Planning in Massachusetts

An Examination of the Inherent Challenges in the Existing Intergovernmental System

Prepared for the Town of Marshfield by
Gabriel Bottino
Heather Kirkpatrick
Diana Morgan

Executive Summary

The purpose of the project is to twofold. The first is to identify the obstacles to effective planning under the current legal and regulatory framework for planning in Massachusetts. The second is to examine a case study for the Town of Marshfield that illustrates these challenges on a local level. Specifically, the case study identifies the disparate federal, state, and local requirements found in the implementation of stormwater regulations.

Introduction

The primary client for the project is Angus Jennings, planner for the Town of Marshfield. The project is composed of three distinct tasks:

- investigating the Massachusetts Watershed Initiative as a vehicle for regional planning, and assessing the opportunity for regional planning agencies to incorporate the watershed concept
- following the progress of the Land Use Reform Act, and exploring the impact of the proposed legislation on municipal planners, the development community and other stakeholders
- assessing the Town of Marshfield's compliance with EPA Phase II Stormwater Regulations, and proposing recommendations for filling any regulatory gaps

The methodology employed by each of the group members consisted of performing literary reviews, stakeholder interviews, and academic and legal research. Each section required individual analysis and its own set of conclusions or recommendations. The findings, in general, illustrate the inherent constraints to effective planning in the Commonwealth.

Table of Contents

List of Tables

Planning and the Watershed Approach after the Massachusetts Watershed Initiative

The question of how to adequately deal with water quality issues in Massachusetts appears to have found an answer in the watershed approach. The Massachusetts Watershed Initiative (MWI) continued the state's tradition of visionary environmental legislation by delegating responsibility for resolving these issues to local and regional entities. However, the advent of a new political administration brought with it the reorganization of environmental agencies, and the dissolution of the MWI. The following paper will examine the potential repercussions of its dissolution on regional planning for water quality.

Historical Perspective

Water quality in the United States falls under the regulatory authority of the Clean Water Act (CWA). It provides the context for state watershed initiatives and is the major federal policy regulating water pollution. Passed into law as the Federal Water Pollution Control Act Amendments of 1972, it's primary concern was to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters."[1] Although not the first attempt to improve national waterways, the comprehensive provisions of the CWA marked the first major federalization of efforts to improve water quality.

The CWA established a national policy for water pollution control that focused on point source control, such as end-of-pipe discharges, through effluent limitations. However, non-point source pollution soon became the leading cause of water pollution in both agricultural and urban areas, and is currently a primary cause for non-attainment of water quality standards. While funding has concentrated on reducing point source pollution, programs exist in the text of the CWA for alleviating non-point source pollution, including authorizing funding for area-wide planning.[2] Specifically, section 319 was created in 1987 to allow states to determine areas affected by non-point source pollution and reduce its effect on water quality.[3] The primary responsibility for the development and implementation of plans to reduce non-point source pollution was placed in the hands of states on the condition that they would follow federal standards and guidelines. Since the Environmental Protection Agency (EPA) has limited authority over this type of pollution, its role is reduced to evaluating these state-developed plans. This arrangement recognizes the supremacy of federal law and the reality that the states are less isolated from their constituencies and quicker to respond to local issues than the federal government would be.[4]

The Massachusetts Clean Water Strategy was formed in 1992 to meet the requirements of the CWA. It was the state's first formal adoption of integrated watershed decision-making, and came a year after the EPA began to advocate for a watershed approach. Additionally, a 1993 Department of Environmental Protection (DEP) report on the status of water quality in the state confirmed that non-point pollution, such as stormwater runoff and failed cesspools and

---

[1] 33 U.S.C, p. 1251.
[2] Michaels, Sarah. "Configuring Who Does What in Watershed Management: The Massachusetts Watershed Initiative." *Policy Studies Journal*, Vol. 27, No. 3 (1999), p. 567.
[3] Anderson, Scott D. "Comment: Watershed Management and Nonpoint Source Pollution: The Massachusetts Approach." *Boston College Environmental Affairs Law Review*, Winter 1999. 26 B.C. Envtl. Aff. L. Rev. 339, p. 2.
[4] Michaels (1999), p. 567.

septic tanks, was the leading cause of non-attainment of water quality standards in the state.[5] These two events were important steps in the process leading to the implementation of a watershed-based approach to water quality management in Massachusetts.

The Watershed Approach in Massachusetts

A watershed is defined as a geographic area of land in which all surface and ground waters, sediments, and dissolved materials flow to a common point of lower elevation, such as a river, stream, pond, wetland, or estuary.[6] The path followed by rain and other precipitation, wherever it falls initially, will eventually reach the lowest point of its encompassing watershed. This has led to the use of watersheds as the standard geographical unit for the purposes of planning for erosion control, agriculture, and water pollution because they correspond to the geographic effects of hydrologic management.[7]

The watershed approach to regional planning has been favored in recent years as a method to adequately address water quality issues. In contrast to the command-and-control type of regulation traditionally employed by federal and state governmental agencies, the watershed concept favors a bottom-up approach involving stakeholders at all levels. Key features of this approach include:

1. application of a systems approach using watersheds as the fundamental analytical unit
2. multiple-scale, multiple-objective planning for watershed and subwatershed units
3. multi-organizational coordination and public participation
4. science-based and information driven decisions; and
5. adaptive processes to reflect changing conditions, needs, and new knowledge.[8]

On December 7, 1993, the MWI was launched at the Watershed Forum by environmental, business, and local, state, and federal government stakeholders. Participants at the Forum agreed to develop an approach to watershed management, which while emphasizing local decision-making and stewardship would retain water quality standards. A select group of Forum participants went on to form the Watershed Initiative Steering Committee (WISC), which was charged with developing and testing a model approach for how to assess, plan, and make decisions about the state's watersheds.[9] It was from this group that the framework for the watershed approach under the MWI was established.

The stated mission of the MWI is to "preserve, protect, and restore the water resources and ecosystems of the Commonwealth using watersheds as the geographic unit within which diverse interests collaborate, establish priority actions, influence decisions, and achieve measurable results."[10] The methodology that WISC developed for the watershed approach is based on defining management geographically rather than politically, local people solving

---

[5] Ibid.
[6] MWI homepage. http://www.state.ma.us/envir/mwi/watersheds.htm
[7] Jennings, Angus. *Flood Mitigation as Intergovernmental Innovation in a Massachusetts Watershed.* August 2002. p. 10
[8] Born, Stephen M. and Kenneth D. Genskow. *Exploring the Watershed Approach: Critical Dimensions of State-Local Partnerships: The Four Corners Watershed Innovators Initiative Final Report.* River Network, September 1999. p. 6.
[9] Michaels (1999), p. 569.
[10] MWI homepage.

local problems, partnership of watershed stakeholders, guidance by science and public input, and watershed-based prioritization.[11]

The MWI established five overarching goals for the state's watershed approach. The first was to achieve measurable improvements in water quality and environmental conditions. The second was to protect and restore habitats, such as shellfish beds, wetlands, and fisheries. The third was to improve public access to, and the balanced use of, waterways. The fourth was to improve local capacity to protect water resources. The fifth was to promote shared responsibility for watershed protection and management through outreach and education.[12]

Former Executive Office of Environmental Affairs (EOEA) Secretary Robert Durand described the following as the most important features of the MWI:

1. The primary goal for each of the state's 27 watersheds is to achieve measurable gains in the protection and restoration of natural resources.

2. By setting up a Watershed Community Council of diverse interests in each watershed – including business, environmental, municipal, state and federal agency, and citizen interests – community-based environmental protection is implemented using the watersheds as the context for environmental assessment, planning, and decision making.

3. What the watershed initiative achieves for each watershed is the targeting of actions and resources to where a collaboration of interests decide the most good can be accomplished for limited dollars.

4. Through each community council's five-year action plan, updated every five years, each city and town, and each watershed as a region, will see environmental improvements – in the form of cleaner surface and ground waters, protection and restoration of fish and wildlife habitats, and improved public access to waterways.[13]

Governmental and non-governmental entities were charged by the MWI with developing a collaborative means to exchange information about issues relevant to a particular watershed. This is critical because all involved parties had to buy into sharing responsibility for stewarding the watershed in order to gain the most benefit. What was required was a process that reflected the values of all interested parties and incorporated the necessary expertise and authority for successful implementation.[14]

The holistic nature of the MWI's watershed approach required developing a new constellation of government, non-profit, and for-profit organizations and individual citizens. As a result, the Watershed Initiative Steering Committee called for the formation of two complementary groups within each watershed to help facilitate collaborative decision-making. Watershed Teams served as the technical resource on watershed issues. Teams included staff from all state environmental agencies, various federal agencies, watershed

[11] Massachusetts Watershed Initiative Steering Committee Report. October 1995.
[12] Massachusetts Watershed Initiative. Information Sheet. February 1, 1998.
[13] Durand, Robert et.al. The Watershed as the Context for Preservation. Paper delivered at the 1999 National Conference of the American Planning Association in Seattle, WA. Pg. 8. http://www.asu.edu/caed/publications/proceedings99/DURAND/DURAND.HTM
[14] Michaels (1999), p. 570.

associations, municipalities, and other community partners. Beginning in 1998 the EOEA dedicated full-time Team Leaders to coordinate the work of these cross-agency teams and to serve as a single point of contact for stakeholders.[15]

The Watershed Teams focused on a five year management process that was designed to collect and share resources and information, target present and potential impacts to natural resources, assess impacts to natural resources, and develop and implement activities to protect and improve natural resources. Each year built on the work of the previous year, and involved a different activity each year: Year 1 – Outreach, Year 2 – Research and Monitoring, Year 3 – Assessment, Year 4 – Watershed Action Plan Development, and Year 5 – Implementation and Evaluation. The resulting Annual Work Plans were developed with active team involvement and served as a guide for coordinating team efforts. Plans were the building blocks of the more comprehensive Five Year Watershed Action Plan. Action Plans influenced state and federal grants and loans, regulatory decision-making, and educational/technical assistance programs to solve the most important environmental problems affecting communities. [16]

According to the former Team Leader for the South Coastal Watershed, Watershed Teams and Team Leaders served their communities in a variety of ways. They helped to identify and to facilitate the resolution of environmental issues through one or more approaches: use of MWI funded studies, facilitating public outreach, encouraging environmental education through the use of the media and watershed-based organizations, coordinating technical assistance by one or more state agency partners, fostering new regional partnerships and/or coalitions, and promoting capacity development for new and fledgling organizations.[17]

The formation of a Watershed Community Council (WCC) in each watershed was a key component of the MWI approach. This second collaborative group was the forum for discussion, goal setting, and decision-making among all stakeholders. The WCC worked with the Watershed Teams to integrate action planning, public outreach, permitting, and management decision-making. The WCCs worked at the local level to set priorities for protecting their watersheds, and the results of the local projects would be used by the teams to continue to improve the efficiency and effectiveness of state environmental agency resources.[18]

Local and Regional Participation in Watershed Management

The necessity for local and regional participation in the success of the MWI is clearly stated in its recent Strategic Implementation Plan.

> *Groundwater quality and river and stream flow are increasingly becoming a cause for concern in our water-abundant state. The need to use water efficiently and to assure that there is enough freshwater during drought conditions for human consumption, for our*

[15] Michaels, Sarah. "Making Collaborative Watershed Management Work: The Confluence of State and Regional Initiatives." *Environmental Management. Environmental Management* 27:27-35 (2001). Springer-Verlag New York, Inc. p. 29

[16] Massachusetts Executive Office of Environmental Affairs. *Massachusetts Watershed Initiative Strategic Implementation Plan.* October 2002. p. 4.

[17] Conversation with George Zoto, former Team Leader of the South Coastal Watershed. April 2003.

[18] Anderson, p. 25.

wetlands and for instream uses is becoming acute. Increasing sprawl and growth potential, especially along the I-495 belt, and in southeastern Massachusetts, is only going to exacerbate this problem. The biggest challenges facing communities today are to alter local and regional buildout scenarios so that growth does not exceed the limits of our natural resources.[19]

The decisions local officials make about zoning, planning, and infrastructure are pivotal to the success of watershed management. Sprawl, which is characterized by low-density, single-use development that is dependent on private automobiles, has increased dramatically in many areas of eastern Massachusetts. Some of it's hallmarks are: extensive areas of impervious surfaces, declining groundwater recharge, amplified runoff and nonpoint source pollution, increased incidence of flooding, degraded water quality, wetland loss, and fragmented natural habitats.[20] Because of its heavy dependence on automobiles, sprawl creates a vicious circle, whereby more transportation leads to more growth, which in turn necessitates the need for more transportation options. Thus, any successful watershed management plan must address the land use and growth patterns in the individual communities within the watershed.

The structure of local government is based on well-defined political boundaries, within which public services are substantially funded by local tax revenues and state aid. The result is that municipalities are only able to address those problems which fall within their discrete boundaries. Programs designed for intergovernmental environmental management are intended to address those challenges that cannot be resolved without regional collaboration. It is a politically challenging process because most systems of public funding are not designed to facilitate regionalism.[21]

A watershed, by definition, has no political boundaries. The flow of water across political boundaries makes it necessary to work cooperatively with neighboring municipalities to achieve a coordinated management system to address common water issues. The reality is that the local effects of nonpoint source pollution cannot be effectively mitigated through actions taken within an individual municipality's borders. A successfully functioning approach to watershed management, therefore, recognizes the irrelevance of political boundaries. It also seeks a way to address the institutional conflict inherent in a system with overlapping governmental jurisdictions. Regional planning for areas whose jurisdictional boundaries coincide with natural boundaries – such as watersheds – can be highly effective in managing some natural resources and environmental conditions.[22]

Another factor which is inherently frustrating to those seeking regional cooperation in Massachusetts is the deference given to municipal autonomy, and any attempt at regional planning must confront the political realities of home rule. Zoning, subdivision bylaws and ordinances, and open space plans (as interpreted through the lens of master plans) remain the dominant method for land use regulations, and home rule provisions in the state constitution preserve the autonomy of local officials within their borders. The reality for Massachusetts communities is that home rule is ineffective when faced with neighboring community actions

[19] Massachusetts EOEA, p. 2.
[20] Ibid.
[21] Jennings, p. 11.
[22] Jennings, p. 10.

that affect local water quality. (A more comprehensive discussion of land use planning issues occurs in the next portion of this paper.)

However, as regional environmental challenges demand increasing attention from local officials, the virtues of municipal autonomy are balanced by the apparent advantages of regional cooperation. Although it is as-yet unclear if the results of regional cooperation are superior to those results achieved by the individual communities acting alone, the environmental impacts that one community has on another requires some form of regional collaboration to achieve positive lasting results. Through the process and structure of the MWI, EOEA actively encouraged regional collaboration to achieve common environmental objectives.

The End of the MWI and the Future of the Watershed Approach

As is the case for nearly all government initiatives, the MWI is subject to change based on the shifting political priorities of legislative leaders and gubernatorial administrations. The MWI – the favored paradigm for regional environmental planning under the Celucci/Swift Administrations – quickly fell out of favor after the November 2002 election of Mitt Romney.

In early February 2003, EOEA sent a memo to Team Leaders informing them that the MWI had been eliminated as part of the reorganization of state programs and budget cuts championed by the Romney administration. The memo stated that it was "time to take the watershed approach to the next level" by incorporating it into decision-making statewide.

> *We will build on our past successes to ensure our agencies make watersheds the framework for all their environmental decision-making. In advance of these changes we are ending the program as it currently functions.*[23]

As a direct result, Team Leaders and other personnel borrowed from state agencies were returned to their former agencies. Interestingly, a majority of the funding for Watershed Teams came from funds which moved with Team Leaders from their original state agencies when they assumed their roles under the MWI. Now, with its dissolution, that funding is returning with the Team Leaders to their former agencies. Considering that funds were simply being shuffled from one agency back to another rather than being cut, George Zoto, former Team Leader for the South Coastal Watersheds Team, said that he "saw the statement [issued by EOEA] as an oxymoron...it didn't make any sense."

An official at a non-profit watershed association on the South Shore said that necessarily as a result of the reassignment of Team Leaders back to their original departments, they are no longer able to assist their former teams.[24] Because of the attention they must pay to their current duties, watershed issues can no longer be a high priority. This combined with the official end to Watershed Teams leaves the watershed concept in danger of fragmenting at

[23] E-mail message from EOEA Watershed Management to Angus Jennings via Kwabena Kyei-Aboagye, former Watershed Team Leader for the Boston Harbor Watershed, February 4, 2003.

[24] Conversation with official at a South Shore watershed association who wished to remain unnamed. March 2003. This was not an unusual occurrence. In the course of obtaining interviews, I found officials who were reluctant to discuss the current status of the MWI. I am unable to determine if this was due to political issues or other factors.

the regional level due to a power vacuum and a lack of leadership experienced with navigating issues at the state, regional, and local levels.

In the course of my research, I sought to answer a few questions regarding the future of the watershed concept in Massachusetts. These questions reflected the uncertainties remaining in the aftermath of this dramatic announcement.

1. What opportunities are available for regional planning agencies (RPAs) to incorporate the watershed approach given their current resources?

The role of RPAs is to provide technical support to towns in terms of protecting environmental resources (through the use of such tools as GIS, master plans, zoning, cluster development, and open space plans) and identifying future potential water resources. Their involvement in the MWI and their focus on environmental issues with regional impacts seems to position them as the natural inheritors of the watershed approach. The responses I received were not as encouraging.

> *First, the range of capability of RPAs is very wide--some are really good, while others less so. The other problem is that RPAs are bounded by town/county lines, not watershed lines. Nonetheless, some have taken a watershed approach (PVPC and MAPC for example) and are looking at watershed issues. I think the potential is there for more RPAs to use the approach, but there needs to be an impetus, some understood reason for them to cross their town lines and look at watersheds. The bottom line is that there are opportunities for them if their staff are motivated or they get some outside encouragement.*[25]

> *It will probably be very difficult for RPAs to continue their participation in advancing the "grass-roots" based watershed concept where partnerships were developed for identifying and resolving important watershed-related issues. This is primarily due to a lack of financial support for their time to pursue these issues.*[26]

Zoto explained that RPAs tend to focus on select issues where they can delegate their limited resources. In many cases, this means the funding they receive from the federal government to prepare a regional Transportation Improvement Plan where local projects are identified and listed, following a public hearing process, and prioritized for federal funding during a five-year period. He provided a specific example from his tenure at South Coastal Watershed. Southeastern Massachusetts was described by a Harvard University study as a "region at risk" due to rapid growth and the prospect of even more growth if existing plans to increase transportation services came to fruition (such as rail services and adding an extra lane to Rte. 3) The study concluded that few towns had completed master plans, which left them ill prepared for buildout scenarios. With this prospect becoming even more of a reality for many towns, RPAs are making assessing how well-equipped individual towns are with their master plans, zoning, and open space plans a primary focus.

2. What trends are occurring in watershed associations in response to the dissolution of the MWI?

---

[25] Conversation with Mike Gildesgame, Director, DEM Office of Water Resources. April 2003.
[26] Zoto.

I know that the initiative did help move towns and state government in the direction they wanted to see happen. Now they don't have that funding or programming assistance.[27]

The success of the MWI lay in its ability not just to identify and address the environmental issues important to a watershed, but also in aiding local groups in securing funding for their activities. Watershed Teams served as a crucial link between these groups and state agencies and their associated funding.

3. What could be some anticipated effects of the MWI's demise?

Fewer watershed-wide assessments of natural resources, habitats, hydrology, etc. Less emphasis on watershed planning and management at the state level overall, and perhaps a more narrowly focused approach to environmental issues--town oriented rather than subwatershed.[28]

The implication that towns may be given the responsibility to assess and remedy their environmental issues seems daunting given the challenges of unprecedented growth that many towns in Massachusetts are facing.

At the town level, elected officials are still missing the big picture. This is the strength of the MWI because of its ability to promote an understanding of big picture, watershed-wide issues through the facilitation and coordination of new partnerships, outreach /education, and technical assistance. In this way, it was able to assess water issues from "headwaters to coast" and to address land-related impacts that affect water quality and quantity.[29]

However, some towns may be capable of incorporating a few of the valuable lessons learned from the MWI into their planning strategies. The chairman of the Cohasset Board of Health provided potential hope in an article he wrote for the Cohasset Mariner, one of the few papers that mentioned the MWI's demise.

It's for the future to say what impact the watershed concept has in cleaning up the region and how well communities will communicate without the coordination provided to our region for the past five years by the Watershed Initiative. But for Cohasset, it gave us an invaluable plan that will lead us into a cleaner more healthy use of our town's precious environmental resources.[30]

4. In its announcement that the MWI would be terminated, the EOEA stated that the watershed approach will now be furthered even in its absence. What action is the EOEA taking to make good on this claim?

It's possible, and there remain a lot of state agency staff as well as advocacy groups and others who continue to think watersheds, so I don't think the concept will vaporize.

---

[27] Gildesgame.
[28] Gildesgame.
[29] Zoto.
[30] Bobo, Steve. "Health Notes: End of environmental effort could be watershed for groups." *Special to the Cohasset Mariner*. February 20, 2003.

However, it is as yet unclear to me how the administration plans to "internalize" the watershed approach.[31]

Until FY04 budget issues related to agency restructuring and funding are resolved, it is too early at this point to tell if the watershed approach will be carried on at the state level.[32]

Conclusions

Remediating the externalities created by water issues exceeding both local boundaries and the authority of local officials necessitates a collaborative approach with a multitude of stakeholders. In the relatively short time of it's employment, the MWI appears to have embodied many of the traits necessary for successful watershed management. With it's dissolution, the opportunity presents itself for regional planning associations to take a leading role in advancing the watershed approach in Massachusetts. However with the limited resources that RPAs currently possess to address the ongoing issues in their communities, it is unlikely that they will be able to champion the cause of watersheds without substantial financial and logistical support. While the possibility exists for pockets of regional watershed planning, for the most part RPAs are unequipped to maintain such programs at this time. The ultimate conclusion from those I talked to is that unless the state incorporates the watershed approach at some level, this form of environmental management is in danger of falling between the cracks.

[31] Gildesgame.
[32] Zoto.

Land Use Zoning Reform Legislation

> *Issues such as transportation, housing, and protecting water supplies are regional in nature and can't be solved at the local level. Nevertheless, communities need new tools that will help manage growth and support well-planned development. Some municipalities grasp at large-lot zoning and moratoriums on growth to maintain community character and limit growth. This will continue until better tools, including improved planning, are made available to communities and until Massachusetts reforms its antiquated zoning laws.*[1]

As seen with the Watershed Initiative, regional planning has struggled in Massachusetts aside from a few shining exceptions, such as the Cape Cod Commission. The current statutory framework for land use planning in the state stands in stark contrast to the concept of regionalism and presents a tremendous obstacle to effective planning on a local level. For this reason, many stakeholders in Massachusetts feel the best hope for more effective planning rests not in regionalism--at this point in time--but in fixing the current statutory framework and providing local governments better tools to do their jobs more effectively.

This portion of the project is intended to—

- Develop a context for the state legal framework governing land use in Massachusetts
- Identify and discuss the proposed revisions to the Massachusetts statutory framework governing land use
- Incorporate feedback from various stakeholders, who may support or oppose the legislation

Growth Management: 101

One of the primary responsibilities of local planners is to balance the management of development and re-development with the goals and character of their community. Every community struggles with a diverse range of issues. To do their job effectively, local planners need a wealth of flexible tools and the authority to guide and inform development. Despite an array of complex regulations and requirements at a local level, there is little authority that enables planners to effectively manage growth. At the same time, developers are frustrated with the disparate requirements encountered community-by-community and acknowledge the current framework is antiquated.

> *Massachusetts lags behind other states in planning and zoning reform because state laws that establish the framework for local control contain unclear or restrictive provisions that 'effectively deprive these same municipals of the authority consistent with their responsibilities.'*
>
> -- Massachusetts Municipal Association[34]

> *There's no question reform is necessary. Chapter 40A is antiquated and does not accomplish what it is intended to do.*
>
> -- Dave Wluka, Vice President, Massachusetts Association of Realtors[35]

---

[33]Aaron Gornstein and Jim Gomes, "Growth Can Be Green," Boston Globe, January 2, 2003.
[34]Massachusetts Municipal Association website:
http://www.mma.org/news/news_tiles/econ_develop_news/zoning_group_4-8-02.html

Growth is by and large regulated at the local government level in the United States. States delegate authority to local governments. Local governments use the authority to adopt legislation that protects the health, safety, and general welfare of its citizens.[36] This is particularly true in the Commonwealth of Massachusetts where "home rule" prevails. "In a 'home rule' state...the responsibility for land planning and the authority to regulate development rest with its cities and towns."[37] Many in the planning community question the reality of this authority, claiming that home rule is in fact impeded here under the statutory framework.

> *Despite widespread rhetoric about home rule and the existence of the Massachusetts Constitution's Home Rule Amendment, it is striking how much power state law takes away from local governments, especially compared to most other states. The state law framework...frequently prevents local governments from effectively controlling their destiny.*[38]

The courts often support the decisions made by the local governments under the concept of *legislative presumption of validity.* "The courts give great deference to regulations that are properly enacted by local governments, generally holding them valid unless clearly proven otherwise."[39] Court support ends, however, when regulations begin to look so restrictive that they result in a "taking" of private property. Such an occurrence necessitates that a landowner receive compensation.

Local governments use a number of tools and regulations in an attempt to direct or control growth. These include—

- comprehensive plans
- zoning ordinances and bylaws
- subdivision regulations, and
- capital improvement programs

The following matrix provides an overview of how a local government uses each of the regulatory approaches.

---

[35]Conversation with Dave Wluka, Vice President of Government Affairs for the Massachusetts Association of Realtors, April 15, 2003.
[36]Douglas Porter, Managing Growth in America's Communities, Island Press 1998, p. 18.
[37]Jeff Lacy, *Guest Column: Zoning Reform Needed to Address Sprawl.* One-pager provided in email correspondence.
[38]Joel Russell, Time for a Change in Massachusetts Land Use Legislation. September 6, 2001.
[39]Porter, p. 18.

Table 1: Building Blocks for Managing Growth[40]

Comprehensive Plans (General Plan or Master Plan)	A Comprehensive Plan determines how a community should develop over a 10- to 20-year timeframe, concentrating on quality, location, and amount of development. In Massachusetts, local Planning Boards must adopt a Master Plan but there is no requirement for zoning or subdivision consistency.
Zoning Ordinances	Zoning Ordinances are written requirements and standards that define the permitted uses of land and buildings, the height and size of buildings, the size of lots and yards around buildings, the supply of parking spaces, size and type of signs and fences, and other characteristics or development. Their intention is to separate incompatible uses of land. Maps clearly delineate zoning districts.
Subdivision Regulations	Subdivision regulations govern subdivision of land for sale or development via standards for size and shape of lots, design and construction of streets, water, and sewer lines, other public facilities, and other concerns such as environmental protection.
Capital Improvement Programs	Capital Improvement Programs provide a construction schedule for planned infrastructure improvements. Identifies expected sources of funds to pay for them and timetables for where the improvements will be made.

In addition to requirements enacted on a local level, there are times when the state and/or federal agencies play a role. These instances range from special permits (e.g. drilling wells in rural areas) to requirements for adherence to environmental laws (such as Title V that governs DEP stormwater regulations).

Land Development in Massachusetts

Communities around the nation are turning their attention to the constraints and ramifications often associated with sprawl development. This is particularly true in a state and region where many of the key elements of sprawl – commercial strips, big-box stores, low-density residential subdivisions, traffic congestion, numerous large scale parking lots, and rapid consumption of open land – are taking hold and (some would argue) changing the historical character of communities. Jeff Lacy, Chief Environmental Planner for the Metropolitan District Commission, paints the following picture.

> *Although sprawl is not unique to New England, it is particularly evident here, where it stands in stark contrast to our traditional settlement patterns...compact towns surrounded by a "working landscape" of fields and forest...Our regional identity and sense of place have begun to suffer. "Anywhere U.S.A." is not that far away.*[41]

[40]Porter, pp. 22-27.
[41]Jeff Lacy, *Guest Column: Zoning Reform Needed to Address Sprawl.*

There is little doubt Massachusetts is struggling to control sprawl, particularly in the less developed rural communities. A quote from a Boston Globe article offers one perspective about the rate at which the rapid growth is occurring.

> *Massachusetts is not growing fast in terms of population but development is spreading out to Interstate 495 and beyond at a rapid pace, resulting in clogged highways and the loss of open space according to the Boston Society of Architects and other environmental groups. They say consumption of land is occurring seven times faster than the growth in population.*[42]

Practitioners offer a wealth of definitions for sprawl and its causes. One particularly useful definition identifies five segregated components.[43] In assessing the challenges facing many of the Massachusetts communities, these components seem fitting.

1. Housing subdivisions. These areas are exclusively residential.
2. Shopping centers. Places exclusively for shopping, ranging in stature from small markets to big box stores or malls. Walking to these locations is not a real option. Distinguishing characteristics include no surrounding homes or offices, single-story height, and parking lots that separate the building from the road.
3. Office and/or business parks. Places exclusively for work. Distinguishing characteristics include free standing building in a park, large parking lots, isolated, and surrounded by parklands and/or major highways.
4. Civic institutions. These institutions include town halls, schools, and other places that once served as focal points for communities. In suburbia, these facilities are dispersed, unadorned, and surrounded by parking.
5. Roadways. The separation of the aforementioned uses requires a significant amount of infrastructure and roadway to connect them. "Since each piece of suburbia serves only one type of activity, and since daily life involves a wide variety of activities, the residents of suburbia spend an unprecedented amount of time and money moving from one place to the next. Since most of this motion takes place in singly occupied automobiles, even a sparsely populated area can generate the traffic of a much larger traditional town."

What encourages these basics elements of sprawl? Robert Burchell, a professor of urban planning at Rutgers University, provides one theory, which seems to fit in the context of the Massachusetts structure.

> *The legal framework within which sprawl occurs is fragmented into numerous relatively small units, separately controlled by discrete local governments with unique rules and regulations.*[44]

To this end, sprawl may always exist in Massachusetts, a state where divisions supporting Home Rule, Regionalism, and state planning collide. For those who want to better control it,

---

[42]Anthony Flint, "Mass. Zoning Overhaul Recommended," Boston Globe.
[43]Andres Duany, Elizabeth Plater-Zyberk, and Jeff Speck, Suburban Nation: The Rise of Sprawl and Decline of the American Dream, North Point Pres, Farrar, Strauss and Giroux 2000, p. 5.
[44]Robert W. Burchell, Costs and Benefits of Alternative Development Patterns: Sprawl versus Smart Growth. In *Metropolitan Development Patterns: Annual Roundtable*, Cambridge, MA: Lincoln Institute of Land Policy 2000, p 42.

a part of the solution is said to exist in developing innovative and flexible tools for local governments to use.

There are others, however, that argue there are some benefits to sprawl. A recent study by Mathew Kahn of the Fletcher School of Law and Diplomacy at Tufts University claims that sprawl could have some positive aspects, including "more affordable housing and greater opportunities for home ownership, particularly among blacks."[45] A Boston Globe article that discusses the findings of the report quotes a caution posed by Peter Gagliardi, President of the board at Citizen's Housing and Planning Association, "Smart growth for some means not letting anybody else in."[46]

This is an important finding that warrants serious consideration in a state that both faces a tremendous housing shortage and is pursuing the concept of Smart Growth. Another Boston Globe article, published in April 2003, ties together the housing shortage, current zoning and land use rules, and the potential for the situation to worsen.

> *The root of the problem, developers say, is that there isn't enough land to build on—not so much a physical scarcity as a scarcity of land that cities and towns are willing to allow development on...the NIMBY crowd is enabled by local zoning rules and land use regulations, some of which actually prohibit multifamily residential developments...About 45 communities have passed slow-growth or no-growth measures on top of the existing rules, such as caps on building permits per year. What ends up being built are large-lot, single-family subdivisions: by definition, more expensive homes, and not very many of them.*[47]

This is an enormous issue in Massachusetts but for the scope of this document simply cannot be addressed adequately. The serious concerns surrounding the issues, however, receive a little further discussion under the proposed revisions on Inclusionary Zoning in Chapter 41 § 81Q.

Massachusetts Land Use Reform Act

> *The challenge of restoring the integrity of environment systems and the vitality of urban centers requires bold action lest we lose all of the special character, diversity, and quality of the Massachusetts landscape. Many communities are willing to take such actions but have been stymied by constraints in state law. Land use regulatory provisions commonly used in other states, such as mandatory clustering, impact fees, and low density rural zoning, simply cannot be used here, or can be applied only through strange and artful legal gymnastics.*[48]

This quote from Joel Russell, Esq. presents a great introduction to the recent reform efforts pursued by the Zoning Reform Working Group (ZRWG). According to a historical overview provided by ZRWG[49], state Representative John Stasik sat on the Joint Committee on Local

[45]Anthony Flint, "Study says sprawl can reduce race gap in home ownership," Boston Globe.
[46]Ibid.
[47] Anthony Flint, "Real Estate Roulette: Why the State's Red-Hot Housing Market Could End Up Hurting the Economy, Harming the Environment, and Landing the Suburbs in Court," Boston Globe, March 9, 2003.
[48]Russell, p 2.
[49]Zoning Reform Working Group, "History of Zoning Reform Working Group," One-pager obtained from Jeff Lacy via email correspondence. April 2003.

Affairs and formulated a group in 1999 to evaluate and make recommendations on the state's planning, zoning, and subdivision statutes. The original group was composed of diverse stakeholders, including members from both the development and planning communities. After representative Stasik's retirement, the group dispersed. Some time lapsed before a smaller portion of it evolved in to an independent technical advisory group, the Zoning Reform Working Group (ZRWG). It is important to note, however, that many stakeholders interviewed for this document pointed out that the newly formed group only really represented the planning community. The ZRWG now has more than 40 members, who work on statutory research and drafting, educational outreach and coalition building.

The ZRWG drafted the Massachusetts Land Use Reform Act (MLURA) as an attempt to comprehensively revise the Zoning Act (Chapter 40A) and Subdivision Control Law (Chapter 41) of M.G.L. Title VII *Cities, Towns and Districts*. The MLURA is intended to enable local planners to move away from regulations and planning that encourage sprawl and towards the concept of growing smart (as an aside, the term "Smart Growth" is said to have originated in Massachusetts back in 1987 at the Center for Rural Massachusetts in Amherst[50]). Proponents claim the comprehensive bill can accomplish this task by enabling communities to adopt or update their local comprehensive plans; develop effective land use regulations that are consistent with the plans; and implement tools to better shape their futures.

In personal correspondence, Lacy explained that the MLURA has been filed 4 different ways on Beacon Hill.[51] Two are standalone versions sponsored independently by Representative Pam Resor (an Acton Democrat) and Representative Douglas Peterson (a Marblehead Democrat). Both of these versions are currently in the Local Affairs Committee. Two other bills incorporate the language of MLURA--one under the *Sustainable Development Act* and the other, sponsored by state Senator Marc Pacheco (a Taunton Democrat), in the *Livable Communities Act*. These two bills are currently in the Committee on Natural Resources. A hearing is set for July 24, 2003.

The proposed revisions are too extensive to examine in detail yet an idea about the breadth of the proposed changes is important. For this reason, the following table will provide an overview of—

- the current statutory requirement,
- the proposed change by MLURA,
- a snapshot of the rationale, and
- notes on how certain sections are expected to change during the drafting process.

It is important to note that much of this information originated from the ZRWG. As a result, some of the rationale may present a bias.

---

[50]Jeff Lacy, Guest Column.

[51]Conversation with Dave Wluka, Vice President of Government Affairs for the Massachusetts Association of Realtors, April 15, 2003.

Table 2: An Overview of the Proposed Revision[52]

Statute	ZRWG Perspective of Current Requirement	Proposed Change	ZRWG Rationale	Notes and/or anticipated changes during drafting
Chpt 40A §2 **The Zoning Act** *General Purposes of Zoning Ordinances & By-laws*	The Zoning Act does not articulate a defined purpose. Therefore, courts must interpret the purposes of zoning.	Establishes 22 purposes for which local zoning may be adopted. Does not limit other locally-defined purposes.	Enhances the utility of zoning; encourages communities to enact innovative planning & zoning methods.	Defined purposes range from implementation of a plan adopted by a city or town to conservation of various features.
Chpt 40A §3 **The Zoning Act** *Exemptions from Zoning Ordinances & By-laws*	Religious, educational, day care, agricultural, and solar energy uses are afforded special treatment, such as locating in any zoning district w/ only limited review. In addition, the section is said to encourage mansionization by excluding any regulation of allowable maximum interior area for single family homes.	Clarifies language in the section. Enhances local review capabilities for the protected uses. Defines education purposes as public and nonprofit private primary, secondary, and higher educational purposes. Exempts community residential programs. Removes restriction on regulating the maximum interior area of single-family dwellings removed.	Improves the local review capabilities for the defined uses. Definitions for uses needed clarification, e.g. educational purpose. Discourages teardowns of smaller, older homes and therefore mansionization.	
Chpt 40A §6 **The Zoning Act** *Consistency w/ an Adopted Plan*	MA does not require zoning to be consistent. Resulting effects-Plans have little weight but long shelf-life; zoning is created in a vacuum; & land use regs frequently contradict plan objectives. Consequently, plans receive little attention from communities or the courts.	Requires that zoning not be inconsistent with a Master Plan by January 1, 2009.	Increases relevancy of planning; discourages ad hoc land-use regulation; connects a community's vision with its zoning.	Under consideration: the addition of criteria for determining consistency or lack thereof and inclusion of a 6-month grace period to bring ordinance and bylaws into consistency with periodic plan changes.

[52]Much of the information is from a Zoning Reform Working Group presentation provided by Angus Jennings, Planner for the Town of Marshfield. March 2003 and another document provided by Jeff Lacy that outlines the MLURA with ZRWG modifications under consideration as of April 8, 2003.

Statute	ZRWG Perspective of Current Requirement	Proposed Change	Rationale	Notes and/or anticipated changes during drafting
Chpt 40A §6 **The Zoning Act** *Applicability of Zoning Ordinances and By-Laws*	Nation's most lenient "grandfathering" statute. The section is extremely complicated and includes a number of provisions on vested rights, protection for ANR plans, and zoning freezes.	Grandfathering of Subdivision Plans-pertains only to the subdivision plan itself; definitive plan approval fixes date of vesting from an 8 to 3-year duration (local extension possible). Section Reorganized-Language is clarified and reformatted.	Current grandfathering perpetuates old zoning that communities are trying to change. As a result, section actually discourages change. The section is trimmed to a basic level, enabling more local discretion for enhancing any protections.	This is a complicated and contentious section. Therefore extensive revisions are anticipated and section is still considered a work in progress.
Chpt 40A §7 **The Zoning Act** *Site Plan Review*	Does not currently exist.	Establishes a statewide framework for site plan review that includes- what is covered; which local agencies may undertake it; what standards are to be used; enforceable conditions on approval; and local discretion in laying out an appeals process.	Zoning Act does not currently provide a framework or guidance. Enactment of this section will help reduce the legal challenge that exists when there is no state statute. Section promotes use of site plan review and establishes needed standards + appeals process.	
Chpt 40 A § 9 The Zoning Act Transfer of Dev. Rights, TDR	Recent amendment to Zoning Act limits local adoption of TDR as a tool b/c of designating special permit as sole administrative mechanism.	Removes density bonus requirement. Municipality chooses permitting mechanism.	Current TDR requirements discourage adoption of this tool. Greater municipal flexibility in using TDR.	
Chpt 40-A § 9D The Zoning Act Development Impact Fees	Zoning Act silent on impact fees; Use of impact fees restricted by court decisions (considered illegal taxation)	§§ 9 and 10-Impact fees specifically authorized. Implementation parameters established. (§9D)	Enables cost recovery for infrastructure (sewer, schools, water) resulting from new development.	Additional guideposts for communities likely in an attempt to make their adoption defensible bylaws.
Chpt 40-A § 9E The Zoning Act Pre-dispute Mediation	Zoning Act is silent on this technique.	Authorizes a conflict assessment process, prior to proposal submission, to attempt resolution of potential land use conflicts. Identifies those interested in or affected by a particular proposal, clarifies the issues, investigates willingness to work together, and determines whether a mediator or facilitator may be useful. (§11)	Resolution of land use disputes before project proponents expend significant resources on proposal development. Reduction in costly/time consuming delays.	

Statute	ZRWG Perspective of Current Requirement	Proposed Change	Rationale	Notes and/or anticipated changes during drafting
Chpt 40A § 17 **The Zoning Act** *Mediation of Land Use Appeals*	Zoning Act provides for judicial review but not for mediation.	Concept of mediation introduced. Stays an appeal pending the outcome of negotiations. A mediator is selected as an intermediary; compensated by the parties. No loss of right to appeal if mediation fails to arrive at an agreement.	Negotiation preferable to legal action. Benefits include reduction of legal logjams, lower legal costs, expedited development, and local solutions.	
Chpt 40-B (See §81Q A/H)		Not changed directly	Belief is that communities will create more Affordable Housing on their own via strengthening of master planning process & greater tools at their disposal.	
Chpt 41 § 81D **Subdivision Control Law** *Master Plans*	Planning Boards required to draft Master Plan. Plans are adopted by a majority vote of the Planning Board. No public hearing required. No connection to zoning or subdivision controls.	Planning Boards must hold a hearing before adopting a Master Plan. Local legislative body must hold a second public hearing before adopting a Plan by a 2/3 majority vote.	New consistency requirements elevate the importance of a Master Plan necessitating greater municipal scrutiny and a more inclusive adoption process.	
Chpt 41 § 81M **Subdivision Control Law** Purpose of Subdivision Control	No requirements for connection to Master Plan for Subdivision Regs	Master Plan becomes a valid purpose of the Subdivision Control Law	SCL enacted '53, most provisions still unchanged. Law does not address current needs. Subdivisions define evolving character of a community. Modernization of SCL needed to connect subdivisions regs and community planning process.	
§§ 81L, O, P, T, & X **Subdivision Control Law** Approval Not Required Plans (ANRs)	Unlimited lot creation along existing roads does not equal a subdivision; ANR lots are not subject to subdivision regs; short review of 21 days; limited planning board discretion	Statutory exemption for ANR eliminated; all land division into lots constitutes subdivision; munis may define and regulate minor subdivisions	ANR unique to MA; lot creation impacts future of town; ANR encourages sprawl, facilitating dev. in remote areas; Communities powerless to deny even w/ substandard roads; ANR dev. dominates landscape	Commentators expressed interest in setting limits for minor subdivisions. Discussions on this topic are likely.

Statute	ZRWG Perspective of Current Requirement	Proposed Change	Rationale	Notes and/or anticipated changes during drafting
Chpt 41 § 81O **Subdivision Control Law** *Date of Submission*	Mailed-in plan id deemed submitted upon receipt and starts review clock.	Date of submission is date of next regulatory scheduled planning board meeting, if-(a) plan is received at least 7 days prior to meeting (b) it is deemed complete @ meeting	Review period is limited (21 days – ANR, 45 day prelim. Plan). Mailed-in plan is deemed submitted upon receipt = less review time Amendment ensures planning boards adequate review time.	
Chpt 41 § 81Q **Subdivision Control Law** Consistency w/ Adopted Plan	No requirement for subdivision regulatory consistency w/ Master Plan	Ensures consistency w/in 5 years of effective date. (§23)	Subdivision profoundly affects a community's character; Increases relevance of planning; discourages ad-hoc development regs;	Definition of affordability likely (not to exceed 100 percent median income). Link to Zoning Act also likely.
Affordable Housing	Communities effectively prohibited from requiring inclusion of AH	Subdivision regs. Could require Afford. Units. Cannot exceed 15% of units; Affordability set locally (% of median income for eligible buyers); Regs allow alternatives (construction offsite, dedication of land, payment in lieu of units) (§23)	Inclusionary housing tool used successfully across nation; market-rate housing fuels need for AH (for additional police, fire, et cetera); Market rate housing consumes land base for AH; market rate reduces community's overall % of AH	
Chpt 41 § 81U **Subdivision Control Law** *Performance Guarantees*	Applicants select type of performance guarantee	Planning boards approve selected type(s) of performance guarantee. (§26)	Planning Board gains ability to ensure subdivision infrastructure is built and completed as proposed, esp. if bonding co. suffers a bankruptcy<?>	
Chpt 41 § 81Q&U *Parks and Playgrounds*	Regulations can't require incorporation of parks or playgrounds. 3-year set aside but developer is compensated. Parks, Greenways, playgrounds seldom included in subdivisions.	Prohibition on requiring dedications of land removed. Compensation requirement removed. Desirable amenities may be required in new residential neighborhoods. (§§ 24 and 25)	Parks are important to quality of life, particularly residents of subdivisions. Requirement adds value to residential neighborhoods, localizes recreational opportunities, and defrays municipal costs of providing recreation.	

Expanded Discussion on Select Sections

The comprehensive revisions proposed by the MLURA affect a number of interested parties. To better determine the scope of potential impacts, a select group of stakeholders were interviewed. Due to time constraints, interviews were conducted by phone in March and April of 2003 and limited to—

- Jon Witten, a land use attorney and professor at Tufts University[53];
- Planners, who included
    - Tony Fields for Burlington (who is also the legislative Chair for the Massachusetts Association of Planning Directors)[54]
    - Glenn Garber for Lexington[55]
    - Charles Grichs for Wareham[56], and
    - Jeff Lacy, the Chief Environmental Planner for the Metropolitan District Commission (who also heads up the ZRWG)[57];
- Mathew Feher, from Legislative Affairs at the Massachusetts Municipal Association[58], and
- Two representatives from the development community, including
    - Howard Chandler, the Executive Officer for The Builders Association of Greater Boston[59], and
    - Dave Wluka, the Vice President for the Massachusetts Association of Realtors[60]

Though this list is in no way representative of all impacted stakeholders, the insights gleaned provide a small window into the enormously complex issues associated with the legislation. Though similarities exist, there are also disparate opinions about how to fix what few dispute is a need for more effective planning in the Commonwealth. Stakeholder comments are scattered throughout the document but are particularly evident in the following sections.

General Support or Opposition

In general, support or opposition followed expectations—planners, in general, supported the bill and the development community opposed it. However, there are a few common concerns, the most serious of which is the perception of a flawed process that resulted from limited stakeholder involvement.

- Wluka participated in the original Stasik Committee around 1999 and 2000. He claims that after Stasik's retirement, when ZRWG emerged as a sort of spin-off, the group became extremely one-sided and represented only half (roughly) of the original participants-none of which represents the development community. In

[53]Conversation with Jon Witten Esq., attorney and professor at Tufts University, March 2003.
[54]Conversation with Tony Fields, April 2003.
[55]Conversation with Glenn Garber, March 2003.
[56]Conversation with Chuck Grichs, March 2003.
[57]Conversation with Jeff Lacy, April 2003.
[58]Conversation with Mathew Feher, March 2003.
[59]Conversation with Howard Chandler, April 2003.
[60]Conversation with Dave Wluka, April 2003.

addition, he feels much of what is proposed is a compilation of other pieces of work and that it fails to examine the issues on a comprehensive level.
- Grichs echoed part of this sentiment by indicating the process is flawed or will be perceived as flawed until a concerted effort is made to sit down with the development community.
- Witten also feels leaving out the development community was a bad idea.

The ZRWG counters that the development stakeholders expressed no active interest in (nor would they support) the type of radical reform that is needed. Participation from the development community is now limited to the hearing process and Massachusetts Bar Association debates where a number of good suggestions are emerging. Lacy emphasizes, however, that the group is open to ideas and remains flexible.

Chapters 40A, §6 and 41, §81Q (Consistency with Comprehensive Plans)

Nearly every interview, at some point, turned its attention to the topic of Comprehensive Plans. Despite a requirement for development of a Comprehensive Plan, zoning and subdivision regulations do not require consistency. This is a fundamental obstacle to effective planning. "In states not requiring consistency between plans and zoning...zoning may vary from a plan, causing a great deal of unpredictability in the Community Development Process" [61]

This quote illustrates one of the common frustrations encountered by both planners and developers. For planners, the concern stems from both a lack of incentives to implement a plan and a lack of authority to enforce it.

According to Fields, planning in Massachusetts is more administrative and reactive as opposed to true planning. Zoning and Subdivision statutes have mechanisms that thwart local efforts (e.g. grand fathering and freezing of zoning). Though in other places zoning is based on the Comprehensive Plan, here a planner can merely "do what you can, when you can do it."

Witten strongly feels the Comprehensive Plan has to be the overarching guiding document and that the plan should require adoption by Town Meeting or City Council. Though MLURA provisions call for consistency with Comprehensive Plans, there is no legal connection to it or teeth to enforce the plan, which renders it useful to local planners and officials only as a guiding statement for subsequent policy formulation. Witten thought Massachusetts should look to states with progressive planning policies, such as Rhode Island or California, as a model. In California, for example, the plan is considered the "Constitution for all new development."

For Grichs, a former planner in Rhode Island, the transition to planning in Massachusetts was an eye-opening experience. He could not believe some of the rules in place here. For example, everything is about the Comprehensive Plan in Rhode Island and Florida. Here, though, Grichs is concerned that a planner could not even quote a master plan in

[61] Porter, p. 25

court. For real change to occur in Massachusetts, Grichs feels you need to start at the top with the Master Plan (Master Plan and Comprehensive Plan are used interchangeably). He also feels Rhode Island serves as an excellent model, as it makes the Comprehensive Plan the heart of the legal framework for land use.

The bottom line is that many of the planning stakeholders feel that though consistency between the Plan and zoning and subdivision regulations is a good place to start, there is some disappointment that the legislation does not strengthen its authority. Lacy, however, claims that the consistency requirements themselves strengthen the authority because planners would likely have legal recourse if there are glaring inconsistencies.

For the development community, frustration often emerges from the disparate requirements encountered and the perception that towns are failing to plan effectively.

Wluka expressed the following sentiment, "Towns need to plan and implement planning. If there is no authority or teeth...no penalty, then the Plan won't work...Development and environmental protection are not mutually exclusive. Both just require good planning to accommodate all interests."

Finley Perry, President of the Builders Association of Greater Boston, is quoted in a Boston Globe article, expressing a similar sentiment. "...zoning in Massachusetts is nutty...we need more regional planning. Towns don't want to plan, they just want to regulate. What developers need is predictability."[62]

The inability to enforce a plan may also be a contributing factor to the assumption by the development community that planners are not doing their job effectively. It seems most planners readily admit they need more innovative and effective tools to do the job at hand.

The inability to enforce a plan or vision for the community is resulting in other problems. For example, Ben Fierro, the attorney who represents the Home Builders Association of Massachusetts, is quoted in a Boston Globe article as saying, "We have too many communities mired in 1950s-style zoning...Homebuilders build what they are allowed to build. People say we need fewer cookie-cutter subdivisions or less impervious surfaces that prevent runoff – all valid points, but most zoning in our suburban communities still provides for just that."[63]

This is an interesting point and one worth exploring for a moment. In the book Suburban Nation, Duany tackles this issue.

> *As exposed in Philip Howard's the "Death of Common Sense"...lengthy codes can be burdensome to the point of farce. But the problem with the current development codes is not just their size; they also seem to have a negative effect on the quality of the built environment. Their size and their result are symptoms*

[62]Anthony Flint, "Planners Seek To Revamp Outdated Zoning Legislation," Boston Globe, September 3, 2002.
[63]Anthony Flint, "Romney Urged to Overhaul Zoning Law," Boston Globe, January 5, 2003.

of the same problem: they are hollow at their core. They do not emanate from any physical vision. They have no images, no diagrams, no recommended models, only numbers and words. Their authors, it seems, have no clear picture of what they want their communities to be.[64]

In Massachusetts, the planner is severely limited in this regard. A vision is often outlined in the Comprehensive Plan. To mandate a Plan, however, that has no authority, no legal power, is to impede a planner from enforcing or developing regulations that promote their vision and minimize sprawl. Therefore, the real problem may not rest solely on a lack of vision as implied by Duany (which may be true in some areas of the country) but also on inherent problems in a state's legal framework for local planning.

Chapter 41, §Q (Inclusionary Zoning)

Affordable housing, as previously mentioned, will not receive the discussion it deserves for the scope of this document. However, the issue is on the minds of all stakeholders interviewed and is addressed in that context.

Housing affordability is perhaps one of the greatest threats to the economy in Massachusetts. The following quote from a Boston Globe op-ed written by Aaron Gornstein (Executive Director of Citizen's Housing and Planning Association) and Jim Gomes (President of the Environmental League of Massachusetts) is very telling about the extent of the problem.[65]

Massachusetts is suffering both an acute housing shortage and threats to the environment because our state and local governments have not yet faced the challenges of growth and land use. Consider:

- *The median house price in Greater Boston has increased by over 50% over the past three years, giving our state the distinction of being least affordable in the country.*
- *Land is being developed at four times the rate of population growth but that development is doing little to address our need for affordable housing.*

Right now, affordable housing is covered under Chapter 40B, a controversial statute that enables a developer to bypass local zoning laws if affordable housing units are proposed in communities that have not maintained the required 10% affordable housing stock. The MLURA does not address this issue head on. Lacy indicated that the political environment and slew of proposed legislative reforms surrounding Chapter 40B needed "another player like it needed a hole in its head." The ZRWG made a conscious decision not to revise this chapter and to focus on strengthening zoning and planning.

Witten is emphatic about his disappointment that the MLURA does not address this issue. Since Witten's initial involvement with the ZRWG, the process has evolved over time to only address zoning and subdivision and overlooks what he considers the 2 most crucial

[64]Duany, p. 19.
[65]Gornstein and Gomes.

elements: Comprehensive Plan reform and Chapter 40B. He emphasized the need to fix Chapters 40A, 40B and 41 at the same time because they are all inter-related. It does no good to revise Chapter 40A if a Chapter 40B project is filed. Further, Chapter 40B has not changed in 34 years. According to Witten, all of the decision making power resides in the Housing Appeals Committee, which he feels often sides with the developer. As a result, even sensible planning and local zoning requirements are often thrown out for 40B projects.

Witten does acknowledge, however, that legislation will strengthen the tools available to planners to address the issue of 40B but claims local planners could take action under the existing statutes with inclusionary zoning. Witten suggests that a better approach is to enable communities to plan for affordable housing needs and fulfill those requirements. So long as they are meeting the requirements, there should not be a draconian law forcing a one size fits all policy on the various towns/cities.

Grichs also indicates that the 40B is a draconian statute and its reform really needs to be a major priority here in Massachusetts.

Chandler emphasized the need for more open dialogue and education of the public on issues related to housing affordability. He feels there's a stigma with the term "affordable housing" and that many fail to understand the benefits to their communities.

In a Boston Globe article, City Manager Chelsea--Jay Ash—also echoed this frustration, "We don't see affordable housing as a curse but a blessing. I get frustrated when suburbanites associate affordable housing with bad things. We have people living in affordable housing who contribute to the community, who are members of boards and commissions, and whose kids go off to do great things."[66]

In addition, Chandler pointed out that no one talks about how affordable housing projects can work. Instead, communities focus their efforts on identifying the problems or stopping the projects from moving forward without any real consideration or discussion. He also provided two excellent examples of how this process of improved communication and public involvement can work. One of the projects is in Chelmsford; the other in Marlborough.

Unfortunately, planners do need additional tools to ensure development fits the needs and character of the community. The current situation with Chapter 40B is often abused by the development community and leaves planners with little, if any, control: "...developers use the law as a blackjack to force communities into accepting projects that are too big and intrusive. If a developer can't get his proposal past local zoning codes, he can avoid that roadblock my making 25 percent of his development affordable."[67] Though representatives of the development community, such as Chandler, may say better communication and public involvement is needed, following through on

[66]Alan Lupo, "Affordable Housing is a Tough Sell in Suburbs," Boston Globe, December 5, 2002.
[67]Ibid.

this suggestion is critical to ensure the stigma of affordable housing is removed as it begins to better blend in to the various communities.

Every suburb is feeling pressure to expand the diversity of housing options. This is a trend that is likely to continue in the foreseeable future.

> *"...middle- and moderate-income central city households still want to suburbanize. In particular, more African-American households are moving in to first- and second-ring suburbs than ever before as they seek the benefits of better educational opportunities and utilize a change in federal housing policy that encourages low- and moderate-income households to move throughout the metropolitan area...Now we can do something differently by allowing those who desire a suburban residence, regardless of race or income, to move there, while encouraging those who prefer an urban environment to fulfill their dream."*[68]

While planners may claim that strengthening the tools available to local planners will enable them to better plan for and develop affordable housing in their communities, there are reasons policy makers need to closely scrutinize this matter, particularly when one considers that 19 communities have yet to provide even 5 percent of their housing stock as affordable.[69] Ash went on in the article to say "I believe folks should have local control from a land use perspective and that localities should be able to determine their own fate. But having said that, it's incredibly unfair that some communities won't open their borders to allow people with lower incomes or certain types of needs to move into those communities...at the end of the day every community has an obligation to provide its share of affordable housing for the Commonwealth." [70]

It remains to be seen whether tools such as inclusionary zoning will help address this situation in Massachusetts. Finley Perry, President of the Builders Association of Greater Boston, wrote a Letter to the Editor that cautioned, "...the concept of inclusionary zoning, though well meaning, doesn't work well in the real world unless communities are truly committed to creating affordable housing. Too often, inclusionary zoning can turn in to a buck-passing pay-to-play "tax" on new home buyers in towns that lack the backbone to face up to housing affordability issues on a community-wide basis."[71]

Local planners and the development community need to bridge this gap, whether through inclusionary zoning or better communication and public involvement, to ensure effective planning and Smart Growth help communities better plan for affordable housing and not strengthen their ability to exclude it.

Approval Not Required

The ZRWG explains, "Massachusetts is the only state that permits unlimited division of individual parcels along existing roads, which are not required to meet the review

---

[68]Burchell, p. 41.
[69]Lupo
[70]Lupo
[71]Finley Perry, "Cooperation Key in Land Use Issue", Letter to Editor, Boston Globe, September 3, 2002.

requirement applicable to new subdivisions. The creation of these roadside building lots by the filing of "approval not required" (ANR) plans effectively determines the future of communities more than any municipal land use plan...A community...is almost powerless to deny these proposals even if located on substandard roadways."[72]

Stakeholder interviews quickly revealed this is an issue of paramount importance to planners. Though perhaps one of the most contentious of the proposed revisions (and one of the ones to most likely to experience fierce resistance from the development community), it also seems to enjoy strong support in the planning community.

Grichs identified ANR lots as perhaps the most difficult issue with which most communities struggle. He feels it is unheard of elsewhere to allow a developer to cut lots simply because of street frontage. This type of policy prevents a town planner from dealing with a number of critical issues, such as drainage. To illustrate the point, Grichs provided a specific example from his community. A proposal came in to cut 2-3 lots on an old country road that contained stonewalls the town wanted to preserve. A "gentlemen's agreement" was made for a private driveway off a side road to service the property (e.g. with mailboxes). This arrangement also helped the planner address safety concerns associated with the main road. After the lots were cut, the landowner sold his property to a developer, who essentially did what they wanted with no regard to the prior agreement. The planner then lost all control over the safety aspect of the road.

Garber also identified ANR lots as a very serious issue for rural Massachusetts. "It's creating a checkerboard of growth. Growth on an unrestricted basis changes the character of a town. There needs to be a class for minor subdivisions under the ANR."

Home Rule vs. Regionalism

In every stakeholder interview, a central question surrounded regionalism. Did the stakeholder believe in the concept? And if so, could this piece of legislation pose a threat to the pursuit of regionalism in the future. The irony is that though everyone supports the concept of regionalism, most of them felt Massachusetts has to "fix what we have first."

Grichs felt strongly that fixing the current statute was the right approach. He believes a regional effort is likely to emerge out of one of the various regional planning authorities in the area.

Garber feels that the Massachusetts planning statutes are so bad that "the priority is to reform what we have before pursuing regionalism." To him, the theory of regionalism is great--and it's working in Cape Cod and Duke County through the Cape Cod Commission. But given the New England form of government, it likely to take a long time before being adopted on a larger level.

[72]Zoning Reform Working Group, "Time for a Change in Massachusetts Land Use Legislation."

Fields indicated that regionalism in New England is a difficult dream. He feels that until a revenue-sharing mechanism other than local property tax is developed, regionalism will not happen. Planning here is based on the local property tax scheme.

Even the development community favors the concept. Chandler indicated regionalism is a way to create more opportunities for all of the involved stakeholders. He feels strongly that such a concept, if implemented, would work and would work well.

Wluka also indicated regionalism could do a lot to address the current problems with land use development in Massachusetts. He is quick, however, to add that regionalism is also a "pie in the sky" concept here.

Witten, on the other hand, feels the group did overlook a last good opportunity to explore regionalism for Massachusetts. His perspective is that comprehensive reform requires a tremendous amount of effort, coordination, and resolve. The likelihood of another groundswell or movement after this one is very unlikely for the foreseeable future. Witten claims, "you can look through every major planning initiative, for example Smart Growth, and identify a person with the political courage to take initiative, motivate, and make that change." In his mind, Massachusetts simply does not have that person.

Despite the support for regionalism, a recent article in the Boston Globe quotes Andres Duany, a founder of the Congress for the New Urbanism and designer of Seaside, FL. Duany insisted in the article that zoning codes and building rules are key to revolutionizing development in the United States. "Changing the 'DNA of development" – codes – will be far more enduring than any one governor or regional planning effort or smart growth legislation."[73]

Duany goes on in the article to acknowledge that overhauling zoning codes will require political clout. Clout that many of the stakeholders I interviewed feel might now be present with Governor Mitt Romney, whom the Globe articles identifies as having come out in support of smart growth.

This perspective indicates that perhaps the comprehensive revisions proposed in the MLURA, while by no means a dramatic new approach to planning here, might actually have the potential to realize some significant changes that could begin to fundamentally change the way land is developed in Massachusetts.

Conclusions

This portion of the group project clearly revealed that land use planning in Massachusetts is an enormously complex problem. Not a single stakeholder resisted the notion that the statutory requirements are antiquated and need revisions. The deep divide quickly emerges when one tries to identify the root of the problems as well as formulate proposed solutions. With a few exceptions, the development and planning communities appear to

[73]Anthony Flint, "'Smart Growth' Expands: Its Thinking Advocates Seek A Political Footing," Boston Globe, February 9, 2003.

be digging in for a political fight over the proposed revisions, each side firmly believing the other is missing the point. Though it has been said that a chance to pursue regionalism may have been overlooked, one cannot help but realize something more fundamental was ignored: the need for widespread collaboration. The tentacles of this legislation are far reaching and will impact stakeholders who never participated in the process or provided solutions. The issues are so complex that perhaps they are impossible to fully grasp unless one deals with the daily struggles on both sides of the issue. There is no doubt the legislation is backed by strong support. Nor is there any doubt it will run into walls of fierce opposition. In the long run, the overall process is weakened. Though perhaps based on ideal concepts, it seems evident that the only way to enact lasting change is to craft a solution based on feedback from all pertinent stakeholders who struggle with these issues on a daily basis. To that end, the following is a simple list of observations encountered in this process.

- Though ZRWG did not want a compromise bill, the development community needed to be involved. The legislation will clearly affect their daily livelihood.
- Regardless of what happens with the MLURA, an issue on the minds of every stakeholder is Chapter 40B.
- Comprehensive Plans, ANR, and Grandfathering receive the greatest support from planning stakeholders.
- Even if this particular piece of legislation passes, the group should ensure continued participation. Such activity will ensure Massachusetts does not face a similar situation in another 30 or 40 years. Effective planning needs to be dynamic to help planners address and adapt to the challenges they face or that will emerge.

An Implementation Guide for Meeting EPA Phase II Stormwater Regulations

General Description

This section of the paper provides a description and an analysis of the regulations related to Environmental Protection Agency (EPA) Phase II Stormwater Rule. The study is carried out at the Federal, State and Local Level.

Forty percent of water bodies in the United States do not meet water quality standards and one of the most important sources is polluted runoff. The EPA Storm Water Program was created in 1990 under the Clean Water Act. The Storm Water Program promulgated Phase I of the stormwater program that requires the use of National Pollutant Discharge Elimination Systems (NPDES) permits, which are directed to the control of polluted runoff. Under NPDES, public and private facilities that discharge wastewater originated in a point source, that could be a pipe, a channel, or a ditch, and that ends in a waterbody, must require a permit to operate (not included in this framework are those discharges that are received by an owned treatment work).[74]

Stormwater is constituted by the flow of snow or rain that does not evaporate and remains over the land surface. Stormwater runoff is collected by drainage systems like curbs, gutters, and drains, channels, ditches, pipes and culverts that do not treat the effluent.

Thus, *40 CFR 122.26(b)(8)* defines:

> *"municipal separate storm sewer means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):...Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body... used for collecting or conveying storm water...which is not a combined sewer...which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.*

The relevance of stormwater regulation is that stormwater constitutes a pivotal source of environmental contamination through the transport of soil sediments, metals, petroleum derivatives, pesticides, fertilizers, and nutrients into water bodies.[75]

MS4s refers to municipal small separate storm sewer system which began to be regulated in 1990 under the Storm Water Phase I program that focused on areas with more than 100,000 habitants. According to *40 CFR 122.26 (b) (16)*

> *Small municipal separate storm sewer system means all separate storm sewers that are:....owned or operated by the United States, a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law)....not defined as "large" or "medium" municipal separate storm sewer systems*

[74] http://www.epa.gov/region1/npdes/
[75] http://www.state.ma.us/dep/brp/stormwtr/aboutstm.htm

.....this term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.

MS4 discharges are a cause for concern because of the concentration of pollutants and illicit connections to sanitary sewers. They are intended to carry only surface stormwater runoff. If the discharges are not controlled, the negative consequences range from loss of aesthetic value to destruction of ecosystems and contamination of drinking water. The Phase II final rule affects small MS4s that are those MS4s not already covered by Phase I of the NPDES stormwater program. It covers all operators of small constructions in those urban areas with at least 50,000 habitants.

Federal Level

As authorized by the Clean Water Act, the EPA, through National Pollutant Discharge Elimination System (NPDES) permits, regulates point sources that discharge pollutants into waters of the United States.

In December 1999, the "Storm Water Phase II Final Rule" was created to extend the requirement of permits to those areas defined as "urbanized" by the US Census Bureau:

"an urbanized area is a land area comprising one or more places- central places- and the adjacent densely settled surrounding area- urban fringe- that together have a residential population of at least 50,000 and an overall population density of at least 1,000 people per square mile".[76]

Phase II is focused on unregulated sources of stormwater discharges that could continue degrading the environment. The NPDES program will require a permit for a point source discharge that was often considered a nonpoint source of pollution, trying to prevent and eliminate illicit discharges or improper connections to the sewer system. This new requirement may avoid the worsening of water quality but not necessarily improve it.[77] The implementation of Best Management Practices (BMP) constitute the most important means to success in Stormwater Phase II regulations. This concept is basically interpreted here as structural best management practices like detention and catch basins, dry wells, and swales.

Section 122.34 of "Storm Water Phase II Final rule" requires MS4s operators to reduce the discharge of pollutants to the maximum extent practicable. This requirement must be reflected through a storm water management program (SWMP) that covers the following areas:

---

[76] EPA 833- F- 00- 004, December 1999 Fact Sheet 2.2

[77] Buzzards Bay Project Fact Sheet, Phase II Storm Water Program: Basic Elements of Municipal Plans Which are Due March 10, 2003 available at http://www.buzzardsbay.com

1. Public education and outreach on storm water impacts.
Implementing a public education program or conducting outreach activities about the impact of storm water discharges on water bodies and the steps the public can take to reduce pollutants in storm water runoff.

2. Public involvement/participation.
Complying with State, Tribal and Local public notice when implementing a public involvement program.

3. Illicit discharge detection and elimination.
Developing and implementing a program to detect and eliminate illicit discharges to a system. Operators must develop a storm sewer system map showing the location of all outfalls; inform public employees, businesses and general public of hazards associated with illegal discharges; prohibit through any regulatory mechanism non-stormwater discharges and implement enforcement procedures. Prohibit through a regulatory mechanism the discharge of non-stormwater into the town sewer system as well as identify non-stormwater discharges including illegal dumping.

4. Construction site storm water runoff control.
Develop and implement a program to reduce pollutants in any stormwater runoff from construction activities disturbing one or more acres of land. The program must include an ordinance for erosion and sediment control, and sanctions to ensure compliance; requirements for construction site operators to implement the best management practices to control waste that may affect water quality; procedures for site inspections and for receipt of information submitted by the public.

5. Post-construction stormwater management in new development and redevelopment.
Developing and implementing a program to address stormwater runoff from new development projects disturbing one or more acres of land. Operators must develop strategies including structural and non-structural best management practices (BMPs) appropriate for the community; use a regulatory mechanism to address post-construction runoff from new projects (to the extent allowable under the law); ensure long term operation and maintenance of BMPs.

6. Pollution prevention/good housekeeping for municipal operations.
Develop and implement programs that include training for the prevention and reduction of pollutant runoff from municipal operations such as park and open space maintenance, fleet and building maintenance, new constructions and stormwater system maintenance.

All the municipalities subject to Small MS4 should have applied by March 10, 2003 for permit coverage by submitting a Notice of Intent (NOI) in order to be eligible to be covered under such permit and must be submitted within 90 days of permit issuance. However, the State of Massachusetts recommended not proceeding with the submission because "it will not be considered as a valid method for coverage under the general permit".

State Level

Even though Massachusetts is not included among the delegated states to oversee NPDES, the Massachusetts Department of Environmental Protection (DEP) is taking an active role in reviewing Storm Water Management Programs developed by communities and is revising regulations for 314 CMR 3.00 (Surface Water Discharge Permit Program). The State of Massachusetts already has a Stormwater Management Policy that is closely related to NPDES final rule. Its main goal is the implementation of standards to improve water quality and quantity issues that are a consequence of stormwater discharges. Such standards are intended to be applied during routine project review carried out by authorities under the Wetland Protection Act. The objective is the prevention or minimization of adverse environmental impacts due to unmanaged stormwater. These standards are used to support existing legal authority and for the interpretation of existing regulations for the DEP. According to the Stormwater Management Policy, discharges that meet the Stormwater Management Standards do not need permits. Here lies a central issue that refers to the implementation of the "Storm Water Phase II Final Rule" and if such permits will or will not be required under the new federal regulation. These standards apply to residential, commercial, institutional, and roadway projects.

The standards of the stormwater management policy were created to be used under multiple regulatory frameworks (Wetland Protection Act, Clean Water Act). The standards address water quantity and quality through the use of Best Management Practices. The standards must be applied during process review carried out by conservation commissions or the department under the Wetlands Protection Act. (310 CMR 10.00).

In the absence of NPDES permits, local commissions or conservation departments may issue permits according to 310 CMR 10.05 (6) that makes reference to quality and quantity from point sources within the buffer zone.

Regarding existing discharges, DEP will apply remedial actions established in the Clean Water Act and the Massachusetts regulations that establish when a permit for stormwater is required. The standards apply to industrial, commercial, institutional and residential subdivisions, including roadway projects, site preparation and redevelopment.[78]

Massachusetts has also developed a MS4 storm management program directed to the enforcement of the reduction of discharge of pollutants, protecting water quality and meeting the requirements of the Clear Water Act. Like the Phase II NPDES program, minimum control measures include public education through outreach with local groups in residential and industrial areas, focusing mostly on public involvement and participation, and giving the opportunity for the general public to intervene in the completion and examination of the program.[79]

---

[78] Commonwealth of Massachusetts Executive Office of Environmental Affairs, Department of Environmental Protection, *Stormwater Management Policy*.

[79] Massachusetts Small MS4 Storm Water Management Program, Part II.

According to this program, applicants must comply with the Massachusetts Department of Environmental Protection, the Wetland Protection Act and the Stormwater Management Program to put into practice the requirements for the construction site stormwater runoff control (II. B.4), and post-construction stormwater management in new development and redevelopment projects (II. B.5)

In relation to the requirements of construction site operators regarding sediment and erosion control, (II. B.C) Standard 8 of the Stormwater Policy must be applied ("Erosion and sediment controls must be implemented to prevent impacts during construction or land disturbance activities."). As a bottom line, the program must include mechanisms that require sediments and erosion control at construction sites, enforcement mechanisms like sanctions (monetary and non-monetary) to ensure the compliance with the program, control of waste, receipt of information submitted by the public, and inspection procedures.

For post-construction measures, standards 2 (post-development peak discharge rates do not exceed predevelopment peak discharge rates), 3 ("loss of annual recharge to groundwater should be minimized through the use of infiltration measures to the maximum extent practicable..."), 4. ("...stormwater management systems must be designed to remove 80% of the average annual load of Total Suspended Solids (TSS).") must be met.[80] The post-construction program must include a regulatory mechanism to address construction runoff procedures that ensure long-term operation and controls in place to prevent or minimize impacts to water quality.

In areas that are outside the jurisdiction of the Wetlands Protection Act, the permitee must comply with standard 3 described above. Each particular program must be evaluated annually and EPA and Massachusetts DEP may require changes to the Storm Water Management Program related to impacts of water quality provoked by discharges of MS4s or the development of more stringent requirements.

Finally, other pivotal issues in this program include illicit discharge and elimination, requiring the development of a storm sewer system map showing the locations of all outfalls. In this sense, mechanisms prohibiting non-storm water discharges into the system must be developed.

---

[80] The remaining standards are:
1. No new stormwater conveyances (e.g., outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth.
5. Stormwater discharges from areas with higher potential pollutant loads require the use of specific stormwater management BMPs. The use of infiltration practices without pretreatment is prohibited.
6. Stormwater discharges to critical areas must utilize certain stormwater management BMPs approved for critical areas. Critical areas are Outstanding Resource Waters (ORWs), shellfish beds, swimming beaches, cold water fisheries and recharge areas for public water supplies.
9. All stormwater management systems must have an operation and maintenance plan to ensure that systems function as designed.

Local Level

Under the Wetlands Protection Regulations of the Conservation Commission, when filling the NOI under the Marshfield Wetland Protection By-Law in its section V. C (regarding those fees that must be paid by the planner fee category 2) it is indicated that any point source discharge must be clarified in the application form and that the project cost should also include the cost of drainage construction.

Section X. B. of the same regulation makes reference to the development drainage systems and establishes stormwater performance standards for structures related to stormwater management such as swales, retention and detention basins, drainage pipes and headwalls (X.B ii). It makes specific reference to water quality, highlighting in Section X.B.I that any project that shows "reasonable likelihood" that the stormwater could be discharged into an area that could be adversely affected, will fall under the area of competence of the Wetlands Protection By-law. In this sense, it is specifically explained that the proponent must file a notice of intent to prevent adverse effects when these systems are constructed.

The local Zoning Board has its own regulations regarding stormwater drainage. The Zoning By-Law of the Town of Marshfield, in its Article XIII (Superimposed districts), describes a group of districts and in all of them makes reference to the protection of watershed quality.

In section 13.01, Inland Wetland District, the focus is on the protection of the groundwater table and the conservation of the watershed areas of the town for the health, safety and welfare of the people. In the same line, in the section referred to as the Coastal Wetland District, one of the subsections makes special reference to the promotion of the safety and purity of water and the control of contaminant sewage (13.02, c).

Section 13.03 is even more important and makes reference to the Water Resource Protection District that is superimposed over any other District because its purpose is to prevent the contamination and preserve the quality of ground and surface water that is actually or potentially a source of water for the Town's residents.

The Rules and Regulations of the Planning Board of the Town of Marshfield pay special attention to runoff systems through the procedure for the submission and approval of plans. In this way, the applicant must demonstrate to the planning board that the design of the plan will not have measurable or significant impact on wetlands. The Planning Board will also require an on-site storm drainage design for all those developments that mitigates the 10-, 25- and 100-year storm events. The presentation of information should include: calculation of wetlands, soil conditions, density of development, and assessment of water pollution. Department of Public Works (DPW) standards must be considered for maintenance and performance, as well as existing potential public water supplies on or near the site. Section 4.22 h refers exclusively to storm drains and the most important features are the following:

- Storm drainage designs must conform to specifications of the Master Drainage plan, it must be designed on the basis of 25 years and a complete storm drain system should be provided. Such system should include gutters, catch basins, manholes, culverts, drain lines, head walls. A set of technical requirements is provided regarding location, features, directions, measures, elevation, distance from dwellings, and sizes. All of these features must conform to the DPW standards, and applications for development submitted to the Planning Board are reviewed for compliance by the Town Engineer.

Applicants for development must also supply a soil map, a topographic map and a land use map for the sub area watershed and predevelopment drainage patterns on the site and post-development patterns on the site.

The use of artificial drainage systems must not constitute a substitute for adequate erosion control measures including the improvement of soil conditions.

Availability of funds

Coastal Pollution Remediation (CPR) Program funds are available for municipalities in the Massachusetts Coastal watershed. The importance of this program remains the possibility of funding for projects for water quality monitoring, development of plans and assessment and investigation of storm drains and suspected source sites of contamination. Sample data will be required for the completion of an application. Water quality data like Massachusetts Division of Marine Fisheries (MDMF) classification sample or the Massachusetts Department of Environmental Protection (DEP) 303 (d) list are only sufficient for assessment proposals but not for implementation proposals.[81]

Filling the Gaps

From the analysis developed in the previous pages it is possible to infer that the most important gaps are found between the federal and local regulations and between the state and local regulations. In this order, the National Pollutant Discharge Elimination System (Regulation for Revision of the Water Pollution Control Program Addressing Stormwater Discharges, 40 CFR) focused to MS4s is complemented in general by the Stormwater Management Policy of the Commonwealth of Massachusetts and, in particular, by the Massachusetts Small MS4 Stormwater Management Program that is in direct relation with Phase II NPDES regulation. The State Program establishes the nexus between Phase II regulations and the Standards developed in the State Stormwater Management Policy. The actual local normative framework will allow the identification of new development drainage systems and will give the town the chance to create new requirements to control pre- and post-development of new construction.

However, the most important lack of implementation measures are related to illicit discharge detection and elimination, and it is necessary to have an enforcement mechanism prohibiting the discharge of illicit water waste. The first step is the identification of the sites where toxic wastes are dumped. For example, in a model for

[81] Coastal Pollution Remediation (CPR) Program Questions and Answers.

the Compliance Water Management Program, a core element is the creation of a map showing stormwater drainage systems and catch basins. A combination of public involvement (that reports illegal toxic dumping and, at the same time, receives information about the dangers posed by these illegal discharges) and new enforcement measures are the central necessity in this specific area.[82]

The construction of site runoff control and the post-construction control constitutes the other two sensitive issues for the implementation of this program. The Town of Marshfield, as previously described, has already established several requirements through the Planning Board Rules and Regulations for pre-construction developments. The Massachusetts MS4 Stormwater Management Program is a central document that must be considered by the Town of Marshfield for the implementation of NPDES Phase II. In this sense, in addition to the existing requirements regarding erosion and sediment controls will be necessary legal mechanisms (ordinance or by-laws) that identifies monetary and non-monetary sanctions when erosion and sediment controls are not carried out. Along the same lines, inspection procedures and the construction of information channels with data provided by the general public are extremely necessary. It will also be necessary to adopt an ordinance or a by-law directed to long-term post-construction monitoring and evaluation.

Regarding runoff from municipal operations, the Town of Marshfield should consider the development and implementation of a comprehensive program intended to reduce pollutants and waste runoff from its own operation sites.

The Town of Marshfield should also consider the incorporation of inspection and control mechanisms of BMPs before, during and after the construction procedures as well the development of enforcement mechanism in this area too.

Public education and participation in this area is equally important. This topic should be discussed at public meetings, and education programs should be implemented in public institutions as well as in private companies. The general public constitutes a key actor in the identification of illegal and contaminant discharges. Several requirements of Stormwater Phase II are already fulfilled by the Town of Marshfield's by-laws or ordinances. The remaining measures deal mainly with enforcement measures, control of illicit discharges and long term monitoring of site post-construction.

[82] http://www.buzzardbay.com

Table 3: Phase II elements. Laws and Regulations Regarding Construction Requirements, Post-Evaluations and Water Quality Testing

PHASE II ELEMENTS	Creation of Infrastructure	Control Runoff Post Development	Water Quality Testing
Department of Public Works (DPW)	Rules and Regulations of the Planning Board.		
Planning Board (Subdivision Regions Zoning)	Rules and Regulations of the Planning Board. Section 4.2.2 h		
Conservation Commissions (Wetlands Regulations)	Marshfield Wetland Protection By-Law V. C.		Marshfield Wetland Protection By-Law X. B. (ii)
Zoning Board Of Appeals		Zoning Bylaw of the Town of Marshfield Art. XIII	Zoning Bylaw of the Town of Marshfield Art. XIII Section 13.01 Section 13.02 Section 13.02
State	310 CMR 10.00 (Wetland Protection Act) Stormwater Management Policy. Standard 8 Wetland Protection Act (MGL.c.131, s.40) Senate Bill 1232 Senate Bill 1261 Senate Bill 1733	310 CMR 10.00	314 CMR 9.00 (401 Water Quality Certification) 314 CMR 9.00 (Surface Quality Standards) 314 CMR 6.00 (Ground Water Quality Standards) 310 CMR 10.00 310 CMR 10.05 (6) Coastal Pollution Remediation Program. Stormwater Management Program.
Federal	Clean Water Act Phase II Stormwater Rule 401 Certification Conditions of EPA General Permits 314 CMR 3.00 (Surface Water Discharge Permit Program)	Clean Water Act Phase II Stormwater Rule	Clean Water Act Phase II Stormwater Rule

310 and 314 CMR are administered by Department of Environmental Protection.

Conclusion

Our individual analyses resulted in the following overall conclusions regarding the obstacles to planning in Massachusetts.

- A lack of coordination among stakeholders presents a real challenge to effective planning.
- Ambiguous authority is an issue which is detrimental to planning efforts.
- Significant gaps exist in federal, state, and local requirements.
- A need for reform in the legal framework is paramount and evident.
- Scarce resources prevent effective implementation of policy.

MEMORANDUM OF UNDERSTANDING

Tufts University Field Projects Team and the Town of Marshfield

Spring 2003

This document details the scope of work, deliverables, timeline, work processes, and additional stipulations agreed to by the parties for the satisfactory completion of the project. The project provides the Tufts team (the Team) an opportunity to examine and pose potential solutions to critical issues that arise from a discrepancy between the state legal framework for land use and the realities of local planning. There are three specific tasks.

- Track and provide policy updates on the Land Use Reform Act, a comprehensive proposal pending before the legislature for reform of the Massachusetts statutory framework governing land use. Explore the impact of the proposed legislation on municipal planners, the development community and other stakeholders involved in the process.
- Based on review of existing municipal regulations governing development and stormwater management, assess Town of Marshfield compliance with pending EPA Phase II Stormwater Regulations. Based on identification of regulatory or enforcement gaps, propose viable strategy to support Phase II implementation.
- Investigate the Massachusetts Watershed Initiative (MWI) as a vehicle for regional inter-municipal implementation of federal directive (i.e. EPA Phase II Regulations). Identify and document theoretical and practical challenges to watershed-based regional planning in a "home rule" governmental structure.

Client

Angus Jennings, Town Planner, Town of Marshfield
870 Moraine Street
Marshfield, MA 02050
[redacted]

Project Goals

Task 1: Student will gain understanding of existing state statutory framework governing land use in Massachusetts, as well as municipal officials' and developers' perception of said framework. Student will also critically evaluate specific components of proposed reform legislation based on impact of proposed amendments on municipal officials and developers. Client will receive regular updates as bill receives legislative consideration, and will build local understanding of proposed legislation through student research.

Task 2: Student will gain understanding of varying local, state and federal jurisdiction governing development in Massachusetts. Student will consider specific regulatory amendments to support local implementation of federal directive. Client will receive student assessment and recommendations for possible regulatory amendment or revision to enforcement practice.

Develop an implementation guide for any gaps between state level regulations and the requirements of the new federal regulation. Document Phase II implementation strategy of neighboring (South Shore) communities based on informational interviews (w/Diana)	March March	
Task III: Evaluate MWI as vehicle for regional implementation of federal directive *Task Lead: Diana Morgan*		
Conduct research and interviews with relevant parties in local and state agencies including EOEA, MWI, DEM, Marshfield Identify and document theoretical and practical challenges to watershed-based regional planning in "home rule" governmental structure Assess feasibility of pursuing Phase II implementation on watershed basis in the South Coastal Watershed (w/Gabriel)	February and March March March	

Work Processes and Communication

The Team will report directly to Angus Jennings and other appropriate contacts under his direction and as required by the nature of the task.

There will be weekly calls (or more as needed) and the Team will be onsite on February 2 and 15th, and any other dates agreed to and determined necessary by Jennings and the Team.

If time permits, the Team will attend a Planning Board Meeting and/or present their finding to the Board.

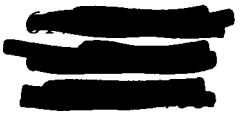
Project Conditions

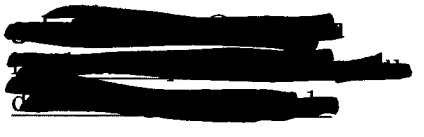
Expenses: The project budget is $100 (for travel, phone, copying, and other minor expenses). If the client requests an expenditure that exceeds the budget at that point in time, the Team must notify the client and ensure that the expense is both approved and covered by client if necessary for completion of task.

Time Allocation: Each member of the Team is expected to spend 5-8 hours per week on the project outside of class time.

Contact Information for Tufts Team Members

Gabriel Bottino
Heather Kirkpatrick
Diana Morgan





Signatures

Tufts Team

Town of Marshfield

Tufts Field Project Coordinator

Task 3: Student will gain understanding of the present and potential role of municipal and state officials in land use planning. Student will assess opportunities and challenges associated with MWI based on literature review and targeted informational interviews. Working with student, client will further graduate research for professional application.

Deliverables and Timeline

The Team will provide the Town of Marshfield a final presentation that details:

- Policy implications of proposed land use reform legislation
- An implementation guide for meeting EPA Phase II Stormwater Regulations
- A policy analysis of implementing regional watershed management at the local level

General Timeline	**Target Date**	**Actual Date**
Initial Meeting with client.	January	1/27/03
Conduct research and engage in weekly/bi-weekly dialogue.	February	
Summarize results. Provide initial reports to client for comment. The client will provide an interim evaluation of the Team's progress.	Early to mid-March	
Draft Report due.	March 26	
Make revisions to report. Prepare for oral presentation.	Early April	
Final Report due.	April 23	
Individual Task Timeline		
Task I: Track Specific Provisions in proposed Land Use Reform Act & develop Impact Assessment for Local Planning *Task Lead: Heather Kirkpatrick*		
Conduct research and interviews with primary stakeholders including legislative sponsors (House & Senate), municipal officials, builders' lobbyist, local developer(s)	February thru March	
Attend meetings and hearings	As needed	
Provide client with legislative updates		
Conduct policy analysis on specified issues, such as development impact fees and inclusionary zoning	Early March	
Task I1: Develop implementation guide for meeting EPA Phase II Stormwater Regulations *Task Lead: Gabriel Bottino*		
Identify and document (through creation of matrix) state and local regulations related to EPA Phase II Stormwater Rule.	February	
Provide and evaluate available implementation options.	February	