PUBLIC INFORMED OF CENTER HILL DAM PROGRESS

Liz Engel Herald-Citizen Staff, Cookeville, TN Wednesday, Dec 05, 2007

U.S. Army Corps of Engineers Project Manager Linda Adcock briefs local residents about Center Hill Dam at the Buffalo Valley Community Center last night. It was the first time Corp officials were in Putnam County to address the repair situation at the dam, which should be complete in 2013.

BUFFALO VALLEY -- For the first time since Center Hill Dam was deemed high risk by the U.S. Army Corps of Engineers in January, residents in Putnam County were prepped on the project first hand at a public meeting held here last night.

More than 50 Putnam, Smith and Jackson County residents filled the seats at the historic Buffalo Valley Community Center for one of three meetings scheduled for the area. A meeting was held Monday in DeKalb County and one is scheduled for tomorrow in Smith.

Both Corps officials and local emergency management agency directors were on hand for a brief presentation and to answer any questions residents had about the dam and its repairs, which are scheduled to begin in the next several weeks.

"We believe we are very well in advance with this fix before the dam would become a danger," Center Hill Project Manager Linda Adcock said. "However we do prepare for that type of thing."

The meeting last night was also one of the first times residents got to publicly view the flood inundation maps for the area. For Homeland Security reasons, the maps are currently only available at local Corps offices and at the offices of local county emergency management agencies.

The main presentation dealt with the repairs the Corps is planning for the dam. The major repairs planned for the dam are running slightly behind, but work is expected to begin soon. In the meantime, the Corps has been closely monitoring the dam for months and some minor grouting work has already been completed.

"We have been monitoring seepage, which has been a problem at Center Hill for many, many years -- since the dam was built," Adcock said. "Even the original constructors wrote in the completion report that the dam, because of the (area's limestone) foundation, is going to need continual maintenance through the years to make sure it is safe.

"The dam is already stronger," Adcock said. "And each day we do construction (in the future), the dam will be safer."

Adcock said the first step would be grouting work at the earthen embankment at the dam and the left rim.

"This is the Achilles heel, if you will," Adcock said. "This is where seepage is the most critical."

Grouting, which is when a cement, sand and water mixture is pumped into the dam to fill openings in the rock, makes the dam safer immediately but is not a long-term solution. Eventually a cut off wall, the last major step of the repairs, will need to be constructed.

The project, which will cost \$243 million to complete, is expected to be finished in 2013.

And if the dam were to fail, which Corps officials had said is very unlikely, there would likely be signs of failure in advance. Only a portion of western Putnam County, including Buffalo Valley, Rock Springs and Indian Creek, would be affected if the dam broke.

Residents attending the meeting were mainly concerned with how much time they would have to evacuate in the event of a dam failure, and that answer depends on lake levels.

Where the dam is right now, at its lower winter levels, flood waters could take two to three hours to reach the Buffalo Valley Community Center and just eight hours before reaching a peak height of about 560 feet. The flood of 1929 in the Buffalo Valley reached a maximum height of 523 feet.

Putnam County Emergency Management Director Tyler Smith told the crowd that a weather band radio (\$60-80 at any electronic store) would be the best way to stay informed in the event of an emergency, and that EMA officials would also use the Reverse 911 system to notify the approximately 250 residents in the area.

"Some of the things I need for my office is special needs -- if you've got a neighbor or family member that's bed-ridden or doesn't have a vehicle -- that they have a way to get out," Smith said. "We need to know that for our records, to maybe help get them if this does happen."

Adcock also said residents unable to attend the meeting, but still have questions about whether or not their property is located in the flood plain, can call one of two hotlines. Residents are asked to leave their address, and within two business days, someone will be able to return their call. Those numbers are (615) 548-8581 or 858-4366.

For more information about Center Hill Dam, visit www.lrn.usace.army.mil/CenterHill/.



Listening to the program is Ted and Carolyn (Shanks) Huddleston local residents of Buffalo Valley. They are seated in the 2^{nd} row on the left side.

CENTER HILL DAM WORK COULD BEGIN IN APRIL

Herald-Citizen Staff Friday, Feb 29, 2008

LANCASTER -- The first construction contract for work at Center Hill Dam has been awarded, and U.S. Army Corps of Engineers officials say preliminary work at the site could begin sometime in April.

A contract for foundation grouting was awarded last week to Kiewit - A.C.T., J.V., a joint venture between Kiewit Southern Co., and Advanced Construction Techniques, Ltd., for a price of \$87.4 million.

Linda Adcock, project manager with the Corps, said that price was a bit over an independent government estimate, but within the Corps acceptable range of total cost for that portion of work.

"I estimate the equipment to start arriving and preliminary work to begin in mid to late April," Adcock said.

Grouting is the first major step in the planned rehabilitation. A sand, concrete and water mixture is pumped into the dam, making it safer immediately, but is not seen as a long-term solution.

"Grouting into the foundation provides an immediate defense by slowing the seepage," Adcock said. "(It) provides valuable information about the nature of openings and the condition of the rock, and seals the rock foundation to allow for construction of the concrete cut-off wall. The cut-off wall is the permanent seepage barrier."

Adcock said once necessary permits are approved and detailed designs are completed, work can begin. Grouting is expected to begin late summer.

Main components of the work include:

- * Construction of a work surface along the upstream (lake) side of the main dam earthen embankment.
- * Construction of a work surface along the left rim (just west of the dam). This requires excavation similar to a road cut through the hill just west of the dam.
- * Drilling small diameter holes into the rock foundation and pumping grout in the foundation to fill any voids
- * Installation of an approximate 3,500 foot-long continuous grout line into the main embankment and left rim.
- * Filling a cave feature in the rock foundation of the left rim.

Because of the scope of construction, Center Hill's recreation area, boat launching ramp and picnic area, also known as Ike Park, will be closed once contractors arrive on site and construction begins -- the park is expected to remain closed for the next five years.

"Ike Park will be used by both the grouting contractor and the future cut-off wall contractor for access to the earthen embankment and for contractor equipment and plant area," Adcock said. "Signs will be posted to make sure the public understands Ike Park is closed. The closest alternative ramps are Center Hill Marina and Edgar Evins State Park."

Adcock said the Corps is also expecting brief interruptions to traffic along nearby roadways including Highway 96 over the dam as well as Highway 141 for the duration of the five-year project.

Center Hill was identified by the Army Corps of Engineers in January 2007 as a high risk dam due to worsening foundation seepage. Work is expected to be completed by 2014 and cost as much as \$260 million.

"This grouting contract is an important first step to significantly improve the long-term reliability of the dam and public safety," a Corps press release said.

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