

***Permitting and Regulation of Large Groundwater
Withdrawals in New Hampshire***

***Appropriate Roles for Municipalities and Consideration of
Criteria that Should Be Used***



***A Report to the New Hampshire Legislature
As Required by Chapter 176,
Laws of 2008***

Prepared By:

***The Groundwater Commission established by Chapter 305,
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EXECUTIVE SUMMARY

New Hampshire lacks of a comprehensive water use regulatory structure that is integrated with local long-term land use planning efforts to ensure water of a sufficient quantity will be available to meet future public health and environmental needs. This gap in the regulatory structure, philosophical opinions on the use of water and/or a misunderstanding of statutory law, common law and the role municipal land use planning has in the use of water resources have led to numerous legislative proposals to change how groundwater withdrawals are managed in New Hampshire.

A subcommittee of the Groundwater Commission ("HB 1353 Subcommittee") rigorously studied the existing regulatory process in New Hampshire for regulating groundwater withdrawals and met with municipal officials the general public and water suppliers throughout the State as a way of illuminating issues related to the state and municipal role in sustainable groundwater resource management. Recognizing that land use planning and regulation at the municipal level ultimately affects how water resources are used, the subcommittee finds that there is a need to expand a municipality's role in groundwater management in New Hampshire in order to effectively evaluate proposed withdrawals in the context of long-term sustainability and public benefit.

A critical and weighty issue for the HB 1353 Subcommittee was whether to recommend the continuation of the current preemption of the State regulatory process mandates by RSA 485 C-20, or to abrogate it in whole or in part in one of the several ways suggested by some members of the public. After due deliberation, the subcommittee concluded the preemption should continue but with some modification to the language of RSA 485-C:20 to more narrowly and precisely define the contours of that preemption as recommended below. The primary reasons for the subcommittee's conclusion on preemption were 1) the legal, political, technical and practical difficulties inherent when varying and perhaps inconsistent municipal regulatory regimes are applied to a resource that crosses municipal boundaries; and, 2) the substantial resources required to reach scientifically justifiable and legally defensible regulatory decisions.

The question of continuing preemption, however, was not easily decided. The HB 1353 Subcommittee heard and understood the considerable concern of the public especially where large quantities of water are withdrawn and exported or used consumptively in a context where future needs and capacities are unknown. Thus the continuation of preemption was premised on the concomitant enactment of the various recommendations.

The foundation and centerpiece of these recommendations is the development of data to reasonably estimate future availability of groundwater and surface water (which is inherently connected with groundwater) on a watershed basis to be partnered with municipal projections of future needs. This data would then form the basis of a two-tiered regulatory scheme that is described in Section 4.1. Municipalities would regulate withdrawals of less than 57,600 gallons per day with the State continuing to regulate larger withdrawals, but with both regulatory systems tied to the same database of future needs and capacities. Similarly, preservation of the preemption envisions enacting the recommended changes to the State's large groundwater

withdrawal permitting process summarized below to enhance the ability of municipalities to effectively and knowledgeably participate in that process. The recommended changes include:

- Expansion of the duration of the public comment period in the large groundwater withdrawal permitting process as described in Section 4.2;
- Enable municipalities to hire an expert at the expense of an applicant to assist in reviewing and preparing comments on submittals associated with an applications for a new large groundwater withdrawals as described in Section 4.3;
- Provide direct notification to entities that may be potentially impacted by a proposed large groundwater withdrawal when a permit application is filed as described in Section 4.4;
- Clarifying that municipalities may coordinate with the New Hampshire Department of Environmental Services (NHDES) to inspect and enforce compliance with large groundwater withdrawal permits as described in Section 4.5;
- Require that NHDES conduct a mandatory public hearing in the municipality of a proposed withdrawal as described in Section 4.6; and
- Clarification RSA 485-C:20 relative to ensuring compliance with lawful municipal regulations as described in Section 4.7.

The recommendations of the HB 1353 Subcommittee are offered not merely as a series of stand-alone recommendations but rather as a groundwater regulatory program for true partnership between the State and municipalities based on the future needs of our public and the future capacities of our watersheds. It is respectfully requested and urged that the Groundwater Commission consider them in that context.

In completing its work, the HB 1353 Subcommittee received testimony and recommendations relating to many water use and groundwater related issues that were beyond the scope of work for this subcommittee to study. Because of the value of this information relative to sustainable water resource management, the subcommittee has provided a summary of these issues and its recommendations in Section 5 of this document.

1.0 INTRODUCTION

This report fulfills the requirements of Chapter 176, Laws of 2008 (see <http://www.gencourt.state.nh.us/legislation/2008/HB1353.html>) for the Groundwater Commission that was established by Chapter 305, Laws of 2003 and Chapter 136, Laws of 2005 to conduct a study of the following:

- Criteria, including public benefit, for the granting of large water withdrawals other than those of RSA 485-C.
- Appropriate roles for municipalities in the permitting and regulation of large groundwater withdrawals.

Chapter 176, Laws of 2008 requires that the Commission obtain input from municipalities and other appropriate entities in completing the study. The law also requires that the Groundwater Commission report its findings by November 30, 2009.

2.0 STUDY APPROACH

The Groundwater Commission with the assistance of representatives from regional planning commissions throughout the state developed a document titled “Land Use Regulations and Large Groundwater Withdrawals” (see nhgroundwater.com). The document was designed to explain: 1) Statutory and Common laws that affect large groundwater withdrawals; and 2) Municipal land use regulations that can affect projects that include large groundwater withdrawals. The Commission also developed a list of questions that were designed to understand the viewpoints of a broad range of stakeholders and to identify potential study issues. The list of questions included:

- Do you understand how groundwater withdrawals are regulated in NH?
- What are the pros and cons of current groundwater regulation in NH?
- What should be the criteria associated with approving new groundwater withdrawals?
- Should these criteria be the same everywhere? Should the criteria be the same for all types of water uses?
- Who should regulate groundwater withdrawals in NH - municipalities, the State, and/or a regional entity?
- How should the regulation of groundwater withdrawals be integrated into other local regional and state master plan and regulatory decision making processes?
- If there was a drought emergency and a water supply shortage, who should make the decisions on who gets the water?
- Beyond protecting public health, what should the criteria be for prioritizing one water use over another?
- Are there any specific experiences with groundwater withdrawal projects or specific data pertaining to groundwater that you draw upon to form your opinion about groundwater management in New Hampshire?
- Do you believe a land owner’s right to use water beneath their land could be unfairly impacted by the over regulation of groundwater by any entity?

A subcommittee of the Groundwater Commission (“HB 1353 Subcommittee”) was formed to coordinate with the nine regional planning commissions in the state to conduct nine regional meetings to discuss issues listed in Section 1.0 of this document.

The regional planning commissions and the HB 1353 Subcommittee issued invitations along with the background materials described above to municipal boards of selectmen, planning boards, conservation commissions, planners, managers/administrators. These materials were also distributed by the subcommittee to community water supply managers, legislators, and executive councilors. The subcommittee also requested that Groundwater Commission members representing various interests notify their constituents of the regional meetings. Lastly, numerous press releases were issued advertising the regional meetings as well as the website nhgroundwater.com which contained the schedule of meetings and all associated background materials developed by the Groundwater Commission.

With the exception of the meeting arranged by the Upper Valley Regional Planning Commission which had no attendees, each regional meeting was videotaped, key points recorded on a flip chart and written detailed meeting minutes were developed (see nhgroundwater.com). Attendees for each meeting are listed in the meeting minutes. Each meeting opened with an introduction to the history of the Groundwater Commission and the HB 1353 Subcommittee. The subcommittee then gave a fifteen minute presentation on the existing statutory and common laws that affect large groundwater withdrawals in New Hampshire (see nhgroundwater.com for a copy of the presentation). The subcommittee then opened the meeting to comments from the public. The subcommittee specifically asked meeting attendees to describe their view points and associated reasoning regarding the questions listed above.

3.0 PUBLIC COMMENTS

The HB 1353 Subcommittee's charge was to garner public input on the potential municipal role in groundwater withdrawal regulation. However, at each of the regional meetings the attending public voiced a wider range of comments and concerns about the present regulatory regime and other aspects of groundwater withdrawal. In the interest of providing the Commission with the full spectrum of public input, all of the comments are briefly summarized below. The majority of the comments made, even though in many cases not focused directly on municipal regulatory control, relate to the various ways in which groundwater resources may be better protected and therefore are seen as important to the municipalities' interests. The summary that follows is organized, with some overlap, into topic headings. (For a detailed report of the public commentary is in the meeting minutes at NHgroundwater.com)

3.1 Local/Regional Role or Control in Permitting or Otherwise Regulating Groundwater Withdrawals

Regarding the key question of whether municipalities should regulate large groundwater withdrawals, there were impassioned views expressed on both sides. Some felt strongly that only local government knew their groundwater resources and present and future groundwater needs best and therefore were in the best position to regulate withdrawals. Others felt that an exclusive state regulatory regime is necessitated by one or more of the following factors: 1) the scientific knowledge and data gathering that must inevitably be involved in a legally supportable regulatory regime cannot be supported by town resources; 2) local control entails the prospect of a patchwork of regulatory regimes over groundwater that will impede equitable administration; and 3) groundwater rarely contains itself within town boundaries, which requires regional if not statewide regulation. As could be expected, there were a host of comments that struck on middle ground.

Some urged that there be concurrent state and local regimes, as there are for wetlands protection. Several participants noted that towns should expressly be permitted to fill the regulatory gap that exists for withdrawals of fewer than 57,600 gallons per day. Additionally there was some confusion over the precise delineation between pre-empted groundwater withdrawal regulation and conventional land use regulation and site plan review of groundwater withdrawal operations. Another variant was that while uniform regulations and permitting should be effectuated by the state, towns should be able to enforce the regulatory conditions and limits placed on permits. Alternatively, it was suggested that the state develop and maintain the scientific data base needed for decision- making that the towns could utilize in enforcing their own regulations.

Two common themes in all of the meetings with the public, were concerns around adequately assessing future water needs and also regulating groundwater withdrawal on a regional basis. Recognizing that aquifers cross municipal boundaries, there were calls for the assessment of the effects of large groundwater withdrawals on a regional basis and for the development of a process to coordinate the efforts of towns to manage and protect shared groundwater resources. It was noted repeatedly that assessment of water needs and availability must be conducted on a

regional basis, in the sense that regionality is defined by hydrological systems. Some participants argued specifically for the creation of watershed districts to regulate groundwater withdrawals or indeed any water use that would adversely impact the watershed. Some were more parochial in their outlook, noting that the process should at least take into account future water needs as dictated by municipal master plans.

Regardless of the view on regionality, the level of concern expressed that any regulatory system governing large groundwater withdrawals must take into account future needs and future water capacity, including estimate of the effects of climate change, cannot be overstated. This theme will be revisited in other topics below.

There were a number of comments in all of the meetings relating to the municipal role in the current permitting process. Many felt that an enhancement of municipal control over groundwater withdrawal can be accomplished by enhancing, in various ways, municipal participation in the process. Many suggestions in this category focused on assisting towns in understanding the scientific and technical data, assumptions and conclusions bearing on a permit application by a) creating a groundwater withdrawal permit ombudsman who would coordinate state and local regulatory efforts; or b) creating a State consumer water advocate to assist affected towns in the permitting process; or c) conferring authority to permit the towns to hire a licensed professional to review large groundwater permits applications at the applicant's expense.

A number of participants noted that, given the technical complexity of the process, towns and other affected entities should be given an expanded comment and response period under the permitting process rules. It was also suggested that intervener status be given to all towns over the aquifer (or other hydrological system) that is sourced for the withdrawal and that direct notification of the application be required for a broader range of residents and other property owners or water users 'near' the planned extraction site.

In a more general tone, several participants called for towns to be given greater protection under and a stronger deciding voice in the permitting process.

Many observations, taking various forms, centered on the general question of whether the permitting process should take into account the planned use of the extracted groundwater. It was noted a number of times in a number of ways that the concept of regulating water use for the public benefit was inherent in the Public Trust doctrine and a public benefit analysis should be part of the permitting process. In a similar vein, it was suggested that the rigor of the permitting process should vary according to the use of the water; especially and repeatedly noted was the idea that water that was to be 'exported' should receive greater regulatory constraints than water which was to 'stay local'. Some felt a distinguishing factor should be whether the water was for public or commercial use, urging that, in particular, the process for public water systems should be streamlined. Another proposed variable was whether the use was consumptive or non-consumptive, the former requiring greater scrutiny and constraints. A few called for town veto power over withdrawals that were to be 'exported' or were otherwise consumptive. More than a few felt that towns should be allowed to preserve water for their future needs especially in the

context of a regulatory system that treats withdrawals for consumptive uses versus non-consumptive uses and local consumption versus exportation identically.

Certain special interests also had comments relative to local municipal control over either large or any groundwater withdrawals. Agricultural interests urged that they not be subject to local control, citing increased cost burdens and the prospects of uneven administration across towns. Development interests noted that the cost and burdens of the permitting process creates a disincentive for creating community water systems in large residential developments.

3.2 Permitting Process Improvements

The comments targeting improvements in the permitting process were wide-ranging and not easily grouped. Although this section purports to distinguish comments relating specifically to the permitting process rather than to municipal participation in groundwater regulation, often the distinction cannot be made and there is considerable overlap.

A significant example are the numerous comments described above relating to varying the process according to the use or user of the extracted water, including distinctions to be made between public and commercial uses (including streamlining for community water systems), consumptive versus non-consumptive uses (streamlining for uses that are non-consumptive), local versus exported uses, agricultural uses, obstacles to creating community water systems in residential development including conservation subdivisions, and the need for public benefit analysis in the process. All of these observations are incorporated here by reference. Similarly treated are the various comments relating to the need to provide assistance to towns and affected parties with understanding the technical aspects of the process.

A few expressed concerns relating to the capacity of the current State administrative structures to adequately regulate groundwater withdrawals. One expression of this concern was that the NHDES does not have sufficient resources to monitor everything going on in the state relating to groundwater withdrawals and argued for partnering with regional agencies. This concern was expressed both in relation to the ability to adequately assess future water needs and the capacities of water systems to meet those needs and to the ability to adequately monitor and assure mitigation of adverse impacts under the Groundwater Protection Act.

As to perceived deficiencies in the rules and regulations, a number of observations were offered. First and, perhaps, foremost was the recognition that the Groundwater Protection Act leaves quite a bit of groundwater withdrawal unregulated. It does not apply to wells established before 1998 and does not apply to withdrawals of less than 57,600 gallons per day. A number of public participants inquired about the reasoning or technical basis, or apparent lack thereof, underlying these limitations.

There were a number of comments relating to the hydrologic aspects of the rules. Several argued that surface water and groundwater are so intrinsically related in respect of quantity and quality that they should be regulated under one regulatory regime. One comment went further in calling

for better coordination of all NHDES permitting programs to better assure compliance and consistency.

Other technical suggestions included that 1) field testing should be done only during dry periods; 2) a determination of the age of the groundwater to be extracted should be required in the process; 3) the quality of the extracted water that is returned to the hydrologic system should be considered; and, 4) technical difficulties in defining the impact area for bedrock wells should be addressed. And again, there were a number of comments calling for the permitting process to include an assessment of the adequacy and capacity of the encompassing watershed to meet a reasonably sound estimate of the projected future requirements of that watershed.

A number of comments spoke to the life and ownership of the permit that is issued in the process. Some questioned whether the ten year term was too long and whether the permit should automatically expire if not put into use within a certain timeframe. In addition it was noted that further thought should be devoted to whether additional review or approval is needed when a permit is transferred to a new owner, including a transfer resulting from a bankruptcy proceeding.

There were also more general comments focusing on the equities of the process. One participant questioned whether there was an intended or unintended weighting of the process in favor of applicants. Some community water applicants, however, experienced a foreboding attitude. Several comments noted that the variable nature of the permit, i.e. that under certain circumstances NHDES could reduce the amount of withdrawal, was insufficiently clear in the rules. Others called for more transparency in the permitting process generally.

The concept of mitigation of adverse impacts seemed to generate more than a little concern, first in relation to the ability to discover adverse impacts in a timely and sufficient manner, but more importantly in relation to the ability to assure an adequate and appropriate mitigation. It was observed that the statute and rules lack sufficient specificity on that matter. As one noted, having a water tanker parked permanently on the lawn to mitigate a dry well was not a just and sufficient remedy. The concerns over mitigation also extended to the financial capacity of the applicant which will be taken up below.

3.3 Financial Capacity of a Permittee and Transfers of Permits

The comments in this category address the financial capacity of a permittee and the circumstances under which permits are transferred to new ownership. Although the permitting process seeks to establish parameters that avoid adverse impacts resulting from groundwater withdrawals, the possibility that adverse impacts may nonetheless occur focuses attention on the permittee's financial capacity to remedy such impacts. This concern logically extends to transferee's of a permit. Public comment on these issues included 1) requiring bonding or insurance or the creation of a fund through imposition of permit fees to remedy adverse impacts; 2) requiring demonstration of financial capacity as a prerequisite in the permitting process; and, 3) conditioning transfer of the permit on the demonstration of the transferee's financial capacity, including, to the extent permitted by law, transfers of a permit in bankruptcy proceedings.

3.4 Adequacy of Data to Regulate Large Groundwater Withdrawals

The HB 1353 Subcommittee heard public concern that there is inadequate data to properly manage groundwater withdrawals and to avert both short and long-term adverse impacts. Several participants argued that withdrawal impacts must be assessed on a watershed basis. Others pointed to the paucity of bedrock monitoring wells despite the fact that a large portion of the population relies on bedrock wells. As a result, they observed, the ability to measure recharge capacity is significantly impaired. Participants urged that the State quickly address this issue on a statewide basis, creating a data base that towns could use as well. It was also suggested that a moratorium be placed on large withdrawals until the State develops adequate data on groundwater needs and capacities.

3.5 Fees /Consumption Tax

A number of public participants argued that an equitable regulatory system would compensate the towns and /or the State for water use, especially for consumptive or exported uses. Suggestions ranged from instituting permit fees to levying a tax per unit of withdrawal.

3.6 Public Trust/ Human Rights/Constitutional Rights

A miscellany of comments all relating to the legal status of groundwater is grouped in this subsection. Some participants voiced confusion over the meaning, legal and practical, of the Public Trust Doctrine. Learning from the HB 1353 Subcommittee's presentation that there was as yet no New Hampshire Supreme Court decision placing groundwater in the Public Trust, some were concerned that this somehow be accomplished. Others wondered what protection of water resources the Doctrine actually affords, and believed that water is better recognized as a human right rather than a shared resource. Following the lead of a few towns that have adopted municipal constitutions that redefine the constitutional rights of corporations, some advocated that the State Constitution also be similarly amended, which, in their view, would redress a power imbalance between corporations on the one hand and human beings and ecosystems on the other in competing for water resources.

3.7 Hierarchy of Water Uses

In various comments the public expressed concern over the absence of an established hierarchy of water uses that would assure the availability of water to humans and ecosystems. This concern also surfaced as part of the expressed needs for a public benefit analysis and for the assessment of future water needs and capacities.

3.8 International Trade Agreements

Questions concerning the potential effects of international trade agreements on either State or municipal regulatory regimes were raised in several meetings, and the importance of understanding these potential interactions in structuring any regulatory regime was noted.

4.0 RECOMMENDATIONS ASSOCIATED WITH THE LOCAL ROLE IN THE PERMITTING PROCESS AND PUBLIC BENEFIT

In the regional meetings, the HB 1353 Subcommittee heard a wide range of observations and suggestions. Those comments that translated into recommendations for action or for further study are set forth below. A number of the comments did not relate to groundwater withdrawal and thus were not given further consideration by the subcommittee. All comments pertinent to groundwater withdrawal, however, even those not relating directly to municipal role, were given serious consideration by the subcommittee. The working premise was that improvement in the accuracy and credibility of the State regulatory process as well as enhancements in the participatory role of municipalities in that process both redound to the public benefit.

A critical and weighty issue for the subcommittee was whether to recommend the continuation of the current preemption of the State regulatory process mandated by RSA 485 C-20, or to abrogate it in whole or in part in one of the several ways suggested by some members of the public. After due deliberation, the subcommittee concluded the preemption should continue but with some modification to the language of RSA 485 C- 20 to more narrowly and precisely define the contours of that preemption as recommended below. The primary reasons for the Subcommittee's conclusion on preemption were 1) the legal, political, technical and practical difficulties inherent when varying and perhaps inconsistent municipal regulatory regimes are applied to a resource that crosses town boundaries; and, 2) the substantial resources required to reach scientifically justifiable and legally defensible regulatory decisions.

The question of continuing preemption, however, was not easily decided. The HB 1353 Subcommittee heard and understood the considerable concern of the public especially where large quantities of water are withdrawn and exported or used consumptively in a context where future needs and capacities are unknown. Thus the continuation of preemption was premised on the concomitant enactment of the various recommendations below.

The foundation and centerpiece of these recommendations is the development of data to reasonably estimate future availability of groundwater on a watershed basis to be partnered with municipal projections of future needs. This data would then form the basis of a two-tiered regulatory scheme. Municipalities would regulate withdrawals of less than 57,600 gallons per day with the State continuing to regulate larger withdrawals, but with both regulatory systems tied to the same data base of future needs and capacities. Similarly, preservation of the preemption envisions enacting the recommended changes to the State process set forth below to enhance the ability of municipalities to effectively and knowledgeably participate in that process.

Thus, the recommendations set forth below are offered by the HB 1353 Subcommittee, not merely as a series of stand-alone recommendations but rather as a groundwater regulatory program for true partnership between the State and municipalities based on the future needs of our public and the future capacities of our watersheds. It is respectfully requested and urged that the Commission consider them in that context.

4.1 State-Local Partnership in Consumptive Water Use Watershed Capacity Planning

4.1.1 Background

A number of stakeholders recommended to the HB 1353 Subcommittee that New Hampshire's approach to managing water resources is disconnected from local planning processes. The public expressed concern that this means future groundwater needs are not being considered when the State processes a large groundwater withdrawal application. Similarly, the public expressed a concern that certain land uses with large groundwater withdrawals may not assess "public benefit" such as how the withdrawal will impact growth development of other land uses desired by a community, or the overall social, economic and environmental well being of a community that is expressed in a master planning. The public deemed traditional land use controls that they are enabled to develop and to enforce as an indirect and inadequate mechanism for properly managing land uses that include large groundwater withdrawals.

In addition to these comments, the HB 1353 Subcommittee identified that the current legal framework for managing new groundwater withdrawals in New Hampshire has the following shortcomings:

- The State does not have statutory authority to regulate impacts associated with groundwater withdrawals less than 57,600 gallons per day from a well or wells at a single property or place of business.
- Municipalities may or may not be able to regulate groundwater withdrawals less than 57,600 gallons over any 24-hour period.
- Approximately sixty-one percent of the groundwater use in New Hampshire occur at extraction volumes that are below New Hampshire's statutory threshold of 57,600 gallons over any 24-hour period. In 2005, private domestic wells accounted for 44% of the average daily groundwater use in New Hampshire (see <http://pubs.usgs.gov/circ/1344/pdf/c1344.pdf>)
- Over ninety-three percent of the groundwater extracted (by volume) in New Hampshire is not subject to water quantity regulations requiring environmental/water level monitoring because of pre-dating the statute or not exceeding the regulatory extraction volume threshold.
- Existing state, local and regional programs lack a comprehensive approach to ensuring that the state will manage its groundwater in a sustainable manner. There are several laws on the books that require or encourage state agencies and municipalities to develop water management plans and ensure there will be a sufficient quantity of water for the future. However, these laws have been developed in a piece-meal fashion overtime for different objectives. When applied collectively, a process for estimating future water needs, estimating available supply and developing and executing a plan regarding the use of

groundwater in a given region is lacking. A brief summary of the existing water use regulatory frame work and their limitations is provided below:

- **Office of Energy and Planning Water Protection Assistance Program (RSA 4-C:19-RSA 4-C:23)** - Since 1987, State law enables the Office of Energy and Planning and municipalities, with assistance that is available from existing resources at NHDES are authorized to develop water resource chapters to protect and manage water resources. A municipality is also enabled by state law to implement the water local water resource management plan by adopting ordinances or amending subdivision and site plan review regulations to protect water resources. State law allows municipalities to enter into intermunicipal agreements for the purpose of implementing the requirements of the water resource management plan.

The provisions of RSA 4-C:19-RSA 4-C:23 provide municipalities a methodology for developing water resource plans and implementing the plans. The limitations of the methodology established by these statutes include:

- 1) RSA 485-C:20, enacted in 1998 clearly preempts municipalities from regulating groundwater withdrawals from a well or wells sited after July 1998 from a single property or place of business that cumulatively exceed 57,600 gallons over any 24-hour period.
- 2) The Attorney General's Office as well as an attorney from the Municipal Association has testified before the Groundwater Commission that the provisions of RSA 485-C:20 are ambiguous and could be reasonably interpreted to mean that municipalities can or cannot regulate groundwater withdrawals that are less than 57,600 gallons over any 24-hour period.
- 3) RSA 41:11-d was enacted in 2006 to provide municipalities a clear methodology to manage residential lawn watering from all types of water sources during times of drought. This legislation was intended to address a re-occurring cause for water shortages which could not be controlled during the drought from 2001-2003. The adoption of this law may have unintentionally limited municipal authority to adopt ordinances or regulations regulating water use not related to drought. In New Hampshire, state laws dictate specifically what municipalities can or cannot regulate. Various statutes provide municipalities with broad authority to protect the public welfare and health and safety and land use compatibility. Because state statute was amended in 2006 to enable municipalities to explicitly regulate water use associated with residential lawn watering during times of drought, several legal experts stated that this could be interpreted to mean that municipalities are not enabled to otherwise regulate groundwater. The broad authority for municipalities to protect public welfare and safety on other statutes may now not be considered applicable to water use because a specific statute states when a municipality can or cannot regulate water use. It is important to note that RSA 41:11-d was adopted because municipalities were uncertain if they had legal authority to control discretionary water uses during the 2001-2003 drought.

4) The Water Protection Assistance Program, which is required by RSA 4-C:19-23, has not been supported at the Office of Energy and Planning for the last seven years. This program was established by state law to assist municipalities in developing water resource management plans.

5) The criteria in RSA 485-C:21 for approving or denying an application for a groundwater withdrawal that exceeds 57,600 gallons over any 24-hour period from a well or wells sited after July 1998 at a single property or place of business does not contain provisions for considering local or regional water resource management plans.

- **Study of Future Water Supply Needs By Department of Environmental Services -**
In 1989, RSA 485:49-RSA 485:53 was enacted requiring NHDES to study the probable domestic water supply requirements of groups of municipalities with that will likely experience growths for the next fifty years. Since 1989, numerous water supply studies have been completed by the state, federal, municipal and regional agencies. The 1990 Southern New Hampshire Water Supply Study, the 2003 NH Seacoast Water Use and Groundwater Study, and the ongoing State-wide stressed basin index study all assess existing and future water supply needs. Data from these assessments have been and will continue to be useful for water planning efforts. However, state laws that govern local land use planning and state water withdrawal permitting programs do not enable municipalities or the state to consider in their decision making processes the future water supply needs information.

4.1.2 Recommendation

The HB 1353 Subcommittee recommends that the Commission spend the next year developing a state-municipal-intermunicipal process that enables municipalities that want to have more control over groundwater use and the state to develop a consumptive water use plans for small watersheds (approximately 5-10 square mile catchments). Conceptually these plans could estimate the consumptive water use capacity of a watershed by: 1) Assessing future water needs for a given watershed; and 2) Estimating the consumptive water use capacity of a watershed. (Amend RSA 4-C19-RSA 4:C23). The process could include provisions such as the following in order to ensure that state and local interests are being fully considered as groundwater use decisions are made:

- A consumptive water use plan for watersheds ("plan") must be developed in accordance with guidance from NHDES and OEP. The HB 1353 Subcommittee has developed a draft of a plan of this nature that can be further refined by the Commission over the next year.
- The plan must be approved by NHDES.
- The plan can result in towns developing subdivision regulations, site plan review regulations and ordinances to protect, conserve and develop groundwater (for withdrawals less than 57,600 gallons over a 24-hour period) in accordance with a consumptive water use capacity

of a watershed in a given area of the town. (Amend RSA 674:36, 674:44 & 674:16. Amend RSA 485-C:20 to clarify local authority to regulate groundwater withdrawals less than 57,600 gallons over a 24-hour period.)

- The plan must be considered when NHDES makes decisions on large groundwater withdrawal permits. The applicant for a large groundwater withdrawal must demonstrate compliance with the provisions of the plan. NHDES must make permit decisions that are consistent the plan (Amend RSA 485-C:21).
- The plan must contain provisions whereby more in-depth studies could be conducted by an applicant to collect data that may result in the alteration of the estimate of the consumptive water use capacity of a watershed established by the plan. Similarly, the plan must provide an opportunity for an applicant to assess and obtain a waiver from compliance with the plan if a proposed groundwater is demonstrated to be a nonconsumptive use and does not adversely impact water quality. An example of this would be where certain groundwater withdrawals occur in a watershed with significant impoundment controls that primarily control the occurrence of baseflows in a watershed. Another scenario where a waiver may be warranted is if a proposed withdrawal can be demonstrated not to be impacting the baseflow in the watershed due to the nature of the hydrogeology at the withdrawal site.
- Authorize municipalities to develop subdivision or site plan review regulations that assess well interference or localized aquifer dewatering concerns with new subdivisions or when new projects with consumptive groundwater use requirements are proposed for projects that will not be subject to the large groundwater withdrawal permitting process (Amend RSA 674:36 & 674:44). Localized well interference/dewatering cannot be assessed using the methodology proposed for the consumptive water use plan. An example of how this concept could be applied has been developed in draft form and should be refined by the Commission over the next year.
- Encourage adjacent municipalities with overlapping watersheds to jointly complete plans and enter into an intermunicipal agreement pursuant to RSA 53-A in order to jointly put the plan into effect.
- Consider applying some amount of regulatory oversight to large groundwater withdrawals from wells that predate the effective date (August 1, 1998) of the existing large groundwater withdrawal statute.
- Continue to coordinate with other water resource planning efforts to integrate the management of groundwater, surface water, wastewater, stormwater and water conservation.

The HB 1353 Subcommittee has developed an initial draft of a consumptive water use watershed plan for the Bloody Brook Watershed in the Exeter River Watershed that can be used to initiate the Groundwater Commission's work on this recommendation.

4.2 Expand the Comment Period for Municipal Review

4.2.1 Background

RSA 485-C:21 and 14a set-forth in statute the timing and duration of the public comment periods during the large groundwater withdrawal permitting process. State law allows a municipality to request a public hearing within 15 days of receiving the preliminary permit application or final report. If a public hearing is requested, it must be held within 30 days of the request. After setting a date for the public hearing, NHDES notifies the applicant, who then must publish the following public notices that describe the time, place, and purpose for the hearing:

- At least seven days prior to the hearing post a notice in two public places in each of the municipalities that was notified about the proposed withdrawal.
- At least eight days prior to the hearing publish a notice in two newspapers, one of general circulation throughout the state and the other of regional circulation.
- Seven days before the hearing publish a notice in two newspapers, one of general circulation throughout the state and the other of regional circulation.

Members of the public may present comments at the hearing if one is requested, or submit them directly to NHDES during the comment period. Members of the public including municipalities, water suppliers, and the applicant have 45 days from the hearing or, if no hearing is requested, 45 days from receipt of the preliminary permit application or final report to submit written comments to NHDES.

Representatives of municipalities that attended the regional HB 1353 meetings suggested that there may be instances where the existing comment periods are insufficient in duration for a municipality to comprehensively assess an application and coordinate with various boards and departments to prepare comments. Municipalities stated that this is especially true if they were to obtain their own third-party review expert.

4.2.2 Recommendations

The HB 1353 Subcommittee recommends the Commission review the statutory requirements for regarding public comment periods and consider extending the comment periods by a fixed amount when a municipality submits a request to extend the public comment period.

4.3 Third-Party Review for Municipalities

4.3.1 Background

The large groundwater withdrawal permitting process has two public hearings and written comment periods. The first hearing and written comment period occurs after a preliminary

application is submitted to NHDES. The second hearing and written comment period occurs after the final report is submitted. NHDES must consider all recommendations made by the public, water suppliers and municipalities on a large groundwater withdrawal application. NHDES must explain in writing any decision it makes that is inconsistent with a recommendation made during the public hearing or written public comment period. By amendments made to the RSA 485-C:21 in 2006, municipalities in the potential impact area of a proposed large groundwater withdrawal clearly have standing in the large groundwater withdrawal permitting process and the right to require NHDES attend meetings and answer questions about the a pending large groundwater withdrawal application.

While the opportunities for municipalities to comment on a large groundwater withdrawal permitting application are extensive, some have found the utility of the public comment opportunities questionable in value because:

- Municipalities generally do not have staff that by education and experience have a background in assessing hydrogeologic reports.
- Municipalities generally do not have staff that that by education and experience have the legal or scientific background to fully understand the requirements of state statute and regulations pertaining to the large groundwater withdrawal permitting process.
- Municipalities generally do not set aside funds to hire experts to assist them in preparing comments to NHDES for large groundwater withdrawal applications in the event one is proposed.

The large groundwater withdrawal permitting process has been in place since August 1, 1998. In general, comments provided by the public or municipalities without the assistance of a qualified professional are either general in nature or not applicable to the provisions of the large groundwater withdrawal statutes and regulations. Conversely, the comments prepared with the assistance of qualified professionals are often very specific and directly relate with implementing the intent of the large groundwater withdrawal permitting process.

In the 2009 legislative session, legislation (HB 314) was introduced and proposed to enable municipalities to conduct their own environmental impact studies at the cost of the applicant for proposed large groundwater withdrawals. HB 314 was amended in a legislative committee to allow a municipality to hire a Professional Geologist or Engineer at the expense of an applicant to assist in preparing comments on the a large groundwater withdrawal preliminary application and final report. The amended version of HB 314 specifically proposed:

"Each municipality in which a well associated with a proposed withdrawal is or will be located may assess the applicant all reasonable costs associated with obtaining the services of a New Hampshire licensed engineer or geologist to review and comment on documents submitted by the applicant to the department that are associated with requirements of this section and RSA 485-C:4, XII. Community water systems, as defined in RSA 485:1-a, I, are exempt from the provisions of this paragraph."

During legislative hearings for HB 314, some stakeholders opposed the provisions of HB 314 because:

- 1) HB 314 did not contain provisions for defining "reasonable costs" meaning an applicant could be exposed to substantial third-party review fees;
- 2) NHDES provides a third party review of large groundwater withdrawal applications and additional third party reviews are not necessary;
- 3) The large groundwater withdrawal permitting process is already thorough and costly. Any additional costs could discourage economic development in New Hampshire.
- 4) HB 314 exempted community water systems which constitutes over 80% of the large groundwater withdrawals in New Hampshire.

4.3.2 Recommendation

A majority of the HB 1353 Subcommittee recommends the concept of enabling municipalities to hire a professional geologist or engineer at the cost of an applicant to assist it in reviewing and participating in the public hearing and comment processes associated with an application for a new large groundwater withdrawal. The HB 1353 Subcommittee has prepared suggested amendments (see underlined/bold/italics text) to HB 314 to more specifically identify the costs that a municipality may recover from an applicant applying for a large groundwater withdrawal permit. This language is provided below:

*X. Each municipality in which a well associated with a proposed withdrawal is or will be located may assess the applicant all reasonable costs associated with obtaining the services of a New Hampshire licensed engineer or geologist **to attend hearings conducted in accordance with RSA 485-C:21, III IV and V-a, attend meetings conducted in accordance with RSA 485-C:21, IX,** review and comment on documents submitted by the applicant to the department that are associated with requirements of this section and RSA 485-C:4, XII. **Services provided may include an evaluation of assumptions, conclusions, recommendations and completeness of document relative to the requirements of RSA 485-C:21 and RSA 485-C:4, XII. Services provided shall not include duplication of data collection activities required by an applicant in RSA 485-C:21 or RSA 485-C:4, XII. The applicant may not be assessed any costs directly associated with filing an appeal of a decision on a large groundwater withdrawal application.** Community water systems, as defined in RSA 485:1-a, I, are exempt from the provisions of this paragraph."*

The HB 1353 Subcommittee recognizes that the Groundwater Commission discussed the proposed language above at a Groundwater Commission meeting on October 19, 2009. At the end of the discussion, Commission members conducted an informal poll and the majority of Commission members in attendance supported removing the exemption for community water systems in the language proposed above. The subcommittee recommends that the Commission re-evaluate this issue as Commission members not in attendance at the October 19th meeting

were not notified that the Commission was voting on this topic, and other Commission members stated afterwards that they did not fully understand what they were voting on.

The HB 1353 Subcommittee supports maintaining the exemption for community water systems because it could result in unfunded mandate which is unconstitutional under Article 28a of the New Hampshire Constitution. Additionally, withdrawals for community water systems are already subject to more extensive regulations relative to sustainability than other type of withdrawals and the HB 1353 Subcommittee does not believe the third party review requirement is warranted.

4.4 Direct Notification of Stakeholders

4.4.1 Background

Several attendees at the regional HB 1353 meetings stated that the current public notification process is not adequate in the large groundwater withdrawal permitting process. The notification process was described in Section 4.2. Some attendees stated that they were abutters to a property where a large groundwater withdrawal application had been filed, but had no knowledge of the pending application.

4.4.2 Recommendation

The HB 1353 Subcommittee recommends that the public notification process established by the statute be improved. The subcommittee also recommends reorganizing statutes and to eliminate certain statutes pertaining to public notification that are redundant and superceded by the notification provisions required by RSA 485-C:21.

The HB 1353 Subcommittee recommends the proposed changes:

- 1) Require the inventory of entities potentially impacted by a proposed large groundwater withdrawal as identified in administrative rule Env-Wq 403.09 be notified via certified mail at the initial stage of the permitting process.
- 2) Make the public notification requirements in the statute consistent by:
 - a. Deleting RSA 485-C:14-a which has notification requirements that are redundant to RSA 485-C:21;
 - b. Amending notification language to replace "supplier of water" with "community water system" as the entity that must receive a copy of a large groundwater withdrawal application;

- c. Allowing a community water system to request a public hearing when the Final Report is submitted. Currently, a community water system can only request a public hearing for the preliminary application; and
 - d. Deleting a notification requirement regarding groundwater withdrawals in RSA 481:14-a. The notification requirements in RSA 485-C exceed the requirements of RSA 481-14-a.
- 3) Reorganize RSA 485-C so that notification requirements are in RSA 485-C:21-a and the technical requirements of the permitting process are in RSA 485-C:21-b.

4.5 Municipal Inspection and Authority for Facilities with Large Groundwater Withdrawal Permits

4.5.1 Background

Many attendees at the regional meetings questioned NHDES' ability to provide adequate oversight to ensure compliance with the conditions of large groundwater withdrawal permits. The recommendation was made that municipalities have authority to inspect facilities operating with large groundwater withdrawal permits and to enforce the conditions of the permit when appropriate.

4.5.2 Recommendation

The HB 1353 Subcommittee supports the concept of municipalities having authority to inspect facilities with large groundwater withdrawal permits. NHDES also supports the concept of municipalities coordinating with NHDES to address any deficiencies identified as result of these inspections.

The HB 1353 finds that provisions of the Groundwater Protection act (RSA 485-C) which includes the statutory requirements for large groundwater withdrawal permitting, partially accommodates municipal inspection and enforcement.

***485-C:15 Investigation and Inspection.** – The department, any authorized representative, any authorized representative of any agency operating under a memorandum of agreement with the department, or any town or city health officer may enter any land or establishment for the purpose of administering the provisions of this chapter, and shall at reasonable times have access to any facility subject to this chapter.*

HB 1353 Subcommittee interprets this statute to allow a municipality to inspect and enforce requirements associated with a large groundwater withdrawal permit if a municipality is operating under a memorandum of agreement with NHDES. The HB 1353 Subcommittee believes that a memorandum of agreement with NHDES is required because the provisions of RSA 485-C:20 may pre-empt municipal authority to conduct inspections and enforce conditions

of permits. The subcommittee recommends that the Groundwater Commission evaluate RSA 485-C:15 to determine if it agrees with the findings of the subcommittee or if it believes additional legislation is required to allow a municipality to inspect and enforce requirements associated with a large groundwater withdrawal permit if a municipality is operating under a memorandum of agreement with NHDES

4.6 Mandatory Public Hearing

4.6.1 Background

Attendees at the regional meetings that lived in municipalities where large groundwater permits were issued expressed concern that a public hearing regarding the large groundwater withdrawal application was not conducted.

The public notification requirements for large groundwater withdrawal applications are described in detail in Section 4.2, above. Public hearings are not conducted when municipalities or water suppliers within the potential impact area of a proposed large groundwater withdrawal do not request a public hearing within fifteen days of receiving a copy of the preliminary application or final report.

4.6.2 Recommendation

The HB 1353 Subcommittee recommends that the statute be amended to require that NHDES automatically conduct a public hearing in the municipality where a proposed large groundwater withdrawal is located when a preliminary application is submitted. This amendment to the statute will ensure that the general public has an opportunity to learn about a large groundwater withdrawal application even if the governing body in a municipality intentionally or unintentionally does not request a hearing.

4.7 Clarification that Local Ordinances Must Be Complied With

4.7.1 Background

The HB 1353 Subcommittee reviewed two Superior Court Cases [Town of Nottingham v. Garrison Place Real Estate (02-E-369) and Garrison Place Real Estate Investment Trust v. Town of Nottingham (05-E-0684)]. Based on decisions made by courts in these cases, the subcommittee is concerned that the preemption of regulation of large groundwater withdrawals in RSA 485-C:20 may be broadly interpreted to limit the authority of the municipality under other lawful ordinances, codes and regulations.

4.7.2 Recommendation

The HB 1353 Subcommittee recommends that RSA 485-C be amended to state:

***485-C: 20 Effect on Local Ordinances.** – Nothing in this chapter shall be deemed to preempt the authority of municipalities, under other statutes, to enact local ordinances or regulations affecting groundwater ~~other than groundwater withdrawals~~ provided, however, that requirements imposed under this chapter shall be considered as minimum and except that the permitting of large*

groundwater withdrawals under RSA 485 C:21 and associated administrative rules authorized under RSA 485 C: 4 XII shall be solely done by the department. The issuance of a permit by the department shall not affect any obligation to obtain local approvals required under all applicable, lawful local ordinances, codes, and regulations not inconsistent with this chapter.

The subcommittee noted that while assessing this issue that it became apparent that the introductory paragraph to RSA 485-C:1 also requires revision to reflect the expansion of the Groundwater Protection Act over the last eleven years to include the protection of water quantity in addition to water quality.

5.0 OTHER RECOMMENDATIONS PROVIDED AT THE REGIONAL MEETINGS

5.1 Legal Standing of Communities in the Large Groundwater Withdrawal Permitting Process

A number of individuals and representatives of municipalities expressed a concern that municipalities and/or ad-hoc organizations may not have legal standing in the large groundwater withdrawal permitting process. The HB 1353 Subcommittee found that this concern was addressed by the legislature in 2006.

In 2006, RSA 485-C:21 was amended to state:

VIII. Before the department issues a large groundwater withdrawal permit, any municipality in which a well is sited or proposed to be sited, or any municipality within the potential impact area of the proposed withdrawal pursuant to paragraph V-e, may require the department to determine that the withdrawal will not infringe on the public's use of groundwater, including any contribution to wetlands and surface waters, by ensuring that the requirements of paragraph V-c are met. The department's determination shall be based on substantial evidence and shall include the methods, evidence, and data it used to support its judgment.

IX. The department shall allow any municipality showing that it may be substantially and specifically affected by a proceeding under this chapter to intervene as a party in the whole or any portion of the proceeding and shall allow the municipality to participate by presentation of argument orally or in writing or for any other purpose, as the department may order. A municipality that intervenes before the department shall retain its status through any appeal of the department's decision

The amendments made to RSA 485-C:21 in 2006 ensures that any municipality within the potential impact area (a several square mile watershed surrounding a proposed large groundwater withdrawal) has legal standing in the large groundwater withdrawal permitting process. RSA 485-C:21 does not address the legal standing of ad-hoc organization in the large groundwater withdrawal permitting process. The HB 1353 Subcommittee finds that it is not practical to establish provisions that delineates criteria for when ad-hoc organizations should or should not be recognized as having legal standing in the large groundwater withdrawal permitting process.

5.2 Creation of a State Water Advocate/Ombudsman

A number of stakeholders recommended that the State establish an advocate for municipalities or an ombudsman that can assist municipalities in understanding the legalities and technicalities associated with the large groundwater withdrawal permitting statutes and regulations in conjunction with other environmental permit applications that may be associated with the project. Stakeholders felt that an advocate and ombudsman could improve information exchange between NHDES and Municipalities. Stakeholder also thought that this position could foster a

better understanding of concerns, decisions and actions of NHDES, municipalities and/or an applicant during the large groundwater withdrawal permitting process.

The HB 1353 Subcommittee found that there was merit to the concept of a State water advocate or ombudsman. However, the HB 1353 Subcommittee determined that the recommendation in Section 4.3 will more effectively enable a municipality to participate in the large groundwater withdrawal permitting process in an informed manner. The subcommittee recommends that the concept of a state water advocate/ombudsman be revisited if the recommendation in **Section 4.3** is not implemented.

5.3 Incentives for Water Efficiency

A number of stakeholders recommended that the State develop incentives to promote water efficiency. The HB 1353 Subcommittee agrees that that water conservation should be promoted and notes that New Hampshire has made significant progress in promoting water conservation. In 2001, NHDES and the New Hampshire Public Utilities Commission issued a report titled "Regulatory Barriers to Water Supply Regional Cooperation and Conservation in New Hampshire" (see http://des.nh.gov/organization/commissioner/pip/publications/wd/documents/des_puc.pdf). In 2002, RSA 485.61 was enacted to require entities that are developing new sources of water that require a permit from NHDES to demonstrate compliance with Water Conservation Rules established by the NHDES. In 2005, NHDES adopted Env-Wq 2101-Water Conservation Rules (see <http://des.nh.gov/organization/commissioner/legal/rules/documents/env-wq2101toc.pdf>). NHDES recently joined the United States Environmental Protection Agency's Water Sense program and has numerous outreach materials regarding water conservation (see http://des.nh.gov/organization/divisions/water/dwgb/water_conservation/index.htm).

5.4 Better Integration Between Permitting Programs

Several meeting attendees stated that projects that include a large groundwater withdrawal permit should have an integrated permitting process. It was suggested that the state should review the large groundwater withdrawal application in conjunction with other significant environmental permit applications including but not limited to wetland permit applications, alteration of terrain permit applications and subsurface permit applications. Several individuals recommended that NHDES issue a single permit for projects that include a large groundwater withdrawal that verifies applications for the various state permits are consistent with one another and complies with state laws and regulations.

NHDES is exploring the concept of an integrated permitting process as part of the Innovative Permitting and Technical Assistance Initiative (see <http://des.nh.gov/organization/commissioner/p2au/pis/iptai/index.htm>). It is anticipated that this approach to permitting will be tested on select projects in 2010.

5.5 Status of Permit After Bankruptcy

Attendees at the regional meetings stated that there should be provisions in state law or rule that address the status of a large groundwater withdrawal permit in the event a permittee files for bankruptcy. People questioned what is the status of a permit if the assets associated with the property are sold, or if the new owner changed the use of the land. People also suggested that provisions be added to state laws or rules that ensure the new owner has an adequate financial capacity to mitigate the occurrence of any adverse impacts that could be caused by a large groundwater withdrawal. People were concerned that a large groundwater withdrawal permittee could cause adverse impacts that are not mitigated and then file for bankruptcy.

An application must also assess the impact of the withdrawal on water users and resources and develop a water budget to support this assessment. A large groundwater withdrawal permit is issued based on an application that includes a demonstration of need and a water budget. If a new owner changed the use of the land and purpose of a large groundwater withdrawal, an amended or possibly a new large groundwater withdrawal permit would be required.

This concern is beyond the scope of the HB 1353 Subcommittee's work. However, there was sufficient public concern regarding this topic and the subcommittee recommends that the Groundwater Commission research the legal implications for a large groundwater withdrawal permit of ownership of a business or property associated with a large groundwater withdrawal permit changes through the bankruptcy process.

5.6 Financial Assurance

Many people expressed a concern that a permittee may cause adverse environmental impacts and either not cooperate in mitigating the impacts or not have the financial resources to address the adverse impacts. A significant number of people recommended that State law be amended to require large groundwater withdrawal permittees to have financial assurances in place that state and local governments can access if needed to address adverse impacts.

The HB 1353 Subcommittee recommends that the Groundwater Commission explore financial assurance requirements over the next year. The HB 1353 Subcommittee notes that although many legislative proposals have been proposed regarding this topic over the last ten years, the legalities and practicalities of implementing financial assurance requirements have not been definitively addressed.

5.7 Adequacy of Data

Several attendees at the regional meetings explained that New Hampshire is not adequately collecting water availability data or studying and documenting its water resources. Many of these comments were targeted at the occurrence of groundwater in bedrock.

Data adequacy was identified as "Issue 6 - Groundwater Management Data Needs" in the Commission's work plan established in 2005 and the legislature required that the Commission develop a state-wide water level monitoring network pursuant Chapter 176, Laws of 2008. Currently a subcommittee consisting of Commission members, professional geologists and engineers, and academia, are developing a state-wide water availability monitoring network. The subcommittee is currently developing second draft of a proposed state-wide monitoring network. The subcommittee will complete its work by November 1, 2010.

5.8 Permit Fees or Extraction Fees for Commercial Withdrawals

A number attendees at the regional meetings recommended that New Hampshire establish permit or water use fees for commercial withdrawals. It was recommended that the fees be used to address water resource protection and planning. Some meeting attendees recommended that some or all of the revenue generated be returned back to the municipalities.

The Groundwater Commission identified fees for consumptive uses of water as Issue 4 of its work plan established in November 2005. To date, the Commission has researched water use fee structures in other states and presented this information at a meeting in January 2008. The Commission decided to consider fees after work was substantially complete on Issue 6 - Groundwater Management Data Needs. The Commission determined that it would be more appropriate to assess of issue of fees once the level of effort associated with data needs for groundwater management was determined.

5.9 Private Well Public Health Concerns

Several attendees at the regional meetings stated that they are concerned about the fact that so many people rely on private wells with water quality that does not meet health standards. They explained that the State should address this issue.

The Groundwater Commission has examined this issue with a broad group of stakeholders named the "Private Well Working Group" over the past year. A white paper summarizing potential issues associated with private wells and drinking water quality was developed (see NHgroundwater.com). The white paper also examined how other states addressed this issue and listed options that New Hampshire can consider. A significant majority of stakeholders on the Private Well Working Group supported a recommendation to the Groundwater Commission that testing of private wells be required when a water supply well is constructed or deepened and at the time of a real estate transaction.

5.10 Hierarchy of Water Users

Several attendees at the regional meetings stated either the State or local governments should establish a hierarchy of water users for drought conditions.

The Groundwater Commission studied this concept in 2009 and issued a report with a recommended approach for establishing a water user hierarchy. The Commission found, however, that the state generally lacked the data to equitably establish and implement a hierarchy of water users. The Commission developed a list of data the State should collect if it is going to implement a water user hierarchy. The Commission also identified measures that water users can take to avoid water supply emergencies during drought emergencies. The report issued by the Commission on water use hierarchy can be found in the Commissions 2009 Interim report.

5.11 Status of Permit After Bankruptcy

Several attendees at the regional meetings stated that there should be provisions in state law or rule that address the status of a large groundwater withdrawal permit in the event a permittee files for bankruptcy. People questioned what is the status of a permit if the assets associated with the property are sold, or if the new owner changed the use of the land. People also suggested that provisions be added to state laws or rules that ensure the new owner has an adequate financial capacity to address potential problems to other water users or resources.

The HB 1353 Subcommittee recommends that the Groundwater Commission should research the legal implications for a large groundwater withdrawal permit if the property ownership changes through the bankruptcy process. The subcommittee also recommends that the Groundwater Commission assess if criteria for financial adequacy should be considered issuing a large groundwater withdrawal permit or when transferring a permit from one owner to another.

5.12 Regulation of Large Groundwater Withdrawal from Wells Sited Prior to August 1, 1998

HB 1353 Subcommittee members and some attendees at the regional meetings identified the lack of statutory requirements for large groundwater withdrawals from a well or wells at a single property or place of business that were sited prior to August 1, 1998 ("pre-1998 withdrawals") as a major shortcoming in the management of New Hampshire's groundwater.

The HB 1353 Subcommittee noted that the Groundwater Commission previously assessed the issue of regulating pre-1998 withdrawals. The Commission assessed two regulatory approaches for regulating these withdrawals. The first regulatory approach would have required that pre-1998 withdrawals apply for a large groundwater withdrawal permit if a water user increased their average daily withdrawal rate over 57,600 gallons per day over historical reported extraction volume. This concept was not supported by the Commission because the accuracy of historic water use data reported to NHDES is questionable. Additionally, water suppliers and businesses often developed water resources with a capacity that exceeds existing use needs with the intention of increasing water use overtime to support growth. Requiring a permit for increasing the use of these water resources seemed unfair to some Commission members. Another practical concern is that if an existing water user applied for permission to increase withdrawal volumes from a pre-1998 withdrawal source, that the application of existing surface water quality regulations during this permitting process may identify the pre-1998 withdrawal operating at

current levels is not in compliance with current regulatory standards. This means a water use with pre-1998 withdrawal not only would have its request to increase withdrawal volumes denied, but also have to reduce its withdrawal rate from its current levels.

The secondary regulatory approach considered by the Groundwater Commission would have established a process where NHDES would complete an investigation if an entity filed a complaint that a pre-1998 withdrawal may be adversely impact another water user or water resources. NHDES would have authority to require the owner of the pre-1998 collect additional data if necessary to complete the investigation. NHDES would then make findings, and if necessary, require that mitigation measures be implemented to address the adverse impact. The Groundwater Commission was concerned that this approach could result in frivolous complaints being filed with NHDES, especially where an owner with a pre-1998 withdrawal is in dispute with nearby land owners. Additionally, Commission members were uncomfortable with the investigation process.

The HB 1353 Subcommittee recommends that the Groundwater Commission again explore this issue. The subcommittee notes that over 160 large groundwater withdrawal sites exist in New Hampshire that pre-date the August 1, 1998 enactment of the permitting process. Many of these well have the potential to increase withdrawal volumes substantially.

5.13 Evaluation of the Threshold for Requiring a Large Groundwater Withdrawal Permit

A number of people that attended the regional meetings questioned if the permitting threshold for a large groundwater withdrawal of 57,600 gallons over any 24-hour period is adequate.

The HB 1353 Subcommittee recommends that the Groundwater Commission assess if the threshold for requiring a large groundwater withdrawal permit should be reconsidered. The subcommittee notes that research previously prepared by the Groundwater Commission summarized what eastern water law states have groundwater withdrawal permitting programs and the withdrawal thresholds associated with those programs.

5.14 Public Education Regarding International Treaties

A number of people that attended the regional meetings were concerned that international trade treaties could under certain circumstances undermine the ability of the State to regulate groundwater withdrawals.

The HB 1353 Subcommittee recommends that the Groundwater Commission develop educational and explanatory material for the public regarding this issue for the next year. The HB 1353 Subcommittee also recommends that the Groundwater Commission seek input and comments on these materials by the Citizens Trade Policy Commission established by Chapter 19-L, Laws of 2007.

5.15 Exportation of Water for Private Profit

A significant number of people at the regional meetings spoke against the exportation (off-site use) of groundwater that was minimally processed. The same people did not express the same level of concern for when water was consumed on-site or used as an ingredient in a product manufactured on-site. When prompted by HB 1353 Subcommittee members, the people at the regional meetings could not provide a basis for distinguishing exportation of water off-site versus consuming water on-site.

The HB 1353 Subcommittee could not find a technical basis for making regulatory distinctions among consumptive uses of water for one water use versus another water use. However, the HB 1353 Subcommittee recognizes that the exportation of minimally processed groundwater seemed to be one of the most protested activities at the regional meetings. Accordingly, this issue is summarized in the report and the Groundwater Commission should assess if this issue warrants further investigation and analysis.

5.16 Complexity of the Permitting Process

A significant number of people identified the large groundwater withdrawal permitting process to be too lengthy and costly to comply with. For example, it was noted the costs and uncertainties associated with the permitting process is infeasible for small agricultural operations that only need to withdraw groundwater from groundwater sources seasonally and generally for a short period of time based on natural precipitation trends. Many of these groundwater sources are located in remote locations it was noted. Similarly, some representatives of community water systems expressed great frustration regarding the costs, length of time and uncertainties associated with developing a new large groundwater withdrawal.

The HB 1353 recommends that the Groundwater Commission assess if modifications to the large groundwater withdrawal permitting process are possible and warranted.