

Earthen dam proposal for Ragged Mountain presented to water authority
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Charlottesville Tomorrow

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The Board of Directors of the

Rivanna Water and Sewer Authority

(RWSA) met Tuesday to

review the latest proposal to construct a new dam at the Ragged Mountain Reservoir

as part of the community's 50-year water supply plan. Opponents of the dam called for more information to be provided, while supporters said it was "cause for celebration" and time to move forward.



Two representatives from

Schnabel Engineering

, based in Glen Allen, presented their recommendation that the RWSA build a massive earthen dam just downstream from the current

Lower Ragged Mountain dam

. The new dam would raise the reservoir's water level by 45 feet and is a design change from the concrete dam proposed by

Gannett Fleming

, the previous consultants.

Randall Bass, a project manager with Schnabel, said that geotechnical investigations at the reservoir had led to the selection of the earthen dam alternative.

"Earthfill dams have been around for a long time. In fact, if you look at the national inventory of dams ... there's about 80,000 dams in the U.S. that are typically above 25 feet [in height] and close to 90 percent of those dams are earthfill dams," Bass said. "If you have earth available, it is a lot cheaper to move dirt than to place concrete."

"When we started looking for on-site aggregate [for a concrete dam], all we found was dirt," Bass said. He also said that an earthen dam would eliminate the need for 15,000 truckloads of concrete material to be brought up Reservoir Road and that it was a project more local contractors would be qualified to bid on.



*Liz Palmer, former member of the
Albemarle County Service Authority Board of Directors*

“For many in this community, this Schnabel report ... is cause for celebration,” said Liz Palmer, a county resident and former board member of the

Albemarle County Service Authority

. “[The RWSA] staff’s foresight, professionalism and dedication will result in our community savings millions of dollars, and so I want to thank them. Now that we have a price for the new dam that is less than the price previously approved ... I urge all of you to move forward as soon as possible to take advantage of the current construction climate.”

RWSA Executive Director Thomas L. Frederick Jr. said the new dam will have a total cost of between \$28.5 million and \$36.6 million, which includes final design and engineering work, an environmental mitigation plan and protection of the Interstate 64 embankment, which the larger reservoir will reach.

“They are seeing very favorable prices in the construction market for dams in the current economy,” Frederick said in an interview. “There is uncertainty how long that period will last, but they have told us if there is a way to get this project to bid sooner rather than later, it is possible we could even see prices below the range that Schnabel has provided.”

“This community has been debating water supply for a lot longer than I have been here, probably 30 or more years,” Frederick said. “One of the decisions that may face this community, if we’ve got an excellent proposal that provides a 50-year or even longer solution, can we do that and then move on to other priorities, or do we keep thinking small and keep debating this issue for another 30 to 40 years?”



Betty Mooney, Citizens for a Sustainable Water Plan

Charlottesville resident Betty Mooney, a representative with

Citizens for a Sustainable Water Plan

, told the board she was concerned a cheaper dam wouldn’t be as safe.

“Gannett Fleming, our last dam designers, were fired not because of the cost of the dam they gave us ... They were fired because they wouldn’t accept the risk of a cheaper dam,” Mooney said. Mooney asked for more information about the lifespan of an earthen dam and the seepage rates included in Schnabel’s design.

“There was a very careful deliberation on that decision,” Frederick said about the dismissal of Gannett

Fleming. "There were a number of factors involved. Their design was overly conservative and led to higher costs, it was not a single issue as Ms. Mooney might suggest."

Mooney has said previously that no decision should be made about the dam's construction until additional studies are completed on dredging the

South Fork Rivanna Reservoir

and on a revised demand analysis.

Neil Williamson, executive director of the

Free Enterprise Forum

, said in an interview he was encouraged by Schnabel's new design.

"I'll be more encouraged when we reach an agreement solving the community's future water supply needs," Williamson said. "I believe some are arguing for additional studies in the interest of delay."



Charlottesville Mayor

Dave Norris

said in an interview that he expects the studies he wants to see will all be done by late summer, allowing a decision in the fall.

"I don't think the construction market is going to be dramatically different a few months from now. If we find that the existing dam can be simply repaired and enlarged at a cost that is significantly cheaper than building a new dam, then if we can still meet our long-term needs with that approach, then we need to continue to ask those questions," Norris said. "I have no interest in prolonging this debate for many more months and years. It needs to be decided by summer or early fall."

At the very beginning of Tuesday's meeting, Albemarle Supervisor

Kenneth C. Boyd

seized an opportunity to add the dam to the assumptions in the RWSA's five-year capital budget, a document he thought should include the major elements of

the plan approved in 2006

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"We have an approved [water supply plan] right now," Boyd said. "I am more inclined to think we ought to go ahead and put forward a [capital budget] based upon our approved plan."

"I hate to put staff through all the effort of pricing that plan that may well get changed," Norris responded. "But for the purposes of starting the discussion that is fine."

The board reached consensus to add the water plan projects to the capital budget. A draft of the proposed capital budget will be presented to the RWSA board at its July meeting.

The RWSA has scheduled two public information sessions related to recent water supply studies.

The first, which will focus on the new earthen dam design, will be held at 6 p.m. June 1 at CitySpace in the Market Street Parking Garage. The second meeting is to discuss the next phase of the South Fork Rivanna Reservoir dredging feasibility study. That session will be held at 6 p.m. June 30 at the same location.