

Scientists OK wastewater study methods

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HYANNIS — The science behind the Cape's multi-billion dollar wastewater clean-up meets scientific standards, an expert panel said Wednesday.

The peer review of the Massachusetts Estuary Project was funded by the Cape Cod Water Protection Collaborative and conducted over a three-day period this week by a group of six scientists who specialize in different aspects of wastewater management.

The panel told the collaborative and audience members Wednesday that they found no reason in the scientific methodology to delay work on wastewater solutions.

More than 100 people from the Upper to Lower Cape filled the Barnstable Town Hall hearing room for the 1 p.m. meeting.

"It is the unanimous opinion of this panel that we believe the MEP modeling approach is scientifically defensible" and functionally adequate, said Victor Bierman, the panel's chairman.

The panel reviewed computer models developed by scientists at the University of Massachusetts Dartmouth, under contract with the state Department of Environmental Protection, that were used to predict the various sources of nitrogen levels and other contaminants that pollute the Cape's coastal waters.

In most cases, the major source of nitrogen that could be controlled was septic systems. High levels of nitrogen in the water fuel algae blooms that deplete oxygen levels and hurt the region's fisheries, tourism and economy, supporters of the project say.

These computer models are used to determine how to restore coastal water bodies to health and to analyze the effectiveness of proposed remedies.

In cases where the project's models recommended centralized sewer systems to restrict nitrogen flow, residents in various balked at the high price tag and raised the possibility of flawed science. The expense also moved some to advocate alternative methods of removing nitrogen that would not include large-scale engineering and costly construction projects.

But the peer review backed the scientific veracity behind the project's approach, pointing out that various models used by UMass — such as watershed delineation and watershed loading — are already well-documented and tested, Bierman said.

"These models weren't just made up," he said.

With peers backing the science, residents and officials can tackle other pressing questions as the project moves forward, said Andrew Gottlieb, executive director of the Cape Cod Water Protection Collaborative in an interview after the meeting.

"Now we still have some difficult decisions to make," Gottlieb said, mentioning high costs associated with the plan. "The one thing they don't have to worry about now is the validity of the science."