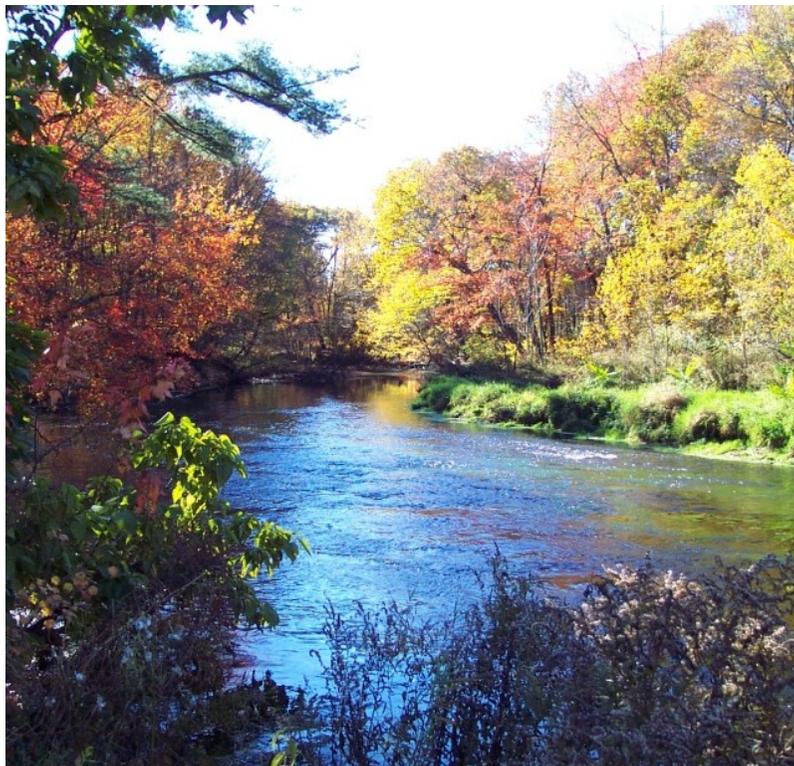


Massachusetts Coalition for Water Resources Stewardship

Report to the Massachusetts Congressional Delegation on

Regulatory Reform

December 2008



Executive Summary:

The Massachusetts Coalition for Water Resources Stewardship (the Coalition) represents municipalities and publicly owned wastewater treatment plants in Massachusetts. Coalition members are extremely concerned about (1) the impacts of stringent Clean Water Act (CWA) permit requirements and related costs on communities that can ill-afford the expense due to the competing needs of their citizens; (2) increasingly stringent controls and the high cost to meet them, resulting in diminishing environmental benefits; and (3) regulations that result in permits based on inadequate science.

The lack of adequate funding for infrastructure improvements and for scientific studies, which provide the basis for permits, is of paramount concern. **The Coalition urges the United States Congress to include funding for water resource infrastructure (drinking water, wastewater and stormwater) in the stimulus package it is currently considering.** These critically important sectors generate jobs per unit of funding comparable to transportation and energy projects. In almost every area of the country, water and wastewater sectors show signs of distress in terms of overall condition. Money that might otherwise be spent on operations and maintenance is diverted to comply with environmental regulations. The resulting deferred maintenance can lead to infrastructure failures that put public health at risk. Enhanced funding for infrastructure improvements can be managed through existing State Revolving Loan Fund (SRF) programs using financing tools such as principal forgiveness. Equally important is funding for the scientific studies and models that should govern permit conditions. At present, too many public entities are forced to spend hundreds of millions of dollars on treatment upgrades based in great part on conjecture about the conditions of the receiving water. For hundreds of thousands or even a few million dollars, scientifically valid resource analysis and modeling can be performed that will help guide management decisions for a specific waterway and aid in selection of the most beneficial approach to improving the nation's waters.

The Coalition strongly believes that a new paradigm is needed and urges the U.S. Environmental Protection Agency (EPA) to consider adopting an acceptable affordability criterion. The public's money, whether it comes from EPA and the federal treasury or the pockets of ratepayers through City Hall, needs to be spent judiciously. Costs (both capital and operation and maintenance) and benefits need to be considered to ensure that public funds are expended prudently on projects that have a clear environmental benefit. The indirect environmental cost of permits cannot be overlooked. For example, there is a push to reduce nutrients in National Pollutant Discharge Elimination System (NPDES) permits to the limit of technology without acknowledging the resultant environmental cost in terms of increased greenhouse gas emissions and increased quantity of residuals requiring disposal. The public is tired of spending money when results are ephemeral. All parties must scrupulously ensure that the public's money is spent wisely.

To better understand the perspectives of the regulatory authorities, the Coalition's Permitting Task Force met with representatives of EPA Region 1 and the Massachusetts Department of Environmental Protection (DEP) on a monthly basis between May and December 2008. The discussions informed this report and the recommendations it outlines. This report was prepared by the Coalition and reflects the opinions of the organization and its member districts and communities.

The purpose of the meetings was to discuss in detail the 10 recommendations contained in the Coalition's White Paper – ***The Case for Environmental Regulatory Reform: Clean Water Act NPDES Permitting.*** The recommendations are consolidated in this report to reflect four major themes that were carried throughout the discussions: **Communication, Cost and Affordability, Permitting Framework/Process, and Science-based Criteria.**

This report summarizes the discussions based on the four general categories, highlights the findings and recommends actions to resolve differences and implement changes that will improve the process of CWA permitting for the public sector. The report conclusions are summarized below.

Communication. All parties agreed that better communication is needed between regulators and permittees. There was also recognition that improved internal communications within regulatory agencies is necessary.

Cost and Affordability. All parties recognized that compliance costs were a significant factor for public sector permittees. There was no resolution on this issue. EPA maintained that the CWA did not give it discretion relative to costs, cost effectiveness or cost/benefit analysis. Further, EPA believes that it adequately addresses cost issues through compliance scheduling and Use Attainability Analysis. The Coalition thinks other options must be developed to better address cost issues. The CWA itself appears to be a hindrance to effective change as it limits EPA's discretion in key areas (permit terms, cost issues).

Permitting Framework/Process. On matters of process, there was agreement and disagreement. The parties agreed that a holistic, watershed based approach is preferable and that creative approaches to permitting should be pursued. There was no resolution on the issue of the duration of permit terms. EPA and DEP will discuss primacy.

Science-based Criteria. On the issue of science, there was much disagreement as to the definition of acceptable science and whether the best science is always considered in permit decisions. All parties agreed that there is inadequate funding for appropriate scientific studies.

Agreements

It is important to note that while there were areas of disagreement between the Coalition and the regulatory agencies, there were also areas of agreement. These include:

- Better communication is needed between regulators and permittees
- Watershed based planning and permitting deserve further consideration
- Innovative permitting approaches, particularly trading, should be strongly considered
- DEP and EPA should explore authorization of the NPDES permitting program in Massachusetts
- Compliance costs are a significant factor for public sector permittees
- Good science should form the basis for regulatory decision making

Recommendations

In light of the findings from this series of meetings and other communications between the Coalition, EPA and DEP over the past eight months, the Coalition recommends a number of future actions to further the effort to reform the NPDES permitting program to achieve a more balanced approach that values and considers all stakeholders needs and concerns. Each party in this effort needs to play a critical role in taking these next steps, which include:

United States Congress

- Amend or revise the Clean Water Act
 - Increase permit terms
 - Make compliance costs for public facilities a permit consideration
 - Include sustainability as a requirement in all CWA decisions
 - Require that permit conditions include a cost-effective component and demonstrate a suitable cost-benefit ratio

- Determine other areas where the CWA needs to be revised to serve as a fair, reasonable and effective tool for addressing current and future water resources issues
- Provide infrastructure and scientific studies funding

US EPA

- Incentivize and promote pollutant trading and other creative permitting
- Roll over five-year permits (after public process) for at least one additional term, except where valid data clearly shows continuing declines in water quality
- Institute efforts to coordinate EPA's various programs to provide consistency and reduce the "regulatory permitting silo" effect
- Reconsider use of Section 208 of the CWA or a similar approach to river basin planning, in order to prioritize all aspects of water quality concerns
- Reassess the relevance of the 2% HMI test for determination of reasonableness and feasibility of meeting standards, not merely affordability purposes
- Include sustainability as a consideration in setting permit conditions
- Provide detailed procedures and guidance relative to the entire realm of UAA opportunities afforded by federal regulations
- Be an active participant in efforts to identify cost-sharing opportunities to reduce the financial burden on communities

Commonwealth of Massachusetts (including DEP)

- Re-establish and incentivize watershed-based approach to permitting
- Provide funding for science-based river studies
- Re-establish 0% SRF loans, grants programs or principal forgiveness financing options
- Review and amend TMDLs that are of questionable quality
- Revise water quality standards to include urban areas and CSO considerations
- Provide detailed procedures and guidance relative to the entire realm of UAA opportunities afforded by state regulations

Coalition

- Promote pollutant trading and other creative approaches as a permitting option
- Coordinate watershed-based permittee meetings
- Work with National Association of Clean Water Agencies to promote and advocate for statutory changes
- Seek modifications to TMDLs that lack scientific validity and be involved in the TMDL process
- Comment on state water quality standards when review period begins
- Investigate and better understand the entire realm of UAA opportunities afforded by federal and state regulations

Massachusetts Coalition for Water Resources Stewardship Report to the Massachusetts Congressional Delegation

The Massachusetts Coalition for Water Resources Stewardship (the Coalition) represents municipalities and publicly owned wastewater treatment plants in Massachusetts. The Coalition has several significant concerns related to the regulatory framework for Clean Water Act (CWA) permitting and the associated costs. To better understand the perspectives of the regulatory authorities, the Coalition's Permitting Task Force met with representatives of the US Environmental Protection Agency, Region 1 (EPA), and the Massachusetts Department of Environmental Protection (DEP) on a monthly basis between May and December 2008.

The initial meeting in May set the framework and schedule for subsequent meetings and covered some related topics. The purpose of subsequent meetings was to discuss in detail the 10 recommendations contained in the Coalition's White Paper – *The Case for Environmental Regulatory Reform: Clean Water Act NPDES Permitting*. The recommendations were:

1. Open dialogue with regulators and stakeholders
2. Coordinated permitting by watershed
3. Longer permit terms
4. Commonwealth to assume primacy for Clean Water permitting
5. Costs must be considered
6. Better science in decision-making based on a holistic watershed approach
7. Focus on biggest problems not easiest regulatory targets
8. Numerical limits based on valid science and pragmatic watershed needs
9. Realistic expectations
10. Creative permitting

There were a number of themes repeated throughout the series of meetings. These themes intersected with many of the recommendations and allow consolidation of the ten specific items from the White Paper into four general categories:

- 1. Communication**
- 2. Cost and Affordability**
- 3. Permitting Framework/Process**
- 4. Science-based Criteria**

Discussions between the Coalition, EPA and DEP focused on these areas. This report will therefore summarize the discussions based on the four general categories, highlight the findings and recommend actions to resolve differences and implement changes that will improve the process of CWA permitting for the public sector. This report was prepared by the Coalition and reflects the opinions of the organization and its member districts and communities.

Communication

Throughout the discussions it became readily apparent that an underlying problem with National Pollutant Discharge Elimination System (NPDES) permitting is poor communication between

regulatory agencies and public sector permittees. Part of this failing is due to the process of issuing permits, which hampers meaningful dialogue due to timeframes and legal limitations on when discussions can occur. The meetings were useful in enlightening Coalition members on the statutory requirements of the CWA and to enhance better understanding of the roles and constraints EPA and DEP personnel operate in when administering the process. EPA acknowledged that communications must improve if there is to be “buy in” from permittees. To this end, EPA indicated a willingness to explore opportunities for earlier and more open dialogue with permittees and all stakeholders in a given watershed. Due to staffing limitations, the agency made clear that it could not offer such extended dialogue for all permits but will bring this approach to what are considered “major” permits. The Coalition expressed a desire to ensure these early discussions identify the major issues for a receiving water, highlight the science that supports the identification of issues and solutions, suggest options for addressing these problems and allow permittees and other stakeholders to weigh in with recommendations based on local knowledge of infrastructure needs and the receiving waters. Early involvement was envisioned in Section 208 of the CWA, which also called for river basin planning. Should this section or a similar approach be re-initiated, it appears that the most appropriate time for stakeholders to get involved in the discussion is during the early stages of river basin planning. Lacking future river basin planning efforts, it was suggested that the start of open dialogue be initiated no later than upon submission of permit reapplications.

EPA expressed concern that permittees who are afforded the opportunity to engage in early dialogue have often used this option to begin contesting a permit, thereby contributing to inordinate delays in a number of cases. EPA also reminded the Coalition that it has obligations to issue timely permits and cannot allow permit backlogs to develop, as has been the case in the past.

Coalition members expressed serious concerns about apparent regulatory review and permitting “silos,” most notably identified when responding to water supply, wastewater, stormwater and energy programs. EPA acknowledged that there could certainly be more effective integration between different permitting branches in the interest of ensuring that permittees do not receive conflicting directives.

Cost and Affordability

The major issue that led to the creation of the Coalition and ultimately to these meetings with EPA is the cost to communities to comply with permit conditions. Within this theme, there is also the issue of balancing environmental benefits and compliance costs. EPA reiterated during the course of discussions that the CWA neither provides for consideration of compliance costs nor considers cost/benefit analysis or cost effectiveness in setting discharge standards. The statute does not appear to prohibit EPA from considering cost but instead is silent on the issue.

EPA said it considers costs in two ways:

1. Through compliance scheduling via an administrative consent order (ACO) after the final permit is issued
2. Through a Use Attainability Analysis (UAA)

The Coalition noted that when federal dollars funded most wastewater infrastructure projects under the CWA, cost/benefit and cost effectiveness were clearly considerations. Now, with all funding derived from local ratepayers, cost is no longer a factor. EPA clarified that cost-effectiveness and cost/benefit were concepts associated with the former Construction Grants Program, not with the setting of permit discharge limits. While compliance scheduling can be helpful, it is far from being a solution to the problem of cost and affordability. Schedules approved through consent orders rarely extend beyond five to seven years, while compliance costs can be in the hundreds of millions of dollars. A compliance schedule of five to seven years offers little benefit when hundreds of millions of dollars are being borrowed over 20 to 30 years and permittees are faced with the prospect of another costly set of requirements in the next five-year permit cycle. This disconnect between funding current projects and mandates for new projects is a problem for public officials who are forced to implement the elements of the permit and for the public, who must pay for it.

The other option EPA has to mitigate costs is through a Use Attainability Analysis (UAA). EPA provided a detailed explanation of the economic portion of its UAA, which is the only method currently available to assess community affordability of compliance costs. This process, which has only been used once in the last 20 years in EPA Region 1, does not set out to directly reduce the permit compliance burden but rather to determine whether a water quality standard (WQS) should be downgraded or a designated use removed because compliance with the standard would cause “substantial and widespread economic and social impact” to a community (a change to WQS might then affect permit conditions). The analysis includes a comparison of wastewater rates to household median income (HMI) in the impacted community. If the ratio is above 2%, a community has hit the threshold and it would be probable that EPA would determine it a substantial impact; however, this determination is not absolute. If the ratio is between 1% and 2%, EPA considers a range of “secondary factors” affecting the financial capability of the community. If the ratio is below 1%, EPA would likely find wastewater rates to be affordable. Coalition members noted that even the poorest communities in the state have not been able to trigger this threshold and question whether this analysis is adequate as a test of affordability (although EPA noted that it did approve a UAA for the Massachusetts Water Resources Authority, in part based on affordability concerns in poor member communities). Even in those cases where the “affordability threshold” may be reached, this provision only allows for a public process to take place that would lower the classification of the water resource in question so that a lesser standard could be satisfied. Lowering a receiving water classification through a public process would be very challenging.

The Coalition was also very concerned that with major pollutant sources already addressed through past infrastructure improvements (e.g., wastewater treatment plant construction and upgrades in the 1970s and 1980s) the additional cost to obtain further, marginal water quality improvements will be disproportional; that is, each dollar invested will result in a less significant return. The benefits derived simply fail to match the local investment required to comply. The process also fails to identify and target the most cost effective means of achieving water quality goals. Where solutions to improve impaired waters may be found outside of the jurisdiction of the permittee (such as management of impoundments or removal of sediments), the permitting process does not lend itself to a comprehensive assessment of the problem beyond the typical realm of the permit holder.

EPA maintained that it has no statutory or regulatory authority to consider compliance costs beyond the limited methods it already employs. The Coalition maintains that EPA seemed to have this discretion in the past when federal dollars were at stake and that this remains the single greatest issue relative to the NPDES permitting. Further research by the Coalition has revealed that under federal and state regulations (40 CFR 131.10(g) and 314 CMR 4), the UAA encompasses a much larger range of feasibility assessments beyond economic and affordability measures. Use attainment and discharge variances can be considered relative to natural and man-made impacts that are beyond the scope of the discharger. These additional UAA opportunities need to be further explored.

The Coalition strongly believes that a new paradigm is needed and urges EPA to consider adopting an acceptable affordability criterion. The public's money, whether it comes from EPA and the federal treasury or the pockets of ratepayers through City Hall, needs to be spent judiciously. Costs (both capital and operation and maintenance) and benefits need to be considered to ensure that public funds are expended prudently on projects that have a clear environmental benefit. The indirect environmental cost of permits cannot be overlooked. For example, the push to reduce nutrients in NPDES permits to the limit of technology without acknowledging the resultant environmental cost in terms of increased greenhouse gas emissions and increased quantity of residuals requiring disposal is remiss. The public is tired of spending money when results are ephemeral. All parties must scrupulously ensure that the public's money is spent wisely.

Permitting Framework/Process

Issues with the administrative procedures employed to implement the CWA NPDES program were the focus of discussion at many of the meetings. The single most burdensome of these, from the Coalition's perspective, is the five-year permit term. Given the complexity, cost and implications involved in financing requisite capital programs needed to comply with permit conditions, a five-year permit is simply untenable. EPA made clear that it has no discretion in the matter of permit terms: the CWA stipulates permit terms must be five years. There was discussion on how the agency may effectively issue longer permits within the constraints of the statute. For example, the same permit conditions could be issued in consecutive five-year increments, thus giving the permit an effective term of 10, 15 or even 20 years. EPA warned, however, that each five-year term would require the full public process, including comment periods, and that it would have to consider all comments, potentially altering the permit in response to valid comments. The implementation of newly completed and approved Total Maximum Daily Loads (TMDLs) could also require permit modifications. Options for using long-term ACOs or delaying re-issuance of permit renewals were also suggested as an alternative means of achieving longer effective permit terms, although any inordinate delay in permit issuance would contribute to backlog creation, which the agency must avoid. With any such options, the risk remains of third party intervention forcing the issue and driving new permit conditions.

Another topic under the theme of process is the matter of coordinating permits by watershed. The Coalition suggested such an approach could lead to more cost-effective measures being implemented and would help target major problems and solutions. EPA noted that such an

approach was pursued under Section 208 of the CWA. That effort met with a general lack of success, however, as the state agencies failed to secure the needed resources to follow through, schedules slipped and limited progress was made. A similar attempt was made with permitting in the Assabet River basin but there was, according to EPA, a lack of interest among the communities that was specifically coupled to the notion of building nutrient trading into the Assabet community permits. EPA did commit to coordinating permits in major watersheds such as the Blackstone and Connecticut. There is some thought by the Coalition that while the Section 208 approach may not have been successful in the past, with improved regulatory outreach and encouragement, it may be better suited to current needs, especially nutrient control.

Both the Coalition and EPA expressed an interest in exploring opportunities for more creative, “smart” permitting. This would provide more effective watershed-based approaches, although it would involve a more comprehensive scope and review process. There were numerous national examples of permits issued that met the requirements of the CWA, but used more creative approaches. Examples include multiple discharges under a single permit, which was done in Oregon; use of mass loadings rather than concentrations; and use of 30Q10 or other receiving water flows rather than 7Q10 for determining dilution factors and pollution trading. EPA said it is open to all such ideas and suggested that these concepts be brought forward at the time of permit renewal application. EPA did warn that where these efforts have been successful, many years of coordination with other communities, states and regulators were necessary.

Finally, the issue of state primacy was raised within the general discussion involving permit framework/process. Implementation of the CWA is authorized in all but four states where EPA holds primacy. Massachusetts and New Hampshire are among the states where EPA retains control. DEP announced that the Commonwealth has agreed to discuss primacy with EPA. DEP has several goals for this change: the ability to include innovation and innovative technologies in the regulatory mix; to be able to allow more time to meet effluent limits with less dependence on interim technologies; to avoid crushing oversight; to include scientific decision making in a holistic approach; and to work toward more sustainable solutions. DEP will need more resources – funding – to support this work. EPA said it is willing to listen to DEP’s proposals. The Coalition said that permit fees or other similar approaches to funding might be acceptable. EPA and DEP held their first discussion on November 3, 2008.

Science-based Criteria

The scientific basis for nuanced and explicit permitting decisions was the focus of many discussions between the Coalition, EPA and DEP. The Coalition contends that sufficient science is lacking in many permits. With exorbitant compliance costs, it is critical that permits are supported by the best science available. EPA maintains that it indeed uses the best available science. The Coalition raised concerns regarding potential bias introduced into many of the studies completed to date given the source of funding and membership of the oversight team. DEP noted it also plays a key role in applying science as it establishes the state WQSs and performs the TMDL analyses that govern many permits.

All participants recognized that financial resources limit the level of scientific investigation done for each receiving water. Permits that entail hundreds of millions of dollars in cost are being

issued based on little prior scientific investigation due to the limited resources available to EPA and DEP for such efforts. Sometimes studies done in one watershed are assumed to apply to others, because costs prohibit a detailed analysis of each system. DEP acknowledged that when detailed or site-specific information is lacking, the agencies must rely on general assumptions. The Coalition cited examples of TMDLs, which drive some permit conditions, being based on 25-year-old studies.

The Coalition also expressed dismay that EPA may choose not to consider a superior scientific analysis produced by a permittee and instead rely on outdated and disputed models. Illustrative of this point was EPA's refusal to wait a few months before issuing the permit or even consider the findings of the most comprehensive model of the Blackstone River being developed by the Upper Blackstone Water Pollution Abatement District. With full knowledge that this model was nearly complete, EPA issued a draft permit and then a final permit to the District, rather than wait for completion of a tool that would be invaluable in making science-based decisions about the river and the impacts of discharges. The Blackstone River Water Quality Model results were released by the District at a regional public meeting on December 8, 2008. A similar situation occurred in the Upper Charles River Basin.

DEP said that WQSs are reviewed every three years and entail a public process. It suggested that the Coalition would be wise to get involved in this process as a means of seeking changes to the standards.

The Coalition expressed concern that permit decisions are driven by achievable treatment technology in the absence of good science on appropriate water quality measures. That is, as technology evolves and the ability to limit pollutant loads becomes achievable, regulators will stipulate the technology-driven processes without science-based evidence that they will result in a discernable improvement to water quality. EPA argues there is a scientific basis for all the water quality based limits it sets, while acknowledging the basis must sometimes be generalized from one location to another. EPA also referenced that water quality based effluent limitations are derived notwithstanding the availability of achievable treatment technology. This is the distinction from technology based effluent requirements. The Coalition maintains that what is acceptable for one area may not be acceptable for another. EPA acknowledged that more current studies would be beneficial, but financing and timely permitting cannot wait when there is clear evidence that water quality is impaired, particularly when a state lists the receiving water on its 303(d) list of impaired waters. The Coalition believes that a sound scientific basis is required to support permit limits and should be a fundamental prerequisite to their issuance, taking precedence over timeliness. Even if the water quality of the river is impaired, it does not mean that the proposed solution costing the community hundreds of millions of dollars will provide any significant improvement to the water quality of the river.

The Coalition said that water quality goals should be established before modeling is done and the agencies should be willing to perform additional model runs. Permittee representatives should be involved in the scoping of the scientific research, which is driving permit decisions and is used to prepare associated fact sheets, which often reference other documents. It is important to start the discussion in the early stages of water quality planning and they should include all

stakeholders. DEP said the state's watershed initiative, which brought all the stakeholders together at the same time, could be reinstated.

True assessments of receiving water quality require that studies look at the watershed in a holistic manner to determine the largest contributors to impairments. Non-point sources and dams may be greater contributors than treatment plant discharges. EPA stated that under the CWA it is obligated to control discharges, but that through stormwater permitting it is paying more attention to these other sources, citing recent initiatives in the Charles River basin as an example. The Coalition noted, however, that regulatory permitting silos seem to prevent holistic approaches to addressing common goals; instead, each NPDES permit is derived independently with little consideration for what is happening in the watershed overall.

The lack of a holistic view and the regulatory permitting silo effect are most apparent relative to the sustainability of clean water mandates. Goals for nutrient removal to extremely low levels require treatment upgrades that are energy and chemical intensive. With concerns about climate change requiring careful and deliberate assessment of our collective "carbon footprint," any proposed changes to permit levels should be equally deliberate. EPA understands that this is not the case with NPDES permits and the current statutory/regulatory constructs and it is grappling with this conflict.

Another concern relative to the application of sound science is the issue of realistic expectations: are the water quality goals for every receiving water valid and achievable. A significant discussion ensued regarding the "designated use" of receiving waters. The Coalition raised concerns that many of these designated uses and associated water quality goals were defined at a time when there was little public appreciation or understanding as to the science, technology or costs required to achieve them. DEP said there may be opportunities to change receiving water classifications similar to partial use classes for CSO discharges. The Coalition said that heavily urbanized waters should have classifications that recognize centuries of alterations, dams, sediment contamination and multiple permitted discharges, which could make full achievement of water quality standards impossible. It should be recognized that restoring all waters to pristine conditions is neither scientifically practical nor financially feasible. It is on this basis that the Coalition believes a more pragmatic consideration of a water resource is necessary.

Coalition members also raised the issue of the difficulty in planning and implementation to achieve narrative water quality goals, whose definitions are often subjective, nebulous and prone to changing interpretations. The Coalition would consider numeric water quality standards **if and only if** the numeric limits were site-specific and based on a firm and valid understanding of the receiving water, including thorough collection of water quality data, peer reviewed modeling and broad-based review by all stakeholders. While recognizing this as a laudable goal, the regulatory agencies suggested that the level of study required would not be financially achievable as they lack the resources to perform such work. The Coalition noted the irony of the agencies' inability to conduct the necessary level of scientific investigation due to a lack of finances and resources, yet permittees who express the same limitations relative to implementing permit requirements are rebuked.

Conclusions

Discussions on how to improve the process of the Clean Water Act (CWA) permitting for the public sector have yielded some important areas of agreement, clarified areas that remain open to spirited debate and highlight areas the Coalition suggests should be further considered. The Coalition, EPA and DEP agree that these discussions have been productive and should continue to pursue solutions to the topics under discussion.

Summary

Communication. All parties agreed that better communication is needed between regulators and permittees. There was also recognition that internal communications within regulatory agencies and a breakdown of regulatory permitting silos is necessary. EPA committed to an early and open dialogue with permittees and all stakeholders in a given watershed at least relative to major watersheds, while adding that permittees also need to let the agencies know that they are interested in such a dialogue.

Cost and Affordability. All parties recognized that compliance costs are a significant factor for public sector permittees. There was no resolution to this issue. EPA maintained that the CWA did not give them discretion relative to costs, cost effectiveness or cost/benefit analysis when developing water quality based effluent limits. Further, EPA believes that it adequately addresses cost issues through compliance scheduling and Use Attainability Analysis. The Coalition thinks other options must be developed to better address cost issues.

The CWA itself appears to be a hindrance to effective change as it limits EPA's discretion in key areas (permit terms, cost issues).

Permitting Framework/Process. On matters of process, there was agreement and disagreement. EPA cannot issue permits for more than five-year terms and seemed reluctant to consider alternatives, while the Coalition believed there were options that conform with the CWA and would effectively turn a five-year permit into a 10 to 20 year permit. EPA also made a commitment to coordinate permits by watershed in major river basins, but did not envision new funding under Section 208 of the CWA to incorporate watershed-based planning. EPA was very willing to consider creative approaches to permitting and left it to the Coalition members to advance ideas. The parties also understand that DEP is willing to discuss the issue of state primacy with EPA.

Science-based Criteria. On the issue of science, there was much disagreement as to the definition of acceptable science and whether the best science is always considered in permit decisions. The regulators said that their science is valid, but limited by funding constraints, which requires some assumptions. The regulators made clear that there are opportunities for permittees to weigh in on state water quality standards and TMDLs. EPA also confirmed that it does not weigh the impacts of its permits relative to sustainability and energy use.

Agreements

- **Better communication is needed between regulators and permittees.** All parties will make concerted efforts to increase timely and open communication, both with one another and within their respective organizations. Where permit revisions are likely, the dialogue should commence no later than the time of permit reapplication.
- **Watershed based planning and permitting deserves further consideration.** The parties should identify a few watersheds with impairment due to point and non-point sources and use a watershed-based approach to permitting. This should start with an open dialogue regarding policy development and science (both what is known and what is lacking) and specific watershed issues, along with relevant social and economic community matters. These discussions should include all permittees, stakeholders and independent scientists.
- **Innovative permitting approaches, particularly trading, should be strongly considered** wherever a watershed-base approach is pursued.
- **DEP and EPA should explore authorization of the NPDES permitting program in Massachusetts.** The agencies have begun a dialogue, with the full support of the Coalition.
- **Compliance costs are a significant factor for public sector permittees.**
- **Good science should form the basis for regulatory decision-making** and regulators, permittees and other stakeholders should work toward identifying scientific gaps and securing necessary funding to fill in the missing information.

Unresolved Issues

- **Cost and Affordability.** While the parties agreed that compliance costs are a major factor, there were different views on how costs can or should be considered in setting permit limits. The regulatory agencies believe the CWA does not give them discretion to consider costs, cost effectiveness or cost/benefit analysis when developing water quality based effluent limits. The regulators believe they can only consider affordability through a Use Attainability Analysis during water quality planning. During permitting, the regulators try to factor in cost issues over time through compliance scheduling. The Coalition thinks other options must be developed to better address cost issues and there are other options under the CWA, but the regulators are hesitant to use them. [see Coalition recommendations below.]
- **Permitting timeframe.** The Coalition believes that an increased level of regulatory certainty is key to sustainable funding of wastewater infrastructure. The Clean Water Act limits permit terms to five-years. The Coalition believes there are options that conform with the CWA and would effectively turn a five-year permit into a 10 to 20 year permit. All agree that an appropriate level of public participation would be needed under current program requirements.

- **Science-based criteria.** In contentious permit decisions, the adequacy of the science that forms the basis for discharge limits and water quality standards may be in the eye of the beholder. The regulatory agencies claim to rely on the best science available to them at the time of the permitting action. Where site-specific data or models are not available, region-specific information drawn from national guidance is used. With hundreds of millions of dollars of stranded investment at stake, the Coalition believes generic guidance is wholly inadequate. The Coalition also noted that the “buy-in” of technical studies would be significantly improved if the early design plan for such research was formulated with appropriate consideration of all stakeholder interests. For this reason, the Coalition advocates for the inclusion of peer reviewed, site-specific science with stakeholder involvement, especially when costly upgrades may be required, as well as improving the underlying data upon which TMDLs have been established. The Coalition also supports delaying issuance of new permits while site-specific studies and models are under development.
- **Carbon footprint/Sustainability considerations.** The Coalition believes EPA should now be weighing the carbon footprint and sustainability implications of increased chemical and energy requirements when tightening permit limits. The Clean Water Act does not anticipate these considerations in setting water quality based effluent limits. EPA does not believe this should be viewed as a question of trade-offs. EPA and the DEP are actively working with wastewater treatment plant operators to help them reduce their energy use, and expect that the technology marketplace will respond to the carbon footprint signal with less energy intensive approaches to achieving the necessary pollutant reductions. With stricter discharge limits already being imposed, the Coalition does not believe permittees have the luxury of waiting for the marketplace to catch up with proven, reliable technology. Further, the Coalition doubts that reasonable levels of energy conservation achieved by the current EPA program will offset the new resource and energy demands driven by mandated treatment upgrades to meet more stringent standards. This is especially significant when direct costs are expanded to include indirect costs such as chemical production and transport and sludge/waste processing and disposal.

Recommendations

In light of the findings from this series of meetings and other communications between the Coalition, EPA and DEP over the past eight months, the Coalition recommends a number of future actions to advance the effort to reform the NPDES permitting program to achieve a more balanced approach that values and considers all stakeholders’ needs and concerns. Each party in this effort needs to play a critical role in taking these next steps, which include:

United States Congress

- Amend or revise the Clean Water Act
 - Increase permit terms
 - Make compliance costs for public facilities a permit consideration
 - Include sustainability as a requirement in all CWA decisions
 - Require that permit conditions include a cost-effective component and demonstrate a suitable cost-benefit ratio

- Determine other areas where the CWA needs to be revised to be a fair, reasonable and effective tool for addressing current and future water resources issues
- Provide infrastructure and scientific studies funding

US EPA

- Incentivize and promote pollutant trading and other creative permitting
- Roll over five-year permits (after public process) for at least one additional term, except where valid data clearly shows continuing declines in water quality
- Institute efforts to coordinate EPA's various programs to provide consistency and reduce the "regulatory permitting silo" effect
- Reconsider use of Section 208 of the CWA or a similar approach to river basin planning, in order to prioritize all aspects of water quality concerns
- Reassess the relevance of the 2% HMI test for determination of reasonableness and feasibility of meeting standards, not merely affordability purposes
- Include sustainability as a consideration in setting permit conditions
- Provide detailed procedures and guidance relative to the entire realm of UAA opportunities afforded by federal regulations
- Be an active participant in efforts to identify cost-sharing opportunities to reduce the financial burden on communities

Commonwealth of Massachusetts (including DEP)

- Re-establish and incentivize watershed-based approach to permitting
- Provide funding for science-based river studies
- Re-establish 0% SRF loans, grants programs or principal forgiveness financing options
- Review and amend TMDLs that are of questionable quality
- Revise water quality standards to include urban areas and CSO considerations
- Provide detailed procedures and guidance relative to the entire realm of UAA opportunities afforded by state regulations

Coalition

- Promote pollutant trading and other creative approaches as a permitting option
- Coordinate watershed-based permittee meetings
- Work with National Association of Clean Water Agencies to promote and advocate for statutory changes
- Seek modifications to TMDLs that lack scientific validity and be involved in the TMDL process
- Comment on state water quality standards when review period begins
- Investigate and better understand the entire realm UAA opportunities afforded by federal and state regulations