Description of the Fox River and Green Bay Site

About 90,000 years ago, the Wisconsinan glaciation began, which was the beginning of the last ice age. By about 12,000 years ago, the Laurentide ice sheet had created the Great Lakes. One of the largest bays on the Great Lakes was created because of the Niagara Escarpment, which ran from New York through Ontario, Wisconsin, and Illinois. The Escarpment resisted the gouging of the ice sheet, leaving the Door Peninsula in Wisconsin and the Garden Peninsula in Michigan, along with a chain of islands between them. These peninsulas and islands separated the Bay of Green Bay form the rest of Lake Michigan.

Green Bay is about 120 miles long and about 10-20 miles wide. It has a surface area of about 1,600 square miles, about the size of the Rhode Island, and it drains a watershed that is about 16,000 square miles, about half the size of Maine. Native Americans began migrating into the Green Bay area about 9,000 years ago. They reached a population of about 25,000 by 1600 A.D., mostly the Winnebago and Menominee Tribes. During the 1600s, additional tribes moved into the area from the East, including the Ottawa, Huron, Fox, Sauk, Potawatomi, and Ojibwa. The first European explorers reached the area by 1634, and the first European settlements were established by 1671. The human population then quickly increased, following the fur trade in the 1700s, the lumber industry in the 1840s, wheat agriculture in the 1860s, and dairy agriculture in the 1900s. There are now seven counties bordering the bay: Brown, Door, Kewaunee, Marinette, and Oconto in Wisconsin, and Delta and Menominee in Michigan.

The Lower Fox River flows northeast about 40 miles from Lake Winnebago to the Bay of Green Bay. It once included many rapids along its 164 foot drop in elevation — similar to the drop in Niagara Falls—until dams were constructed in the 1850s. It drains a watershed of about 6,500 square miles, a little bigger than Connecticut, at an average rate of about 4,000 cubic feet per second, about one quarter of the Hudson River. Many paper mills were constructed along the banks of the Lower Fox River during 1850-1900, taking advantage of the natural features that made the location desirable. The number of mills peaked at about 24 — the largest concentration of paper mills in the world.

By the time of the modern environmental movement in the 1970s, the Lower Fox River and the Bay of Green Bay represented a nearly perfect intersection of vast natural resources being impacted by obvious and widespread pollution. Many other places had similar or worse pollution but fewer remaining natural resources to impact, like the Cuyahoga River that burned in Cleveland Ohio, the Grand Calumet River in Indiana at the heart of metropolitan Chicago’s industrial complex, and the Passaic River in New Jersey at the heart of metropolitan New York City’s industrial complex. Many other places had similar or richer natural resources but fewer pollution sources, like most of Lake Superior and Alaska.

Paper mills on the Lower Fox River were a source of major contamination throughout much of the Twentieth Century. They discharged sulfite liquors in the 1940s that choked the River of oxygen. They discharged about 660,000 pounds of PCBs in the 1950s-1970s that insidiously affected waters and life throughout the entire Green Bay System for decades more, even as biota recovered in the River when oxygen levels returned to normal. The vastness of Green Bay and its rich natural resources throughout made persistent PCB pollution of the Lower Fox River a very big deal, including fish consumption advisories for nearly every species targeted by anglers in the River and Bay, among them trout, perch, sturgeon, bass, and walleye. Advisories started in 1976 in Wisconsin and 1977 in Michigan, and they eventually covered the entirety of both the Lower Fox River and the Bay of Green Bay. These advisories directly affected nearly 800,000 open water fishing days per year and 50,000 ice fishing days per year.
The Green Bay shoreline of Door Peninsula evolved into a playground for metropolitan Chicago and the Twin Cities. Door County became known as the Cape Cod of the Midwest after it was featured as a 1969 cover story in National Geographic. The Door County communities of Sturgeon Bay, Egg Harbor, Fish Creek, Ephraim, Sister Bay, and Ellison Bay were nestled among its limestone bluffs overlooking the Bay. People flocked to marinas, shops, forests, and five state parks: Newport, Peninsula, Potawatomi, Rock Island, and Whitefish Dunes— notably the most state parks of any county in the U.S.