INTRO: This is Superior Science News. Today's program explores efforts to educate people about water quality on Lake Superior.

This marks the fifth year of boat tours on Lake Superior and its shoreline. The "View From the Lake" project is a joint effort between the University of Minnesota Duluth and the University of Wisconsin--Superior to promote awareness of water quality issues in and around the lake. Sue O'Halloran is a Water Resources Specialist at UW-Superior.

"We have a sixty-foot tugboat. It belongs to UW-Superior--the L.L. Smith, Jr., and we've used it for research and education programs through the years. About five or six years ago, I started working with Minnesota Sea Grant. We came up with this View From the Lake program, which is still a discussion how we use the land and our impacts on water quality, water resources, but it's also trying to give people an idea of how they can minimize those impacts at the individual level, community level--you know, things that they can do."

O'Halloran says they talk about a number of issues on the tour.

"We talk, you know, about the streams, the wetlands and ultimately the impact on Lake Superior of what we're doing and how we're changing the landscape. So, we talk about increases in impervious surfaces, decreases in our wetlands and changes in the forest cover, native plants."

Minnesota Sea Grant Coastal Communities Educator Jesse Schomberg says this year forest cover and trees are what they'll be talking about.

"When you look at some of the numbers, it's amazing how important those trees are in protecting the streams that are flowing into Lake Superior and then, of course, ultimately Lake Superior itself. So, we're going to focus on them and help folks understand how important those trees are and some things that they can do in their own back yards, but also things that communities can do to try to protect and maintain trees within their community."

Schomberg says the way trees hold water and soil improves water quality.

"A lot of the rainfall that occurs up here gets caught in the leaves of the trees in our forests. That water doesn't reach the ground and it doesn't run off and it doesn't cause erosion and it doesn't bring pollutants into the streams and into Lake Superior. In our case up here with the soils that we have, when you have more water getting into the stream, it causes significant amounts of erosion of the stream itself. And those trees catch that water and keep the flows lower in the streams. They also
shade the streams, which helps keep the streams cooler for our trout. Those roots help prevent erosion as well."

Minnesota Sea Grant Water Quality Specialist Cynthia Hagley says coastal development has reduced forests around the lake's shoreline, but it's not the only threat to trees.

"Another thing that we are seeing is that our deer populations are really high, and deer populations have a big impact on the types of trees that are able to start up and grow. Deer really impact cedar and white pine, and so we're seeing changes in our forests--the types of trees that are growing because of deer and disease problems and other things."

Hagley says people who take the tour will get to sample water.

"We'll look at the aquatic insects and what we would call invertebrates--the little critters that live in the water. We'll also look at how much sediment is in the water--how much soil has eroded into the water in the places that we're at. We'll look at water clarity--just how clear the water is."

The *L.L. Smith, Jr.* will travel to eight ports around the lake, making 26 trips this summer. Hagley and Schomberg say people who've been on the boat in past years can't stay away.

"We are seeing a number of folks that have come every year. There's a couple of folks that have come all the way up from Chicago for every trip and have visited different ports. We do encourage folks to come back year after year. That's why we create a different program and different issues every year so we can encourage folks to come back and learn something new year after year. But, we also like to see new people out as well."

"We've also seen people come on the trips because somebody made them, but it's been fun to watch because we've had people come on who clearly aren't very interested, but by the end of the trip they're digging in the mud from the bottom of the lake and they're doing other things that show that they've gotten really engaged during the time they've been out on the boat. So, it's fun to watch."

The tours have been funded with help from the Wisconsin Coastal Management Program and Minnesota's Lake Superior Coastal Program. O'Halloran says the bi-state effort is proof of the importance of maintaining water quality in the lake.

"It really speaks to the importance of this message and that people really are interested in learning about our big lake out there."

Schomberg says the boat can hold 25 people at a time. They see around 500 people come out for the three-hour tour of the lake each year.
"We haven't yet gotten shipwrecked like Gilligan, but we're hopeful that we'll keep our record up."

(Background sound, Gilligan's Island theme song.)

The cost is 20 dollars to take the tour, and people can begin registering on May 19th. For more information, visit Minnesota Sea Grant's Web site at seagrant dot umn dot edu or call 726-8106.

For Superior Science News, I'm Marie Zhuikov.

OUTCUE: This is a production of the Minnesota Sea Grant program at UMD and KUWS radio.