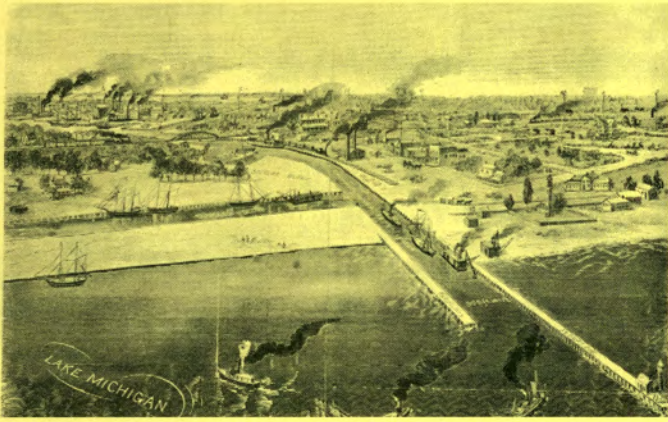




# Chicago's Southeast Side:

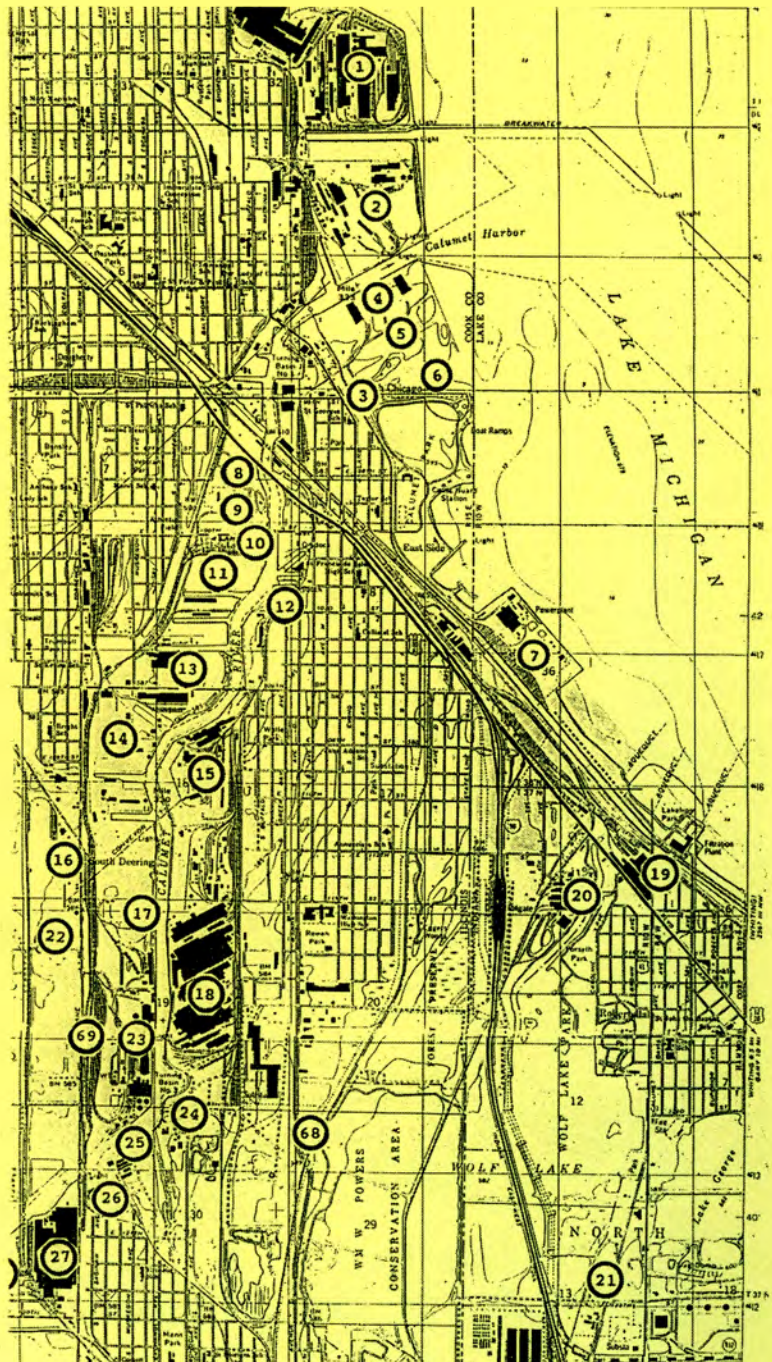
## An Environmental History Industry vs. Nature





## Chicago's Southeast Side Industrial History Map

- 1) 1880 North Chicago Rolling Mill  
1928, 1935 Illinois Steel
- 2) 1974 U. S. Steel
- 3) 1960 Valvoline Oil
- 4) 1997 Illinois Intl. Port District
- 5) 1897, 1928 Iroquois Iron & Steel  
1935 Youngstown Sheet and Tube
- 6) 1960 Connolly Slag Plant
- 7) 1990 Commonwealth Edison
- 8) 1928, 1974 People's Gas Light & Coke
- 9) 1974 Commonwealth Edison Co.
- 10) 1940 South Chicago District Yard
- 11) 1974 Rail to water Transfer Yard
- 12) 1974 Chicago Block Co.
- 13) 1974 General Mills Co.
- 14) 1897 Calumet Iron & Steel  
Cleveland Linseed Company  
1928 Wisconsin Steel  
1954, 1974 International Harvester  
1980 Navistar
- 15) 1928 Riverside Iron  
1954, 1974 Interlake Iron & Steel
- 16) 1928, 1935 Byproducts Coke Corp.
- 17) Great Lakes Carbon
- 18) 1928, 1935 Interstate Iron & Steel  
1954, 1974 Republic Steel
- 19) 1930, 1995 Lever Brothers
- 20) 1906 Western Glucose Co.  
1908, 1995 American Maize Products  
(Amaizo)
- 21) 1961, 1993 Keil Chemical Co.
- 22) 1944 South Deering Yard
- 23) 1960, 1974 Cargill
- 24) 1897 Chappell Chemical Co.  
1928 Calumet Refining Co.  
1935 General Chemical Co.
- 25) 1974 Allied Chemical Co.
- 26) 1974 Globe Roofing Products
- 27) 1928, 1993 Ford Motor Co.
- 28) Allied Chemical Co.
- South of Map Area
- 29) 1897 U. S. Car Co.  
1935 Western Steel Car and Foundry  
1993 Chicago Enterprise Center



The map depicts the dense concentration of heavy industry drawn to the region by the Calumet River. Dates refer to reference maps used not to dates related to individual companies.

**Map courtesy of Keith Ryder,  
Army Corps of Engineers**



# **Chicago's Southeast Side: An Environmental History Industry v Nature**

**by  
Biology  
Chemistry  
History  
Museology  
Classes of Washington High School**

This booklet is one of several outcomes of a cross curricular, project based initiative at Washington High School. The overall project was part of a Chicago Annenberg Challenge Grant overseen by the Chicago Metro History Education Center and has been in operation since 1997. Funding for this booklet was generously provided by the Oppenheimer Family Foundation.

In relating the history of the Southeast Side from an environmental perspective, students have researched topics from the point of view of their respective disciplines. Articles were prepared by the students and are the basis for the text of this booklet. Another out come of the project was the gathering of numerous materials relating to environmental issues in the region. They have been organized as the "Annenberg Environmental History Collection" and are housed at the Southeast Historical Museum in the Calumet Park Field House. Some students in the project participated in the CIMBY (Calumet Is My Backyard) Program. They were involved in environmental restoration projects at various sites in the Calumet region and in the release of Purple Loosetrife Beetles at Wolf Lake.

Many have helped in the development of this booklet. We would like to thank the Southeast Historical Museum for the use of their facilities and for the pictures which they furnished. Special thanks to Ora Coon who assists Museology students. Thanks also to Raymond Mulac for the images of area industries from his postcard collection. Thanks to James Landing of the University of Illinois Chicago, Keith Ryder of the Army Corps of Engineers, and Judy Lihota of CEPA for providing maps for the booklet. Thanks to Marian Byrnes for her presentation to students and information about the environmental movement on the southeast side.

Thanks especially to the students of Washington High School who assisted in this project. This includes Biology, Chemistry, Museology students and students involved in the CIMBY Program. Besides the students listed in the book, the following students contributed written materials: Ingrid Jimenez, Erik Perez, Simona Velasquez, Eileen Figueroa, Carolina Chavez, Yolanda Martinez, Elizabeth Perez, Reyna Soto, and Leticia Segura.

**Washington High School Annenberg Team  
Eva Aseves - Biology / CIMBY  
Rita Koziarski - Chemistry  
Rod Sellers - History / Museology**



## The Early Years: A Pristine Wilderness and Recreational Destination

Chicago's Southeast Side, which is part of the Calumet region, is located at the southern tip of Lake Michigan near the Illinois and Indiana border. It did not become part of the city of Chicago until 1889, when the Village of Hyde Park was incorporated into Chicago in anticipation of the 1893 World's Columbian Exposition. It had, however, served as a destination for Native Americans and Chicagoans who took advantages of the natural features of the marshes, forests and prairies in the area.

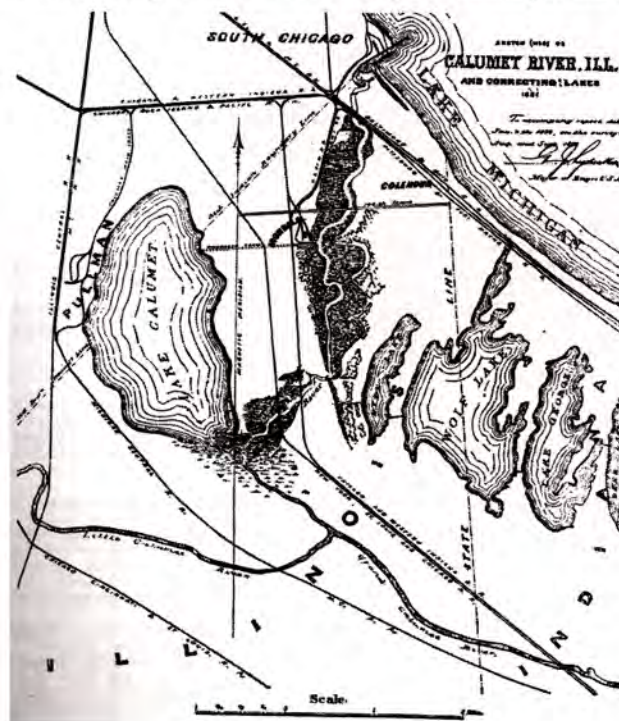
### Calumet Landscape

Thousands and thousands of years ago, the Calumet region was slowly developing. Having been covered by the prehistoric Lake Chicago, this area was once under over sixty feet of water. Slowly, as the lake receded, the Calumet area was uncovered. What was left were remnant beaches, marshes, moraines, prairies, small ponds, and slow moving rivers in northwestern Indiana, and northeastern Illinois.

As the Calumet region began to stabilize, the natural communities changed from savannas and sand prairies to tall grass prairie. The areas geology, along with deciduous forests, boreal remnants, and tall grass land made the Calumet region one of the most diverse in the country. The Grand Calumet River and the Little Calumet River both started in Indiana and flowed into Illinois, meeting the Calumet River and discharging into Lake Michigan. All of the rivers were surrounded by extensive wetlands and shallow lakes.

In the Calumet section of the Lake Plain, a series of shallow lakes was captured by sand spits, as Lake Chicago receded. While the Calumet region was settled, the natural communities of the strand plain formed a transition from sand savanna and sand prairie associated with the dune region in the east to tall grass prairie in the west. The areas geological history, combined with the convergence of the three major biomes (eastern deciduous forests, boreal remnants, and tall grass land), resulted in one of the most biotically diverse regions in the country.

The decrease in the levels of Wolf and Berry Lakes formed Hyde and Deer Lakes between 1872 and 1881. The lowering of the water levels uncovered some of the sand ridges that were underwater previously, creating Hyde Lake in what was the western part of Wolf Lake and Deer Lake in what was the western part of Berry Lake. Hyde Lake and Deer Lake are now gone due to being filled in. Only small portions of Lake George in Indiana remain. Much of Lake Calumet has been filled in, other parts dredged for the International Port, and other parts have been reconfigured. Lake Calumet once had extensive wetlands around it that stretched to the Calumet River. Remnants of these wetlands remain today. The map below shows Hyde Lake, west of Wolf Lake, which no longer exists having been filled in. It also shows Deer Lake in Indiana, now filled in and Lake George in Indiana which only has a small portion of its original area remaining.



Lake Calumet Area 1881



The Marsh and Lake Section occupies most of Illinois portion of the Greater Calumet Wetlands and extends east into Indiana. Marshes and shrub swamps are by these areas. Marshes are wetlands with emergent vegetation and were most often dominated by cattails or common reed. Shrub swamps have at least 50% shrub cover and maybe permanent or semi-permanent wetlands. Shrub species, which commonly occur in these areas, include: buttonbush, red-osier dogwood, silky dogwood, and sandbar willow. These natural areas are dominated by prairie but often include a variety of wetland and/or savanna communities. Chief activities in the marsh areas prior to industrial development were hunting and fishing.

Also included in the Greater Calumet Wetlands are a number of high quality prairie remnants. Prairies occur on black soil within a wide variety of soil moisture conditions and have native grassland species, such as leadplant, big bluestem, and little bluestem. Species that characterize this type of prairie include little and big bluestem, and prairie coreopsis.

Before Europeans ever came to the area, Native Americans crisscrossed the Calumet region using countless trails, including branches of the Sauk Trail and Vincennes Trace. Native Americans settled the region in villages of various sizes and in temporary campsites associated with seasonal migrations. One branch of the Sauk Trail followed Gostlin Street in Hammond and Brainard Avenue in Hegewisch then turning north at Carondelet Avenue. This later was known as the Chittendon Trail and also as Indian Ridge. It is believed that a Native American village was once located near this trail in the vicinity of 116th and Torrence Avenue. Another major trail followed the Lake Michigan shoreline and crossed the Calumet River at the place where the 92nd Street Bridge crosses the river at present. By the time that the first Europeans came to the area, the Native American Trails were well known and well defined, so explorers, hunters, traders and others all used them. The trails were the predecessors of streets, railroad right of ways, highways, and expressways. Most diagonal streets in the Chicago which run contrary to the grid system were former Native American trails. Indianapolis Boulevard and the Chicago Skyway, South Chicago Avenue, and Brainard Avenue all are examples.

(Article by Yolian Cintron and Karina Cornejo. Information from National Park Service Calumet Ecological Park Feasibility Study, 1998)



Map courtesy of James E. Landing and University of Illinois at Chicago,  
Department of Geography Cartography Laboratory



## Early Intrusions

The first intrusions on the natural landscape of the Calumet area came from the railroads and from the Calumet and Chicago Canal and Dock Company which began development of the Calumet River. At this time the area was cat tail marsh crossed by a series of ridges made of sand dunes, sand bars, and sand ridges. The ridges were used originally as Native American trails and later as roads and railroad right of ways.

### Railroads Intrude

The first major factor in changing the natural landscape of the Calumet area was the coming of the railroads. When the railroads came they followed the sand ridges which separated the cat tail marshes of the region. Railroad embankments were built to raise the trackbed above the water that covered much of the land. Land was filled in to provide places to build shops and roundhouses to service the trains. In 1848 the Lake Shore and Michigan Railroad extended its tracks through the southeast side from Englewood. They followed the major transportation corridor which follows Indianapolis Boulevard and South Chicago Avenue. The Pennsylvania and Fort Wayne railroad and Elgin, Joliet, and Eastern railroad came soon thereafter. By 1874 there were four railroad trunk lines in South Chicago. In 1883 the Illinois Central began to operate suburban trains through the community along the lake front.

Hegewisch was at one time a huge marshland avoided by the railroads. Eventually railroads arrived and development began through the efforts of A. Hegewisch who established United States Rolling Stock Company in Hegewisch in 1883. The Chicago and Western Indiana and Pennsylvania Railroads opened stations in Hegewisch.



**Railroad Crosses the Barren Landscape  
of the Hegewisch Area Known as "Arizona"**



**Railroad Tracks Inside U. S. Steel South Works**



## Early Development of the Calumet River

The Calumet River was once called the Callimink. It was called the Callimink by the Potawatomi Indians who used the river for hunting and fishing. The mouth of the Calumet river was once considered as a site for Fort Dearborn but the idea was rejected. The Potawatomi Indians were granted the Callimink Valley by the Treaty of Tippecanoe in 1811. Later the Indians donated land (the Notre Dame Tract) to a Catholic order at South Bend, Indiana. In 1830 Reverend William See was granted permission by the commissioner's Court of Peoria County to operate a ferry across the Callimink River at the head of Lake Michigan. By 1833, the Callimink River became the Calumet River. Lieutenant Jefferson Davis conducted a survey for a ship canal, which was to connect the Calumet River to the Mississippi River. In 1839, a toll bridge was built across the Calumet River. In 1856, the area where the Calumet River joined Lake Michigan was in a decline because of the closing of its lighthouse. By 1869 the federal government provided funds for construction of piers and the improvement of the channel. After the Chicago Fire of 1871 there was increased commercial traffic and the Calumet area became more populated. The area began to grow and the community became known as South Chicago.

The Calumet and Chicago Canal and Dock Company was incorporated by a group of enterprising and wealthy businessmen. They named James H. Bowen as president of the company. Their first office was in William Gear's general store on the River at 93<sup>rd</sup> Street. They relocated to their first new building, built on Harbor Avenue, the first street to be made in South Chicago. They applied to the legislature for a land charter and created a subdivision.. For them to completely retrieve all the land they wanted to buy for the company they had to evict the long-term residents of that area. Since the people had never gone to court to settle the legal proceedings to make the land officially theirs, they had nothing else to do but leave with many feelings of anger and frustration toward the company. By 1871, the company had acquired 6,000 acres near Lake Calumet. Some of their accomplishments were that they graded, drained, and opened streets. They also built docks, dredged, and straightened river lines. They also constructed hotels and a railroad facility.

James Harvey Bowen was the first person who opened the Calumet River and Harbor. He is known as the "Father of South Chicago". He brought the first boat into the Calumet Harbor on April 11, 1871. He was a very important figure in the development of the Calumet region. Bowen's first contact with the Calumet Area was when he became president of the Calumet and Chicago Dock and Canal Company in 1867. He helped to improve the Calumet area. The way he improved the river was by draining sloughs, deepening the river and building piers and docks. He organized the constructions of railroad lines and bridges around the Calumet area. Many other things were built because of this man. Bowen also donated an old building located on Harbor Avenue between 91<sup>st</sup> and 92<sup>nd</sup> street, which became the first firehouse for the first Fire Department of South Chicago. Disaster struck on May 1, 1881 when Bowen was thrown from his buggy at a railroad crossing on Commercial Avenue. What happened was that the horse became startled when he heard an engine blow off steam. The horse jumped which caused Bowen to fall off the buggy into a ditch on the east side of the street. Mr. Doyle carried Bowen to the South Chicago Hotel where they tried to save him. But on May 3, 1881 he died at age 59. In his honor a school was named after him, Bowen High School. (Article by Anaisabel Perez)



**Mouth of Calumet River 1873**





**Calumet River at 102nd Street Early 1900's**

### **Calumet River Use and Abuse**

The Calumet River has been rearranged by human action. The original mouth near Miller was blocked and a channel was dug from the river near Hegewisch to about 90<sup>th</sup> Street in South Chicago. The river was reversed to flow away from Lake Michigan. There have been massive changes through widening, straightening, and deepening the channel and through dredging and filling at Lake Calumet. Early industrial development included factories which shipped goods on the river, an early lumberyard, and other businesses. Later the steel industry, refineries, soap, paint, chemical, and cement plants were constructed. The older mills especially caused incredible air and water pollution. Dirt and grime covered the surrounding communities. There were tons of waste materials and inevitably much of it ended up in the river. Vacant marshes in the area provided space for disposal of wastes, for raw material storage, and if filled, space for further industrial development.

Between 1869 and 1921 the quality of the Calumet region was deeply altered. As industrial production increased, companies used customary practices of the era for removing industrial wastes. Liquids and some solids were dumped in the waterways, usually untreated. Hundreds of acres of wetlands and shoreline were altered and often ruined. Solid wastes were dumped in marsh areas. Mills produced large amounts of phenols and cyanides and expelled them into the water. Pickle liquors were another source of wastes. They were sulphuric acid solutions used to remove rust from steel. Solid waste was removed to vacant land near the factories and dumped. Domestic sewage tainted water supplies and cholera and typhoid epidemics occurred. Various paint, chemical, and oil manufacturers contributed to waste production. There was evidence of muriatic, sulphuric, and nitric acid from these factories.

There are other things that often pollute the Calumet River that contribute to its abuses. Acid rain contaminates the water and toxic chemicals that are in that water often kill the life forms in the water. There are 423 hazardous waste sites around the main area of concern near the Calumet River, regulated under the Resource Conservation and Recovery Act (RCRA), such as landfills or surface impoundments where hazardous waste is disposed. There are more than 460 underground storage tanks in the area of concern near the Calumet River. Atmospheric deposition of toxic substances from fossil fuel burning, waste incineration and evaporation enter the Calumet River through direct contact with the water, surface water runoff and leaching of the accumulated materials deposited on land. Toxins from this source include dioxins, PCBs, insecticides and heavy metals. Groundwater contaminated with organic compounds, heavy metals and petroleum products contaminate the Great Calumet River surface water. (Article by Celina Oliver and Jacqueline Camarena. Information from Industrial Wastes in the Calumet Area by Craig Colton and various web sites)

### **Lake Calumet**

Major changes have been made in Lake Calumet as commercial and industrial development took place. Some of Lake Calumet was filled in for portions of Pullman. The northeast portion was cut off by the building of railroad from Hammond, Indiana to Irondale and then to the Illinois Central at Burnside in the 1880's. The western portion was filled in for the highway construction and later for the Calumet (now the Bishop Ford) Expressway. The northern third was filled in for a city of Chicago garbage dump. The development of the Saint Lawrence Seaway resulted in dredging portions of Lake Calumet to the depth of 26 feet to accommodate the ocean ships.



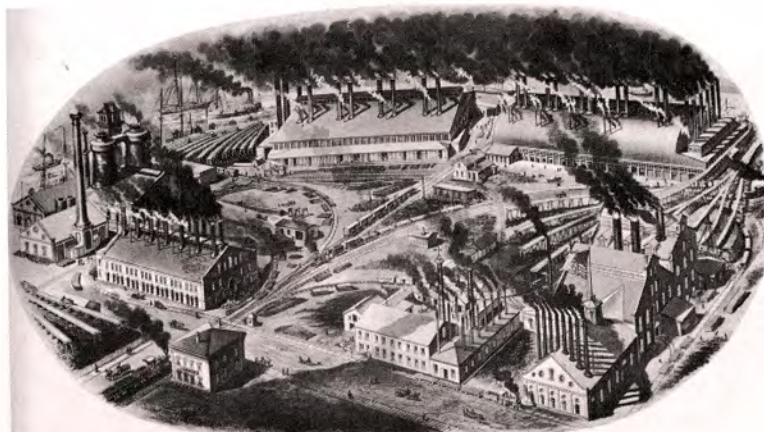
## The Steel Industry Takes Over the Calumet Area

After the Civil War, large scale industrial development began to occur in the Calumet region which was originally not desirable for residential development because of the marshy conditions. The mills came because the Calumet offered all the needs of the growing American iron and steel industry. Vacant land (much of it wetlands) at low prices, access to water transportation, space to dump waste materials, rail connections, and a source of labor made this an ideal location for one of what would become one of the world's premier steel producing regions. Once the steel mills were built, housing development followed. Damage to the environment also occurred.



**Wisconsin Steel Works**

**Wisconsin Steel Works** was opened on July 5, 1875. It was first called the Joseph H. Brown Iron and Steel Company and was the first mill built in the Calumet region. The mill's history includes at least eight changes in ownership and the mill mirrored the growth and decline of steel manufacturing in the United States. The Brown Mill was located at about 109th and Calumet River and its opening proved that the river was navigable. It normally employed from 1000 to 1500 men who lived near the mill in rooming houses supplied by the company. The company also supplied gas and electricity to portions of the town. About 1882, the interest in the mill was sold and it became known as the Calumet Iron and Steel Works. In 1899 it was sold to the South Chicago Furnace Company. In 1902, five of the largest harvesting companies in the country formed the International Harvester Company. Finally, in 1977, the mill was sold to Envirodyne Industries. In 1980, the company had to lay off all of its workers and entered into bankruptcy. By 1982 everything was shut down and demolition activities began. Wisconsin Steel Works covered more than 100 years of operations.

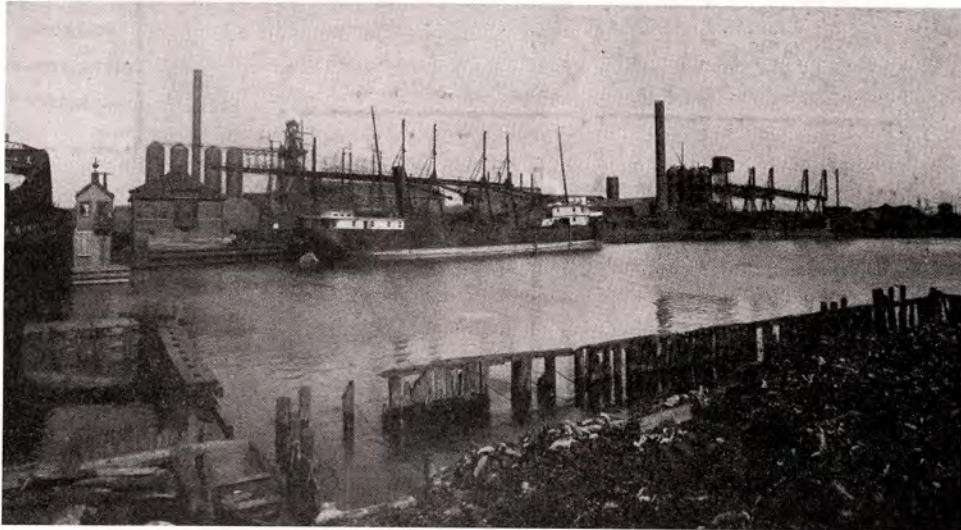


**North Chicago Rolling Mills**



## Steel Industry cont.

**U.S. Steel South Works** opened in 1882. This company began operations as the North Chicago Railway Mill Company. It was renamed the North Chicago Rolling Mill Company and later had grown into the Illinois Steel Company. It was sold to the Carnegie Illinois Steel Company and finally became known as U.S. Steel South Works. This company was located along Lake Michigan at the mouth of the Calumet River. It was a major factor in the development of the communities located nearby. It brought thousands of families to the area and employed thousands of people from different backgrounds and different ethnic groups. The mill once employed close to 20,000 people. U.S. Steel South Works was at one time one of the cleanest and most modern steel mills in the country. The plant was permanently shut down on April 10, 1992. The plant was closed partly because of the stagnation of the economy, but the main reason was that U.S. Steel South Works had outlived its time and had not kept pace with new technologies in the steel industry.



**Iroquois Iron and Steel**

**Iroquois Steel** opened in 1891. It was located at 95th Street and the Calumet River. Rogers Brown was the owner. In 1916, the Schlessinger Company from Milwaukee acquired the property and it was later formed into the Steel and Tube Company of America. In 1923, the Youngstown Sheet and Tube Company took over the plant located along the E.J.&E. railroad. They added new equipment. Three blast furnaces with an annual capacity of 650,000 tons of pig iron kept 800 employees busy. In 1928 a coke plant was erected. 70 coke ovens, which had a coal carbonizing capacity of 800,000 tons yearly consumed boatloads of coal brought in during the open lake season. Millions of gallons of water were pumped daily for use in boilers and condensers, also for cooling purposes around furnances. The company shipped pig iron. Iroquois Steel plant closed and grew into the Youngstown Sheet and Tube Company.



**Grand Crossing Tack / Republic Steel**



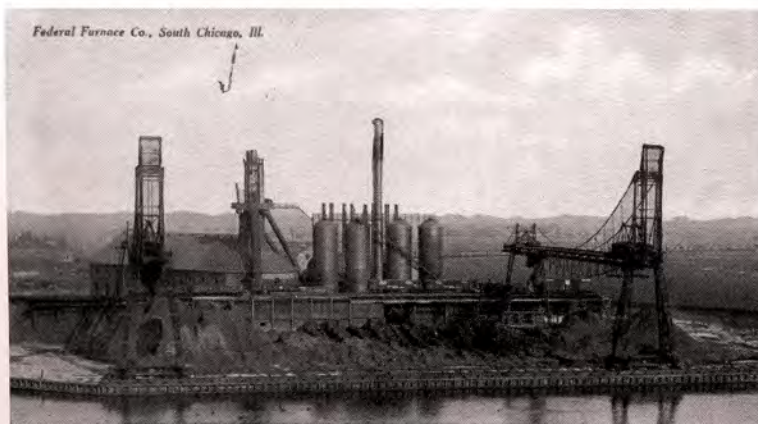
## Steel Industry cont.

**Republic Steel** began as an outgrowth of the **Grand Crossing Tack Company**, and was originally located in 1876 in an area known as Grand Crossing. The plant was relocated to a site at 118th Street and the Calumet River. This was where the first unit of two 50 ton open furnaces and a 35 inch blooming mill were started. In 1936, a new wire mill was added to the plant and at the start of War World II, a completely integrated electric furnace, coke ovens, blooming and rolling mills were built on the plant site for the government under the government orders. The company purchased the operation from the Defense Department. Employment at Republic peaked at 6,335 in 1970 and the company operated 24 hours a day. In 1977, two 225 ton QBOP (Quelle Basic Oxygen Process) furnaces replaced four WWII vintage open hearths. During the 1980's, the Chicago District Plant was the third largest plant of Republic's six districts. In 1984, Republic Steel merged with J & L Steel to form LTV Steel, a wholly owned subsidiary of the LTV Corporation, a Dallas based conglomerate which is also involved in energy, aerospace, and defense.



**Western Steel / Pressed Steel**

**United States Rolling Stock Company** was founded in 1883 by A. Hegewisch. When he became president, in 1882, of the United States Rolling Stock Company, he bought 100 acres to build this company and later he bought 1500 acres, north and northeast of the company, so he could sell lots for houses to the employees that would work for him. The purpose of the United States Rolling Stock Company was to build railroad cars. In 1912 the company changed its name to **Western Steel Car & Foundry**, which made electric steel, grey iron, and malleable iron. Finally, the company changed its name to **Pressed Steel Car Company**. At the outbreak of WWI, in 1914, industry needed to provide materials to improve transportation. Pressed Steel had to produce equipment for rail lines within war zones. In 1940, during WWII, Pressed Steel started to produce large quantities of M 4 armored tanks and allied war materials for the war effort. Also, from 1942 to 1945, many women began to work in the plant. Pressed Steel Car Company received an award for their excellent job in producing tanks on September, 1942. In 1956, Pressed Steel was bought by U.S. Steel after it went out of business and closed. U.S. Steel used the property as a supply warehouse and the site currently is occupied by a City Industrial Park. (Articles by Elizabeth Rodriguez and Sandra Rodriguez)



**Federal Furnace / Interlake Steel**



## **Steel Industry cont.**

**Interlake Iron Corporation** opened on June 23, 1905 under the name of By Products Coke Corporation. In 1915, this blast furnace plant, known as the Federal Furnace Plant, was acquired by the By Products Coke Corporation and both plants since that time have been operated under one management. The plant went to operation in December, 1905. The greatest portion of the coal used by this company came from mines in West Virginia and Kentucky by rail to Lake Erie ports, thence by boat to the company's slip on the Calumet River. The principal product of the plant was Solvay Coke. The coke plant is located on the rails of the Chicago Short Line Railway. Per day, the company employed about 350 persons. The present corporation was formed in December 29, 1929, and consists of blast furnaces and coke oven plants. **Valley Mould and Iron Corporation**, 108th Street and the Calumet River, was previously known as the Thomas D. West Company. The first owners were Thomas D. West and George H. Boyd. The original plant moved several times. In 1925, this company built its ingot mould plant in South Chicago, and it was the first in the United States to manufacture ingot moulds from direct metal which is taken from the blast furnace. It was the largest manufacturer of cupola moulds, and ingot moulds in the United States and perhaps the largest in the world. The Chicago plant furnished western steel producers for many years. (Article by Sandra Rodriguez and Elizabeth Rodriguez)

### **The Steel Making Process**

Steel is an alloy of iron and carbon and possibly other elements. Henry Bessemer developed a process for making steel in 1855 and invented the Bessemer furnace which made steel by refining molten iron with blasts of hot air, hence the name "blast furnace". Blast furnaces are still used to make steel from iron ore but some mills produce steel from scrap metal in electric furnaces. They are often referred to as "mini mills".

In the basic steel making process coal is first baked in huge ovens which burn off most of its gases and convert the coal to coke. Coke burns hotter and cleaner than coal. Coke, iron, and limestone are sent to the blast furnace. Coke provides the heat, iron the basic material, and limestone is a cleanser. For a ton of molten pig iron it takes 2600 pounds of iron ore or ore pellets, 1000 pounds of coke, and a few hundred pounds of limestone or other calcium based material. The materials are melted and the molten iron is collected from the bottom of the furnace. The lime from the stone combines with impurities in the ore to form "slag" which floats to the top of the batch because it is lighter than the metal. The impurities are then skimmed off and disposed of. The molten iron is then made into steel by blowing oxygen onto it. The steel is then poured into molds and cooled. Later the steel is reheated and rolled or flattened into sheets and then coiled. (Article by Marisol Hernandez)

### **Other Heavy Industries in Chicago's Southeast Side**

In addition to the steel mills in the area, other heavy industries were drawn to the Calumet region by the convenient transportation opportunities provided by the Calumet River and its access to Lake Michigan. This contributed to the economy and at the same time contributed to the environmental damage that was occurring in the area.



**Ford Motor Company on the Calumet River**



## Other Heavy Industries cont.

### Ford Motor Company

It was not until the 1920's that South Chicago felt the Ford rush . The company purchased a tract of land, easily accessible by water and rail along the Calumet River in Southeast Chicago and began construction of its second largest assembly plant in the U.S .

Locating the Ford Company on the Southeast Side was a really good idea and very successful . The southeast side had a good work force because so many immigrants had come to the area to work for the many steel mills and upon its completion the Ford Motor Company gave and brought new job opportunities. The factory is still located between 130th and Torrence and the Calumet River. The exact location of the Ford plant is near and in an area that was wood land all around and of course being that the plant was located next to the Calumet River this created problems for mother nature . The Ford plant in the past would dump pollutants in the waters and wastes would be thrown near or inside the forestry around the area . It was it in recent year that the Ford plant did local cleanups around the area and they even agreed to clean up the waters and other areas that were damaged with pollution caused by their plant . (Article by Celina Oliver)



**State Line Generating Station**

The **State Line Generating Station**, located on the shores of Lake Michigan near 106th street, is a coal burning power plant. For years the gases released from the plant contributed to acid deposition in the lake and all surrounding surfaces. Wastes generated by the plant went untreated until recently. Since the Generating Station is located near Lake Michigan the plant found it easiest to just dump their waste in the waters . For years they had dumped waste that came from coal burning power plants right in the plant itself. In recent years this plant to has opted to put a control on the waste put into the waters. They along with other plants in the area have set certain limitations on the wastes deposited in the lake itself. The picture above shows that this plant is built on fill extending into the lake. Outside the plant is the State Line Boundary Marker, probably the oldest monument in the Chicago area. It was placed on the state line in 1833 and it was restored and moved in front of the power plant in 1989. The letters on the original monument have been worn off over the years probably, in part, due to acid rain which is partially caused by the emissions form burning coal.



## Other Heavy Industries cont.

### General Mills

It was in 1902 when Chicago's advantages as a grain center were realized, that a grain elevator was built on a slip of the Calumet River near 104th Street. One year later a flour mill was erected by Star & Crescent Milling Company, having moved from down town Chicago. Later, in 1922, the Washburn Crosby company purchased the flour mill from them. They then began to remodel and rebuild the mill.

In April of 1923 ground was broken for a cereal mill. In August of 1923 the seven story building became the home of the Gold Medal Products Company. Later that same year another Washburn Crosby subsidiary came into existence, The Star Grain Company. It was established to provide the continuous supply of grain and sufficient wheat storage for the Chicago mill operation. The first step to link the two plants occurred in February 1922. The Washburn Crosby Company purchased the flour mill from the Star and Crescent Milling Company. They then immediately began remodeling, rebuilding, and enlarging the mill. The plant was rearranged and new machinery was also installed, while the mill remained in operation.

In early 1929, The Washburn Crosby Mill, and the two subsidiaries, Gold Medal Products Company and the Star Grain Company all became one. This movement lead into naming the company General Mills, which continued to expand and modernize in South Chicago.

Later the company purchased the Rialto Elevator, and an annex was added to it, doubling its capacity. Later in order to supply the Cereal Plant with flour for Bisquick and Softasilk they installed a Redler conveyor. The original Cereal Plant building expanded to eight stories, along with a seven story building was added. During the first year the cereal plant produced pancake flour and other products. As of March in 1949, an 80,000 square foot warehouse was added and put in place for operation. This to many represented more than an increase in space, it was a whole new system of loading. Under this new system, the conveyors line from the Packing Department joins a single main line. Later in 1968, a four story building was added to the Package Food Plant, increasing the plant's facilities by 15 percent.

In 1984, the Flour mill was closed due to the fact that sales were not good. Later, in 1990, The South Chicago Training Center was built in the warehouse, making a four story packaging building. Flour items such as Bisquick and softasilk were removed so that the Chicago plant only produced cereal. In 1995 the announcement was made that the South Chicago Plant would close May 1, 1995. (Article by Ana Campos)



General Mills Predecessors

### Fills and Landfills

Among the major factors that changed the landscape of the Calumet region were the filling in of thousands of acres of wetlands. It is estimated that there were originally over 20,000 acres of wetlands in the Illinois portion of the Calumet area. Approximately 500 acres remain. Cheap land was purchased and filled in with slag, dredge spoils, and other materials so that factories and residential housing could be built. Natural shorelines were changed, most noticeably by the construction of U. S. Steel South Works and the State Line Generating Station. Calumet Park is fill, mostly slag. After WWII the construction of the Calumet Expressway, the construction of the Nike site near Wolf Lake, and the coming of the waste disposal industry with incinerators and landfill further contributed to environmental damage in the area.



**9700 Avenue H Lake Michigan Across Railroad Tracks  
from 1897 Sanborn Fire Insurance Map**

**9700 Avenue H Calumet Park Across Railroad Tracks  
from 1947 Sanborn Fire Insurance Map**



## Fills and Landfills



**Dumping Slag a Common Fill Material**

### Fill Deposits

If there is land that is soft or wet on which houses or roads can not be built upon what do you do? The solution to this is to fill in the soil so it can then be built upon; this is where fills come in. Fill are not at all like landfills in that their purposes are completely different. When a fill is made you are then able to build on the land that was covered but with a landfill you would not be able to do this. The reason for this is that the purpose of a landfill is to have some where to put garbage and not to create a base to build on. Fill deposits consist of many different types, there is industrial waste, municipal solid waste, steel-industry waste, which consists mainly of slag, dredging spoil, and biological sludge. There is also construction debris, natural material, ash and cinders. Wetland and low land can be filled with a lot of different materials just as long as it does its job, which is to allow construction on it.

Steel industry waste is the most wide spread fill type that is used in this area. These wastes consist of mainly slag. Slag, a byproduct of the reduction of iron ore and iron to steel, has been the principal fill material in the Calumet region since the early 1900's. Steel industry wastes compose of most of the fill around Wolf Lake, Lake George, the western shore of Lake Calumet and Little Calumet Rivers. Slag has also been used as the foundation for street, bridges, railroads, and highways in the area.

Dredging spoil is primarily sand and silt. It is usually found in small, thin, strips along the banks of the Calumet Sag Channel, and the Calumet and Little Calumet Rivers. At some locations along the Calumet and Little Calumet Rivers, spoil piled along riverbanks was removed and placed in centralized disposal sites east of Lake Calumet.

Biological sludge, which is primarily sanitary sewage, is also used as a type of fill. These sludges are biologically treated and the water is taken out of it before removal and disposed of at a sanitary landfill. Construction debris consists of concrete, wood, and brick which is produced from the demolition of buildings and roads. Grant Park in Chicago was created with debris from the Chicago Fire of 1871. Most of the debris used as fill in this area was deposited near Lake Calumet. This material has also been used for roadbed for the railroad lines.

Fill deposits serve a beneficial purpose, which was helpful to the development of the city of Chicago. Without fills we would not be able to build up the city as we have today. Without the fill deposits we would not have all the land in which to expand the industries like the steel mills. Since the lands by large bodies of water are softer than other land and not really safe to build on they need to put something in the ground to make it more stable. By doing so they are then sure that the ground would support houses, roads or in this case big factories. Some lakes in the area have been completely filled in to create land for the steel manufacturing, petroleum refining, and storage. The lakes that are now completely covered because of this are Hyde Lake, Deer Lake, and Berry Lake. There are still other lakes that have been partially filled. This was done with the southern part of Lake George, the northern and southern parts of Wolf Lake, and about half of Lake Calumet. Fill deposits are everywhere.

Fill in the Calumet area has been identified from as far back as 1840, the approximate beginning of the industrial and residential development. Large-scale fill deposits in this area began with the onset of industrialization, which was in 1870. Hyde Lake was almost completely filled by the year 1902. Between the time of 1902 and 1927, a large amount of fill was deposited as industrial activity was accelerated. Also, Lake Michigan near the Calumet Harbor was being filled in. Fills of course were also placed near the area where steel was manufactured along the Calumet and Little Calumet Rivers.



## **Fills and Landfills cont.**

### **Fill Deposits cont.**

During this time several rail lines were expanded and new ones were built, which required more fills for roadbeds. The western half of Lake Calumet continued to be filled between the periods of 1902 and 1927.

Between the time period of 1928 and 1953 there was a large increase in the area used for fill. During this time the steel industry continued to expand the use of fills around the Little Calumet River, Wolf Lake, and the east bank of the Calumet River. Filling of Lake Calumet continued with the establishment of solid-waste landfills along the northern shore by the city of Chicago in 1940. Between the time of 1965 and 1977 in comparison to previous periods, a fairly small amount of new land was used for fill deposition. The period from 1978 and 1993 was marked by sanitary landfills at facilities in the vicinity of Lake Calumet.

Fills are clearly a major part of the development of the Calumet region. Without fills we would not have the structures we have now. We would not be able to have roads, railroads, and buildings, all of which are a major part in the development of the city industrially. Not only do fills allow use to built on places where it would otherwise be impossible but also allows wastes to go to good use. Where else would we put the excess sand, clay, ash, etc. that we have from the factories them self? Fills thought it may not seem like it are essential to the Calumet region.

However fill deposits eliminate wetlands and areas which provide habitats and environments for many types of biological entities, thereby contributing to their decline. Fill deposits alter the natural landscape and change the environment. Therein lies their harmful effects. (Article by Teresa Espino. Information from Fill Deposits in the Calumet Region by Robert Kay et. al.)

### **Landfills**

A landfill is a method of safely disposing of solid waste in a controlled manner on a prepared site, using soil to surround and contain the waste materials. Municipal solid wastes and, at times, industrial and agricultural wastes are spread in layers and compacted by heavy bulldozers to reduce their volume.

At least once every 24 hours, a layer of soil of a minimum of 15cm (6in) in thickness is placed on top of the compacted waste and is itself compacted before more waste is added. When the desired depth is reached, the alternate compacted layers of solid waste and soil are covered with a layer of soil at least 2ft thick, which is revegetated. Soils suitable for sanitary landfills are loamy in texture, deep, and moderately permeable and have good natural drainage. Sanitary landfills are often used as intermediate stops on the way to such socially desirable land uses as parks, forests, agricultural land, athletic fields, playgrounds, golf courses, and parking lots. Some of these hazardous wastes can be seen in this community. No matter which way the wind is blowing, unpleasant odors waft through Altgeld Gardens, a housing project on Chicago's Southeast Side. Only four Chicago landfills take hazardous wastes, all on the far Southeast Side: Paxton Land Fill Corp., at 122nd Street and Torrence Avenue; Land & Lakes Co., at 12200 S. Stony Island Ave. and 13416 S. Indiana Ave.; and CID Corp., at 138th Street and the Calumet Expressway. In 1985, People for Community Recovery (PCR) joined a campaign to block the proposed expansion of Waste Management's CID landfill. With help from Greenpeace, the international environmental organization, PCR organized a demonstration to block trucks from entering the landfill in July 1987. In September 1995, the CID landfill was listed as one of many "Illinois Non-Hazardous Waste Landfills", as the Illinois Environmental Protection Agency (1995) demonstrated. Yet, living in the vicinity of the landfill and occasionally driving by the landfill, one can still smell the foul odor of the landfill. This odor that is still present in my community and leaves a terrifying question. Is this landfill really non-hazardous or is it slowing killing the community? (Article by April Brewer)

### **How Landfills Work**

In the environment and ecosystem waste is constantly made. We as people have to figure out what to do with the waste. So to keep the waste under control and out of the way, landfills are made. Landfills are the cheapest satisfactory way of waste disposal. There are several landfills in the Lake Calumet area.

A landfill is a carefully designed structure built into or on top of the ground in which trash or waste is isolated from the surrounding environment. This is done with a bottom liner and a daily covering of soil. There are sanitary landfills and there are municipal solid waste (MSW) landfills. The difference between municipal solid waste and sanitary landfills is sanitary uses a clay liner to isolate the trash or waste from the environment. Municipal solid waste landfills use a synthetic (plastic) liner to isolate the trash from the environment. There are many parts to a landfill. The bottom liner is only one part. The liner separates trash and subsequent leachate from ground water. The liner can be clay or synthetic (plastic). The liner effectively creates a bathtub in the ground. If the bottom liner fails, waste will migrate directly into the environment. This may be dangerous or cause certain hazards. Natural clay is often fractured and cracked. A mechanism called diffusion will move organic chemicals like benzene through a three-foot thick clay landfill liner in approximately five years. Because some chemicals can degrade clay, some landfills use other materials as liners.



## Landfills cont.

The very best landfill liners today are made of a tough plastic film called high density polyethylene (HDPE). A number of household chemicals will degrade HDPE, permeating it (passing through it), making it lose its strength, softening it, or making it become brittle and crack. Not only will household chemicals, such as moth balls, degrade HDPE, but much more benign things can cause it to develop stress cracks, such as, margarine, vinegar, ethyl alcohol (booze), shoe polish, and peppermint oil. A composite liner is a single liner made of two parts, a plastic liner and compacted soil, usually clay soil. Reports show that all plastic liners will have leaks. It is important to realize that all materials used as liners are at least slightly permeable to liquids or gases and a certain amount of permeation through liners should be expected. Additional leakage results from defects such as cracks, holes, and faulty seams. Studies show that a 10-acre landfill will have a leak rate somewhere between 0.2 and 10 gallons per day.

Cells are another part of a landfill. Cells are old and new. This is where the trash is stored within the landfill. Perhaps, the most precious commodity and overriding problem in a landfill is air space. The amount of space is directly related to the capacity and usable life of the landfill. If you can increase the air space, then you can extend the usable life of a landfill. To do this, trash is compacted into cells. Cells contain only one day's trash. The amount of trash within the cell is 2,500 tons and is compressed at 1,500 pounds per cubic yard. This compression is done by heavy equipment that go over the mound of trash several times. Once the cell is made, it is covered with six inches of soil and compacted further. Cells are arranged in rows and layers of adjoining cells. In addition to compressing the trash into cells, space is conserved by excluding bulky materials, such as carpets, mattresses, foam and yard waste.

The storm water drainage system is another part of a landfill. It collects rain water that falls on the landfill. It is important to keep the landfill as dry as possible to reduce the amount of leachate. This is done in two ways, excluding liquids from the solid waste or keeping the rainwater out of the landfill.

Another part is the leachate collection system. This collects water that has percolated through the landfill itself and contains contaminated substances. No system to exclude water from the landfill is perfect and water does get into the landfill. The water percolates through the cells and soil in the landfill much as water percolates through ground coffee in a drip coffee maker. As the water percolates through the trash, it picks up contaminants, (organic and inorganic chemicals, metals, biological waste products of decomposition) just as water picks up coffee in the coffee maker. This water with dissolved contaminants is called leachate and is typically acidic. To collect leachate, perforated pipes run throughout the landfill. These pipes then drain into a leachate pipe, which carries leachate to a collection pond. Leachate can be pumped to the collection pond or flow to it by gravity. The leachate in the pond is tested for acceptable levels of various chemicals (biological and chemical oxygen demands, organic chemicals, pH, calcium, magnesium, iron, sulfate and chloride) and allowed to settle. After testing, the leachate must be treated like any other sewage/wastewater; the treatment may occur on site or off site. Some landfills recirculate the leachate and later treat it. This method reduces the volume of leachate from the landfill, but increases the concentrations of contaminants in the leachate.

Another part of the landfill is the methane collection system. This collects methane gas that is formed during the breakdown of trash. Bacteria in the landfill break down the trash in the absence of oxygen (anaerobic) because the landfill is airtight. A byproduct of this anaerobic breakdown is landfill gas, which contains approximately 50 percent methane and 50 percent carbon dioxide with small amounts of nitrogen and oxygen. This presents a hazard because the methane gas can explode and or burn. So, the landfill gas must be removed. To do this, a series of pipes are embedded within the landfill to collect the gas. In some landfills, this gas is vented or burned. More recently, it has been recognized that this landfill gas represents a usable energy source. The methane can be extracted from the gas and used as fuel. The extraction system is a split system, meaning that methane gas can go to the boilers and or methane flares that burn the gas. The reason for the split system is that the landfill will increase its gas production over time and exceed the capacity of the boilers at the chemical company. Therefore, the excess gas will have to be burned. It is not cost-effective to compress the excess gas to liquid and sell it. The last major part of a landfill is the cover or cap. This is an umbrella over the landfill to keep water out (to prevent leachate formation). It will generally consist of several sloped layers: clay or membrane liner (to prevent rain from intruding), overlaid with a very permeable layer of sandy or gravelly soil (to promote rain runoff), overlaid with topsoil in which vegetation can root (to stabilize the underlying layers of the cover). If the cover is not maintained, rain will enter the landfill resulting from leachate to the point where the bathtub overflows its sides and wastes enter the environment. Covers are vulnerable to attack from at least seven sources. One is erosion by natural weathering (rain, hail, snow, freeze-thaw cycles, and wind). Two is vegetation, such as shrubs and trees that continually compete with grasses for available space, sending down roots that will relentlessly seek to penetrate the cover. Three is burrowing or soil-dwelling mammals ( woodchucks, mice, moles, voles), reptiles ( snakes, tortoises), insects ( ants, beetles), and worms which will present constant threats to the integrity of the cover. Four is sunlight. If any of these other natural agents should succeed in uncovering a portion of the umbrella it will dry out the clay permitting cracks to develop, or destroy membrane liners through the action of ultraviolet radiation.



## Landfills cont.

ultraviolet radiation. Five is subsidence an uneven cave in of the cover caused by settling of wastes or organic decay of wastes, or by loss of liquids from landfill drums. It can result in cracks in clay or tears in membrane liners, or result in ponding on the surface, which can make a clay cover mushy or can subject the cover to freeze-thaw pressures. Six is rubber tires, which “float” upward in a landfill. Seven and last is human activities of many kinds.

In the fall of 1999, the Paxton landfill was in danger of collapsing. A slide could have sent as much as 300,000 cubic yards of garbage onto Stony Island Avenue and on to a business, ironically, one of the state’s biggest environmental cleanup contractors, set off massive fires and release toxic fumes and disease spreading vermin across the area. A worst case scenario could include having to evacuate nearby homes and even close down Interstate 94. The issue was taken to Gov. George H. Ryan’s top staff. The governor soon responded by including funding for Paxton II “stabilization” in his February state budget proposal. In the meantime, work began in March to start pumping out millions of gallons of leachate to relieve the pressure on the sides. The start of the work and potential “garbalanche” at Paxton II drew substantial coverage by the Chicago news media including the *Daily Southtown* and the *Chicago Tribune*. The work was initially slow going as leachate was tapped from individual manholes into trucks for treatment at nearby Clean Harbors Environmental Inc., the firm whose facility was most immediately threatened by a possible collapse. A manifold system to connect the manholes at Paxton was devised to make the process more efficient and less expensive. While leachate pumping continued, Bureau of Land Remedial Project Management Section site manager Stan Komperda and other Agency staff and contractors and consultants tackled the major cause of the leachate buildup. (Article by Joey Rodriguez)

### Problems Caused by Landfills

Landfills made their appearance in this area in the 1940’s. Most were located on former wetlands. The Paxton 1 landfill opened in 1971 accepting general garbage, industrial waste and sludge under permits from the IEPA. Inspections of Paxton 1 in 1974 showed inadequate cover resulting in pooling of water at the bottom of trenches. Paxton 2 was opened 2 years later. It was closed by the city of Chicago in 1992 because of safety concerns. Its inadequate capping and other deficiencies led to recent problems which could have resulted in the occurrence of landslides (garbage slides?) onto nearby Stony Island Avenue and onto adjoining properties and wetlands.

Landfills cause other problems. Waste attracts rats, flies, and other vermin. Garbage trucks cause traffic problems as well as air pollution and roadway damage. Major problems include odors from the garbage and gaseous emissions from the landfills. The gas emissions, made up mostly of methane and carbon dioxide, are offensive. There are litter and dust problems associated with landfills. The heavy equipment used in landfills is noisy and contributes to air pollution. Landfills can cause groundwater pollution through leachate, the liquid from the landfill that can enter the ground. Landfills cause a decline in property values. They are a major reason for the phrase abbreviated NIMBY (Not in My Back Yard). In the United State in 1996, nearly 210 million tons, about 4.3 pounds per person per day, of garbage were collected. (Article by Margarita Silva)



Paxton Landfill



## **Environmental Movement**

A strong grass roots environmental movement developed on the southeast side of Chicago as the ecology of the region was damaged by heavy industry and the large number of landfills in the area. The region contained dozens of industrial sites, several of them steel mills. A huge water treatment plant with acres of sludge drying beds is nearby. 90% of the city's landfills are in the area. Long time residents of the community can tell the wind direction based on the smells they encounter. In the days before clothes driers, residents would wash clothes based on wind direction and the likelihood of dust and soot from surrounding industries spoiling their efforts. Local heroes like Marian Byrnes of the Southeast Environmental Task Force and Hazel Johnson of People for Community Recovery took on the major corporate polluters of the area and won numerous battles. The situation is far from perfect and problems still need to be addressed but many improvements have occurred.

### **History of the Southeast Side Environmental Movement**

Starting in 1979 the Committee to Protect the Prairie, was an organization formed to protect the Van Vliissingen Prairie from development as a CTA bus garage facility. Also The Lake Calumet Study Committee was an organization formed to combat threats to Lake Calumet Wetlands. This was a coalition of Audubon groups, Openlands Projects, and the Izaak Walton League. The Committee to Protect the Prairie was the only grassroots Calumet organization invited to join. In 1982 the Committee to Protect the Prairie had help from Lake Calumet Study Committee and the United Neighborhood Organization, also known as UNO, to prevent development of the Van Vliissingen Prairie as a section 8 housing development.

Hegewisch Organized to Protect the Environment, (HOPE for short), was organized to oppose Waste Management's CID Landfill. People for Community Recovery, (PCR, Altgeld Gardens), was organized around the issue of the arsenic wells in Maryland Manor on the Calumet River.

In 1983 Chicago's first landfill moratorium was enacted. This followed a large rally organized by UNO at St. Kevin's Church in South Deering. Then in 1985 Citizens United to Reclaim the Environment, (also known as CURE), was formed. It is a coalition of Southeast Side organizations, including Committee to Protect the Prairie, HOPE, PCR, Pullman Civic Organization and was later joined by Calumet City Cares and Calumet Citizens for Environmental Protection. CURE's first campaign was to oppose Waste Management's application to put a landfill in the Big Marsh.

In 1986 The Mayor's Solid Waste Task Force issued a report stating that Chicago would need one more landfill, and the only likely location would be O'Brien Lock, at 134<sup>th</sup> Street on the Calumet River. In 1988 The Mayor's Southeast Side Task Force on Water Disposal held a series of public meetings on the Southeast Side to promote the idea of a landfill at O'Brien Lock. CURE organized vigorously to oppose with a slogan of "No Dumps No Deal!" CURE put an advisory referendum on the 10<sup>th</sup> Ward November ballot stating that there should be no new landfills on the Southeast Side. It passed overwhelmingly.

In 1989 the Southeast Environmental Task Force, later changed to the 32<sup>nd</sup> District Environmental Task Force was formed. Thirty grassroots organizations signed on to a position that no garbage incinerator should be planned for the Wisconsin Steel site. In 1990 new organizations were springing up like mushrooms because of the Lake Calumet Airport Proposal becoming the focus of the environmental movement. This airport would have wiped out Hegewisch and most of Burnham and portions of Calumet City.

In 1992 the Lake Calumet Airport Proposal was defeated. In December, 200 people attended a meeting to hear Jim Landing's proposal for a Lake Calumet Ecological Park, which had just been endorsed by Sun-Times columnist Dennis Byrne. In 1993 the Calumet Ecological Park Association was formed to promote the ecological park concept. Efforts began to get the attention of Congress for a feasibility study. Then in 1994 the Metropolitan Water Reclamation District began negotiations with the Waste Management for a co-disposal landfill (sludge and garbage) at O'Brien Lock. Environmentalists took a busload of people to a Commissioners' meeting to oppose the plan. The Commissioners decide on a motion by Jo Gardner to put the negotiations on the back burner and hold a public meeting in the community. 200 people came to a meeting at Rowan Park, all strongly opposed to the landfill. And that was the end of that.

In 1998 a National Park Service feasibility study for the Ecological Park was issued in August. It found that the Calumet region is suitable for designation as a National Heritage Area. In 1999 the Lake Calumet Ecosystem Partnership was formed. The Calumet Heritage Partnership was also formed. Also the Chicago Department of Environment announced plans to build an Environmental Center in the Lake Calumet area. In the year 2000 the City of Chicago and the State of Illinois announced an initiative to preserve 3,000 acres of open land for ecological management, and to develop 3,000 acres of brownfields for industrial use. The Chicago Department of Environment announced an initiative to develop an Ecological Management Plan for the Lake Calumet wetlands. Also the Chicago Department of Planning and Development unveiled a land use plan for the Southeast Side. Numerous community based groups are active in the area. The Friends of Wolf Lake have begun a movement to foster a bistate program to improve the lake. They recently released a vision document summarizing their goals. (Article by Eva Ruiz - Information from Marian Byrnes)



## The Present

The present situation in the Calumet region is a good news / bad news story. Many of the major mills and industries have closed. Others have reduced their operations. The good news is that they are no longer contributing to environmental damage in the area. The bad news is that much of the damage has already been done and has not yet been remediated. Also the reduction in industrial production has resulted in the loss of large numbers of jobs, most of which have not been replaced.

**Wisconsin Steel**, the first mill to open on the southeast side in 1875, closed in 1980. The closing of the steel mill left 2,700 workers without jobs. It also left a site that was heavily polluted. In February of 1988 many former Wisconsin steel workers met to talk about their past and what was in store for their futures. Navistar International Transportation Corporation made a settlement offer of \$14.8 million, which the workers accepted even though they had originally asked for \$90 million. The demolition of Wisconsin Steel was completed in March of 2000. However the site is still not cleaned up and therefore not yet up for sale. Testing of the extent of environmental damage is still ongoing. After testing is done a remediation plan will have to be approved and implemented.

**U.S. Steel South Works** was closed on April 10, 1992. The steel works was in operation for 110 years. It was known as one of the greatest industrial plants in Chicago. At one time the mill employed almost 20,000 workers. As the years went by the workforce at U.S. Steel shrunk. At the time of its closing it had about 700 workers. In February of 1994 South Works was put on the market by USX. They offered the 576 acres of lake front property at an asking price of \$85 million. A plan for South Works site was proposed after a series of community meetings sponsored by the city Department of Planning. A few variations were proposed. They included residential housing, businesses, and even a casino. On June 11, 1999 it was announced that Solo Cup 107 acres on the south end of the U.S. Steel property and will be moving there. Recently Solo Cup announced that 1,000 jobs would be located at the plant to be built on former South works property. There are also plans for a portion of the property to be set aside for park land.

Republic Steel, now known as LTV Steel, is still open but employs a few hundred at its coke plant on the East Side, a far cry from the approximately 7,000 who were employed there at its peak.

**U.S. Rolling Stock/Pressed Steel** was located in Hegewisch behind the South Shore Station on the south side of the tracks. The plant closed in the 1950's and location where the U.S. Rolling Stock was is now an industrial park. General Mills closed in 1995 and its property is up for sale.

In January 1985, the Lake Calumet Study Committee, a private non-profit group, announced a proposal to create a 2,500-acre "wetland ecological park - open space recreation area" in the Lake Calumet area.

James E. Landing, the director of the Lake Calumet Study Committee, prepared the original study endorsing the creation of a National Park in the Calumet area. The National Park Service conducted a feasibility study released in 1998. It recommended the creation of a **Calumet National Heritage Area**, not a full fledged national park. The feasibility study recognized the historical and ecological importance of the region. (Article by Margarita Chavez)

### Exotic Plant Species

As the Chicago area grew, its settlers brought with them mementos from their homelands. Some of these were plants. These non-native plants, also known as invasive or exotic plants, not only took up residence, but have seriously altered the characteristics of the wetlands. One prominent culprit is **purple loosestrife** (*Lythrum salicaria*). This beautiful but destructive plant was brought by European settlers. This plant has created major damage to wetlands across the country. It is a perennial that can grow to six feet in height. One plant can produce two million seeds and its rooting system has altered wetlands. Control measures include manual weeding, herbicides, and the introduction of natural predators like the European *Galerucella calmanianae* and *Galerucella pusilla* beetles.

Another noxious weed introduced by European settlers is **garlic mustard** (*Alliaria petiolata*). It is shade tolerant and has established itself in forested areas. Once established it runs rampant and is hard to control. It self pollinates and has a high seed production. The garlic mustard plant reduces the biodiversity of an area by reducing and displacing native plants. Present control measures include stem cutting, herbicides, and controlled fires.

Fresh water habitats are damaged by the exotic plant **Eurasian water milfoil** (*Myriophyllum spicatum*). It is an aquatic weed which can reproduce from fragments and has a high growth rate. It reaches the water surface and forms a dense layer blocking out sunlight needed by native aquatic plants. Control methods include herbicides, hand raking, and biological controls (use of insects are presently being investigated).

**Phragmites communis** (hollow reed) is a herbaceous grass, a native of Europe and the Mediterranean region. It can grow to be 20 feet tall and forms a wall like barrier reducing the biodiversity of the area. At present, controlled fires and manual cuttings are methods of control.



## **The Future of the Calumet Region Jobs or Recreation or Both?**

### **Lake Calumet Economic-Ecosystem Initiative**

In 1996, the Chicago Department of Environment presented a paper at a workshop sponsored by Illinois-Indiana Sea Grant. The workshop sessions focused on the infrastructure improvements necessary to keep the Southern Lake Michigan area competitive, while others highlighted the natural resources most in need of protection. The Department of Environment, (DOE), received funding from the Illinois-Indiana Sea Grant Program for "The Lake Calumet Economic-Ecosystem Initiative Project". Laying down the groundwork for "sustainable" development, the demonstration project shows how abandoned industrial sites can be cleaned up concurrent with the ecological restoration of adjacent natural areas. The DOE wanted to focus mainly in the Calumet area. It also seeks to advance sustainable development practices through brownfield remediation and ecological restoration of adjacent sites.

With a sustainable development approach, the industrial and ecological features of the Lake Calumet area can be seen as complimentary systems. Those favoring economic development and those who value ecological preservation can work towards a common goal. In the city of Chicago, the Department of Environment is the key agency working on sustainable development through the rescue of abandoned industrial properties, which are called brownfields. The second method is through preservation and rehabilitation of natural resources in this area.

The question remains on whether the old and unused industrial sites will be bought and whether retailers will build new industries or nature centers. In this manner, those favoring economical growth will be pleased and those favoring the environment will also be pleased.

A huge step was taken in June, 2000 when Mayor Daley and Governor Ryan announced a joint city and state plan for the area. The plan calls for creation of the Calumet Open Space Reserve, the building of an environmental center in the Calumet area, cleanup of the Cluster Sites near the Paxton Landfill, and building a renewable energy there. The Calumet Open Space Reserve would protect 3,000 acres from development. These areas include Indian Ridge Marsh (north and south) and Heron Pond. The creation of a Lake Calumet Area Industrial Tax Increment Financing (TIF) District will help fund industrial development. Since this area is so environmentally and economically mixed the future of the area is still unknown.

### **Environmental Center**

A corner stone of the Daley-Ryan plan was an environmental center that would focus on the Calumet region's natural and industrial heritage. The center was to have been located at Indian-Ridge Marsh but may now be located at Hegewisch Marsh. Ford Motor Company gave the project a boost when the company announced a \$6 million contribution to fund the environmental center. Visitors to the area will learn many new things that will help this area be understood and helped.

Five city museums would help develop the center, the mayor and government said. "Prairies, wetlands, oak savannas, oak woodlands - these are rare biological treasures that have survived amidst heavy industry and degraded waters and lands," McCarter said, President of Field Museum. "In the long run, we envision thriving plant communities, abundant migrating and breeding birds, living rivers, and healthy lakes replete with aquatic life supported through ongoing ecologically sensitive economic development and the environmental education of Chicago, Illinois and the world."

The abandoned industrial sites, contaminated areas and garbage dumps serve as reminders that industrial progress does not come without costs. In contrast, the abundant wildlife, including vibrant wildflowers, and rare and endangered bird species, are indicators that industrialization may help economically, but not environmentally. People on the southeast side have mixed feelings on this issue. Many have seen what the industry has done and hope to not repeat the issue.

### **Ford Initiative**

Ford Motors Company surprised many people with the announcement of the new Ford Supplier Park that will soon be built. The plan was part of the Mayor Daley and Governor Ryan initiative to help restore the Southeast Side of Chicago. The plant would be located on 126<sup>th</sup> Street between Avenue O and Torrence Avenue near the existing plant. The plant is to bring 1,000 jobs to the area. The plant should be completed in two phases, one beginning this summer. Torrence Avenue would be pushed east to help the company with the transportation of trucks. The second period of construction should begin next year. The project should be completed within two years.

The plant would help this area economically. The 1000 jobs the plant will bring will bring back the many jobs that were lost with the closing of many industrial sites. This is good news for many people that are tired of driving long hours to their jobs. The Environmental Center and the new Ford Motors supplier park show the contrasts in this area and the need for a balancing of both economic and environmental interests. (Article by Monica Serrano)



## Chicago's Southeast Side Environmental Sites

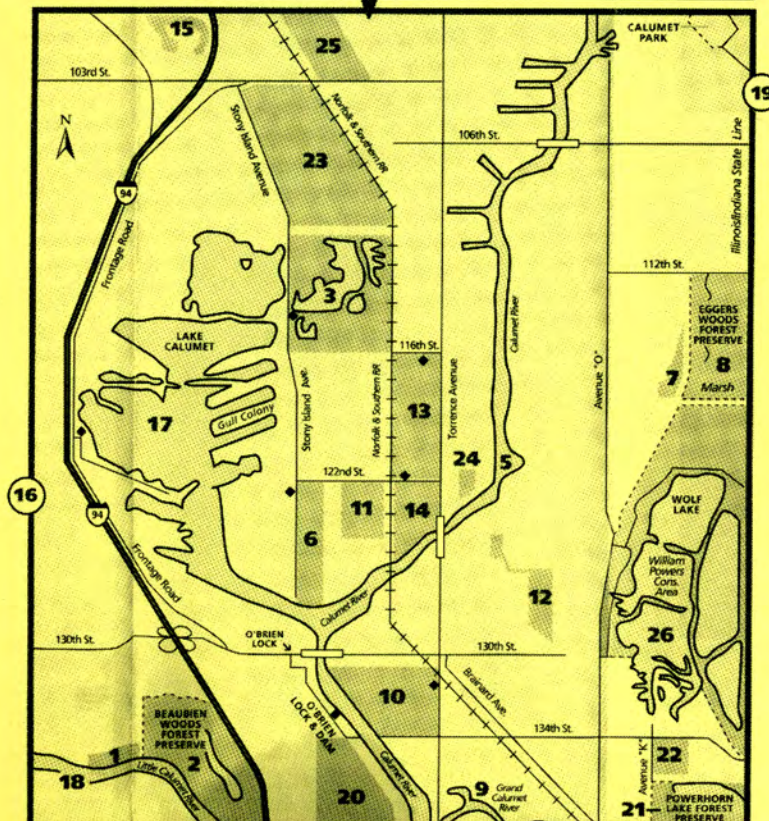
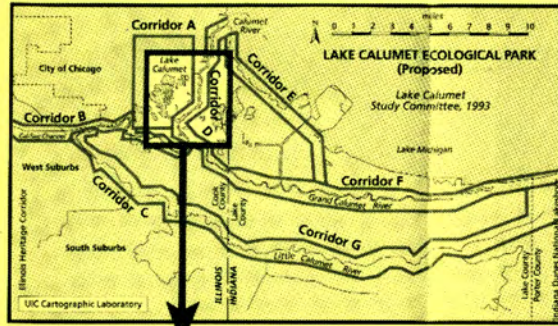
### Lake Calumet Area Treasure Map

The Lake Calumet area is situated between the Illinois Heritage Corridor and the Indiana Dunes National Lakeshore. The map at right shows the proposed corridors which would make up the park lands. A detailed map (below) of the land surrounding Lake Calumet shows the wealth of natural resources threatened by inappropriate development and pollution. Only four of the sites shown on the map are protected areas.

#### Lake Calumet Treasures

Areas marked with an asterisk (\*) are threatened. The size of each area indicated where known.

- 1 \* Altgeld Gardens Marsh  
16 acres
- 2 Beaubien Woods Forest Preserve  
250 acres
- 3 \* Big Marsh  
290 acres
- 4 \* Burnham Prairie (not shown on map)  
175 acres
- 5 \* Calumet River
- 6 \* Deadstick Pond  
80 acres
- 7 \* Eggers Woods Extension
- 8 Eggers Woods Forest Preserve  
250 acres
- 9 \* Grand Calumet River
- 10 \* Hegewisch Marsh  
140 acres
- 11 \* Heron Pond  
50 acres
- 12 \* Hyde Lake  
40 acres



#### Lake Calumet Treasures continued

- 13 \* Indian Ridge Marsh North  
105 acres
- 14 \* Indian Ridge Marsh South  
60 acres
- 15 \* Interchange Marsh  
11.8 acres
- 16 \* Kensington Marsh (not shown on map)  
15 acres (mitigation)
- 17 \* Lake Calumet  
540 acres
- 18 \* Little Calumet River
- 19 \* Migrant Bird Trap (not shown on map)  
16 acres
- 20 \* O'Brien Lock Marsh and Whitford Pond  
120 acres
- 21 Powderhorn Lake Forest Preserve  
175 acres  
Forest Preserve District of Cook County
- 22 \* Powderhorn Lake Extension  
10 acres
- 23 \* Railroad Prairie  
190 acres
- 24 \* Turning basin Wetland
- 25 \* Van Vliissingen Prairie  
160 acres
- 26 William W. Powers Conservation Area (Wolf Lake)  
613 acres  
Illinois Department of Conservation

#### Map Legend

- boundaries of lakes, rivers
- streets, roads, expressways
- boundaries of parks, forest preserves
- + roadside parking spots
- railroad

Map Courtesy of Calumet Ecological Park Association

The map is in stark contrast to the map on the inside front cover of this publication and reflects the sharp contrasts that exist in this part of the city of Chicago. Nature and industry have been hooked in a monumental struggle to control the region. The key question that must be answered is what type of development will take shape in the future? Will we return to the days of environmental abuse? Will development with its jobs and economic benefits stop because of environmental concerns? Or will environmentally friendly economic development take place which balances the concerns of developers with those of environmentalists?