

BUZZARDS BAY WASTEWATER TREATMENT FACILITY QUESTIONS AND ANSWERS

October 19, 2017

What is the proposed wastewater treatment facility?

The proposed facility is a pre-packaged factory-built unit that will treat up to 100,000 gallons per day of wastewater, then discharge the clear, odorless, treated effluent into leaching beds. It will be delivered by truck and installed in a building on the same site as the proposed police station, with the leaching beds under the parking lots.

What will it look like?

The only feature that will be visible above ground will be a 40 by 100-foot building to be erected between the proposed police station and the National Guard armory. The building design will be compatible with the police station, using similar roofing, siding, and architectural features. Associated storage tanks, as well as the leaching beds, will all be underground and not visible except for access manholes. The building will be situated with its narrower end toward the street to minimize its visual impact.

How does it work?

After solids are screened out, the wastewater is then exposed to aerobic bacteria through a series of rotating discs. It then goes through other processes, including ionization to reduce nitrogen content, before being discharged into the ground. The solids are periodically trucked to a larger facility for treatment and disposal.

How long will it last?

These facilities are designed to last 25 years or more, and can be relocated to other sites when they are no longer needed or are supplanted by a larger facility. The treatment units can also be replaced in whole or in part to extend the life of the facility within the existing building.

Will there be any odor from the facility?

No. Because this is a self-contained unit, with charcoal filters on all vents, there is no odor outside of the building, and very little within the building. There are no open lagoons like you see in Hyannis, Wareham, Plymouth, and other large treatment plants.

Why build a wastewater treatment facility?

There are three owners of substantial parcels of vacant or underutilized land on Main Street in Buzzards Bay who have declared their intent to develop their properties, but cannot proceed without a commitment from the town to provide wastewater capacity. This project will provide the needed capacity to serve all three developments, plus additional properties.

The total potential value of the proposed developments is in excess of \$100 million. Once completed, those developments will pay about a million dollars a year in new real estate taxes, and provide several hundred year-round jobs. Moreover, these developments are likely to catalyze additional economic activity in downtown Bourne.

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Why should the town build a treatment facility to benefit private developers?

Bourne targeted its downtown area along Main Street in Buzzards Bay for revitalization in its Local Comprehensive Plan more than a decade ago. The Cape Cod Commission endorsed this concept and designated the downtown as a Growth Incentive Zone to streamline permitting and encourage both new development and redevelopment of derelict properties. The state has paid for substantial upgrades to Main Street with new lighting, landscaping, and sidewalks.

Private developers are more likely to build in areas that have sewer capacity available than to pay the substantial costs and endure the long permitting requirements to build their own wastewater facilities. Bourne has chosen to expand its existing system to encourage new development. As more people move into the downtown area, additional retail and service businesses will follow. Consider this project to be a necessary catalyst to development that provides new jobs, more tax revenue, and creates a vibrant downtown for all of Bourne.

Will the treatment facility delay construction of the police station?

No. The timing of the new police station on the same site as the treatment facility is being coordinated in the same timeframe with no delays for either project.

When is the treatment facility scheduled to open?

If approved at the Special Town Meeting, the projected completion date for the wastewater facility is spring 2019, prior to completion of the police station.

Will there be any cost savings by building both projects on the same site at the same time?

Very likely yes. Site clearing, utility installation, and parking lot construction will benefit both projects. Current budgets do not include any potential cost saving, however, in case funding for the wastewater project is not authorized.

Why has it taken so long to develop?

Wastewater treatment facilities with on-site disposal require extensive hydro-geologic testing of the site; state environmental reviews of site tests and plans; and multiple state and local permits that are not needed for building projects such as the DPW garage, police station, and schools.

The current project has completed all required site testing and environmental reviews, and is awaiting approval of only one more permit for groundwater discharge, which is assured. A certificate of approval under the Massachusetts Environmental Policy Act (MEPA) was issued in June 2016, and was revised to include the new police station on the site instead of the previously proposed ball field. The revised filing was approved in July 2017.

Will this facility mean an end to pumping wastewater to Wareham for treatment?

No. Bourne will continue to send up to 200,000 gallons per day to Wareham under the current inter-municipal agreement, which cannot be cancelled by Wareham.

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What will this facility cost to build?

Although detailed project design is not yet completed, Daedalus Projects Incorporated has provided a conceptual budget estimate of \$5,249,000 for construction, including a 15 percent contingency. Engineering, project management, and other costs bring the total to \$6,893,000, \$335,000 of which was authorized by the Annual Town Meeting. This estimate is considered to be generous so as to avoid having to request additional funding after bids are received. It does not reflect potential cost savings, nor does it reflect any grant funding.

How will it be paid for?

The most likely source of funding for this project is municipal bonding. The town has been awarded a state MassWorks infrastructure grant of \$1.5 million that will reduce the maximum amount to be financed to \$5,058,000. Additional grant money for up to \$2.6 million may be available through a Federal economic development program. Application for that grant has been submitted in partnership with the Cape Cod Commission, and is currently pending review.

The remaining \$2.4 million can be paid by the existing sewer enterprise fund, enhanced by user fees paid from new development connections. Those fees will also pay all operating and maintenance costs. It's important to note that there will be no additional costs imposed upon existing customers or taxpayers.

What effect will this project have on the tax rate?

If the federal grant does not come through, or is less than the \$2.6 million requested, the remaining cost can be bonded by the town with no need to increase the property tax rate. The debt service for this amount can be easily covered by the capital budget within existing policy. New development that is enabled by this project will produce substantial new tax revenue, however, that will help to stabilize the tax rate in future years.

Will a town-wide referendum be required after the town meeting vote?

No. The town is requesting approval of borrowing authority for the full cost of the project. It does not require a tax override or debt exclusion, so no referendum is needed.

Will this plant have a separate enterprise fund from the existing Buzzards Bay sewer system?

No. This new facility will be part of the current enterprise fund. It will simply allow a 100 percent increase in available wastewater capacity for the downtown area of Buzzards Bay.

Will current users be saddled with either capital or operating costs of the new facility?

No. Financial projections indicate that new capital and operating costs will be the same as current costs and will be covered by new users added to the sewer system. As new developments tie in, however, fixed annual costs of the system will be spread over more users, so annual fees for existing users will be stabilized.

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Will additional town employees be needed to operate and maintain the new facility?

The town will hire one additional operator who will run this plant and the existing plant at the high and middle schools. Other current town employees will also be trained to operate the plant. All operating and maintenance costs of the new facility will be paid from user fees.

Who will this facility serve?

The proposed plant will effectively double wastewater capacity in Bourne's downtown. Nearly half of the 200,000 gallons per day that can theoretically be sent to Wareham is allocated to properties that are vacant or not using their full allotment. The new plant will add 100,000 gallons to that capacity, all of which will be available for new or renewed development. Wastewater from all properties east of the Community Center will be diverted to the new plant. That will allow the new plant to operate efficiently, and will free up 100,000 gallons per day for use by new buildings. Currently proposed developments will use much of that capacity.

What happens when that capacity is used up?

State environmental regulations require much higher wastewater allocations than are actually used by newer buildings. After several years of use, those allocations can typically be reduced by 40 percent, based upon actual usage, thereby freeing up capacity for more development.

Will there be separate pipes from new developments to the new facility?

There will be no distinction between where the wastewater originates and where it is treated. Flow from existing sources will be directed to the new facility first, with the remainder going to the Wareham treatment plant. In the event that the new plant needs to be temporarily shut down for maintenance or repair, all wastewater flow can be quickly diverted to Wareham.

What is the status of the environmental mitigation issue?

Consultants at Weston & Sampson initially advised the town that it may have to sewer up to 80 properties near the shore of Buttermilk Bay in order to mitigate the effect of total nitrogen introduced into the ground water by subsurface disposal of treated wastewater. The Secretary of Environmental Affairs, in his certification of the MEPA Notice of Project Change issued in July, however, stated that no mitigation will be required since the infiltration beds are located in a portion of the site where the groundwater flows entirely into the Cape Cod Canal, and not toward Buttermilk Bay or Cohasset Narrows.

Will the groundwater flowing into the canal affect its water quality?

The enormous volume of water flowing through the canal, on the order of 80 billion gallons per day, coupled with the rapid currents, could accept a direct discharge of treated wastewater with no measurable effect. The discharge from the proposed treatment facility is basically clear water with less than five parts per million of nitrogen, so it will not contaminate the groundwater, much less the canal.