Department of the Interior Water Supply, Washington D. C.

The Great Floods of 1884, 1913, and 1937 in the City of Newport, Kentucky.

Ohio River Profile

Steps of the Navigation Project Plan show the 981-mile, 400-foot drop of the Ohio River as it winds its way from Pittsburgh, Pennsylvania, to Cairo, Illinois. Diagrams by Reid Martin



River Miles Below Pittsburgh

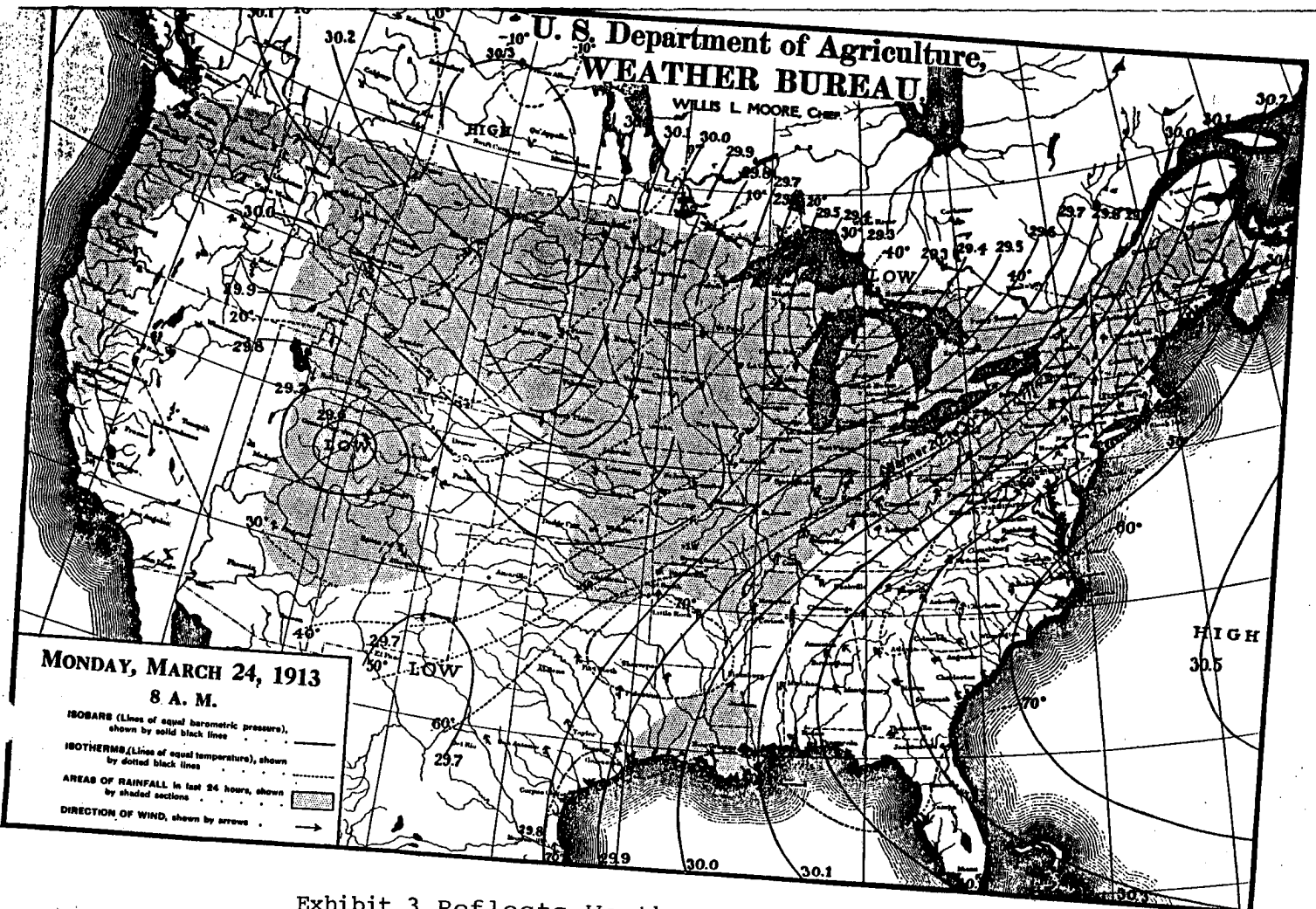
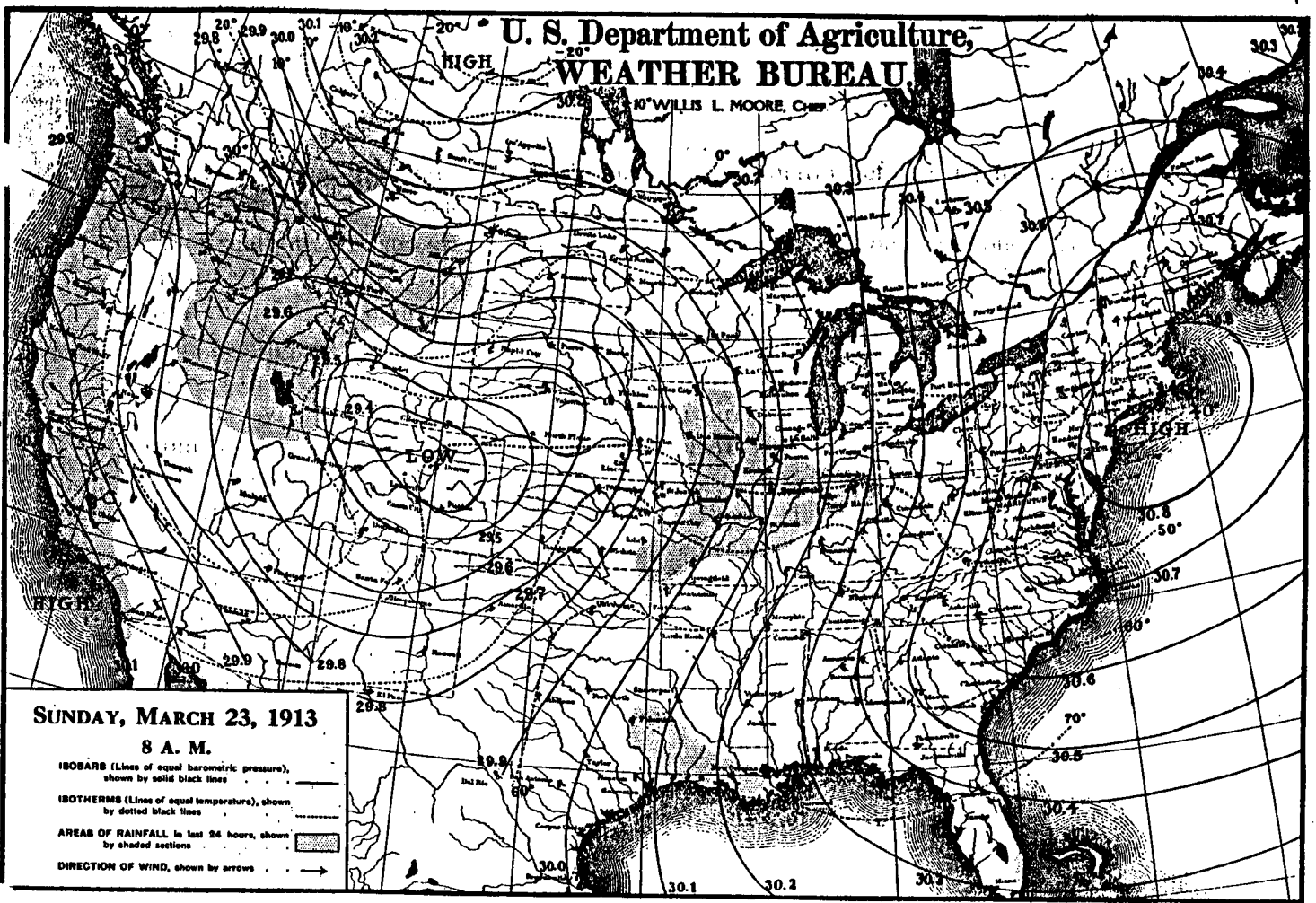
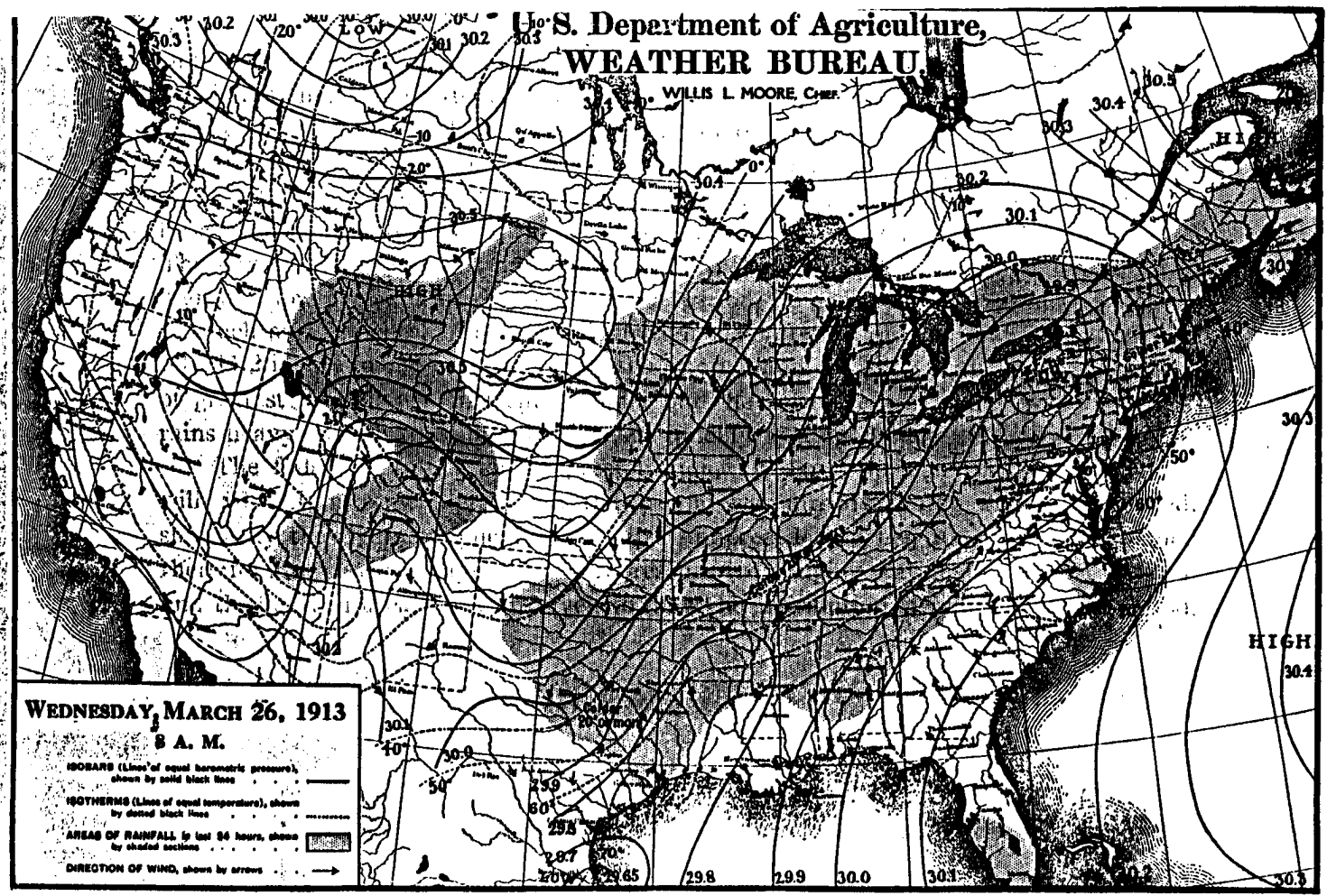
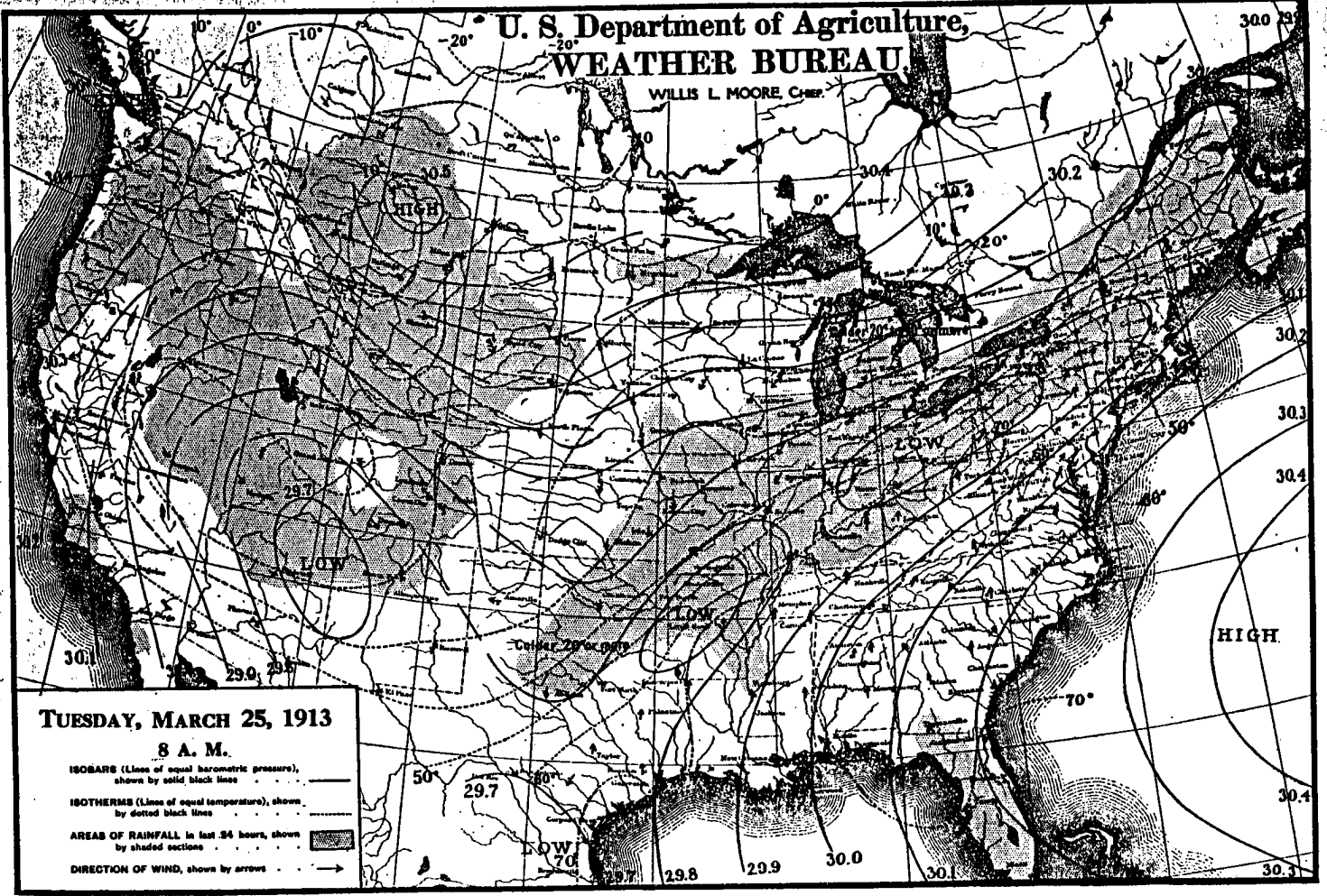


Exhibit 3 Reflects Weather Data



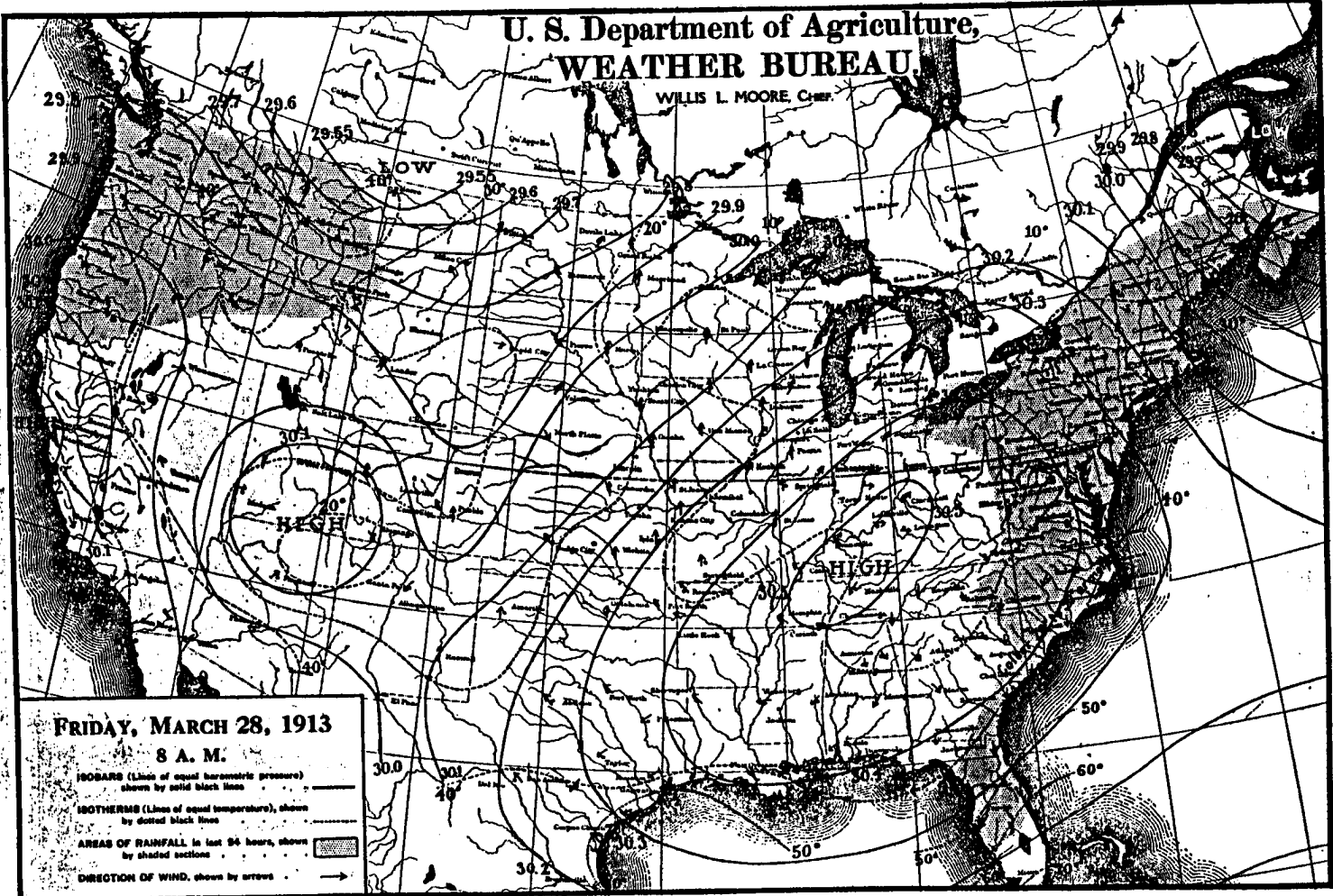
U. S. Department of Agriculture,
WEATHER BUREAU.

WILLIS L. MOORE, CHIEF.



U. S. Department of Agriculture,
WEATHER BUREAU.

WILLIS L. MOORE, CHIEF.



As in 1884 and 1937 damage was widespread in Ohio, Indiana, and Kentucky.

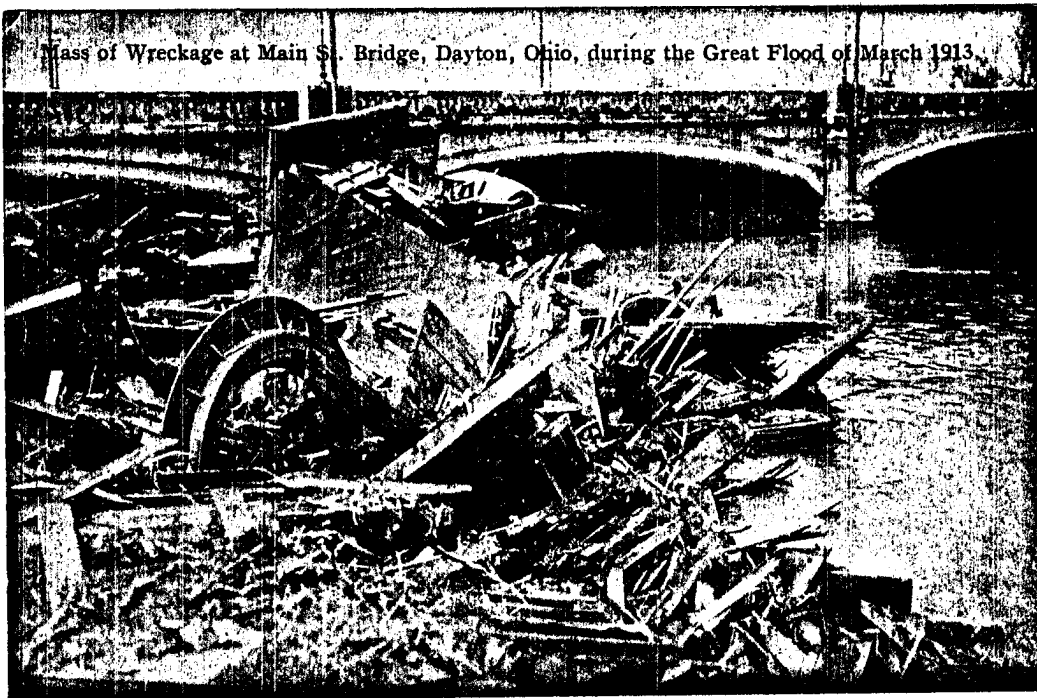
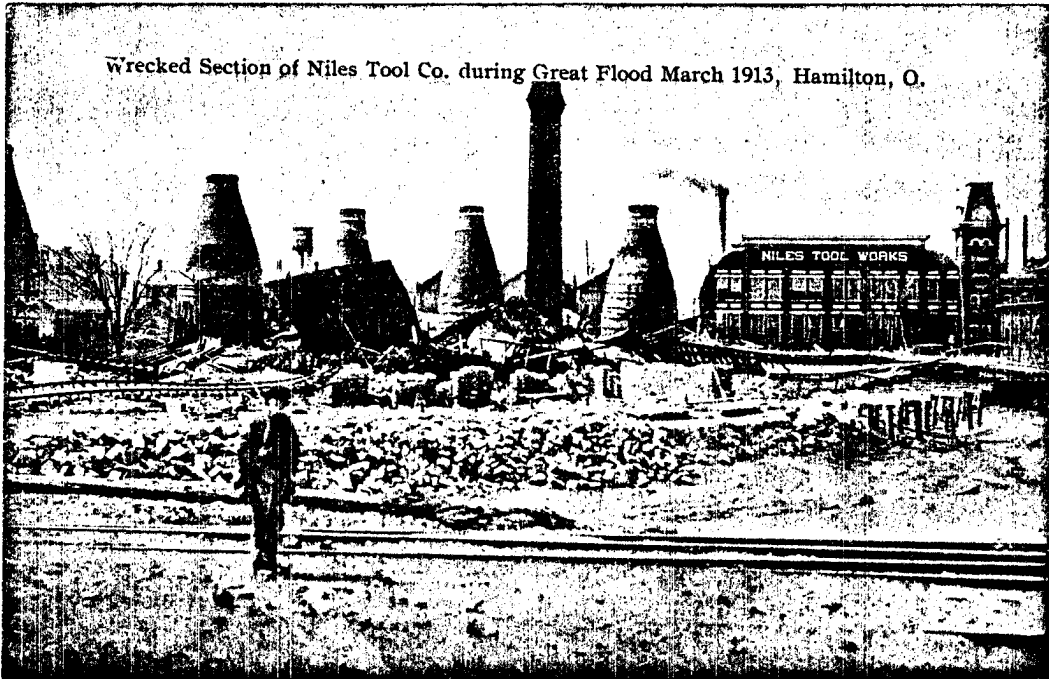


Exhibit Newport, Kentucky 1913 Flood on Fifth Street between Central and Columbia Streets. Water was to rise higher after picture was taken. Note the street car tracks.

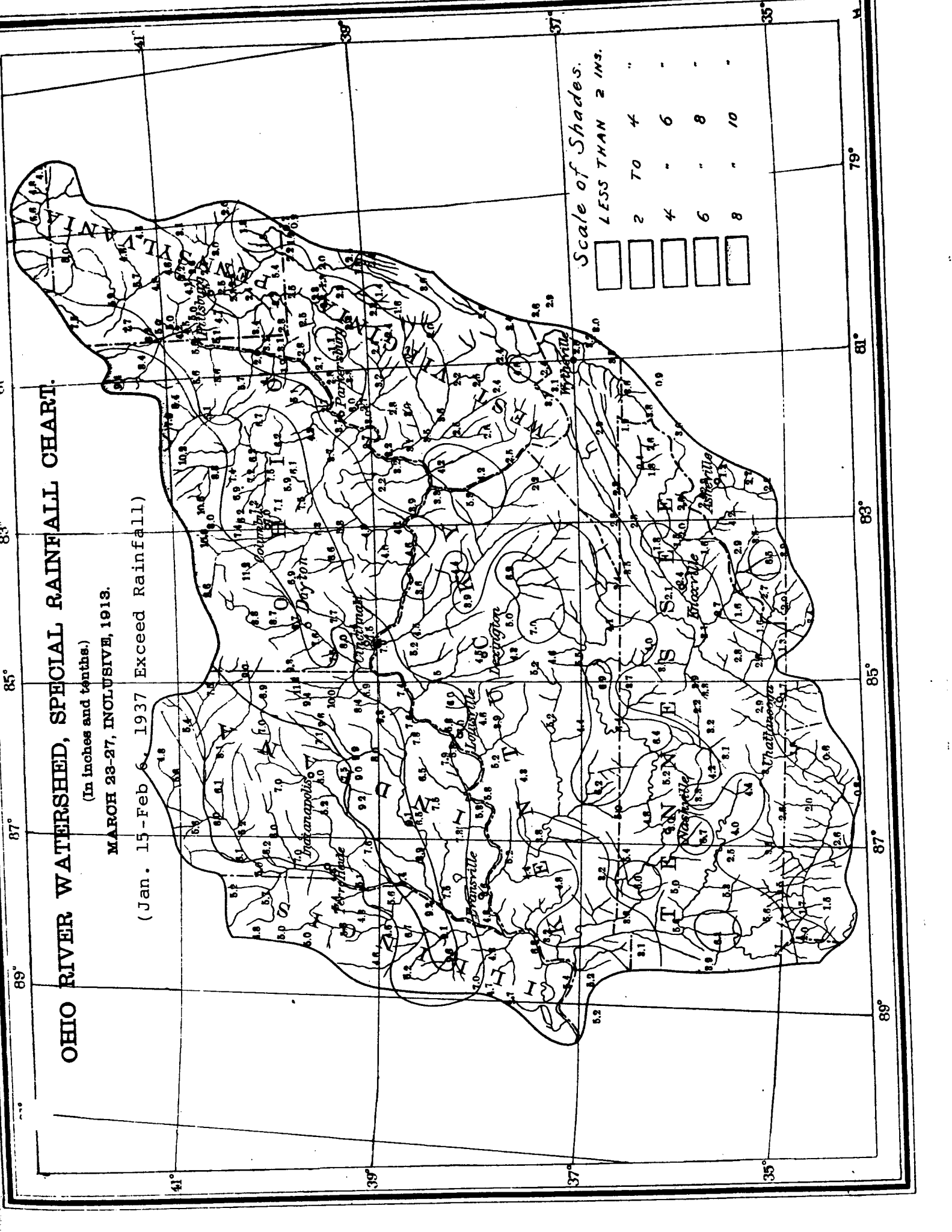
In 1937 the water level would be 10 feet higher at this location. Building to left would float from foundations.



OHIO RIVER WATERSHED, SPECIAL RAINFALL CHART.

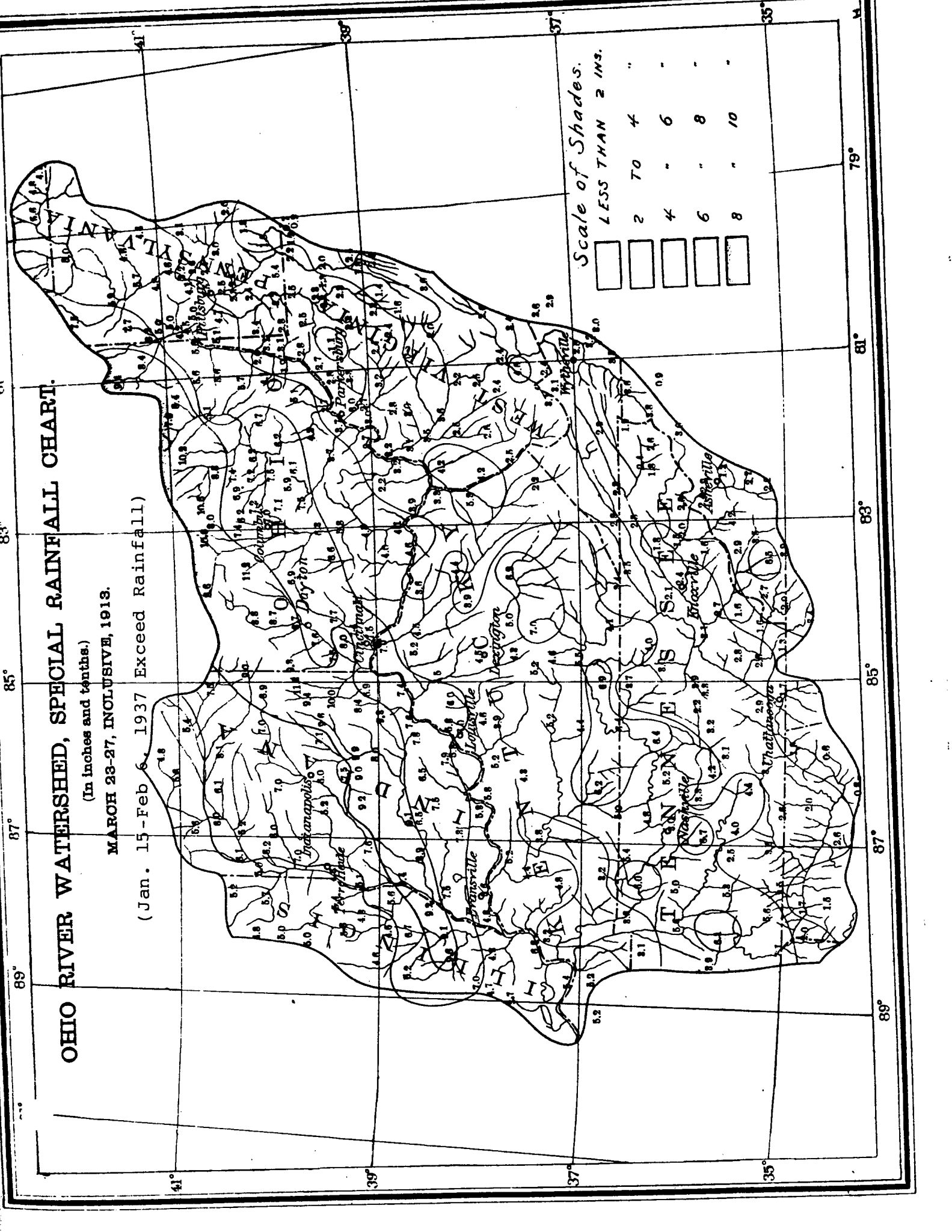
(In inches and tenths.)
MARCH 23-27, INCLUSIVE, 1913.

(Jan. 15-Feb 6, 1937 Exceed Rainfall)



Scale of Shades.

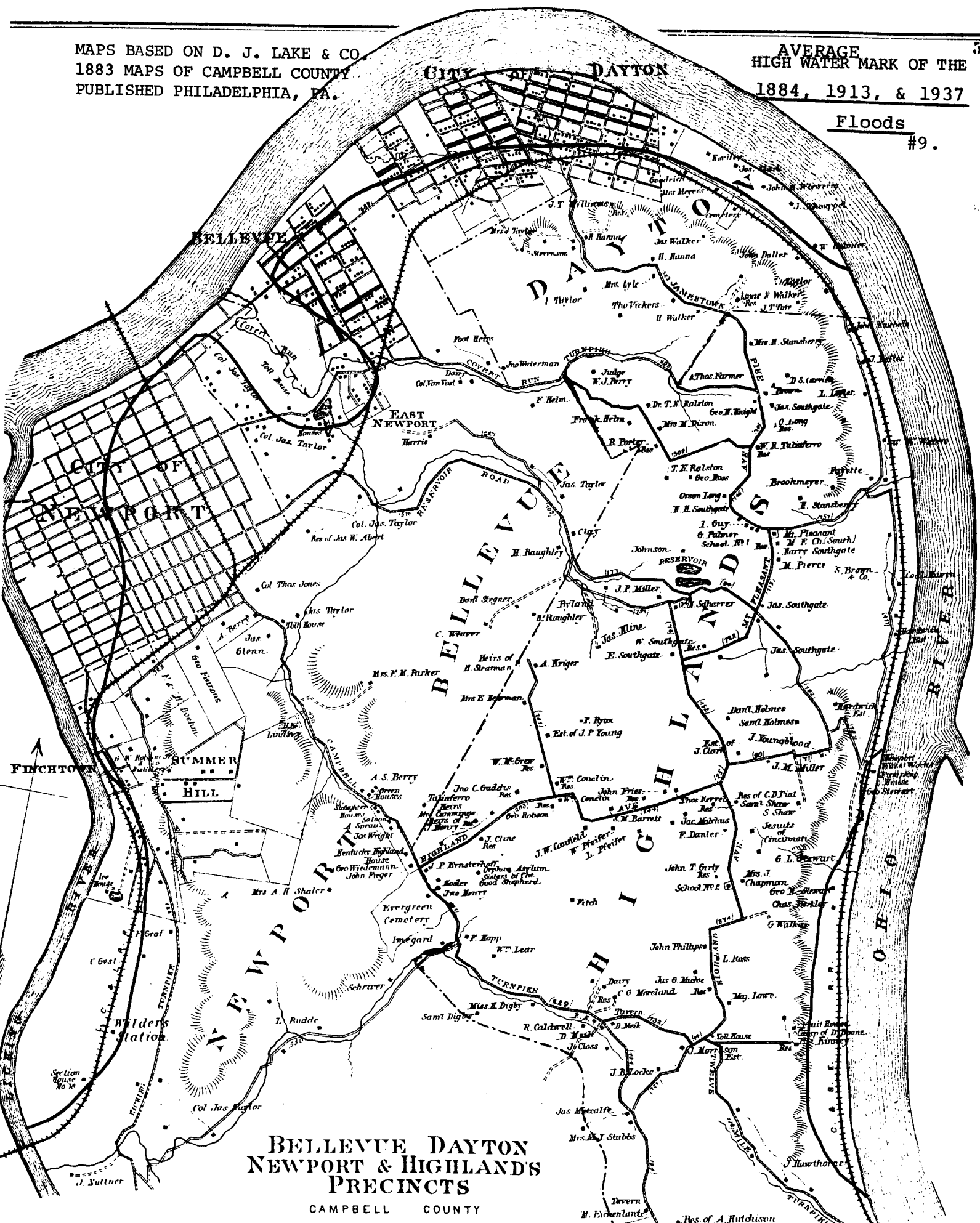
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| LESS THAN 2 IN. | 2 | TO | 4 | " |
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| | 8 | " | 10 | " |



MAPS BASED ON D. J. LAKE & CO.
 1883 MAPS OF CAMPBELL COUNTY
 PUBLISHED PHILADELPHIA, PA.

AVERAGE
 HIGH WATER MARK OF THE
 1884, 1913, & 1937

Floods
 #9.



**BELLEUVE DAYTON
 NEWPORT & HIGHLANDS
 PRECINCTS**

CAMPBELL COUNTY

Res. of A. Hutchison

CINCINNATI, OHIO NORTH

UP RIV



NEWPORT BUSINESS REFERENCES.

- T. P. MARIBBEN**, Attorney at Law and County Judge.
- THOS. JONES**, County Clerk.
- JOHN D. BELLIS**, Deputy Surveyor.
- JOHN E. DUCKER**, Attorney at Law.
- A. W. STOSBERGER**, Attorney at Law. Rooms 210, 2nd and 3rd in National Bank.
- C. F. HEDGECOCK**, Attorney at Law.
- C. E. ALLEN**, Deputy Circuit Court Clerk.
- LOUIS CONSTABLE**, City Treasurer.
- HAS J. HELM**, Attorney at Law.
- AMUEL GRIBLER**, Attorney at Law N. E. cor. York & Madison sts.
- SAMUEL RIGSTAFF**, Attorney at Law. Newport. Abstract Office. Complete chain of all titles in Campbell county from 1792 to the present time, and of Kenton county up to 1840.
- GEO. ARTEMAN**, Master Commissioner of Campbell county.
- GERMAN NATIONAL BANK** of Newport, Ky. Capital \$100,000. Saml. Smith, President; R. Weideman, Vice-President; Wm. H. O'Connell, Cashier. Cash on hand and deposits. All banking business done. Correspondence invited in regard to any matters of special or mutual interest.
- Z. CREUTE & SON**, Attorneys at Law. Residence No. 139 Maple st.
- J. CRAWFORD**, Attorney at Law. No. 64 York st. P. O. Building. Special attention paid to collieries.
- R. H. MOYON**, City Civil Engineer.
- THOS. J. CROCKETT**, Attorney at Law. First National Bank Building.
- JAM. C. WRIGHT**, Attorney at Law. First National Bank Building.
- O. W. BOOT**, Attorney and Counselor at Law. N. W. cor. York and Madison Sts. Rooms over First National Bank.
- WM. H. HARTON**, Mayor of Newport.
- J. A. WILLIAMSON**, President of Newport Light Co. Office No. 185 Bellevue st.
- NEWPORT MUTUAL FIRE INS. CO. T. A. Widrig**, President; H. M. Healy, Vice-President; J. W. Schneider, Secretary.
- GEO. WIDDEBMAN**, Brewer of Lager Beer, Hop Dealer, and Malster, Nos. 4 and 6 Jefferson st., and 118 to 121 Columbus st.
- LICKING RIVER SAW MILLS (J. W. Livey & Co., Props)**. Manufacturers of Building and contracted deals in any kind of Chestnut. Seasoned boards always on hand. Newport st. cars run from 5th and Vine sts., Chin., to mills.

1937 High Water

EXHIBIT 10

CITY OF NEWPORT, KENTUCKY

City of Newport

G. W. ROBSON, JR. & CO., Distillers of Bourbon and Rye Whiskies, and continuous Distillers of Colognes, French and Benedict Spirts. P. O. Newport, Ky.

E. E. TALLIAFERRO, Nurseryman. Dealer in Apples, Peaches, Plums, Pears, Cherry and Quince trees, Strawberry and Raspberry plants.

See Map

ing, heavy rolls, cylinders, and large castings of every description. Flange pipe bored and drilled to order. Machinery, Steam Engines, Pumps, etc. W. L. Deane, Proprietor, 100 W. Main St., Newport, Ky. Consulting Agent; Geo. W. Williams, Bay St. and Treasurer.

SOUTH NEWPORT
JAS. CONNER, Carriage M^r. All kinds of Repairing done on short notice. All work warranted. No. 118 Monmouth st., near Ringgold.
NEWPORT PRINTING AND NEWS-PAPER CO. Book and Job Printers, Stationers and Binders. Publish "Kentucky State Journal," weekly and Tri-weekly, "People's Literary Month-ly" and "Die Union," (German) weekly. J. J. Sch, President, P. P. Eyer, Secretary.
FRS HELLMANN, Manufacturer and Dealer in Boots and Shoes. A full stock of every description constantly on hand, and made to order. Repairing done in the best manner. No. 202 Monmouth, cor. Ringgold st.
J. E. DREW, Prop^r of Newport Marble Granite and Dressing Works. Cutting and Jobbing work promptly attended to. Cor. Monmouth and Ring- gold st.

HERBY WENDT & SON, Dealers in Hardware, Cutlery, Iron, Nails, Edge Tools and Agricultural Implements. Cor. Monmouth and Mayo st.
WHEELER, Saloon and Billiard Hall. Nos. 116 & 118 York st. Fred. W. Fitch, Prop^r.
A. RITTER & CO., Dealers in Dry Goods, Notions, Boots, Shoes, Hats, Caps, etc. Nos. 218 & 216 Monmouth st.
JOSEPH G. FEIN, Apothecary. N. E. Cor. Mad- son and Columbia st.
P. FULNER, Dealer in Stoves, Tinware, Roofing, Gutters, Spouting, etc. No. 90 York st.
M. SHERIDAN, Carpenter, Joiner and Builder. Also Dealer in Sash, Shutters and Ceilings. Hair and Chain Pumps. No. 220 W. First-st^r.
G. HOLZHAUER, Dealer in Dry Goods, Cheeses, Medicines, Pure Wines and Liquors for Medical use. Palms, Glass, Brushes, Dry-Staff, Oil, Van- alishes and all Painting Materials. S. E. Cor. Monmouth and Tibbatts st.
GEO. TIPPENHAUER, Undertaker and Prop^r's Livery and Boarding Stable. Funerals promptly attended. Carriages and Buggies furnished. N. W. cor. Walnut and Brighton st. Also Brickmaker. All kinds of brick constantly on hand. Orders promptly filled. Yard on Tibbatts st. and Licking River. Residence 64 Walnut st.
BEAL & MARBLE WORKS (Lepner and Ochs) work in all kinds of Granite and Marble. Building and Dressing especially for the South. Stock of latest designs always on hand. Reside- tion guaranteed. Fairfield Ave., Ballerine, Ky.
T. A. WIDRIG & CO., Wholesale and Retail Deal- ers in Flour and Feed of all kinds. No. 107 Mon- mouth st.

L. Bacon Home

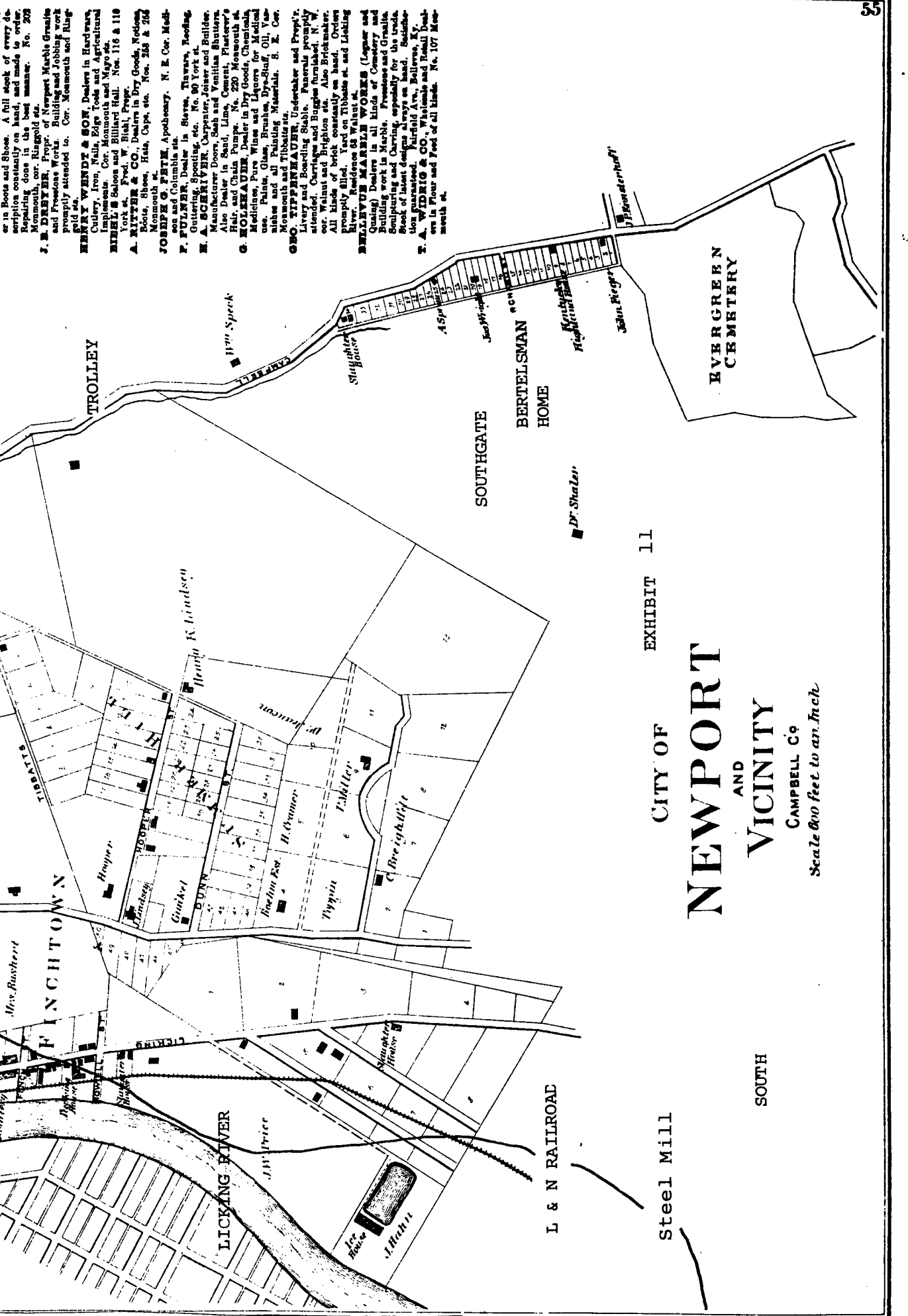
TROLLEY

SOUTHGATE

BERTELSMAN HOME

EVERGREEN CEMETERY

DR. Shaler



CITY OF
NEWPORT
 AND
VICINITY
 CAMPBELL CO
 Scale 600 feet to an Inch

EXHIBIT 11

SOUTH

Steel Mill

L & N RAILROAD

LICKING RIVER

FINCHTOWN

TOLBULLS

FINE

SOUTHGATE

BERTELSMAN HOME

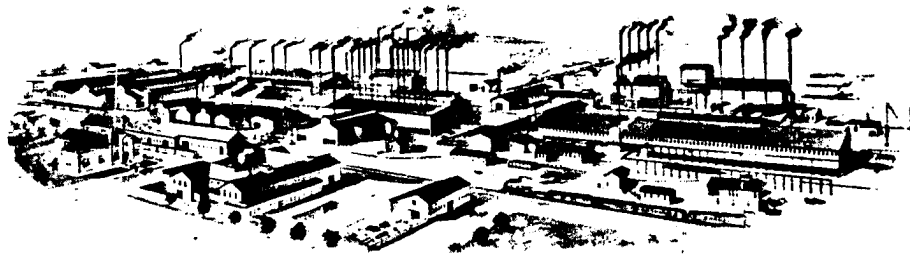
EVERGREEN CEMETERY

DR. Shaler

A. K. ANDREWS, President

JOS. B. ANDREWS, Vice-President

JOS. GAFF ANDREWS, Sec'y-Treas



Bird's Eye view of the Steel Plant, Rolling Mills, Galvanizing and Roofing Department.

MAIN OFFICE—NEWPORT, KENTUCKY.
WORKS ADDRESS—NEWPORT, KENTUCKY.

NEWPORT ROLLING MILL and ANDREWS STEEL CO.

NEWPORT, KY.

Number of Sheet Mills, 19—Annual capacity, 110,000 net tons.
Number of Jobbing Mills, 1—Annual capacity, 24,000 net tons.

RANGE OF ROLLING LIMITS

Black Sheets, 7 to 30 gauge, 24" to 48" wide.
Black Sheets, 7 to 30 gauge, 72" to 144" long.
Galvanized Sheets, 10 to 30 gauge, 24" to 48" wide.
Galvanized Sheets, 10 to 30 gauge, 72" to 144" long, according to gauge.

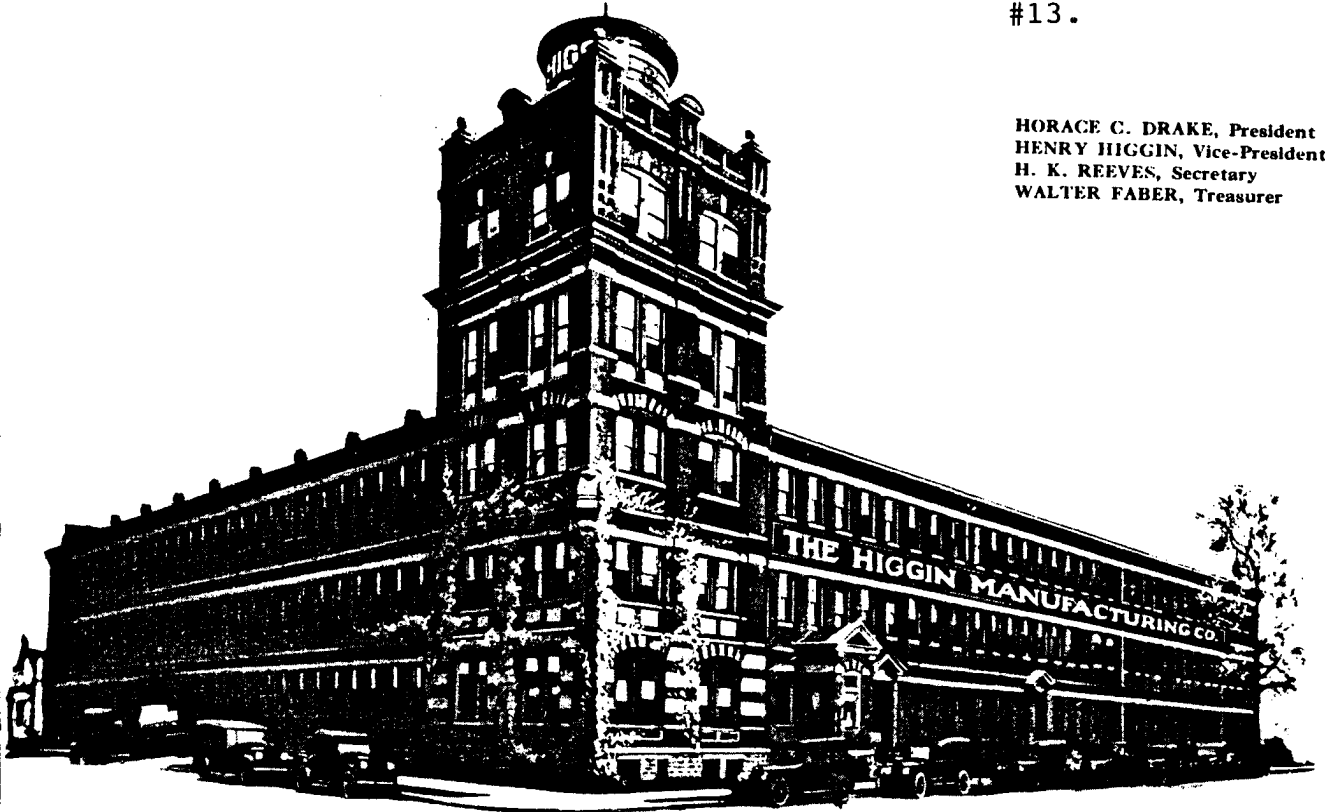
PRODUCTS

Black, Galvanized and Blue Annealed Open Hearth Steel Sheets.
Electrical Steel Sheets, Black and Galvanized "*Genuine Open Hearth Iron*", pure iron copper alloy sheets.

TRADE NAMES

"Globe" Brand Black and Galvanized Steel Sheets.
"*Genuine Open Hearth Iron.*"
Newport Armature.
Newport Electrical "A".
Newport Electrical "A" Special Steel Sheets.

HORACE C. DRAKE, President
HENRY HIGGIN, Vice-President
H. K. REEVES, Secretary
WALTER FABER, Treasurer



The Higgin Manufacturing Company

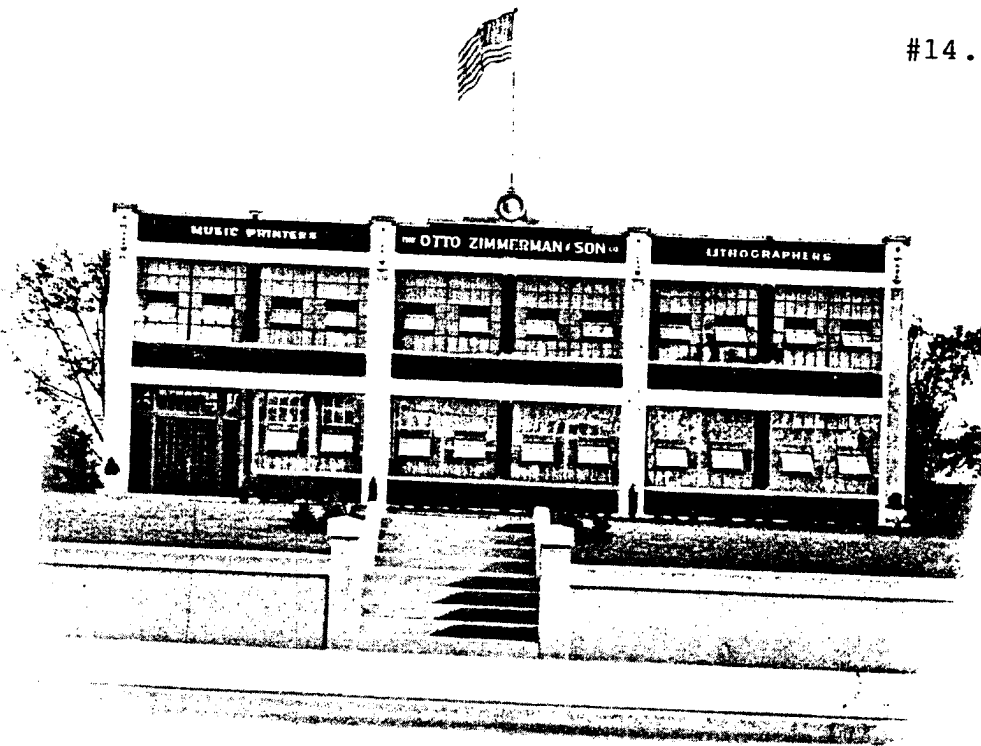
INCORPORATED
NEWPORT, KENTUCKY

THIS COMPANY was organized in 1898 and for the past twenty-five years have been engaged in the manufacturing of Metal Fine Screens and Metal Weather Strips. The output of this concern is universally known and regarded as the best and most durable on the market. The Higgin Manufacturing Company are one of the largest Metal Screen Manufacturers in the South. They are also engaged in the manufacturing of Automobile Accessories. The Executive Staff of this company have always been ready and willing to assist in the betterment of the Community.

OTTO ZIMMERMAN, President

ARTHUR ZIMMERMAN, Vice-President and General Manager
DAVID DAVIES, Secretary and Treasurer

#14.



The Otto Zimmerman & Son Co.

120 East Third St., Newport, Ky.

Music Printers, Engravers and Binders

Lithographers of Quality Hotel Stationery

Established 1876. Employ 100 people.

HAVE the largest and best equipped plant of its kind West of Philadelphia. Their building and grounds are one of the artistic attractions of the city. They reproduce anything in the line of music from popular and classic music with elaborate titles in colors and elegantly cloth bound books to simple one color sheet music numbers and band and orchestra music.

They serve the largest music publishing houses in the country as well as individuals, maintaining an efficient corps of musicians and composers to assist beginners in preparing their compositions.

Their lithographing department specializes in hotel stationery having a capacity of two million noteheds a day.

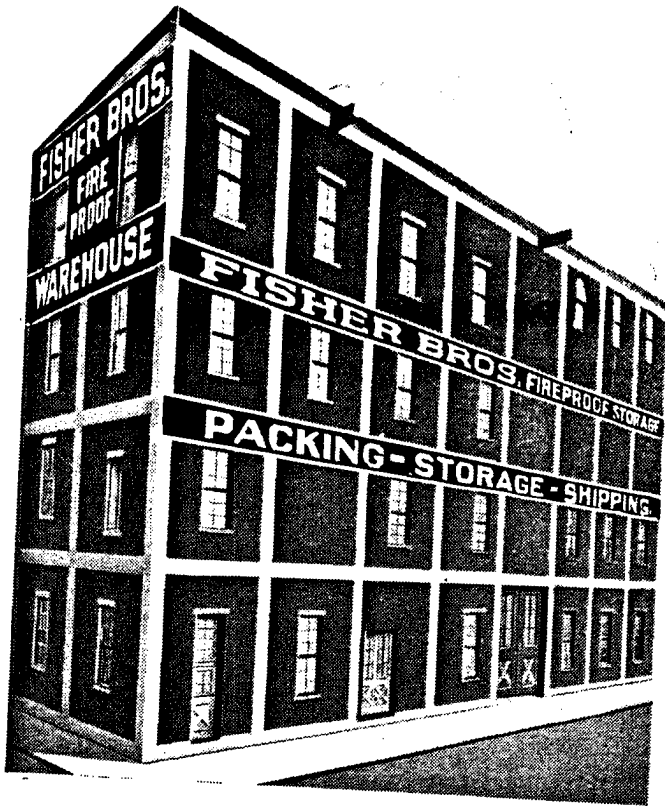
Their Mollo: Price—Quality—Service

"BOOST NORTHERN KENTUCKY"

#15.

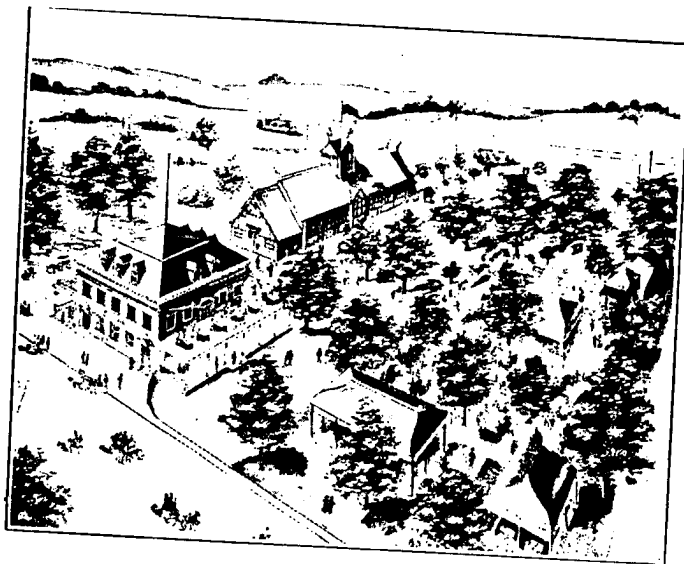
Fisher Bros.

FIRE-PROOF STORAGE
NEWPORT, KY.



THIS COMPANY was established in 1906. The Fire Proof Storage House is modern and equipped with individual rooms for the storing of Household Furnishings. There are more than 22,000 square feet of floor space.

This company is equipped with ten large motor driven trucks which are used for moving and transferring. They specialize in Local and Long Distance Hauling. The active management of the business is conducted by Charles Fisher and A. B. Fisher with offices at 710 Fairfield Avenue, Bellevue.



The Claremont

JAMES KINSELLA, Proprietor

MR. KINSELLA became the owner of The Claremont August 6, 1920. He was active manager for seventeen years. The Claremont is widely known as a rendezvous for families and parties who are entertained and served with the finest food stuffs and all high class eatables in season. Mr. Kinsella's experience as a Caterer is unquestioned and he has surrounded himself with experienced help. The Claremont lies among the Hills back of Newport and can be reached in twenty minutes from the Dixie Terminal Station, Cincinnati, by taking a Southgate car, or ten minutes by automobile.

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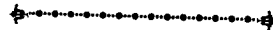


The Fletcher Manufacturing Co.

NEWPORT, KY.

THE FLETCHER MANUFACTURING COMPANY was incorporated in April, 1905. This plant has a capacity for turning out three thousand motors for Washing Machines per month. Their product is A-1 and is distributed all through the United States. They are the largest Washing Machine Manufacturers in Kentucky.

The officials of the company are: John B. Fletcher, President, and C. Fletcher, Treasurer.



American National Bank

Fourth and York

Newport, Ky.

OFFICERS

J. P. WECKMAN, President
 JOHN TODD, Vice-President
 A. M. LARKIN, Cashier
 E. E. KIRKER, Ass't Cashier

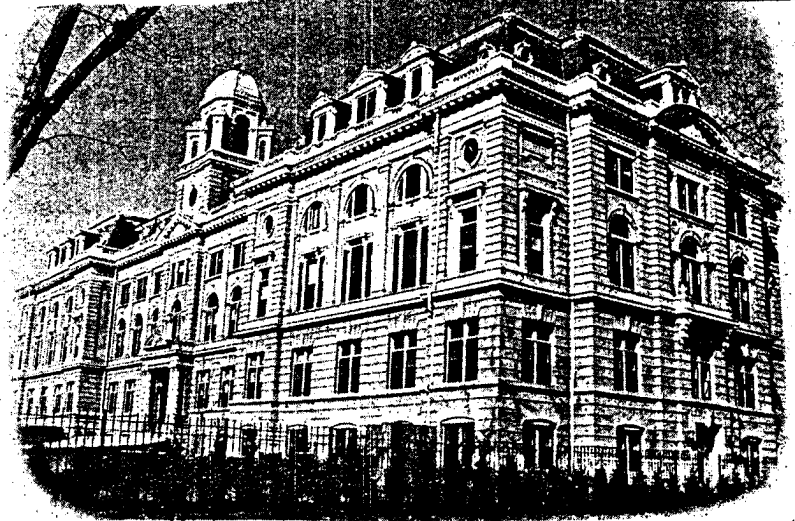
DIRECTORS

| | |
|------------------|----------------|
| WM. DONALDSON | MATT. HEROLD |
| WM. C. BOTTS | J. P. WECKMAN |
| W. A. PATERSON | JOHN TODD |
| A. M. LARKIN | FRANK X. LANG |
| JOSEPH KNECHT | CHAS. WIEDEMAN |
| ANDREW DONALDSON | |

Mansion Hill Area Surrounded by Water in 1884, 1913,
and 1937.

The Hannaford
6th and Linden Streets

This exquisite Beaux-Arts style building was designed in 1902 as a Catholic girl's school by the famous Cincinnati architect, Samuel Hannaford, whose area contributions include Music Hall and Cincinnati City Hall. The building has been restored into 62 unique apartments incorporating quality craftsmanship and original architectural design. The preservation of The Hannaford demonstrates true sensitivity of the integrity of a significant historic structure.



Saunders Mansion
337 Washington Avenue

This symmetrical red brick Italianate palazzo mansion was built circa 1870 as a gift for Martha Saunders, granddaughter of General James Taylor who built 'Bellevue'. The mansion was historically restored in 1986 and converted into nine beautiful apartments reflecting the building's former grandeur.

General James Taylor Mansion, 'Bellevue'
335 East Third Street

Magnificently located facing the Ohio River, 'Bellevue' the Taylor family mansion with its Grecian Revival architecture, was built circa 1842. The present house is the third home built on the site. It is known that the original home was designed by Benjamin Latrobe, the architect who assisted in the design and construction of our federal Capitol building. Bellevue originally contained forty rooms, but one wing was removed and there are now twenty-six rooms. The present facade was added circa 1889, reorienting the house toward the southeast, away from the river. The structure was placed on the National Register of Historic Places on January 17, 1976.





Flood of 1913

Westside of Newport was first area to be flooded by the Licking River. Building is Electric Power Plant for Trolley Cars.
(Trolley cars lost in Flood of 1937 in flooded barn.)



1913

Westside coal company, cement and gravel, steel mill, and hay and grain storage. (Pictures from Hoffman Family Collection)

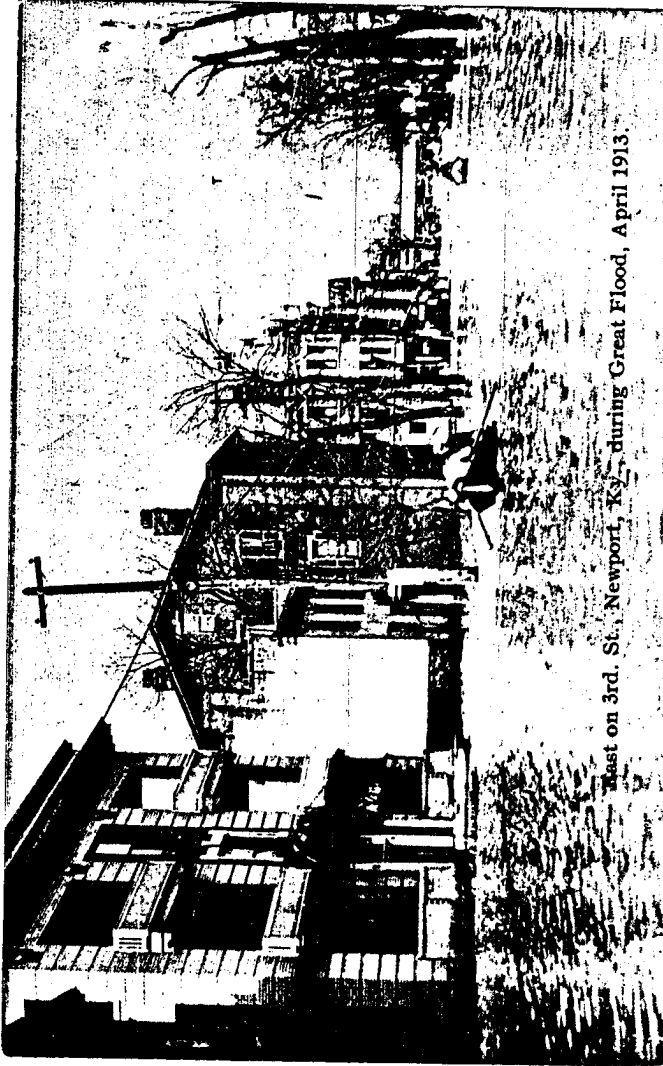


Westside Andrews Steel Co. by Licking River. Gas coke plant.
(Hoffman Family Collection)



Looking East from L & N Bridge on Second Street, Newport.
(Bauer Family Collection)

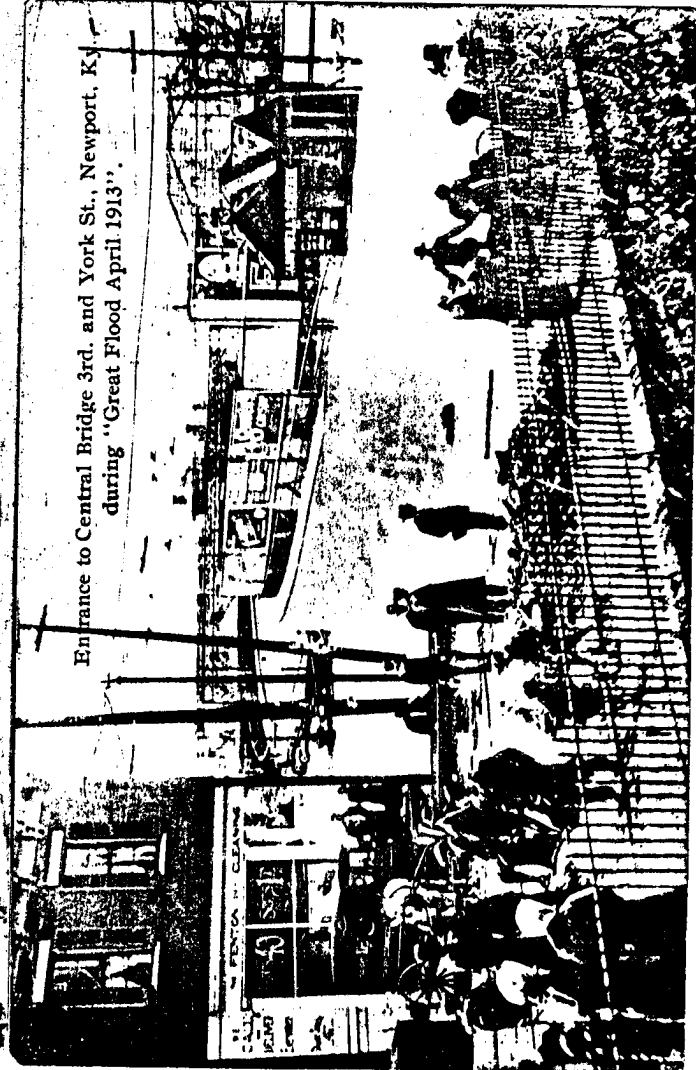
Great Flood of 1913



East on 3rd. St., Newport, Ky., during Great Flood, April 1913.

1987

Exhibit 20



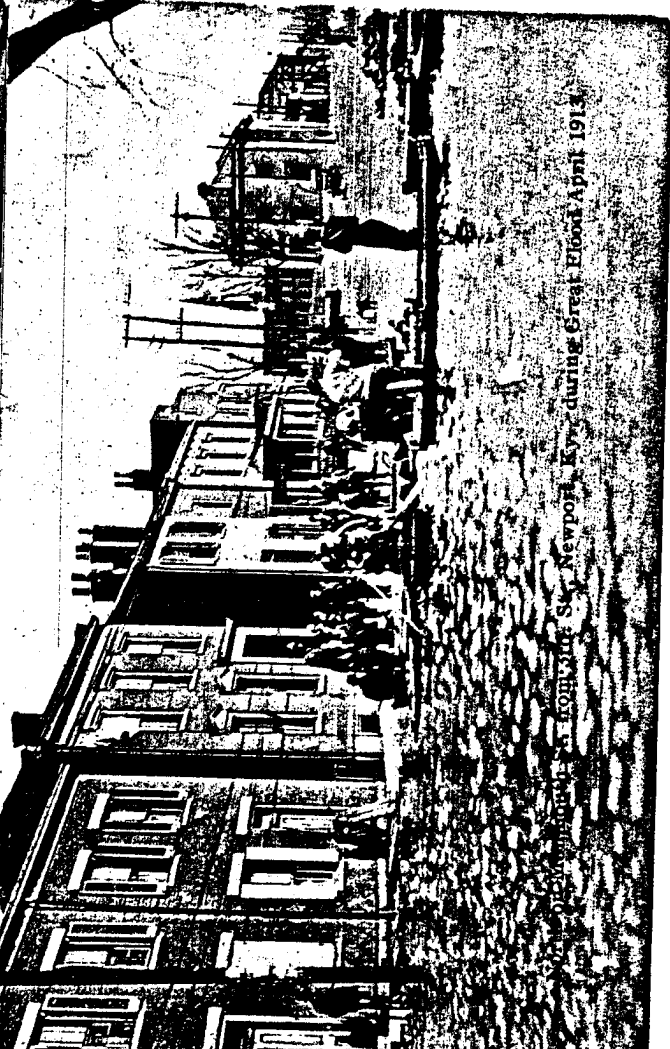
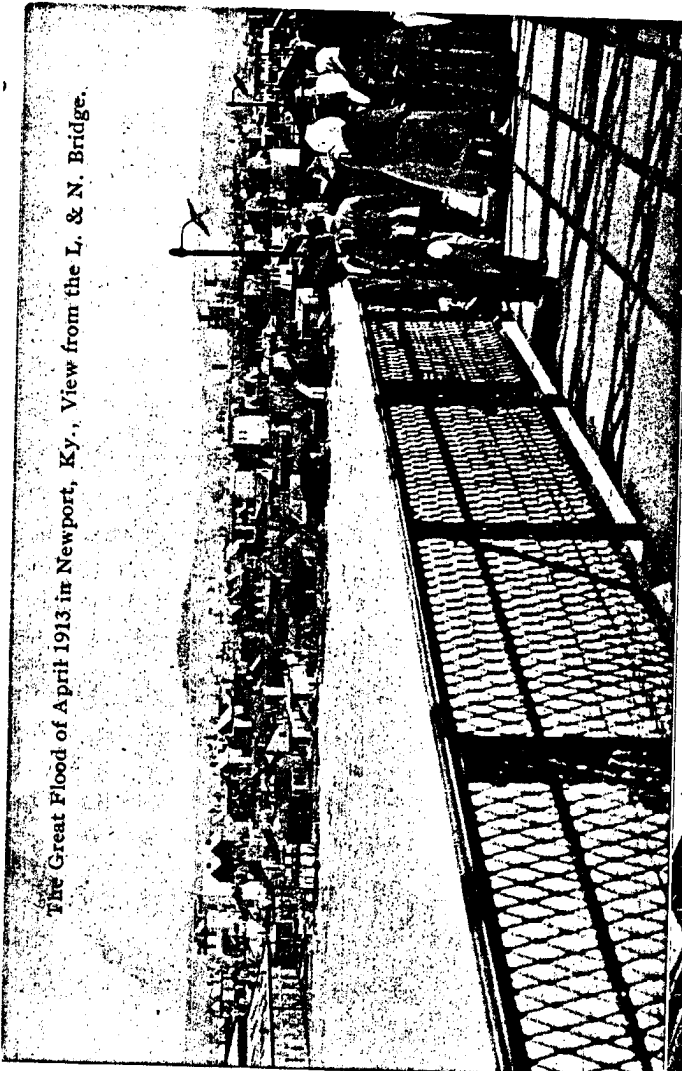
Entrance to Central Bridge 3rd. and York St., Newport, Ky., during "Great Flood April 1913".

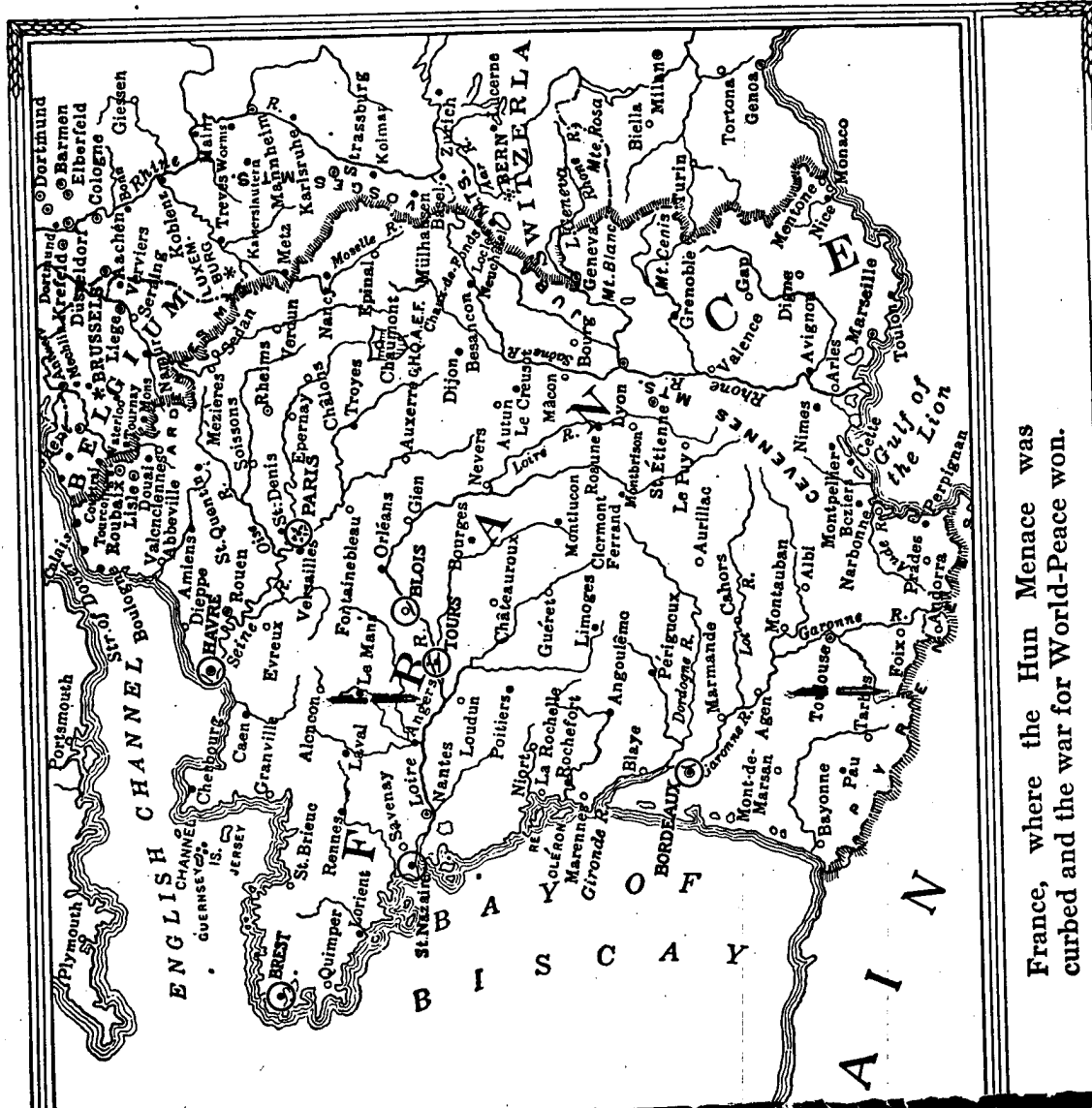


Great Flood of 1913

1988

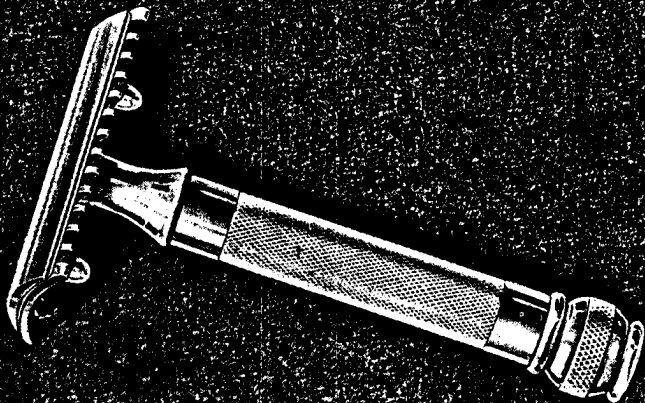
EXHIBIT 21



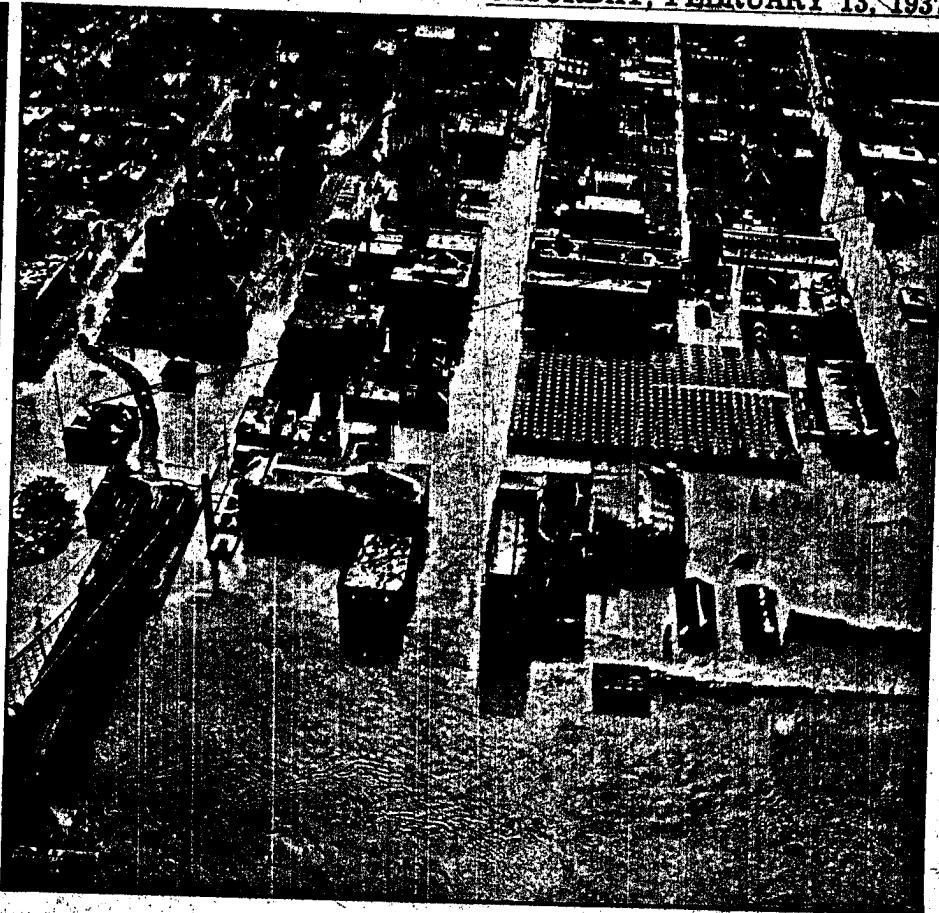


France, where the Hun Menace was curbed and the war for World-Peace won.

The City of Newport was to follow the rest of the nation into the great war effort of World War I. It would mean delay to flood prevention and protection.

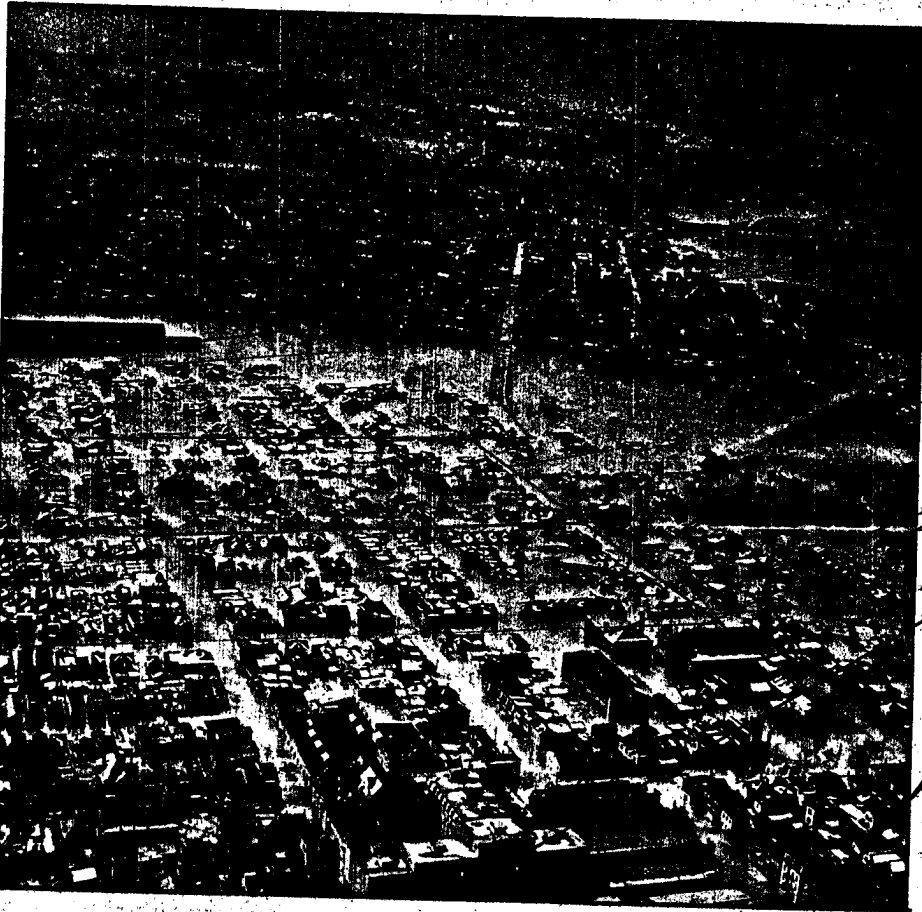


KNOWN THE WORLD OVER
Gillette
 THE DOW DRUG COMPANY
 CINCINNATI AND SUBURBS, OHIO
 CLEVELAND, OHIO
 COLUMBUS, OHIO
 CINCINNATI, OHIO
 COVINGTON, KY.
 NEWPORT, KY.



Covington Riverside unprotected today from flooding.

Covington, south from Suspension Bridge.



Fourth Street Bridge to Covington

Steel Mills

Railroad & Coal

Trolley Line

School

Weidemann Brewing

City Building

Newport, west at Licking River.

Judge Odis W.
Bertelsman's

Photos 1-6

February 7, 1933



Water closing L & N Bridge to Cinicnnati, Ohio



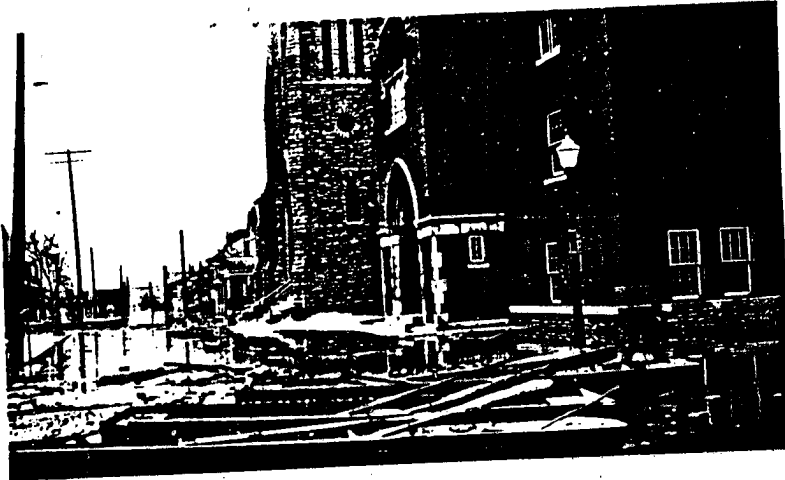
Water south on Saratoga Street



Water stops at 3rd. & Washington Srtreet
Picture looking west from Mansion Hill

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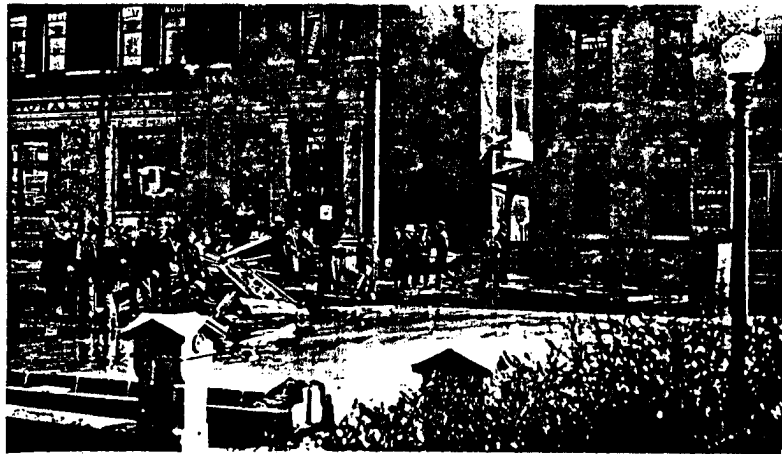
St. Paul's between 3rd. & 4th. Streets.
(Newport City Building to left.)

5



York Street to 3rd. Street and entry to
Central Bridge to Cincinnati, Ohio

6



4th. and York Streets

Judge Bertelsman's Office Door

1937 Flood

Oldtimer always ready-
boat, fishing rod, and
dog.

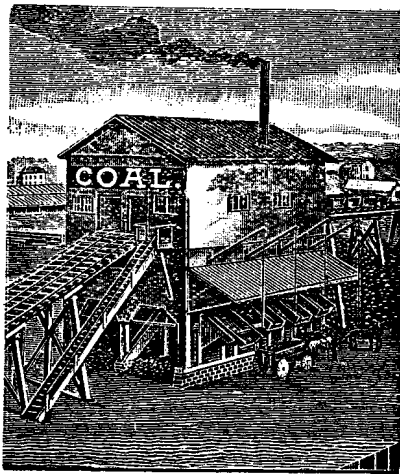


Westside and Waiting
for river crest.



Isabella Street in the
Westside. Coal and the
auto are not much use.
Back to the flatboats.

The 1937 Flood Caused Great Destruction in Newport, Kentucky



**Pittsburgh & Kanawha
Coal Co.**

DEALERS IN BEST GRADES

**Pittsburgh, Coalburg, Semi-
Cannel Lump and Nut Coal.
Also Anthracite and Coke.**

PRINCIPAL OFFICE,
No. 324 York Street.

Elevator and Yards,
11th Street and Licking River.

WM. C. BATTS, - - - Mgr.
Telephone 4269.

**TRY OUR
COALBURG COAL.**

NEWPORT DIVISION.

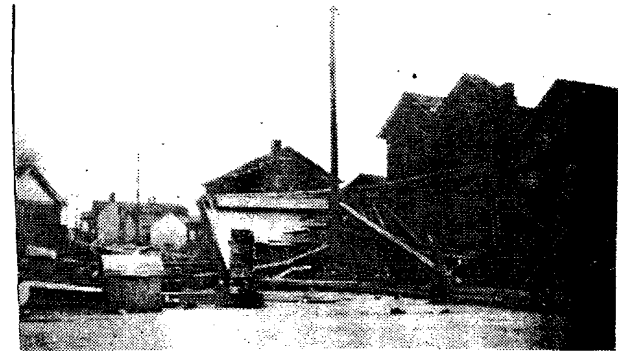
FT. THOMAS & WASHINGTON AVE.

Daily Except Sunday.

Leaving Tenth and Washington Ave.

| 5 | 1 | 6 | 5 | 6 | 2 |
|-------|-------|-------|-------|-------|-------|
| 7 38 | 6 13 | | 6 23 | 6 33 | 6 43 |
| 8 47 | 7 43 | 7 53 | 8 08 | | 8 13 |
| 10 32 | 9 13 | | 9 22 | | 9 43 |
| | 10 43 | | 11 07 | | 11 13 |
| | 12 13 | | 12 16 | | 12 43 |
| 1 26 | 1 43 | | 2 01 | | 2 13 |
| 3 11 | 3 13 | | | | 3 43 |
| 4 21 | 4 43 | | 4 56 | 5 03 | 5 13 |
| 6 06 | 6 13 | | 5 40 | | 6 43 |
| 7 15 | 7 43 | | 7 51 | | 8 13 |
| 9 01 | 9 18 | | 9 36 | | 9 43 |
| | 10 43 | | 10 45 | | 11 13 |
| 6 | 4 | 5 | 6 | 8 | 4 |
| | | 6 58 | 7 08 | 5 43 | |
| 8 27 | | 9 57 | | 7 13 | |
| | | 11 40 | | 8 43 | |
| | | 12 51 | | 10 13 | |
| | | 2 36 | | 11 43 | |
| | | 3 46 | | 1 13 | |
| | | 5 21 | 5 31 | 2 43 | |
| | | | 5 38 | 4 13 | |
| | | | | 5 43 | 5 58 |
| | | | | 7 13 | |
| | | | | 8 43 | |
| | | | | 10 13 | |
| | | | | 11 22 | |

Night signal, illuminated sign "Ft. Thomas."
Sunday time, one trip later in the morning.
Running time, Fort Thomas to Washington Ave., 30 minutes.
Nos. 1, 2, 3, 4, run to Ft. Thomas from Cincinnati.
Nos. 5 and 6 run between Cincinnati and 10th and Washington Ave. only.
No. 4 on its 5 40 p. m. trip runs to 10th and Washington Ave. only.
Transfers are issued to and received from Dayton or Bellevue, and Newport and Covington Belt Line, and Patterson St.
Passengers can secure a transfer on a transfer from Newport and Covington Belt Line to Madison Ave. or Greenup St., Holman St., Main St., and Ludlow.
Passengers can secure a transfer on a transfer from Madison Ave. or Greenup St., SOUTH-BOUND, to Austinburg, Milldale and Rose-dale.



Housing Suffered Most
in the Westside of City



Lost Was the Trolley Line System
When Cars Were Flooded in Barns

Problem of What to Do With Flood-Stricken Area Of Newport Recalls State Solon's Airport Plan

Ultimate Benefits of Rehabilitation Program Cited by John McDermott

COST, REVENUE COMPARED

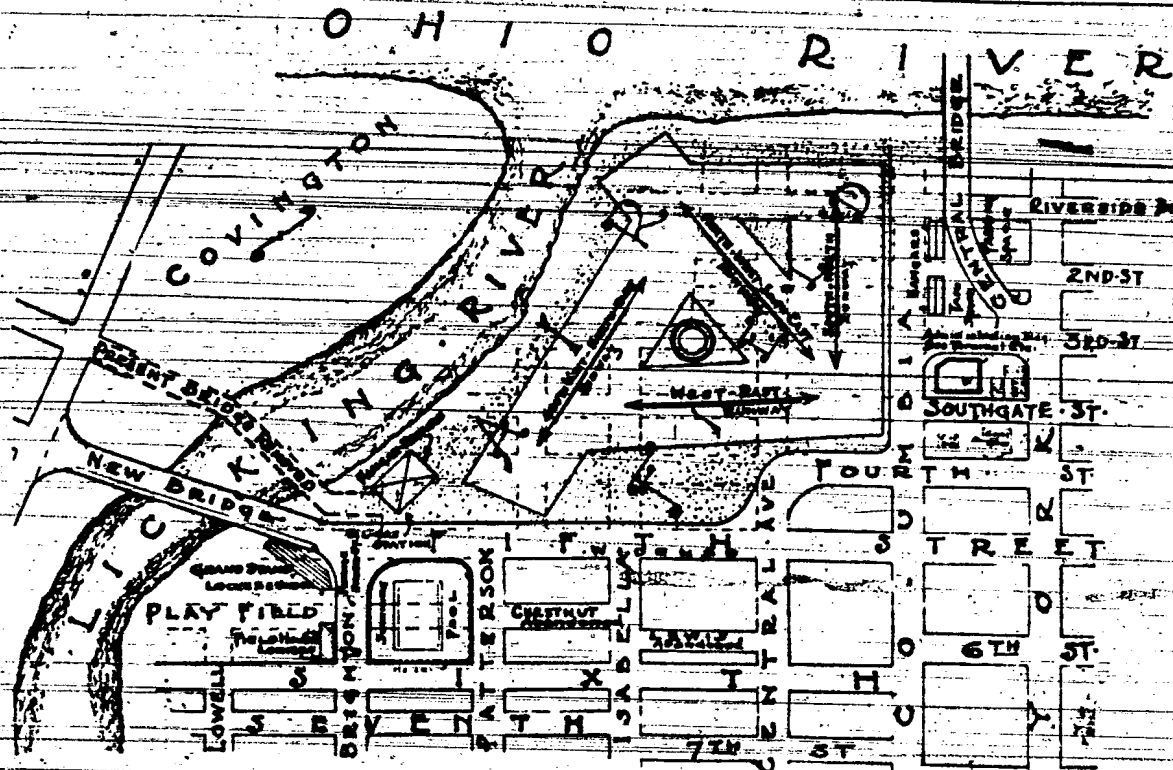
Possibility of Receiving Federal Aid in Carrying Out Idea is Advanced

BY BILL HAGEDORN
Kentucky Post Staff Writer

With Newport's west-end "bottoms" virtually swept to destruction by the flood and with city officials proposing a clearance of the stricken area of all buildings and dwellings, the rehabilitation plan of John L. McDermott, state representative and architect and city planner, for the construction of an airport and recreation center is revived.

Under Mr. McDermott's airport plan, which was drafted several years ago when a slum-clearance program for the city's west end "bottoms" was proposed, the entire area bounded by the Ohio and Licking Rivers and Fifth and Columbia streets would be razed.

At least 75 per cent of the homes in this area have been either totally destroyed by the flood or damaged beyond repair.

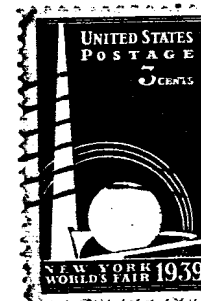


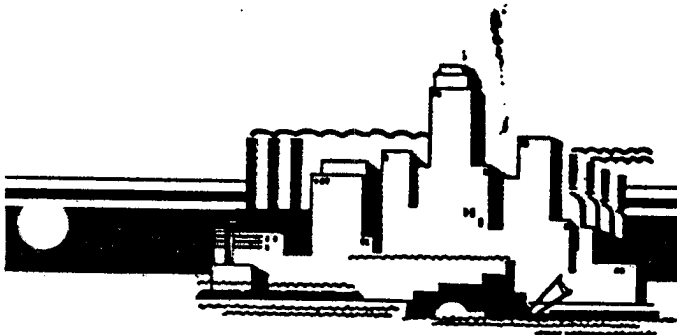
The plan for the rehabilitation of Newport's west end "bottoms" through the construction of an airport and recreation center is shown above. The project would occupy the section bound by the Licking and Ohio Rivers and Fifth and Columbia streets. This plan

was drafted in 1922, prior to the building of the new Veterans Memorial Bridge. Proponents of the plan contend the proposed airport

and recreation center would solve the problem of disposition of depreciated property and would be a source of revenue to the city.

While some in Newport gave thought to flood control and prevention, others sought to see the The New York World's Fair. For now it was 1939, the Depression was ending, and in spring the World was ours to see and enjoy.





CHAMBER OF COMMERCE
of
CAMPBELL COUNTY
Newport Ky.

September 30, 1940.

FLOOD CONTROL COMMITTEE MEETING

Chairman Emil Krauss of the Chamber of Commerce Flood Control Committee has asked that the committee meet on Friday afternoon of this week at 4:00 P.M. in the Chamber of Commerce offices to go over plans and suggested program to be followed on the program we have to put over in connection with the proposed bond issue on the November election.

We are asking Ted Vail, president of the Junior Chamber to see that his Junior Chamber Committee is notified and on hand; we are asking that Don Plummer of the Portland Cement Association to be present too.

Will you please mark the date and the time for this meeting and be present?

Sincerely yours,

H. B. Skinner

H. B. Skinner,
Executive Secretary.

Chamber of Commerce News Release
Summer of 1940 to Fall Election

#30.

In the past 28 years, Newport has been visited by 23 floods that have caused varying degrees of property damage and human suffering, Emil Krauss, head of the ~~Committee~~ Flood Protection Committee, revealed today in announcing the Committee's intention of supplying Newport citizens with pertinent facts regarding the vital need for flood protection.

The Committee, he said, is now shaping plans to carry these facts to the citizens by every possible means, including newspapers, radio and personal visits to homes. In doing this, the committee will have the support of the Chamber of Commerce, the Junior Chamber, city officials and civic clubs and organizations.

Painstaking investigation to supply the facts is being undertaken, Mr. Krauss declared, in the belief that the voters are entitled to authentic information before voting on a \$350,000 flood protection bond issue at the November election. He predicted the facts being assembled will show indisputably that flood ravages through the years have impeded civic and industrial growth. *has placed a tail*

A study of the 23 floods since 1913 shows that the city has to cope with flood conditions on an average of once every 14 ^{MONTHS} 1/2 years. The last great flood, worst in Newport's history -- was in January, 1937, when the water reached a record height of 79.99 feet. Flood stage is reached at 52 feet, according to government engineers.

(more)

Before that, the April, 1913, flood was the most severe. Then the water reached 69.9 feet, the study shows.

The most startling thing about the present survey Mr. Krauss explained, is its glaring revelation of the large number of homes and vast amount of city property affected during flood times.

For instance, with the water at 55 feet -- just three feet over flood stage, 220 homes are inundated. Seventeen square city blocks are inundated. What happens when the water goes up to nearly 70 feet as it did in 1913? At that time, 1,442 homes were affected by the flood waters, while 75 city blocks felt the surge of the river.

The survey shows also that during the 1937 flood, with the water at nearly 80 feet, 95 city blocks were affected. ~~No data is available concerning the number of homes that felt the flood ravages at this stage.~~

"These are cold statistics which have already been dressed in the harsh realities of privation and want and economic loss for many of us who have experienced the floods," Mr. Krauss commented. "Back of the figures lies a tremendous amount of effort, time and money for flood relief and rehabilitation -- largely all wasted -- which would have been spared had we done something to control the floods. We Newport citizens have a chance this year to insure the city's future safety and industrial and civic growth. We should not fail in this responsibility."

Chamber of Commerce Vote Count
 \$350,000.00 FLOOD PROTECTION BONDS

YES NO

FIRST WARD

| | | |
|---|---------|---------|
| A | 145-206 | 77-70 |
| B | 121-154 | 57-41 |
| C | 91-244 | 70-62 |
| D | 160-256 | 91-82 |
| E | 109-190 | 102-94 |
| F | 108-174 | 134-140 |
| G | 116-186 | 89-70 |
| H | 112-123 | 110-106 |

TOTAL PRECINCTS 51

YES 25
NO 26

FIRST WARD TOTAL

1062 1593 730-665

1620
1593
27
665
1414
24

SECOND WARD

| | | |
|---|---------|-------|
| A | 190-292 | 48-32 |
| B | 113-185 | 18-6 |
| C | 180-200 | 19-20 |
| D | 134-205 | 78-37 |
| E | 123-134 | 11-6 |

142-5

SECOND WARD TOTAL

749 1021 170-101

THIRD WARD

| | | |
|---|---------|---------|
| A | 163-241 | 130-91 |
| B | 81-145 | 98-89 |
| C | 118-163 | 103-105 |
| D | 71-127 | 108-108 |
| E | 87-116 | 103-114 |
| F | 91-113 | 84-114 |
| G | 80-135 | 174-142 |
| H | 57-104 | 105-174 |
| I | 78-102 | 100-92 |

132-108

139-142

105-73

THIRD WARD TOTAL

821 1253 1014 929

FOURTH WARD

| | | |
|---|---------|--------|
| A | 103-120 | 67-66 |
| B | 168-235 | 108-86 |
| C | 207-274 | 89-55 |
| D | 160-216 | 32-28 |
| E | 164-202 | 28-15 |
| F | 135-171 | 38-13 |

234-87

278-55

FOURTH WARD TOTAL

930 1218 558 263

FIFTH WARD

| | | |
|---|---------|---------|
| A | 100-179 | 127-112 |
| B | 113-165 | 157-139 |
| C | 101-147 | 118-129 |
| D | 117-176 | 141-145 |
| E | 63-91 | 79-90 |
| F | 77-92 | 119-124 |
| G | 63-61 | 83-97 |
| H | 40-83 | 91-87 |
| I | 100-149 | 80-83 |

FIFTH WARD TOTAL

783 1143 1005 928

SIXTH WARD

| | | |
|---|---------|---------|
| A | 107-149 | 135-117 |
| B | 148-158 | 107-128 |
| C | 89-138 | 108-98 |
| D | 118-176 | 87-63 |
| E | 173-244 | 138-106 |
| F | 107-169 | 85-78 |
| G | 136-194 | 117-104 |
| H | 88-141 | 108-93 |
| I | 116-185 | 86-67 |
| J | 78-141 | 120-123 |
| K | 81-127 | 130-111 |
| L | 61-95 | 92-98 |
| M | 133-222 | 131-126 |
| N | 88-123 | 67-78 |

SIXTH WARD TOTAL

1524 2272 1471 735

TOTAL VOTE

5874 4748

8500 4306

8500
4306
12806
7369
8537
8500
37

MINUTES MEETING OF THE

Flood Control

Committee

November 12, 1940

ON NOVEMBER 12TH, AT 4:00 P.M. WITH THE FOLLOWING MEMBERS OF THE COMMITTEE ON THE FLOOD CONTROL PROGRAM PRESENT:

MEETING HELD IN THE OFFICES OF THE CARROLL COUNTY CHAMBER OF COMMERCE ON NOVEMBER 12TH, AT 4:00 P.M. WITH THE FOLLOWING MEMBERS OF THE COMMITTEE ON THE FLOOD CONTROL PROGRAM PRESENT:

- MAIL KRAUSS, CHAIRMAN
- WILBUR OTTING
- TED BRAUN
- DR. CHAS. FORTY (JC)
- MILTON MARK JR. (JC)
- AND THE EXECUTIVE SECRETARY
- AND THE EXECUTIVE SECRETARY
- ABSENT WERE:
- PRESIDENT V. HEROLD
- WALTER BROWN (BY DEATH)

DISCUSSION AS TO THE WORK OF THE COMMITTEE IN PRESENTING THE \$350,000 BOND ISSUE TO THE VOTING POPULACE OF NEWPORT AND THE RESULTING ELECTION IN WHICH IT SEEMED AS IF THE PASSAGE OF THE BOND ISSUE HAD FAILED BY 13 VOTES. THE CALLING FOR A RECOUNT OF THE VOTE, AT THE REQUEST OF THE CITY OFFICIALS OF NEWPORT AND THE CHAMBER OF COMMERCE RESULTING IN A PASSAGE OF THE BOND ISSUE.

DISCUSSION OF COSTS OF THE CAMPAIGN TO THE CHAMBER OF COMMERCE WERE REPORTED AND LISTED: TOTAL COST \$197.84

- OTTO PRINTING COMPANY FOR 15,000 HANDBILLS \$75.00
- OTTO PRINTING COMPANY FOR 100 WINDOW CARDS 7.50
- BILL POSTERS UNION FOR POSTING CARDS 4.00
- DISTRIBUTION OF HAND BILLS IN NEWPORT 33.60
- WOPD RADIO STATION SPOT ANNOUNCEMENTS 55.00
- LOUN SPEAKER CAR FOR ANNOUNCEMENTS OVER CITY 20.00
- THEATRE SHORT FILMS FOR ANNOUNCEMENTS 2.75

OF THE ABOVE EXPENSE MILTON MARK SENIOR OF THE LOUIS MARK FURNITURE COMPANY DONATED THE COST OF DISTRIBUTING THE HAND BILLS \$33.60 THE PORTLAND CHAMBER ASSOCIATION A DONATION OF \$55.00

THE ANDREWS INTERESTS COOPERATED WITH PAYMENT OF BILLS FOR PRINTING UP TO \$200 OF WHICH ONLY \$109.24 WAS EXPENDED.

MR. KRAUSS REPORTED TO THE COMMITTEE THE ROUTINE WORK THAT HAD GONE INTO THE CAMPAIGN THAT WERE ITEMS THAT HAD TO BE SETTLED WITHOUT THE MEETING OF THE COMMITTEE, DURING THE CAMPAIGN.

EXECUTIVE SECRETARY WAS DIRECTED TO SEND LETTERS OF THANKS TO:

- MILTON MARK, SR.
- PORTLAND CHAMBER ASSOCIATION
- CLAUDE BONAR
- THOMAS HOSKINS
- JUNIOR CHAMBER OF COMMERCE
- SAM FRANK
- V.O. OWENS
- FATHER DELANEY
- FATHER GEISEN

OVER

MINUTES OF THE COMMITTEE

IT WAS AGREED THAT THE COMMITTEE WOULD STAND BY READY TO ASSIST AND DO WHAT IT MIGHT BE CALLED UPON TO DO FOR THE FURTHER ADVANCEMENT OF THE PROGRAM AND IT WAS ALSO FELT THAT THE COMMITTEE HAD CERTAIN RESPONSIBILITIES AS TO THE SALE OF THE BONDS FOR THE PROJECT AND THE EXPENDITURE OF THE DERIVED FUNDS TO INSURE THE TAXPAYERS THAT THEY WERE GETTING VALUE FOR THE EXPENDITURE.

IT WAS FURTHER AGREED THAT THE COMMITTEE WOULD CONTINUE TO OFFER ITS COOPERATION TO THE NEWPORT CITY OFFICIALS AS MIGHT BE NEEDED.

ALBERT W. HENKEL
WALTER BROWN (M. GOVERNOR)

H. B. SKINNER
EXECUTIVE SECRETARY

COPY OF MINUTES TO MEMBERS OF THE COMMITTEE

REPORTING AND LISTING TOTAL COST \$12,800.00
REPORTING AND LISTING TOTAL COST \$12,800.00
REPORTING AND LISTING TOTAL COST \$12,800.00

REPORTING AND LISTING TOTAL COST \$12,800.00

REPORTING AND LISTING TOTAL COST \$12,800.00

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REPORTING AND LISTING TOTAL COST \$12,800.00

REPORTING AND LISTING TOTAL COST \$12,800.00



**FOR
VICTORY**

**AMERICAN NATIONAL BANK
FOURTH & YORK STREETS
NEWPORT, KY.**

Member Federal Deposit Insurance Corporation
Member Federal Reserve System



In November the Flood Wall Bond Issue was passed by the Newport Voters. But, December 7, 1941 would delay the construction until 1946 and the completion until 1951. The people of Newport as they had shared the the Great Depression, shared the war with the rest of the nation. Newport supplied fighting men and women, steel, and savings for VICTORY!

1946 Saw the Start of Flood Wall Construction

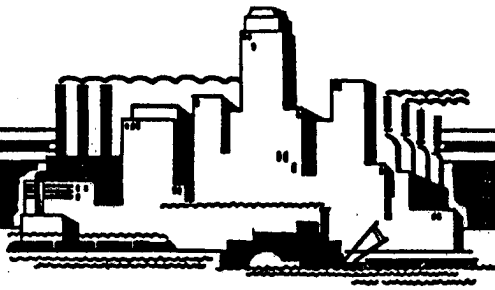
1951 Saw the Completion of Flood Wall and Dedication



Part of Earth Wall Against Ohio and Licking Rivers.



Part of Earth, Steel, and Concrete Construction used under Bridge and roadways. Here L & N Railroad area.



CHAMBER OF COMMERCE
of
CAMPBELL COUNTY
Newport Ky.

September 12, 1951

Dear Member:

The dedication of Newport's Flood Wall will be held Saturday September 29th. This is a Red Letter Day for Newport and also for your Chamber of Commerce.

It was through the efforts of the Chamber that the bond issue for this great project was finally passed. The flood protection bond issue was first placed on the ballot in 1938 and was overwhelmingly defeated. The officers of the Chamber decided at the next election to conduct a flash campaign for about ten days duration. The bond issue was again defeated, the Chamber then decided on a campaign of education for the voters. So for more than a year a committee from the Chamber at which Emil Krauss was Chairman made plans and preparations. We solicited the aid of newspapers, radio stations, schools, churches, Jr. Chamber of Commerce and other organizations. The speakers committee composed of Vincent W. Herold, who was Pres. of the Chamber at that time, Emil Krauss & Carl Ebert conducted more than fifty meetings throughout the city in favor of the bond issue. The \$350,000 bond issue was passed at the November election in 1940. A recount of the votes showed the bond issue carried by the required two thirds majority the vote being 8,635 for and 4,247 against. We feel that if it had not been for the vigorous efforts of your Chamber the bond issue would have been defeated.

The program for the dedication will open with a luncheon at 1 P.M. at Glenn Schmidt's, 18 E. 5th St., Newport, Ky. At the conclusion of the luncheon a motorcade will be held from Schmidt's to the Newport High School Stadium, where a musical and speaking program will be held at 3 P.M. Vice Pres. Alben Barkley, Rep. Brent Spence and Maj. General Lewis A. Pick, Chief of the U.S. Army Engineers will be the principal speakers.

Tickets for the luncheon are available at the Chamber office. Price of the luncheon \$2.00. Please make your reservations by using the enclosed post card. Reservations must be in by Wednesday September 26th.

Sincerely yours,

William J. Pfirman,
President

THE MAYOR AND COMMISSIONERS
OF THE
CITY OF NEWPORT
AND
THE FLOOD WALL DEDICATION COMMITTEE
CORDIALLY INVITE

CAMPBELL COUNTY CHAMBER OF COMMERCE
TO ATTEND THE FORMAL DEDICATION OF THE NEWPORT FLOOD WALL, A FEDERAL
PROJECT AUTHORIZED BY AN ACT OF CONGRESS, PLANNED AND CONSTRUCTED
UNDER THE SUPERVISION AND DIRECTION OF THE UNITED STATES ARMY
ENGINEERS, 1941-1951.

ON SATURDAY, 29TH SEPTEMBER, 1951

LUNCHEON AT THE PLAYTORIUM, 18 EAST FIFTH STREET — 1:00 P. M.
MOTORCADE TO THE STADIUM — 2:45 P. M.
FORMAL DEDICATORY CEREMONIES AT NEWPORT HIGH SCHOOL STADIUM, 3:00 P. M.

Newport Flood Wall
DEDICATION LUNCHEON

Saturday, September 29, 1951 - 1:00 P. M.

— AT —

GLENN SCHMIDT'S
18 East Fifth Street, Newport, Ky.

RESERVATIONS - - \$2.00 PER PERSON

193
No.

NEWPORT FLOODWALL DEDICATION COMMITTEE

DR. A. D. OWENS, Chairman

| | |
|--------------------------|----------------------|
| GENERAL FRED M. WARREN | MR. BLAINE MARZ |
| MR. WILLARD FRIEND | MR. ALFRED VACCA |
| MR. JOSEPH C. MEIER, JR. | MR. EVERETT SMITH |
| REVEREND DANA HEATON | MR. J. B. STAUBACH |
| MR. EDWARD E. STIERITZ | MR. BAILIE MORLIDGE |
| MRS. RUBY OWENS | MR. C. C. TRUESDELL |
| MRS. ANNA K. STRICKLEY | MISS LENORA BACON |
| MR. JOHN STRICKLEY | MR. EDWARD RECH |
| MRS. MARY GILLAUME | MR. CHARLES GOETZ |
| MR. DANIEL J. SMITH | MR. A. T. CARIUS |
| MR. B. J. GROESCHEN | MR. MARTIN WALTER |
| MR. JOHN V. HUCK | MR. JOSEPH KONEN |
| MR. WILLIAM E. SPROTT | MR. WILLIAM BOOKER |
| MR. BEATTIE DeLONG | MR. WILLIAM KEARNEY |
| MR. HENRY SEIBERT | MR. GEORGE J. NUNNER |
| MR. WILLARD MALONEY | MRS. FLORENCE HUGLE |
| MISS MARY WHITEHEAD | MR. EUGENE GIANCOLA |
| MR. JOE MILLER | MR. RALPH MUSSMAN |
| MRS. HAROLD NeCAMP | MR. WILLIAM HAGEDORN |

MICHAELS  PRINTER

DEDICATION

OF THE

NEWPORT FLOODWALL

A

FEDERAL PROJECT

AUTHORIZED BY AN ACT OF CONGRESS

AND

PLANNED AND CONSTRUCTED UNDER

THE

SUPERVISION AND DIRECTION

OF THE

UNITED STATES ARMY ENGINEERS

1941 — 1951

AT

NEWPORT HIGH SCHOOL STADIUM

NEWPORT, KENTUCKY

SATURDAY, SEPTEMBER 29, 1951

THREE O'CLOCK P. M.

NEWPORT CITY ADMINISTRATIONS

1941

- MR. LEO. G. BROERING, Mayor
- MR. EARL DIETZ, Vice-Mayor
- MR. CLARENCE LEHKAMP
- MR. OSCAR HESCH
- MR. JAMES E. DECKERT
- MR. BAILIE MORLIDGE, City Manager
- MR. CARL EBERT, City Solicitor
- MR. WALTER BURKE, Asst. City Solicitor
- MR. WILLIAM HERRINGER, Asst. City Solicitor
- MR. CLEM VOET, City Auditor

1951

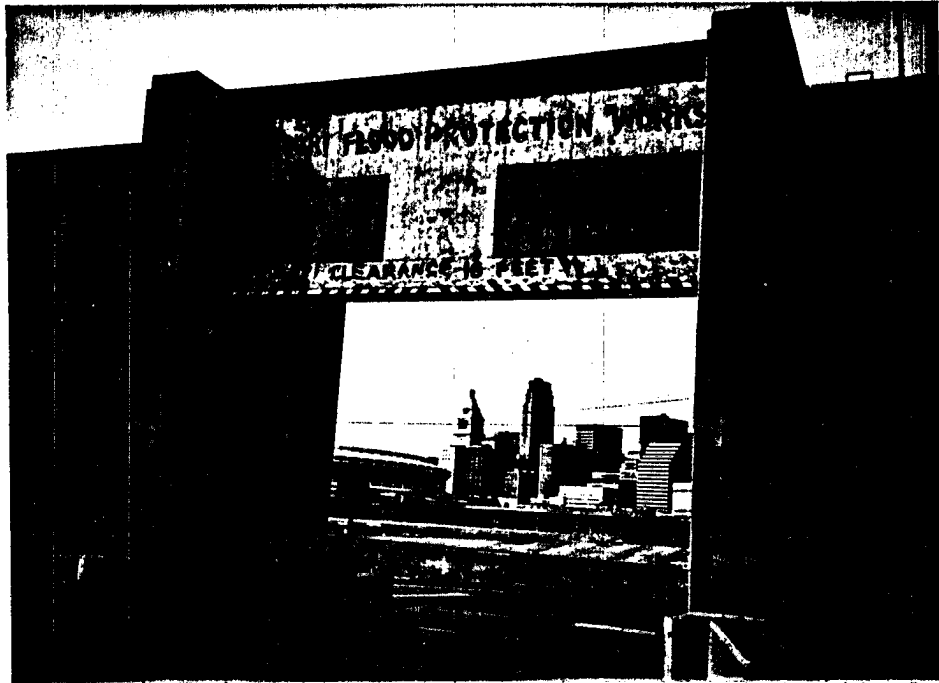
- MR. JAMES E. DECKERT, Mayor
- DR. GEORGE JEFFORDS, Vice-Mayor
- MR. CHARLES EHA
- MR. HARGIS COLE
- MR. HOWARD WIEBE
- MR. MALCOLM RHOADS, City Manager
- GENERAL FRED M. WARREN, City Solicitor
- MR. GEORGE MUEHLENKAMP,
Asst. City Solicitor
- MR. ALBERT WALD, City Auditor

PROGRAM

- Music.....Armored Center Band
Fl. Knox, Kentucky
- Invocation.....The Reverend Dana Heaton
President, Newport Ministerial Association
- Posting of the Colors.....Color Guards
Lawler-Hanlon Post No. 5662, V.F.W.
Leo Trauth Chapter No. 37, D.A.V.
Rankin Prout Carius Post No. 1404, V.F.W.
James Wallace Costigan Post No. 11, American Legion
- Address of Welcome.....Dr. A. D. Owens
Chairman, Floodwall Dedication Committee
- History of Floodwall Project.....Honorable Bailie Morlidge
Former City Manager, Newport, Kentucky
- Address.....The Honorable Brent Spence
U. S. Congressman from Sixth District of Kentucky
- MusicBand
- Address.....The Honorable Alben W. Barkley
Vice President of the United States of America
- Presentation of the Floodwall to the City of Newport.....
Lt. Col. C. Bidgood, District Engineer
Louisville District, Corps of Engineers,
Louisville, Kentucky
- Acceptance of Floodwall.....Honorable James E. Deckert
Mayor, City of Newport, Kentucky
- Retiring of the Colors.....Color Guards
- Benediction.....The Reverend Father John V. Hagenauer
Principal, Newport Catholic High School,
Newport, Kentucky
- MusicBand

(Honor Guards: Firing Squads Lawler-Hanlon Post No. 5662, V.F.W.
James Wallace Costigan Post No. 11, American Legion)

Did Newport cut itself off from future development?



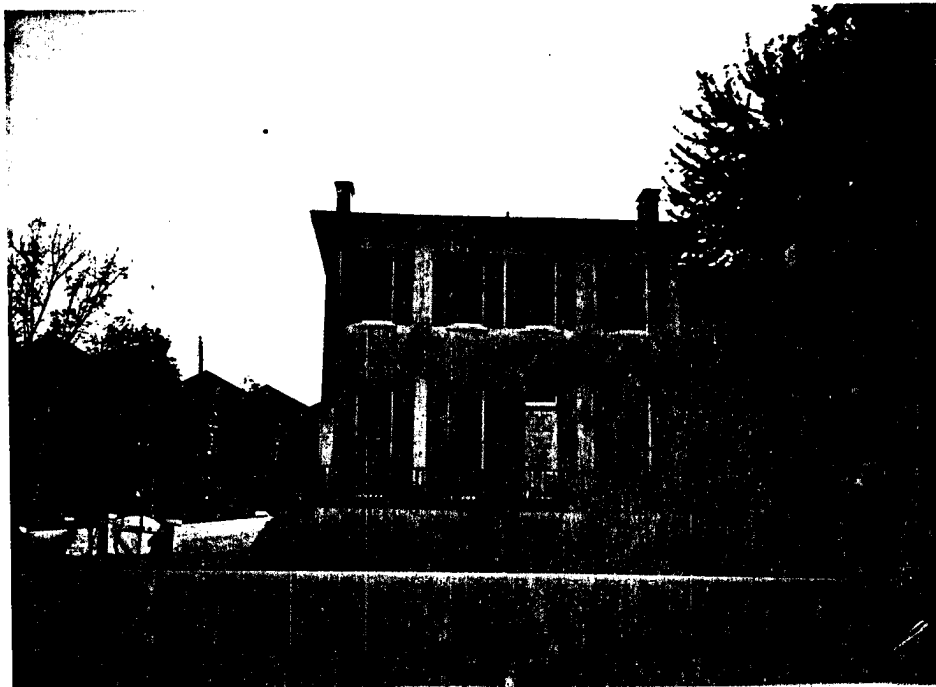
There is a real contrast between the area of flood protection in Newport and the unprotected area in Covington, Kentucky across the Licking River only a mile away. Only in the recent few years has redevelopment started in the City of Newport. And the redevelopment started on the Ohio River side of the Flood Wall!



West side of Newport looking
north from what was the
Weidemann Brewing Works.

Closed public housing
protected by Flood Wall.





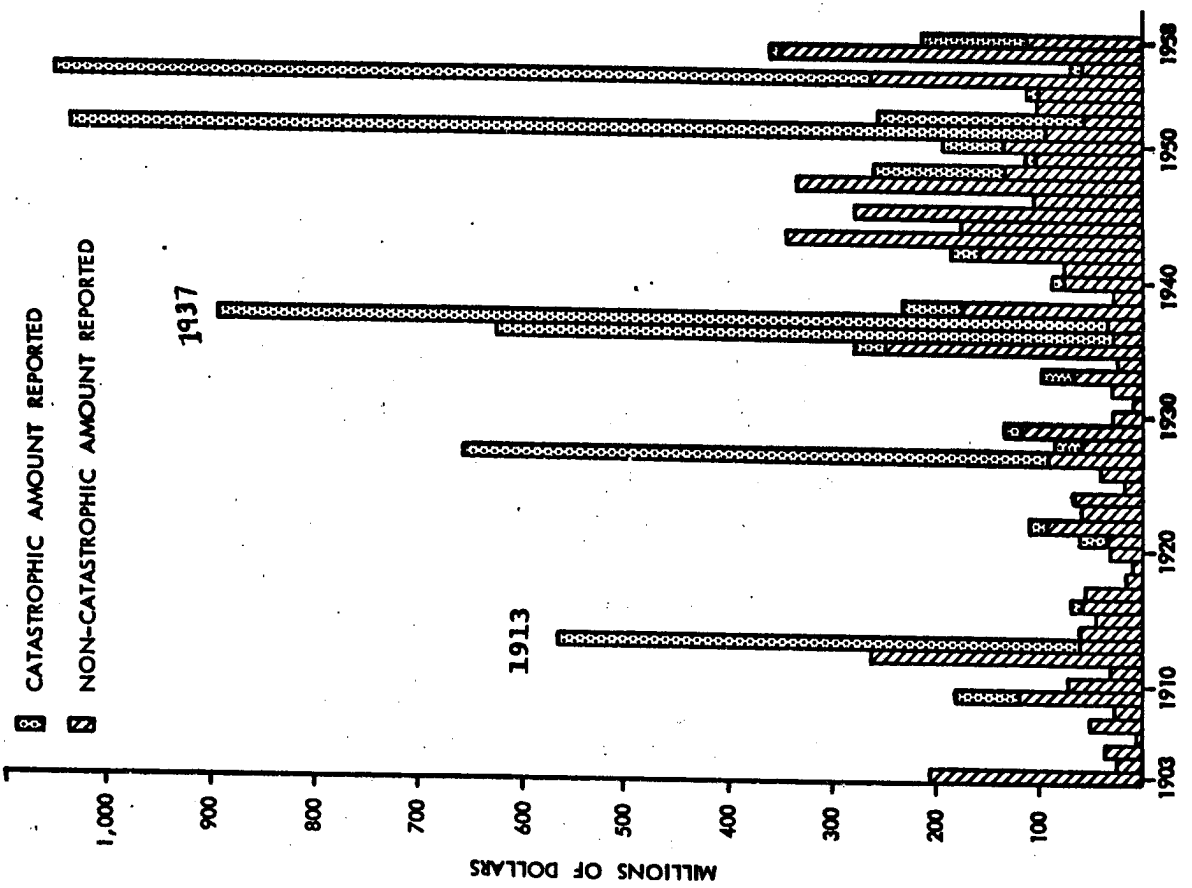
Covington, Kentucky
Riverside Drive Area
Unprotected from floods.
Historical Housing on
Riverside Drive.



Shelby Street along
Licking River not
flood protected. Units
sell for \$265,000.

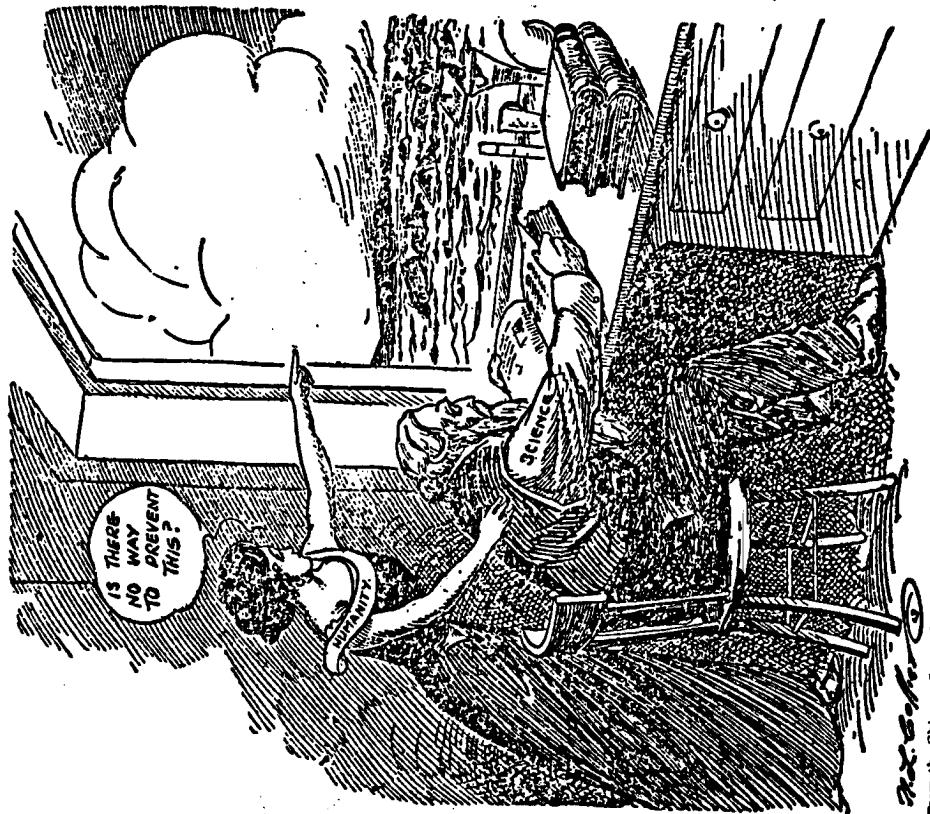
Have these people for-
gotten the message of
of the flood plain?

UNITED STATES ESTIMATED ANNUAL FLOOD LOSSES, 1903 - 1958



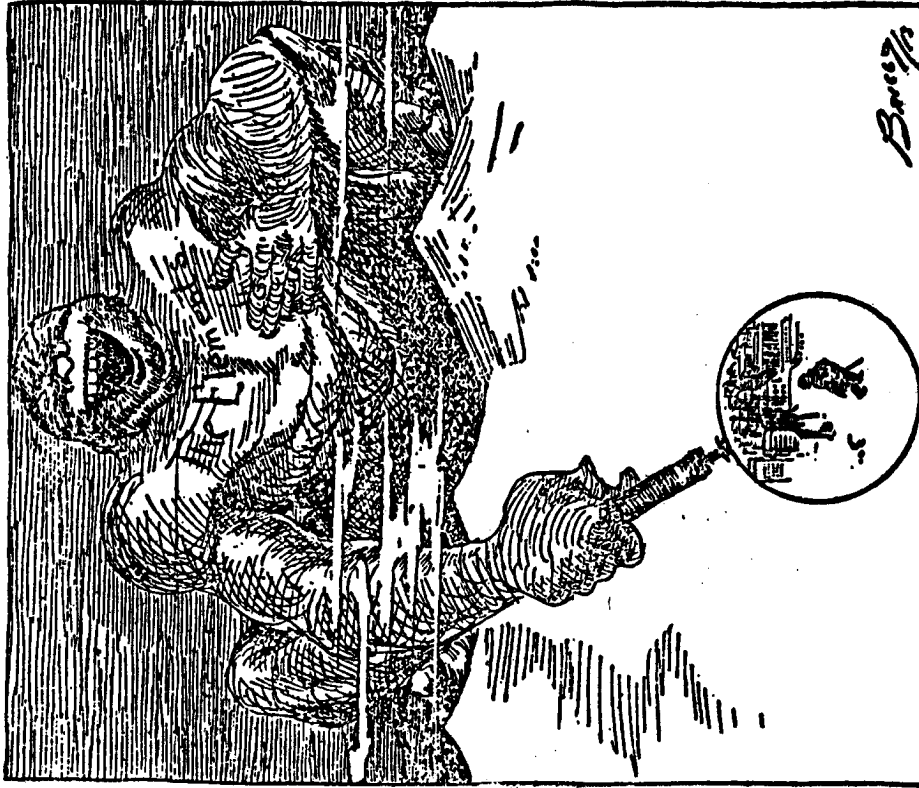
FLOOD CRESTS AND HIGHEST ANNUAL STAGES
OF THE OHIO RIVER AT CINCINNATI, OHIO
(U. S. Department of Commerce, Weather Bureau Office, Cincinnati, Ohio)

| YEAR | DATE | FEET | YEAR | DATE | FEET | YEAR | DATE | FEET |
|------|----------|------|------|----------|------|------|----------|------|
| 1859 | Feb. 22 | 55.4 | 1891 | Feb. 26 | 57.4 | 1920 | April 23 | 52.6 |
| 1860 | April 16 | 49.2 | 1892 | April 25 | 43.8 | 1921 | Dec. 27 | 56.1 |
| 1861 | April 20 | 49.4 | 1893 | Feb. 20 | 54.9 | 1922 | March 18 | 52.2 |
| 1862 | Jan. 24 | 57.3 | 1894 | Feb. 15 | 35.6 | 1923 | Feb. 5 | 47.6 |
| 1863 | April 26 | 52.2 | 1895 | Jan. 14 | 48.4 | 1924 | Jan. 6 | 55.8 |
| 1864 | March 12 | 42.8 | 1896 | April 4 | 47.7 | 1925 | Feb. 18 | 42.3 |
| 1865 | Dec. 23 | 45.1 | 1897 | Feb. 26 | 61.2 | 1926 | Jan. 25 | 46.3 |
| 1866 | March 7 | 55.2 | 1898 | Jan. 26 | 52.2 | 1928 | Dec. 29 | 46.3 |
| 1868 | Sept. 26 | 42.5 | 1899 | March 29 | 61.4 | 1927 | Jan. 27 | 59.1 |
| 1867 | Feb. 23 | 54.1 | 1899 | March 8 | 57.4 | 1928 | July 2 | 43.8 |
| 1867 | March 15 | 55.7 | 1900 | Dec. 1 | 40.0 | 1929 | March 4 | 52.7 |
| 1868 | March 30 | 48.2 | 1901 | April 27 | 59.7 | 1930 | Jan. 15 | 41.0 |
| 1869 | April 2 | 48.8 | 1902 | March 5 | 50.9 | 1930 | Jan. 18 | 41.0 |
| 1870 | Jan. 19 | 55.2 | 1903 | March 5 | 53.2 | 1931 | April 8 | 44.1 |
| 1871 | May 13 | 40.5 | 1904 | March 9 | 45.9 | 1932 | Feb. 7 | 50.4 |
| 1872 | April 13 | 41.6 | 1905 | March 13 | 48.3 | 1933 | March 21 | 63.6 |
| 1873 | Dec. 18 | 44.4 | 1906 | April 2 | 50.4 | 1933 | May 15 | 54.1 |
| 1874 | Jan. 11 | 47.9 | 1907 | Jan. 21 | 65.2 | 1934 | March 9 | 48.6 |
| 1875 | Aug. 6 | 55.4 | 1907 | March 19 | 62.1 | 1935 | March 16 | 53.4 |
| 1876 | Jan. 29 | 51.6 | 1908 | March 11 | 53.4 | 1936 | March 28 | 60.6 |
| 1877 | Jan. 20 | 53.6 | 1908 | April 4 | 55.9 | 1936 | April 10 | 54.0 |
| 1878 | Dec. 15 | 41.2 | 1909 | Feb. 28 | 54.6 | 1937 | Jan. 26 | 60.0 |
| 1879 | Dec. 27 | 42.3 | 1910 | March 7 | 51.8 | 1938 | April 13 | 44.2 |
| 1880 | Feb. 17 | 53.2 | 1911 | Feb. 3 | 49.1 | 1939 | Feb. 7 | 58.3 |
| 1881 | Feb. 16 | 50.6 | 1912 | March 27 | 53.4 | 1939 | April 19 | 58.1 |
| 1882 | Feb. 21 | 58.6 | 1913 | Jan. 14 | 62.2 | 1940 | April 25 | 60.0 |
| 1883 | Feb. 15 | 66.3 | 1913 | April 1 | 69.9 | 1941 | June 9 | 35.5 |
| 1884 | Feb. 14 | 71.1 | 1914 | April 4 | 47.2 | 1942 | Dec. 31 | 50.4 |
| 1885 | Jan. 20 | 46.0 | 1915 | Feb. 7 | 55.9 | 1943 | Jan. 4 | 60.8 |
| 1886 | April 9 | 55.8 | 1916 | Jan. 14 | 53.2 | 1943 | March 23 | 59.9 |
| 1887 | Feb. 6 | 54.3 | 1916 | April 1 | 53.5 | 1944 | April 16 | 48.6 |
| 1887 | Feb. 28 | 54.6 | 1917 | March 17 | 54.1 | 1945 | March 7 | 69.2 |
| 1888 | April 1 | 39.9 | 1918 | Feb. 1 | 61.2 | 1946 | Jan. 12 | 47.3 |
| 1888 | Feb. 23 | 38.3 | 1918 | Feb. 12 | 61.8 | 1947 | Jan. 24 | 41.0 |
| 1890 | March 1 | 56.9 | 1919 | Jan. 6 | 52.0 | 1948 | April 18 | 64.8 |
| 1890 | March 25 | 59.2 | 1920 | March 22 | 54.6 | 1949 | Jan. 30 | 52.8 |
| | | | | | | | | |
| | | | 1950 | Feb. 5 | 59.0 | | | |
| | | | 1951 | Jan. 19 | 49.0 | | | |
| | | | 1952 | Feb. 2 | 56.9 | | | |
| | | | 1953 | March 7 | 36.3 | | | |



From the Chicago Journal

SCIENCE MUST NOT OVERLOOK THE GREAT NEED OF PREVENTING GREAT FLOODS THAT DESTROY LIFE AND PROPERTY



From Chicago Tribune

HOW GREAT IS MAN

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Mr. LeRoy Hoffman and Family: Newport, Kentucky

Mr. Edward J. Klocke and Family: Fort Thomas, Kentucky

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