

Developing a Sewer Ordinance:

ONE TOWN'S EXPERIENCE

by Kate Lampton

As planning commissioners, wouldn't it be great to tell a developer to put his project in an area where the community wants to see development, rather than reacting to a project based on the developer's idea of a profitable project location? Designating areas where essential services, particularly sewer service, can be used is one of the opportunities we, as local planners, have to direct growth to locations that reinforce our city or town goals. Creating a sewer ordinance which directs the location, pace, and type of sewer service is an invaluable tool in managing municipal services, their cost, and local growth.

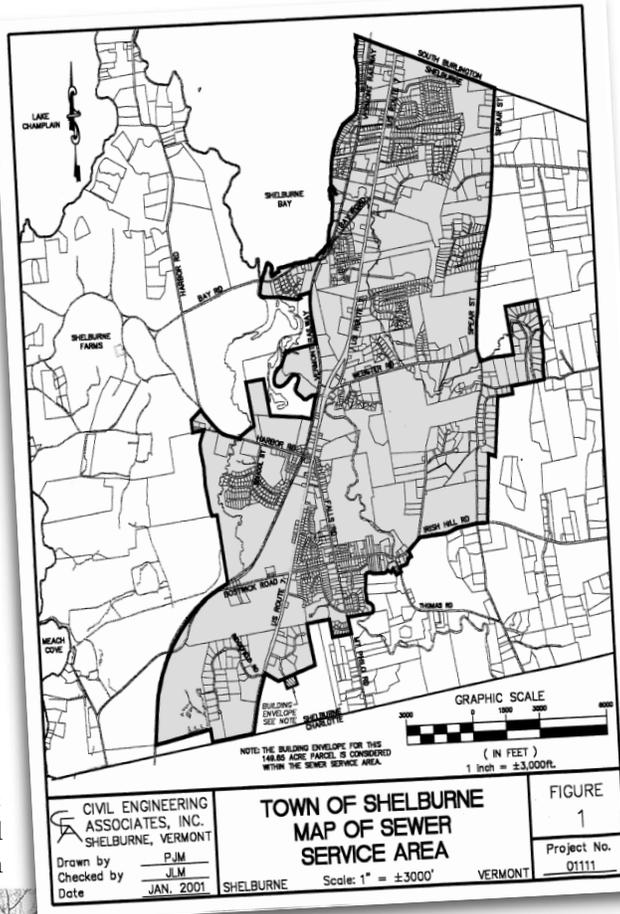
The Town of Shelburne, Vermont, Selectboard (i.e., governing body) recently completed a sewer ordinance. Shelburne is a community of 7,000 residents, located a few miles south of Burlington – Vermont's largest city. The town has a traditional historic village center, a still active agricultural base, extensive Lake Champlain shoreline, and excellent schools and community services. The town is also the site of the Shelburne Museum and Shelburne Farms, two of Vermont's foremost cultural resources. These factors combine to make Shelburne a highly desirable community. Although the rate of growth has been steady, the town was concerned that a more rapid pace would overburden municipal services.

Another impetus behind developing a sewer ordinance lay in the fact that the town was in the process of enlarging its sewage treatment plants and wanted a framework for distributing the projected additional capacity.

While Vermont law requires only that a public hearing be held before a governing body adopts an ordinance, the Shelburne Selectboard decided on a far more inclusive and comprehensive approach to developing a sewer ordinance. To begin with, the Board requested that the Planning Commission work with it on preparing the ordinance, in recognition of the crucial importance of land use and planning considerations in infrastructure decisions.

The Board and Commission then jointly held a series of work sessions to develop a policy framework for the sewer ordinance. These work sessions were open to the public – and well attended. Among those participating: the local Shelburne Citizens for Responsible Growth group, the Conservation Law Foundation (an environmental advocacy organization), and area developers.

Striking a balance between allowing the public to participate at this stage, while still having enough time for the Board and Commission to discuss and craft a policy, was tricky. The public understood that the Board and



Shelburne's village center – within the sewer service area.

Commission needed time to discuss the sewer issues so that a draft ordinance for public hearings could be developed. The Board and Commission allowed the public to make comments at the work sessions and accepted written statements for inclusion in the work session information packets.

Allowing the public to participate at this early stage enabled the decision-makers to be better informed about the range of issues and viewpoints on sewer policy. Having developers involved early on also helped ensure that the ordinance would be workable for those who would be seeking sewer allocations.

In order to move through the policy considerations, the work sessions were broken into three topic categories: location, pace, and type of use. Having the policy issues for each topic thoroughly discussed during the work sessions put the Board and Commission in a far better position to draft a workable ordinance for review at the public hearings.

LOCATION

The Shelburne sewer ordinance specifies a sewer service area. Land outside of that boundary is not allowed to hook onto the municipal sewer system. See *Map to left*. The service area reflected the existing limits of sewer service, with additional area to accommodate growth.

Although it may be tempting to draw a constrained boundary, it is important to allow a realistic area for future growth. For example, if the Shelburne sewer service area were too small, and did not allow for sufficient future growth, its utility as a growth management tool would be undermined. Developers would build elsewhere, without connecting to the municipal system.

Determining the best sewer service area is the product of many factors. Service areas can be based on existing development patterns, on natural features which help define the limits of developed and rural parts of town, on locations which are appropriate for sewer from an engineering standpoint, and on the areas where the town wants to encourage future growth.

In Shelburne, a build out analysis of land within the proposed sewer service area was very helpful in setting the boundary. "A Sewer Service Build Out Analysis," p.14. The estimated sewer capacity needed to service development projected by the build out analysis was also compared with the available sewer plant capacity. Having a roughly comparable match indicated that the sewer service area was sized correctly.

A sewer service area boundary gives clear guidance to developers on the preferred areas for development and helps a town to more economically develop its sewer system by avoiding lengthy lines and numerous pump stations away from the core service area. However, a sewer ordinance should also address those situations where it may make sense to extend lines beyond the service area

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Tony Unica of South Hero, a supervisor with S.D. Ireland Concrete Construction Corp., prepares to pour concrete at Shelburne Waste Water Treatment Plant 2 on Wednesday. The plant has been undergoing a renovation to increase its capacity for the past year. RAJ CHAWLA, Free Press

Sewers to determine growth

Expansion nears completion; Shelburne plans for the future

By Adam Silverman
Free Press Staff Writer

SHELBURNE — Shelburne is on the verge of finishing an expansion to its sewer system, and how town officials decide to go about it will affect how the town grows and looks during the next 20 years.

Other sewer expansion projects — in Milton and Stowe, for example — have led to bitter disputes between local officials and the Conservation Law Foundation, which argued the projects promoted sprawl. In Shelburne, the foundation is working with the town and a local group in what some say could be a new model of collaboration.

"It's a good town for us to focus in on," said foundation attorney Christopher Kilian. "I don't want to say it's a model until I know what the final decision is, but it can be."

The issue in Shelburne is what sort of development will take place, whether it will be concentrated or scattered, far from the town center or closer to it, how rapidly it will occur. Where the sewer goes and how connections to it are regulated play a large part in determining the kind of growth that can be supported.

The foundation and the local group Shelburne Citizens for Responsible Growth say they want to see

Growth



more concentrated growth rather than sprawl, a vision they say is consistent with the town plan. That position is what they have advocated to town officials, many of whom have been receptive, the groups say.

Ken Albert, the Select-

board chairman, said he agrees that concentrated growth closer to the town center is a better, smarter way to expand.

"We just don't want to see farm fields dotted with checkerboard patterns of homes," he said.

Joint work sessions between Shelburne's Selectboard and Planning Commission have resulted in a draft sewer ordinance that includes criteria for how the new capacity will be allocated and a map that sets a boundary beyond which sewer service can't extend except in unusual circumstances.

Initially, the foundation and the residents' group opposed the plan, saying the boundary extended too far from the town center and set first-come, first-served

See SEWER, 3B

Burlington Free Press, Oct. 19, 2000.

A Sewer Service Build Out Analysis

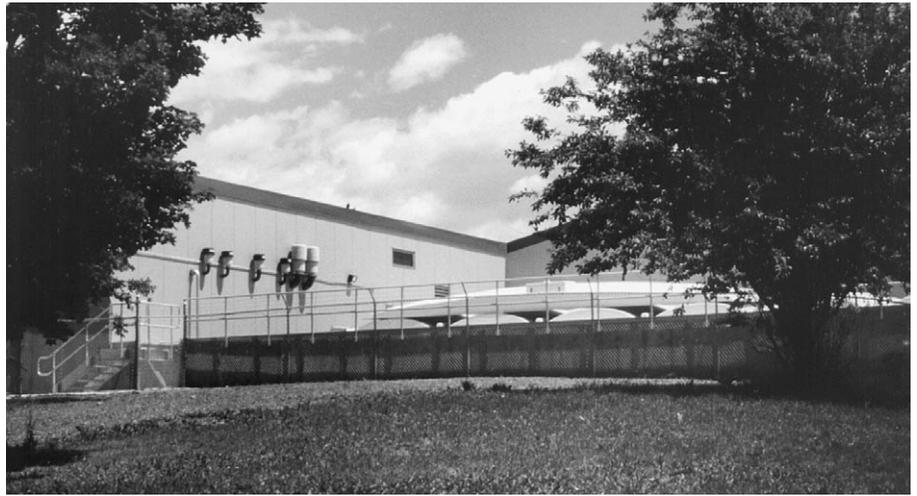
There are numerous ways to conduct a build out analysis and it is important to remember that all are estimates. Shelburne's analysis was relatively simple, although thorough. A calculation was made of the number of new units possible within the sewer service area. The number of new units was then converted to a gallons per day (gpd) of sewer capacity. The following calculations were used in Shelburne's analysis:

- To determine the number of potential new residential units: acreage of each existing lot in the sewer service area, divided by the minimum lot size for the district, minus the number of existing dwelling units, times 80 percent (to account for potential site constraints which reduce development potential) = potential new units

- To convert the number of new units to sewer capacity: number of new units times 250 gpd = sewer capacity needed.

- To determine the sewer capacity needed for new non-residential uses: acreage of undeveloped lots times 80 percent (to account for potential site constraints which reduce development potential), times 500 gpd per acre = sewer capacity needed.

Where specific site constraints were known for a lot, the calculation was reduced by that acreage.



The town's sewage treatment facility.

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boundary. The most common exception is for failed septic systems, or groups of systems, where there is no feasible onsite solution.

PACE

Sewer capacity is a valuable and often limited municipal resource. In Shelburne, the Selectboard concluded that it was important for the town to control the pace at which sewer capacity would be allocated so that the design life of the sewage treatment plants could be met. While there are any number of

techniques to accomplish this, Shelburne took the straightforward approach of dividing the available sewer capacity by the number of years in the plants' design life. This then yielded the number of gallons which would be available for allocation per year.

As a "reality check" on proposed allocation numbers, compare the number of new homes built per year (in the last few years) within the proposed sewer service area with the annual number which would be allowed under the proposed capacity allocation schedule. If they are roughly comparable, the proposed allocation schedule is



The sewer ordinance was designed in part to preserve farmland like this – located just outside the sewer service area.

probably on target.

One additional caveat to keep in mind after the sewer ordinance is adopted: the allocation schedule set out in the ordinance should be reviewed periodically and, if necessary, modified to reflect the town's actual experience in using the sewer ordinance.

TYPE OF USE

The Shelburne sewer ordinance designates a certain percent of available capacity for residential use and another percentage for non-residential. This helps ensure that the town will maintain a mix of uses. In Shelburne, the percentages chosen were based on the existing split between residential and non-residential users.

Other towns may want to designate specific percentages of their sewer capacity for additional categories of use (e.g., a percentage of the capacity might be allocated for affordable housing developments). Shelburne chose not to do this at this time, in order to keep the ordinance as simple as possible. If too many categories are designated it is possible that the available capacity will be divided into blocks which are too small to be of practical use.

SUMMING UP:

Sewer service is a costly and often scarce municipal resource. Sewer availability is also a resource which can become a magnet for new growth. Managing this resource is important for cities and towns, from both financial and growth planning standpoints. An inclusive, well-structured process for developing a sewer ordinance – with public officials and citizens working together – will increase the likelihood of not only accommodating future growth, but guiding it to locations which best meet the community's goals and objectives. ♦

Kate Lampton is Executive Director of the Champlain Valley Greenbelt Alliance. Until recently, she served as the Director of Planning and Zoning for the Town of Shelburne, Vermont. Prior to that, Lampton was Town Planner for Hinesburg, Vermont and also Chair of the Charlotte, Vermont, Planning Commission.



Excerpts from the Shelburne Sewer Allocation Ordinance

Article 1. Purpose:

... The Town of Shelburne has made a significant public investment in improvements and increased capacity to the Town's sewage treatment and disposal facilities and sewage collection and transmission system in order to avoid the environmental damage and danger to the public health caused by limited or inadequate collection and treatment of wastewater.

This sewer allocation ordinance is adopted to ensure that the allocation of sewer capacity occurs in a manner which is consistent with the town plan, subdivision regulations and zoning bylaws, to sustain the available capacity over the projected life of the Plants and to protect the public investment in the Plants and Sewers.

The Town recognizes that the extension of sewer lines in a dispersed and unplanned pattern creates an additional burden on the Town to maintain the Sewers and Plants, creates an additional financial burden on the Town and its citizens and reduces capacity by increasing inflow and infiltration. This ordinance will serve to direct growth to areas most appropriate for the efficient provision of municipal sewer service. ...

Article 4: Sewer Service Area.

No capacity shall be allocated outside the sewer service area, except as specified below:

A. A project which has received Planning Commission sketch plan approval as a Rural Mixed Use Planned Unit Development may be granted capacity regardless of location within or outside of the sewer service area.

B. In the event that any existing wastewater treatment system fails, within or outside of the sewer service area, the Board may make an emergency allocation to alleviate the problem ...

C. Connected Structures Outside of Sewer Service Area: Any structure located outside of the sewer service area, which is connected to the Sewers as of the effective date of this ordinance, may be granted

additional allocation, under the same terms and conditions of this ordinance, provided that the additional allocation is used solely for the connected structure and that the Sewers are not extended beyond the connected structure. The additional allocation shall not exceed fifty percent of the existing allocation to the structure. ...

G. Distribution of Three Year Capacity Allocation:

(1) Residential Allocations: In each allocation period eighty percent of the Three Year Capacity Allocation shall be distributed to residential uses.

(2) Nonresidential Allocations: In each allocation period twenty percent of the Three Year Capacity Allocation shall be distributed to nonresidential uses. ...

Article 6: Allocation Procedures

A. Any allocations made by the Board pursuant to this Article shall be deducted from the Town's Uncommitted Reserve Capacity.

B. The Board shall act on all applications on a first come, first served basis as soon as practical.

C. (1) No applications for individual project allocations shall be considered by the Board unless the project has first received sketch plan approval, pursuant to the Town's Subdivision Regulations, is located on a lot in a preexisting or approved residential or commercial industrial subdivision or has received conditional use approval or site plan approval, as appropriate, in accordance with the Town's Zoning bylaws. ...

Editor's Note: the full text of the ordinance can be downloaded at: www.plannersweb.com/shelburne.pdf