I remember well River Alliance board chair and Fox River Valley native Joe Van Berkel’s observation when he learned that the River Alliance and other parties were negotiating with a dam owner on the Fox River to manage their dam so that kayakers could get access to the river for whitewater kayaking. It wasn’t just the fact that the Fox isn’t exactly the Snake River of the Midwest, Joe said. It was the fact that the Fox – Joe’s home river with its recent history of abuse, pollution and neglect – could be even considered clean enough to where it was safe to have physical contact with the water. (See Page 7 of this issue for more details on whitewater kayaking on the Fox.)

As kids, Joe and his playmates were warned simply to stay out of the river. All rivers have some lore and legend of danger, but perhaps in the Fox Valley, there were enough fathers working in the paper mills to know what was going down the drain and out the pipes to the river was bad stuff, to be avoided. And everyone knew better than to eat a fish caught in the Fox in the 1960s and 1970s. (See Page 4 for an update on the most notorious and persistent pollutant.)

In August, I poked around the many dams, locks, paper mills both abandoned and converted, and other river infrastructure at Appleton, Kaukauna, Combined Locks and Kimberly. One sight at a dam in Appleton particularly impressed me: there were 30 or 40 white pelicans, standing in the river just below a dam, waiting for an easy lunch of fish. It was impressive because it vividly told the story of the river’s recovery – that the water was healthy enough to sustain a healthy fish population and, ergo, a healthy pelican population.

How did this happen? How did a running sewer of a river recover well enough to attract whitewater kayakers, sustain hungry pelicans, spark economic redevelopment (see Page 3 for an inspiring story in that regard) and provoke local history aficionados to dust off this river’s past and honor it anew?

I would argue regulation. Yes, that dreaded, despised, job-killing, bureaucrat-driven function of government, the gutting of which is on the ascendant again. As we illustrated in an earlier issue of the The FLOW this year about the Wisconsin River, the Fox is a clear beneficiary of the Clean Water Act, a federal law carried out by states to curb pollution such that, as the Act states, waters could be “fishable and swimmable” again. Regulations meant factories and cities could no longer mindlessly dump their wastes in the public’s water. Not only did those regulations not “kill jobs,” they spurred innovations that made industry more efficient.

There are places on the Fox River you still would not want to wade with your toddler. But the Fox Valley communities that were founded because of the river are aiding its resurgence by committing to the river’s aesthetic, historic and cultural recovery. Toddlers and their parents can now appreciate the river in ways the sons and daughters of paper mill workers never could.
Watery Heritage Highway

By Helen Sarakinos

Native Americans found, and European traders and missionaries followed, the liquid pathway cutting diagonally across this piece of North America we now call Wisconsin. Heading upstream from Green Bay, on the Fox River, a river traveler will eventually arrive on the banks of the Wisconsin River. Continuing downstream, the traveler achieves the Mississippi.

There is an ambitious project underway to designate the Fox-Wisconsin corridor, stretching diagonally across the state from Green Bay to Prairie du Chien, as a National Heritage Area. The idea to create this 275-mile long linear parkway has its roots in a study published two decades ago, “Lower Fox River/Winnebago Pool Long Range Plan,” and was taken up by some well-placed champions, including then-Assembly Speaker David Prosser. In 1991, the Wisconsin Department of Tourism and the National Trust for Historic Preservation accepted a plan for the Fox-Wisconsin Heritage Parkway (FWHP) as a heritage tourism pilot project for the purpose of highlighting and enhancing the state’s unique heritage tied to these two rivers. The Parkway lists two main goals: to highlight and promote the historical resources of the Fox and Lower Wisconsin rivers and to increase recreational access to the waterways.

These are goals that just about everyone can get behind, from paddling clubs to real estate developers. It is widely recognized that when natural, cultural and historical assets are protected and promoted, they draw tourism and business. The 275-mile long parkway would encompass every kind of landscape, from the sandbars of the Lower Wisconsin to the wine bars of downtown Appleton, but always in celebration of flowing water and our fascination with it.

Earning designation as a National Heritage Area is no small feat (it takes an act of Congress) and FWHP and its partners have been working hard to make it happen. FWHP has begun to work on an interpretive master plan and on creating an economic impact plan that will examine riverway heritage tourism and riverfront development opportunities. In May of 2010, a study was prepared to provide Congress and the public with information about the resources in the Fox-Wisconsin Heritage Parkway and its feasibility as a National Heritage Area. This study was prepared by Friends of the Fox, Inc. and the East Central Wisconsin Regional Planning Commission (http://heritageparkway.org/planning/feasibility-study/).

The Fox-Wisconsin Heritage Parkway would be Wisconsin’s first National Heritage Area. For more information about the program, visit http://www.nps.gov/history/heritageareas/FAQ/.

High-resolution images of the Parkway can be downloaded here: http://heritageparkway.org/gallery/


Marquette and Joliet and de Toqueville Would Be Impressed

Many Groups Active to Honor Fox River

By Helen Sarakinos

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Neenah: “The riverfront is our front porch”

In some respects, the revitalizing of the Neenah waterfront is a case study in effectively using public-private partnerships to get big things done. One of the critical ingredients for success for the city was its close relationship with Future Neenah, Inc. (FNI), a non-profit that promotes economic development in the city. In 1998, FNI gathered citizens for a community visioning session; a focus on their water resources quickly emerged as a priority for the public. FNI and the city government then partnered to commission a waterfront design and development master plan which identified the redesign of Shattuck Park as a priority project.

The $3.2 million redesign was an ambitious project that involved over 25 public meetings in 12 months and a heroic fundraising effort. While the city supported the project, they challenged FNI to raise 30% of the project cost to match the city’s investment. As former executive director Karen Harkness proudly states, “FNI met our fundraising goal and then surpassed it.” The city got a new public park and FNI pledged to program it, moving the farmers’ market to the park and developing a series of music and outreach programs that attracted thousands to the new public space.

Repurposing the riverfront park was a catalyst for several major private redevelopment projects. Concurrent with park redevelopment, Alta Resources consolidated all its offices to downtown Neenah near the river. Not long after, the hotel nearby the park announced a major renovation. Within five years of Shattuck Park’s dedication, Plexus Corporation chose the site of the former Glatfelter Mill on the river for the location of its world headquarters.

Fox River still creates jobs – through restoration

As redevelopment projects came in, the public amenities increased as well: a total of six new parks and open spaces along the Riverwalk will provide more than 25 acres and 1.5 miles of shoreline along the Fox River for the enjoyment of the public. The City of Neenah has invested approximately $22 million in public/private projects in the Riverwalk over the past 15 years which has, in turn, leveraged over $65 million in private investment and brought over 2,000 jobs to the riverfront. The city has accomplished as much in part because they were not the only entity championing these projects: FNI raised private money and lots of public support for these projects, which ultimately was the key to getting them funded.

For Chris Haese, director of community development for City of Neenah, these numbers are exciting but he is quick to add, “The really wonderful part about this is that the riverfront has become the heart of our city. It’s our front porch and we are proud of it.” And that is a real measure of success.
The magic of carbonless paper still fouls the Fox River

By Chris Clayton

Remember completing a form on carbonless copy paper by pen or typewriter and seeing the letters magically transferred to the duplicate pages underneath? During the heyday of carbonless copy paper, a chemical – polychlorinated biphenyls, or PCBs – made possible the transfer of the dye to the copies.

From 1957 to 1971, Appleton Coated Paper Co.* made billions of sheets of carbonless copy paper. During these years, many other paper mills on the Lower Fox River routinely purchased Appleton Coated’s waste paper and trimmings to recycle in the manufacturing of their own paper products. This situation resulted in a stream of PCB-laden wastewater from the highest concentration of paper mills in the world. Today, a massive amount of those PCBs sits amidst the muddy sediments of the Lower Fox River and Green Bay.

PCBs are very stable chemicals. They don’t break down easily and they bind strongly to river sediments, making them persistent in the environment. It has been 40 to 50 years since PCBs were dumped in the Lower Fox River, and yet nearly two decades of cleaning up PCBs is yet to be accomplished.

In 1982 Appleton locks became home to the first hydroelectric central station in the world. Combined Locks/Green Bay passable for boat traffic. Make the nearly 170 foot drop from Lake Winnebago to Green Bay.

The old “cost vs. risk” thing

The health effects to humans and wildlife from PCB-contaminated sediments in the Lower Fox River have been a constant source of debate, pitting estimates by paper companies against estimates by federal and state agencies. PCBs are toxic, and depending on the nature of one’s contact with PCBs, they can cause a wide range of symptoms such as skin rashes and asthma on the tamer side of the spectrum. PCBs are also carcinogens and endocrine disruptors. The dangers of PCBs were first known and documented as early as the 1970s, and further knowledge of their effects on life led Congress to ban their production in 1979.

Because PCBs persist in the environment and because their health effects are complex, it is virtually impossible to prove all of their negative impacts. The magic of carbonless copy paper has come with a cost no accountant can tally.

So instead, we turn to discussing PCBs in terms of risk: In this case, everyone agrees that people who eat fish caught in the Lower Fox River and Green Bay risk ingesting high levels of PCBs. Since the 1970s, a fish consumption advisory has been in place to warn people of this danger. The Wisconsin Dept. of Natural Resources estimates that following the completion of a clean-up effort, it could be two decades before the advisory for PCBs could be lifted.

A messy clean-up and the vagaries of responsibility

About 700,000 pounds of PCBs were discharged to the Fox River over nearly two decades, contaminating 11 million tons of sediment. Each year, roughly 300 to 500 pounds of PCBs are flushed into Green Bay and Lake Michigan. Estimates suggest that 160,000 pounds of PCBs have already reached the bay and lake where it becomes many times more difficult, in some cases impossible, to remove them.

The Lower Fox River
Thirty-nine miles of Wisconsin history, industry and culture.

* Appleton Coated Paper Co.
And as if physical removal is not challenging enough, there is the crucial issue of getting the responsible parties to pay for the clean-up, which was last estimated at $875 million and rising. Government agencies used data on the discharge of PCBs to argue that those who dumped it should clean it up. Appleton Papers and National Cash Register Corporation (NCR) were held responsible, and as such, they formed a limited partnership to pay for cleaning up the PCBs between Little Rapids and (the water body of) Green Bay. The two companies have spent $300 million over the last three years to fund this work. However, who pays for the remaining clean-up is contentious and unsettled. A federal court case is set to begin in February to determine the validity of Appleton Papers and NCR’s claim that other paper companies should help pay.

U.S. District Court Judge Griesbach put the past into perspective by stating that Appleton Coated Paper applied a “risk management strategy to accept the risk of potential environmental harm in exchange for the financial benefits of continued (and increasing) sales of carbonless copy paper containing [PCBs].” And the risk management strategies continue: the companies assumed responsible for PCB contamination take on the risk of costly legal battles and delays in the clean-up effort with the hope they will reduce their costs in the end.

Clean-up work is on again, off again

In 2008, U.S. Paper Mills Corporation and NCR paid to remove PCB-contaminated sediments in an area immediately below the De Pere dam. Although this site had 10% of the total mass of PCBs in the Lower Fox River, it had only two percent of the contaminated sediments that need to be removed. In 2009, the former Wisconsin Tissue Mills, Inc. and P.H. Glatfelter Company paid to complete the dredging of contaminated sediments in Little Lake Butte des Morts.

Three years ago, the Fox River Cleanup Project began to dredge contaminated sediments in a stretch between Little Rapids and De Pere and pump them to a processing facility along the Lower Fox River in Green Bay. Over 800,000 tons of “cakes” of PCB-laden sediment have been trucked from the processing facility to a landfill in Calumet County. Where the contaminated sediments cannot be removed by dredging from the river bottom, sediments are capped by a combination of sand and stone.

The stretch between De Pere and Green Bay is the next area of focus and contains most of the PCB contamination in the Fox River. If the issue of who pays is resolved by the court, and Appleton Papers and NCR continue the project early in 2012, the clean-up should finish up in 2017. Those are two very big ifs.

Earlier this year, the DNR reported that PCB levels in walleye tested in Little Lake Butte des Morts were down by 75% from levels seen from 1990 to 2003. This is encouraging, given that clean-up in that section of the river was only completed two years prior, and is evidence that removing the PCBs actually works in reducing contamination.

If the courts soon rule that responsible parties are indeed responsible, mending probably the most egregious wound to this storied river is within reach.

*Purchased by the National Cash Register Corporation (NCR) in 1970 and merged with another company in 1973 to make Appleton Papers, Inc.
Wisconsin history, culture and geology captured in the Lore of the Lower Fox Locks

By Matt Krueger

The Fox River is defined by two very different sections of river. The Upper Fox begins in east-central Wisconsin and flows generally eastward through flat marshy land, picking up dozens of tributary streams before flowing into Lake Winnebago. The Lower Fox, located in northeast Wisconsin, flows into Lake Winnebago at Oshkosh. The Lower Fox flows out of the north end of Winnebago, and runs 39 miles to the northeast, bisecting Neenah, Menasha, Appleton, and other cities prior to its terminus in Green Bay. Along its course, the Lower Fox drops considerably—nearly 170 feet (roughly equal to Niagara Falls).

Two physical traits of the Fox River system play dominant roles in the river’s historical and present-day context—the proximity of the Upper Fox to the Wisconsin River, and the steep grade of the Lower Fox from Lake Winnebago to Green Bay. The headwaters of the Upper Fox are only a few hundred yards east of the Wisconsin River in present-day Columbia County, and it was this connection between the two river systems (via a short portage, hence the name of the city located there today) that provided a critical transportation link from Lake Michigan and the Great Lakes to the Mississippi River (see graphic on Page 7).

Nearly two centuries later, as cities and commerce established along the river, the steep grade and waterfalls of the Lower Fox proved a hindrance to commercial traffic. The solution was a system of locks, dams, and canals, constructed between 1849 and the 1870s, that allowed boats to navigate up and down the lower river. In place of the raging torrent of rapids and waterfalls previously there, the locks created a slack-water system maintained at different water levels; “stair-stepping” from Lake Winnebago to Green Bay.

Taming a Fox

Taming the Fox River—today placid and tightly controlled—challenged the creative minds of the state’s founding explorers and entrepreneurs. Fortunes were lost and grand schemes dashed, including the attempt to connect the Fox with the Wisconsin River (thereby connecting two sub-continental basins, the Mississippi and the Great Lakes). That effort was stymied due in part to the difficulty of linking up with an unstable, shifting river. Building the Fox locks that one can see, and actually use today, commenced in the 1850s. Ownership and operational responsibility bounced back and forth between governments and private parties for decades. The lock system was shut down in 1984.

Today, the Lower Fox locks are owned and managed by the Fox River Navigational System Authority (FRNSA), which took over ownership of the system from the U.S. Army Corps of Engineers in 2004. The system was nearly dismantled and filled by the Corps, but at the urging of local citizens, the system was preserved. FRNSA is tasked with managing, operating, and restoring the 17 locks of the Lower Fox, as well as 135 acres of waterfront property. The cultural and historic gem that is the Fox beckons paddlers and boaters today, as both the river’s water quality and the locks are improving. FRNSA has been restoring and maintaining the Lower Fox locks since 2004, with work slated to finish by 2015. For a lock fee, watercraft may pass through the locks at Menasha, Little Rapids at Kaukauna, and De Pere, from May to October, and through the Cedars and four Appleton locks on weekends during this time. Portages are required around the 12 dams on the Lower Fox, including the permanently-closed lock at Rapide Croche, now an aquatic invasive species barrier. Few other places in Wisconsin—or the country—can paddlers and boaters experience historic locks, lock tenders, abundant wildlife, dams, commercial barges and cruise ships, and even whitewater, all on the same river trip. The Fox, and its locks, have it all.
Most hydroelectric dams are governed by a federal license issued by the Federal Energy Regulatory Commission (FERC). Most aspects of a dam’s operation—how much water passes through the turbines, how the land around the dam is managed, and whether a dam’s structure is altered—come under the dam’s federal license, which is reviewed every four decades or so. This process, with its elements of public input and comment, is the bane of many a hydro dam owner.

In the case of a recent relicensing of the Badger-Rapide Croche dam at Kaukauna, the National Park Service, Wisconsin DNR, the River Alliance, and American Whitewater successfully convinced FERC to compel Kaukauna Utilities (KU) to manage flows through the dam to enhance fish spawning and recreational paddling, monitor for invasive species, construct and maintain boat access to the Fox River in the vicinity of the dams, and meet other requirements that make this hydroelectric project much friendlier to fish and people.

Kaukauna Utilities tried to back out of the boat access provisions of the license earlier this year when a kayaker dumped in the river at high water. KU claimed the river was too dangerous for paddling and they didn’t want to be liable. The feds denied KU’s request to revisit the matter, saying, “The fact that there may be risk involved with whitewater boating or other recreational activities does not obviate a licensee’s responsibility to provide recreational opportunities in accordance with area needs.” Well said, FERC!

This month, the Park Service, American Whitewater, and River Alliance will sit down with KU to work out lingering issues so that, by next spring’s (very brief) whitewater season, paddlers will be able to take advantage of this emerging recreational amenity of the Fox River.

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The River Rats of the River Alliance of Wisconsin

Whew!

What a year it's been for Wisconsin's rivers. They've been threatened, championed, debated, and enjoyed. And all year, as we have since 1993, the River Alliance has been there to defend, champion and help you speak for and enjoy your rivers and streams. We could not continue to do this without the support of our members. Thank you.

Happy Holidays!

As we reach the holiday season, won't you consider including the River Alliance in your end of the year giving plans? If you're a member, consider an additional gift. If you're not, become one... or give a membership as a gift to a friend or loved one, and help us continue working to save Wisconsin's rivers.

Happy Holidays!