

THE WAVE OF THE FUTURE

WAYNE COUNTY COULD MAKE COOL CASH FROM SALE OF WATER-GENERATED POWER

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12/3/2006

Sunday, 12/3/2006

DOWNRIVER; Also ran in Plymouth-Canton-Northville; Also ran in Livonia

This might seem like a crazy idea, but here it goes.

I think Wayne County should turn into a public electrical utility.

I got this idea when I was doing research and interviews for a report about Henry Ford's old Phoenix Mill auto parts plant in Plymouth.

Former state Rep. Lyn Bankes proposed using the plant - where workers had to be a single woman or need not apply - to house a women's history museum. But Bankes needs money to start and run the museum.

So I thought about how Wayne County could pump bucks literally from the waters of the Rouge River to support that museum.

But this is something for communities to consider, not just a moneymaker for the museum.

I knew the Phoenix Mill plant was powered by electricity from a generator powered by a turbine propelled by water diverted from Phoenix Lake on the Middle Rouge River. Henry Ford loved hydroelectric power and had dozens of little plants sprinkled around southeastern Michigan.

Ford's generators are largely forgotten now. But at one time, Ford had a string of **hydro** plants along the Middle Rouge from Northville to Westland.

And they can be made to work, as the University of Michigan-Dearborn proved by renovating one of two 55-kilowatt generators installed by Thomas Edison at Ford's Fair Lane estate on the Rouge River's main branch in Dearborn. It reduces U-M Dearborn's utility bill by \$18,000-\$20,000 a year, according to David Wheeler, the Ann Arbor engineer who restored the Fair Lane power plant.

Hydroelectric is about as close as you can come to a free lunch. The water is going downhill anyway, so why not run it over or under a wheel or through a turbine so it can light a few bulbs and leave a few watts to

peddle to Detroit Edison?

Not long ago, I read an article in the New York Times about how residents in some states are being gouged by deregulated utilities with rate increases so high that gosh, they're thinking of handing electricity generation over to government authorities.

I called Melanie McCoy in Wyandotte and asked if she'd ever heard of anything as outlandish as having a municipally owned electrical utility. She laughed. Wyandotte has been generating its own electricity since 1894, and was providing its own public water by 1889. McCoy manages the utility.

Pieces are in place

McCoy listened to my idea: Four of Henry Ford's old auto parts plants are owned by Wayne County. They're the Phoenix and Wilcox plants in Plymouth, the Newburgh plant in Livonia and Nankin Mills in Westland. The dams are still there. The buildings for the generators are still there. At Nankin Mills, the generator installed by Ford and his pal Thomas Edison is still there.

It can be done. In 1986, I wrote about how the City of Ann Arbor refurbished two former Detroit Edison dams on the Huron River. The city sold municipal revenue bonds to raise money for new generators and water control equipment.

Larry Sanford of Ann Arbor's water department told me that 20 years later, the **hydro** plants are still selling electricity to Detroit Edison, bringing money into the city treasury.

So I asked McCoy: Why couldn't Wayne County do the same thing? Instead of selling power retail to residents as Wyandotte does, they could sell it wholesale to Detroit Edison.

Turns out McCoy has been thinking about how to harness the Detroit River's 7 m.p.h. current to generate electricity for sale to Edison. McCoy told me about Gov. Jennifer Granholm's 21st Century Energy Plan for adding megawatts to Michigan's power grid, with a significant portion coming from renewable sources like solar, wind and **hydro**.

"The dams are there," said McCoy. "With the 21st Century Energy Plan and the need for renewables, people are going to be looking at all opportunities.

"With the **hydro** dams here, you're not subject to escalating fuel prices. It's very beneficial for everybody."

I called Bankes to see what she thought. "It's a very good idea," said Bankes, a Livonia resident. "I'm going to make sure that gets into the

feasibility study for the use of the building."

A women's history museum with a working **hydro** generator could educate kids and adults about alternative sources of power, Bankes said.

Hydroelectric trail

I described my idea to Tom Stanton, coordinator of the Michigan Public Service Commission's Renewable Energy Program. He told me of a museum in Milford with a Ford power plant and a dream of linking it to an auto heritage trail.

"I believe there will be a way to work on historic restoration and preservation of many or even all of the Henry Ford remote workshops, refurbish their hydroelectric generators, and weave them all together into a special kind of history trail," Stanton said.

Bill Stockhausen of Northville owns a powerhouse and dam in central Michigan that sells electricity to a utility. With more than 1,000 dams already on Michigan streams, he thinks the potential for cranking out watts is great. "They're already there, so there is going to be no change to the environment per se, and a bunch of them obviously could be generating."

"To be honest, I never thought about this issue," said Hassan Saab, deputy director of Wayne County's Department of Public Services. "But it's a very interesting idea. I'm definitely interested in following up on this."

The best possibility for **hydro** might be Newburgh Lake, where there's a 22-foot head of water to run a turbine and where the county has already spent \$12 million removing toxic silt from the lake bottom, suggested Nancy Darga, retired county parks planner.

I found the squat brass generator at Nankin Mills inside a glass-sided room. David Robbins, county parks planner, said he's proposing a generator for the Phoenix Mill museum. He'd like to install a new, more efficient turbine and generator at Nankin Mills.

Selling electricity to Edison "would help defray the cost" of running the Phoenix women's history museum, Robbins said.

"Also, being a museum, it would be a perfect place to interpret the concept of hydropower."

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MANDI WRIGHT / Detroit Free Press

In Wyandotte, a city bulldozer pushes coal in May to make room for tire chips, which are burned as fuel. The city is a leader in energy management, generating its own electricity since 1894. In another

energy-creating move, Free Press writer Joel **Thurtell** proposes that Wayne County harness the power of the Detroit and Rouge rivers, creating saleable hydropower.

Former state Rep. Lyn Bankes says she'll make sure that **hydro** energy is considered for the use of the Phoenix Mill project.

Photos by MADALYN RUGGIERO / Special to the Free Press
Henry Ford's old Phoenix Mill plant in Plymouth, pictured Nov. 22, is the proposed site for a women's history museum, which needs funding. How about raising money through the sale of hydroelectric power? Ford was interested in hydropower, and dams already exist near many of his former plants, including Phoenix Mill.

MADALYN RUGGIERO / Special to the Free Press
A few office chairs and desks are scattered Nov. 22 around the second level of the former hydroelectric-powered Phoenix Mill auto parts plant on the Middle Rouge River in Plymouth. The facility is owned by Wayne County. The county owns other former Henry Ford plants, too. At the plant at Nankin Mills in Westland, the generator installed by Ford and his friend Thomas Edison is still there. If put to use, it could provide energy to light some bulbs and to be sold to Detroit Edison.(CUTLINE RAN ONLY IN THE LIVONIA ZONE PAGE 8)