



Article 41: Wastewater Planning Capacity Study *To determine whether the Town will vote to adopt a resolution supporting the Town Manager's allocation of \$142,000, or any other sum, of Sewer Improvement Funds to investigate wastewater treatment and capacity management alternatives, including continued conservation measures, to accommodate wastewater flows above and beyond those flows necessary to meet existing requirements resulting from development and re-development under current zoning in a range between 320,000 to 600,000 gallons per day, which represents projected wastewater flows associated with objectives referenced in the Comprehensive Long Range Plan and Planned Production Housing Plan and quantified in the Wastewater Planning Task Force Report dated January 2008, and furthermore request that the Wastewater Planning Task Force return to a future Town Meeting to present recommended alternatives, including any requests for debt authorizations required to implement such wastewater treatment capacity alternatives, or take any other action relative thereto.*

Who is Proposing Article 41? The Wastewater Planning Task Force (WWPTF) is proposing the article, with support from the Board of Selectmen (BOS). The WWPTF was created by the BOS to address wastewater capacity constraints and is comprised of the Town Manager and representatives of the BOS, the Planning Board and the Public Works Commission, as well as Town staff and citizen representatives.

What is the Purpose of Article 41? The intent of Article 41 is to inform the Town of the lack of municipal wastewater capacity to implement the goals outlined in the Town's 2005 *Comprehensive Long Range Plan* and 2004 *Planned Production Housing Plan*. The housing and economic development goals of these two plans, along with the visions of the Village Center Committee, require construction of wastewater treatment facilities, either onsite or offsite, to accommodate the associated development or changes-in-use. In order for that flow to be handled by the Town, rather than onsite, more wastewater capacity than presently exists would need to be created. Given these challenges, the WWPTF recommends that the Town evaluate viable wastewater management alternatives to meet these long-range planning goals. An affirmative vote on the article does not commit the Town to any specific flow increase or to the construction of specific wastewater handling facilities. Instead, Town support is being sought to move forward with an alternatives analysis to determine how potential future flows might be handled and to quantify the associated costs, with the resulting recommendations presented at a future Town Meeting.

What is Being Requested of the Voters? Article 41 requests Town support for the expenditure of \$142,000 from the Sewer Improvement Fund to conduct a detailed analysis of wastewater alternatives to meet potential future needs of 320,000 to 600,000 gallons-per-day of additional flow. The Sewer Improvement Fund is a dedicated funding source for costs related to expanding wastewater capacity, financed by a fee assessed to new customers or customers seeking a flow increase. No tax or rate payer funds are requested. While the Town Manager is authorized to expend these funds without a Town Meeting vote, the WWPTF is asking for town-wide support for moving forward with this initiative.

Where Does the Flow Range Come From? The WWPTF was called upon to better define potential development and land use changes in Concord in order to quantify how much additional municipal wastewater capacity might be needed in the future, using previously determined town-wide goals. Table 1 summarizes flow projections developed by the WWPTF.

The first column of Table 1 shows flows that may result even if the Town does not move forward with the initiatives described in the *Long Range Plan* and the *Planned Production Housing Plan*. The WWPTF is presently analyzing alternatives to meet this existing flow need and has recommended that Town Staff move forward with the implementation of flow increases up to 320,000 gallons-per-day. The second column shows the potential flows that may result if the Town pursues the future initiatives of the two planning documents. **Planning for the added flows, between 320,000 and 600,000 gallons-per-day, is the subject of the warrant article.** The attached map (Figure 1) shows the locations of each of the areas described below.

Table 1: Summary of Flow Projections for Existing and Future Needs		
	Present Needs (Under Existing Zoning)	Potential Flow Increases (With Revised Zoning and Baker Avenue Sewered)
Future CWMP Phase Sewer Extensions	98,000 gpd	98,000 gpd
Village Center Neighborhoods	61,000 gpd	233,000 gpd
Baker Avenue Focus Area	-	57,000 gpd
Large Flow Sewer Users	75,000 gpd	124,000 gpd
Infill: Other Non-Residential	20,000 gpd	20,000 gpd
Existing Sewer Area Residential	22,000 gpd	22,000 gpd
Future Sewer Area Residential	44,000 gpd	44,000 gpd
Total	320,000 gpd	598,000 gpd

What Comprises Each Flow Value?

Future CWMP Phases: These are Phases 2, 3, and 4 of the sewer extensions identified in the 2004 Comprehensive Wastewater Management Plan, which called for capacity to be created through elimination of rainwater or groundwater infiltration into the sewer system to serve these areas; further evaluation has revealed that 98,000 gpd cannot be realized by this method, alone.

Village Center Focus Areas: The Village Center Committee focused on three areas: Concord Center, West Concord Center, and the Thoreau St./Sudbury Rd. neighborhood. The WWPTF defined redevelopment scenarios in these areas in accordance with the general tenets outlined in the *Long Range Plan*, the *Recommendations for the Village Center Study*, and the principles of “smart growth.” Associated wastewater flow increases were then calculated for build-out under existing zoning (present needs) and the potential redevelopment scenarios for each area.

Baker Avenue Area: Baker Avenue/Baker Avenue Extension was identified as an area that is presently not sewered but which could potentially provide opportunities for significant economic growth, consistent with the *Long Range Plan’s* goals, should further development be feasible. Providing municipal sewer service to this area could increase development potential to allow for more economic growth for the Town.

Large Flow Sewer Users: The Task Force performed public outreach to the current large-flow sewer system users and obtained input from these entities on anticipated future expansion needs and interests for their specific parcels. Since a portion of the desired expansion would require changes in zoning, 60% was estimated as reflecting present needs and the remaining 40% was categorized as a need that would depend on zoning changes.

Infill Growth: Infill is growth within the presently sewered and future CWMP phase neighborhoods and includes changes-in-use that result in increased wastewater needs, such as a retail store converting to a restaurant. Residential flow values were derived from projected population increases in Concord. Non-residential infill growth was estimated based on historic increases in flows in the sewered areas. All wastewater capacity allocated in the CWMP for infill has now been consumed.

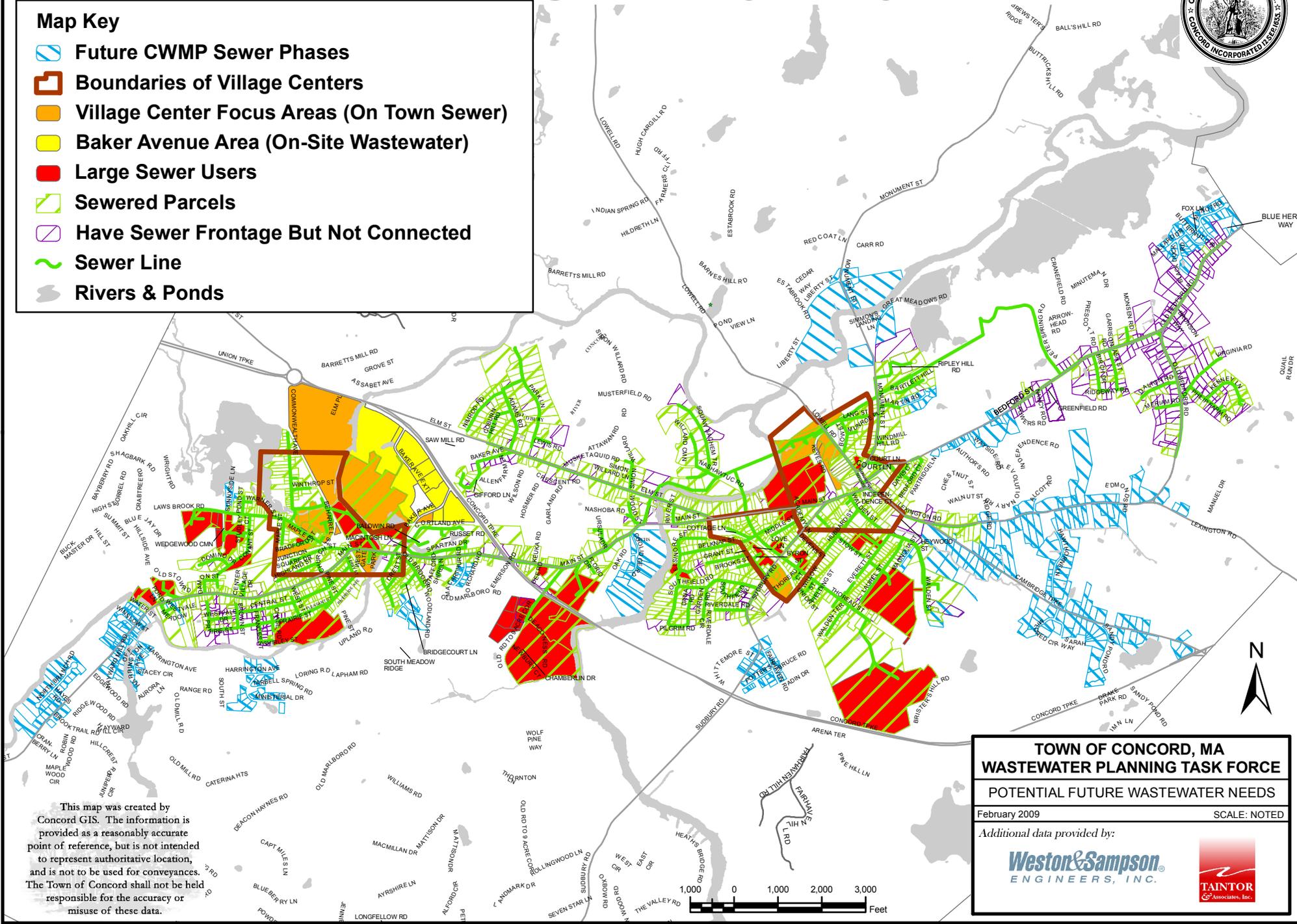
Where Can I Find More Information? By calling the Town offices (978-318-3000) or at: www.concordma.gov/pages/ConcordMA_BComm/Wastewater%20Task%20Force

Wastewater Planning Capacity Study - Article 41



Map Key

-  Future CWMP Sewer Phases
-  Boundaries of Village Centers
-  Village Center Focus Areas (On Town Sewer)
-  Baker Avenue Area (On-Site Wastewater)
-  Large Sewer Users
-  Sewered Parcels
-  Have Sewer Frontage But Not Connected
-  Sewer Line
-  Rivers & Ponds



This map was created by Concord GIS. The information is provided as a reasonably accurate point of reference, but is not intended to represent authoritative location, and is not to be used for conveyances. The Town of Concord shall not be held responsible for the accuracy or misuse of these data.

TOWN OF CONCORD, MA
WASTEWATER PLANNING TASK FORCE

POTENTIAL FUTURE WASTEWATER NEEDS

February 2009 SCALE: NOTED

Additional data provided by: