

EXECUTIVE SUMMARY

The Town of Concord is confronted with a critical decision relative to planning for future wastewater management, with far reaching consequences for the Town's economic development potential, housing goals, and sewer connection policies. The Town has been actively planning in relation to wastewater management and local growth/housing needs since 1999, via numerous citizen boards and committees. Over this period, the planning process produced three key documents: the Comprehensive Wastewater Management Plan (CWMP), dated February 2004, the Planned Production Housing Plan (PPHP), dated June 2004, and the Comprehensive Long Range Plan (CLRP), dated March 2005. All of these planning documents were based on considerable public input but made different assumptions in terms of the Town's future growth.

Driven by public input, the CWMP was purposely "growth neutral" in nature. Consistent with its nature as a wastewater management plan, the CWMP growth concerns were focused primarily on potential growth issues in existing residential neighborhoods where sewers were proposed. Based on their more 'development focused' nature, the CLRP and PPHP considered the potential of large residential developments that could occur under the Comprehensive Permit (otherwise commonly known as Chapter 40B) process, and also proposed creating new Village Center zoning to encourage redevelopment or new development around existing commercial areas in the Town. Some of these areas identified for growth potential in the CLRP and PPHP described new growth that could possibly necessitate sewer connections in excess of those accounted for in the CWMP. Because of the important relationship that wastewater management has with local development, the Town has undertaken an Integrated Planning Initiative to update and coordinate the efforts compiled in these three planning documents.

EXISTING WASTEWATER SYSTEM

Approximately 30% of the developed parcels in Concord are connected to the town sewer system. The Concord wastewater treatment plant (WWTP) is presently limited to treating and discharging 1.2 million gallons per day (mgd), as set by the Environmental Protection Agency (EPA) and Massachusetts Department of Environmental Protection (MA DEP) in the facility's National Pollutant Discharge Elimination System (NPDES) permit. Currently, the Concord WWTP is receiving an annual average daily flow of approximately 1.097 mgd. Projected flows from properties already sewered, along with committed flow from properties previously bettered and approved for connection since February 2004, will cause total flows to reach the maximum discharge permit limit of 1.2 mgd. Consequently there is insufficient capacity at the existing WWTP to meet current wastewater flow allocations for future implementation of Phases 3 and 4 of the CWMP without planned flow reduction efforts. The insufficient capacity at the existing WWTP will also impact future development or redevelopment within the existing sewer area.

The Town's NPDES permit is a restriction on the centralized sewer system capacity and must be recognized and coordinated with planning policies to seek a consensus on the approach to future wastewater management. Any future development will need to be supported by appropriate wastewater management practices, either by on-site systems or connection to a municipal system. Failure to adequately coordinate planning interests may result in: NPDES permit violations due to flows exceeding the WWTP's discharge limit; lost opportunities for town-supported development with resulting loss of a stable economic base; and potential legal challenges.

PAST PLANNING ACTIVITIES

The Town's CLRP is the community's comprehensive policy guide and planning tool through the year

2020. The result of numerous public meetings and workgroup sessions, the three-year planning process identified short and long-term goals and laid out steps to implement that would help achieve a shared vision for the Town's future. Although all of the goals reflect a desire to protect the Town's unique and historic character, the plan also includes measures to generate revenue and increase economic opportunities to ensure that the Town can continue to meet its fiscal obligations and ensure a comfortable standard of living for all residents. Preservation of significant natural resources and open spaces was therefore balanced with the need to encourage new growth in already developed areas. While the CLRP did indicate a need to plan for additional wastewater management capacity, it did not quantify the additional capacity that would be needed to accommodate proposed new residential and non-residential growth.

In addition to the CLRP, the Town's PPHP assessed current and future housing demand, supply, cost and affordability in order to identify potential gaps for supply of housing for individuals and households of a variety of incomes. One of the key considerations for a community in completing a PPHP is to identify solutions to set aside 10% of its year-round housing for low- and moderate-income residents. Not meeting this affordability standard makes the town susceptible to a State override of local zoning if a developer chooses to create affordable housing through the Comprehensive Permit (Chapter 40B) process. Incorporated into the CLRP, the PPHP outlined strategies for increasing the mix of housing options in the community and identified specific areas with housing growth potential.

INTEGRATED PLANNING INITIATIVE

The Integrated Planning Initiative was created to help frame these simultaneous planning processes, to integrate growth and redevelopment with critical wastewater needs, and to initiate public review and

input to clarify land use planning goals and quantify the associated wastewater flows. In order to effectively develop sound wastewater management solutions, it is essential for the Town to answer the following questions:

- 1) How much wastewater flow is associated with the desired development or redevelopment of areas identified in the PPHP and CLRP?
- 2) For what portion of this flow can and will the Town provide municipal wastewater management options?
- 3) In what time frame is this new, municipally-managed flow anticipated to be generated?
- 4) How will the Town fund design and construction costs associated with any future municipal wastewater management solutions?
- 5) Which areas that are currently under-serviced have the highest value to the Town in terms of sustaining continued economic growth through redevelopment and housing production?

By answering these questions, this integrated planning initiative is intended to coordinate Town policies that will ensure that the sufficient wastewater management system capacity is available to sustain short and long-term housing and economic development goals.

Without an integrated planning effort, there is a risk that the community would have to take a reactive versus proactive approach in reviewing desired or undesirable proposals for development and related changes in Town. In addition, there is potential that Concord would exceed the WWTP NPDES permitted discharge flow, which could result in a potential moratorium on sewer connections and/or some form of administrative consent order issued by the state/federal government. Furthermore, without adequate wastewater management capacity, the Town may be unable to support new economic growth or to meet state-mandated housing goals.

WASTEWATER PLANNING TIMELINE

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| 1984 | • Facilities Planning Study, May 1984 |
| 1985 | • WWTP Upgrade and Sewer Extensions |
| 1986 | • Sewer Extensions |
| 1987 | • Long Range Plan, October 1987 |
| 1988 | |
| 1989 | |
| 1990 | |
| 1991 | • Report on Infiltration/Inflow Studies, November 1991 |
| 1992 | • NPDES Permit Renewal |
| 1993 | |
| 1994 | |
| 1995 | |
| 1996 | • Title 5, State Requirements for Septic Systems were substantially revised |
| 1997 | |
| 1998 | • Town of Concord Housing Plan Task Force Final Report |
| 1999 | • Influence of Groundwater on Soil Conditions on Septic Systems in Elm Brook Area, March 1999 • 80% WWTP capacity reached, triggering CWMP requirement |
| 2000 | • Initiated Comprehensive Wastewater Management Planning (CWMP) • CWMP, Volume 1 – Needs Assessment, August 21, 2000 • CWMP, Volume 2 – Alt. Solutions & Implementation Issues, Oct 2000 |
| 2001 | • Wastewater Treatment Facility Capacity Assessment, January 2001 • NPDES Permit Renewal |
| 2002 | • Infiltration/Inflow Control Plan, May 2002 • On-Site/Decentralized Wastewater Management Program: Final Report, July 31, 2002 • NPDES Permit Modification |
| 2003 | • CWMP Summary, February 2003 • Town Meeting Acceptance of CWMP • CWMP/ENF submitted to MEPA |
| 2004 | • Final CWMP and EIR, Feb. 2004 • Wastewater Treatment Facilities Plan, Feb. 2004 • Planned Housing Production Plan, June 2004 |
| 2005 | • Comprehensive Long Range Plan, March 2005 • Sewer Extensions (Phase 1) |
| 2006 | • Infiltration/Inflow Control Plan, September 2006 • Sewer Extensions (Phase 1) • NPDES Permit Renewal |
| 2007 | • WWTP Improvements • Concord Integrated Planning Initiative |
