Cypress Creek Basin survey is completed

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JEFFERSON - Caddo Lake Watershed stakeholders met Monday afternoon for the last time with Espey Consultants Inc. as it has concluded its survey and modeling of the Cypress Creek Basin to best identify the sources and solutions to pollution there.

"I think it went well. I think the stakeholders provided concerns for data used in the model," said Lee Thomas, team leader for Northeast Texas Municipal Water District and coordinator of the Watershed Protection Plan for the Cypress Creek Basin.

"It is an adaptive plan. So we use the best data available to us and one part of the plan will identify where we can use better actual data instead of assumptions," said Thomas. "Models use assumptions and the data will become available as we track things like poultry litter. There are a number of things which will continue to evolve with the plan."

The meeting was at the tourism center with about 40 in attendance.

"I think it was good that the stakeholders got to express their concerns about the data because that will go into the plan itself," said Thomas. "We can implement and monitor preliminary best management practices now, and we did have a lot of stakeholder involvement; we got some input."

Thomas was impressed by the number of experts who gathered to exchange their wisdom in one field or another and all with concerns for the effort for developing the best possible model of the Caddo Lake Watershed.

"It's good to have people with different expertise, with different fields," said Thomas. "Models are only as good as the data which goes in, program that puts out an assumption based on the data provided. As this process continues we will have more data available. We are monitoring with the Clean Rivers Program to monitor water quality looking for water quality problems since 1998 and we continue to collect data almost daily."

Data revealed in the draft plan was recently re-calibrated as more data was revealed in June, well after the initial deadline for additional information was to be received. Its use, however, has made many differences in the way the model was concluded.

"There's still some issues. We've had to do the best we can with the data provided," said Kendra Riebschleager with Espey Consultants. "And when it comes time to implement (practices) on people's properties, they have the right to choose which (practices) are put into place."

In the series of E. coli bacteria load reduction goals, five impaired segments were identified including South Lilly Creek with an 87 percent reduction goal and an average concentration of bacteria at 253.6 per 100 mL.

The standard is 126 colonies per 100 mL or lower as set by Texas Commission on Environmental Quality.

Other streams are any of three sections of Little Cypress Creek with the first at 84 percent reduction and 288.7 concentration, the second at 72 percent reduction and 186.4 concentration and the third has a 74 percent reduction goal at 157.3 concentration.

Black Cypress Bayou has a 22 percent reduction goal with a 130.6 average concentration and James' Bayou was found to need 43 percent bacteria reduction and has a 151.8 concentration average, according to the draft plan prepared by Espey Consultants.

Each stream segment was broken down again with sections identifying the sources for the pollution and corresponding best management practices recommended for remedying these in each area. The biggest cause of bacteria in streams was cattle operations (manure).

In addition to plans for decreasing bacteria were those for decreasing nutrient loads in the water which affect the level of dissolved oxygen, needed for wildlife in streams.

"It's more important to analyze up stream and at the source," said Tim Osting for Epsey Consultants. "How much nutrient reduction is needed to achieve the goal dissolved oxygen?"

As the final meeting with Espey was still being held, there was an apparent effort being made to help the stakeholders get comfortable with the data and models used in the study, said Rick Lowerre, president of the Caddo Lake Institute.

"It's not 100 percent accurate, but it's better than zero. This is the first cut at the kinds of steps that need to be taken by people in agriculture and people with septic tanks to get the pollution problems remedied," said Lowerre. "The model is questioned because it applies better to West and Central Texas streams. We always try to find a one-size fits all formula, but it will always work best where it is developed."

The Caddo Lake Watershed Protection Plan did achieve a major milestone in gathering stakeholders from throughout the Cypress Creek Basin to address pollution issues there, including several state agencies like the Texas Forest Service, Texas State Soil and Water Conservation Board, Texas Parks & Wildlife, Texas Commission on Environmental Quality as well as individuals and agriculture operators from the area.

"We have a broad cross section, which is important because this is a voluntary process. Even if we were perfectly accurate on all of it, we couldn't force anybody to participate in the best management practices," said Lowerre. "There is federal money available if we have a plan that shows what we need to get done. Once we get the plan approved by the (Environmental Protection Agency), then their money can flow here for solutions."

The funding would go to help people commit to the best management practices and also be a boon to the local economy. The next phase is for education and monitoring as stakeholders begin to use the practices.

Incentives and cost share benefits will be offered to stakeholders who use the practices, Thomas said.

"We have to come up with another pot of money to move on to the next phase," said Lowerre. "It is a bit of an adaptive process. Hopefully all people will want to see water quality improvement so we don't see the kind of problems we see at Lake O' the Pines, so we can make it safe by reducing pollution."

Main players which will continue to propagate the education, monitoring and benefits programs will be: Northeast Texas Municipal Water District, Caddo Lake Institute, TCEQ and the EPA.