Locks bill may relieve funding loss from Olmsted overrun

By TIM ALEXANDER
Illinois Correspondent

BLOOMINGTON, Ill. — Efforts to create funding for crucial lock and dam repairs on the Inland Waterways System may have received a boost when U.S. Sen. Lamar Alexander (R-Tenn.) called a press conference at the Chickamauga Lock and Dam on the Tennessee River Oct. 24 to announce his American Waterworks Act proposal.

Alexander's bill seeks to relieve the Harbor Maintenance Trust Fund and Inland Waterways Trust Fund, paid into by a 20 cents-per-gallon fuel tax on barge operators, of their burden of funding the repair of the Olmsted Lock on the Ohio River. He said removing the obligation of paying for Olmsted repairs from these funds would free up much-needed revenue that could be used to address inland lock and dam construction and rehabilitation across the country.

"We have two trust funds to deal with waterway infrastructure like the Chickamauga Lock, and neither of them works," Alexander said. "The Harbor Maintenance Trust Fund collects a lot of money, but it doesn't spend it well.

"The Inland Waterways Trust Fund doesn't collect much money, but spends it well. This bill would fix the way our ports and waterways are funded so that we can meet the challenges they face."

Olmsted Lock repairs, originally estimated to cost $775 million, have absorbed nearly all of the Army Corps of Engineers' maintenance budget. The project, authorized in 1988, has cost more than $3 billion to date, with another decade of work to be done, Alexander said.

His legislation would free money by ending the requirement that trust fund monies must be spent on Olmsted, instead diverting more costs to the federal government. A spokesperson for the St. Louis-based Waterways Council, Inc. (WCI), Debra Colbert, said it supports the bill.

"WCI applauds Senator Alexander's forward-thinking approach to modernizing the nation's critically important locks, dams and ports system. The waterways system provides for growth in American jobs and exports, relieves highway congestion, benefits our environment and allows the U.S. to be ready for the expansion of the Panama Canal," Colbert said.

The proposal also includes full federal funding for harbor maintenance and construction programs to expand harbors to accommodate larger vessels after the Panama Canal expansion is completed in 2014, among other aspects of the act.

While the Illinois Corn Growers Assoc. is still reviewing key elements of Alexander's plan, Field Services Director Jim Tarmann said, "We knew the Senate had great interest in putting together a package which would marry key components to fix the funding issues related to the Harbor Maintenance Trust Fund and the Inland Waterways Trust Fund."

He added the legislation could be "a significant step forward" in preparing U.S. ports and waterways to take full advantage of the Panama Canal expansion.

But Scott Sigman, Illinois Soybean Assoc. transportation and infrastructure lead, indicated that Alexander's bill may not pass the muster of current politics.

"I think (Alexander) is biting off more than the political will is currently willing to chew," he said, "but it is a great first step to start the dialogue and discussion. The way the bill process looks, what comes out the other end won't likely look very much like the initial proposal."

He is encouraged by bipartisan support for the American Waterways Act, but "there are bigger fish to fry with broader public appeal," he said, regarding current bills in front of Congress. "Something needs to be done (about lock and dam funding), and at least there is a proposal on the table," he added.

Alexander's bill would include an increase in the fuel tax paid by vessels using the Inland Waterways System. Any infrastructure project with a benefit ratio of 3-to-1 or greater would automatically be authorized under the bill.

According to *Environment & Energy Daily*, an Alexander aide indicated the senator intends to offer portions of the new bill as amendments to a new Water Resources Development Act (WRDA) currently before Congress, if WRDA moves forward. If not, the aide said, Alexander's bill "offers an alternative pathway for authorizing projects."

Gypsum still one of the best fertilizers, says Indiana firm

By CELESTE BAUMGARTNER
Ohio Correspondent

FREMONT, Ohio — Gypsum, or calcium sulfate, was one of the earliest forms of fertilizer, said Ryan McBride, Ohio sales manager for GYPSOIL, a synthetic agricultural gypsum.

"Gypsum has been applied to the soil for more than 250 years," he explained. "It is a nutrient source and also a soil conditioner with soil amendment properties. It improves soil tilth. Gypsum allows for the quick release of calcium and sulfate ions into the soil and reduces soil crusting."

Nick Rulon is part of Rulon Enterprises, a large family farm based in Arcadia, Ind. He grows corn and soybeans; he started testing gypsum about 10 years ago and began using it on all the fields three years ago.

"We've had certain situations as far back as 10 years ago where we needed a lot of sulfur in a certain area; it's really good for sulfur," he said. "We used it regularly because of the overall benefits that we've been getting from it."

Rulon no-tills and using gypsum increased water permeability. This allowed him to use no-till continuously. Testing on side-by-side fields, Rulon found a five- to 10-bushel per-acre increase in soybean yields in fields treated with gypsum and between a 15- to 20-bushel increase on cornfields.

"We are in an every-other-year rotation (applying gypsum)," he said. "We started out with a base one ton to the acre on everything. We skipped a year and now we're variable-rating. That's anywhere between 8/10 of a ton (to the acre) for the whole farm and certain areas where there are water holes, where we put on around two tons. We have mostly silty loam soils."

Rulon, who spreads about 3,000-4,000 tons of gypsum a year on his farm and custom spreads on other farms, used a 5034 model New Leader Compost Spreader, a chain-driven machine, to spread it.

"It just grabs it and throws it right off the back, and it spreads great," he said. "The synthetic gypsum we use comes out of Indianapolis."

Synthetic gypsum is more readily available since the Clean Air Act Amendments of 1990. That gave rise to new scrubbing systems used by many coal-fired utilities to remove sulfur dioxide from their emissions, said Ron Chamberlain, chief agronomist of GYPSOIL. Synthetic gypsum is a byproduct of that process and is sometimes called flue gas desulfurization (FGD) gypsum.

"Farmers who learn about gypsum want to use it because it changes soil structure and allows the soil to become very friable, very aggregated," said Chamberlain. "When it rains, these fields drain better and when the rain moves through the soil and the oxygen follows, then the soil biology becomes very active. So the soils begin to aggregate and farmers will get more working time between rains."

NICK RULON demonstrates spreading gypsum at the Midwest Soil Improvement Symposium, at the home farm last summer.
(Courtesy of GYPSOIL)

When the soil becomes more mellow, as the biology comes into balance the cost of fertilizer may decrease and it will certainly become more effective, Chamberlain said.

Another "win" in this situation is that gypsum, through a couple of methods, actually reduces the amount of nutrient loading in the watershed from treated fields.

"That is a very important thing today, with phosphorous and nitrates moving into our watersheds," Chamberlain said. "Gypsum does have a direct chemical interaction with those nutrients, but also just in opening up the soil, balancing the soil biology and the chemistry, rather than to erode off the field, gypsum helps the material to be absorbed down into the soil where the soil biology then can tie it up.

"The key is that gypsum aids in efficiency in farming practices, and aids the soil's efficiency in gathering the rainfall, the sunlight, the nutrients, and makes a more salable crop. The efficiency of the farmer's inputs is enhanced and the quality and quantity of outputs is increased, as well."

The cost of using gypsum varies, starting with about $20 an acre and up depending on shipping distance, Chamberlain said. For more information, visit *www.gypsoil.com*