Study: Aging dams a danger

Thursday, August 09, 2007

By Jeff Alexander

jalexander@muskegonchronicle.com

Hundreds of dams already choking Michigan rivers will become safety hazards over the next two decades unless the state creates a fund dedicated to removing some of the aging structures, according to a new study.

There are at least 120 dams in Michigan in need of more than $50 million in repairs. By 2032, 93 percent of the 2,552 dams in Michigan will exceed their expected life span of 50 years, according to the study by Public Sector Consultants Inc., a Lansing think tank, and the Grand Rapids engineering firm of Prein&Newhof.

"This suggests that over the next 25 years, many of these dams will need to be removed or repaired due to their age," according to the study. "Selective removal of dams can be a simple, cost-effective way to alleviate both the financial burden and the environmental and safety problems old dams present."

Prepared for the Michigan Municipal League and the Michigan River Partnership, the study recommends establishing a state fund to pay for dam repairs and removals. Without that fund, "little progress will be made to avert this growing problem," the report stated.

Mark Coscarelli, one of the study's authors, said it won't be easy to create a dam maintenance fund given the state's dire financial situation. He said the fund could be part of an environmental cleanup bond that may be proposed in the coming years to replace a 1998 bond that funded the $675 million Clean Michigan Initiative, which is nearly broke.

Thirteen other states have established funds to pay for dam removals. Removing obsolete, unsafe dams can eliminate a safety hazard, restore natural flows and reconnect the ecosystem of streams to the Great Lakes, Coscarelli said.

Removing dams is not technically difficult but can be socially challenging because the structures often are considered community landmarks, he said. Dam removals can restore natural river flows, improve fisheries and other aquatic life and reconnect miles of streams to the Great Lakes.

"These rivers are the arteries, the life blood, of the Great Lakes," said Coscarelli, a senior Great Lakes consultant for Public Sector Consultants.

Officials who have worked on dam removals said the projects are not cheap, easy or quick.

It took five years for officials at the Muskegon River Watershed Assembly to bring about the removal of the Hersey Dam, a dilapidated structure that disrupted a trout stream flowing into the Muskegon River north of Big Rapids.

"There isn't always a local will to take a dam out and there is no single source of money to pay for removing dams," said Gary Noble, executive director of the Muskegon River Watershed Assembly. "These projects are often more expensive than what a community can afford to do on its own."

There are 93 dams and lake level control structures in the Muskegon River and its tributaries. Four of those dams, including the Croton, Hardy and Rogers hydroelectric facilities, are in the river's main branch.

Two dams have been removed from the Muskegon River system in recent years -- the remnants of the Big Rapids Dam in 2001 and the Hersey Dam last year.

Consumers Energy, which owns the Croton, Hardy and Rogers dams, recently announced it would operate those dams on the Muskegon River through at least 2034.

Removing those three hydroelectric dams in 2034, when the federal operating license expires, would cost $99 million. It also would eliminate a source of clean energy and reservoirs that are popular with boaters and property owners, according to a recent Consumers Energy study.

Removing obsolete, crumbling dams usually costs far less than repairing the structures, according to the report.

It cost $274,000 to remove the Hersey Dam. Repairing the structure would have cost about $1 million.

After the dam was removed, Hersey Village President John Calabrese said the restored river was "gorgeous. To me, it looks like it should."