

2009 INTERIM REPORT
Commission to Study Issues Relative to
Groundwater Withdrawals
SB 155, chapter 0305, laws of 2003;
Extended by SB 142 of 2005, chapter 278:1, laws of 2005
Extended by HB 1353 of 2008, chapter 176:1-176:2, laws of 2008

TO: Governor Lynch, House Speaker Norelli, and Senate President Larson

FROM: Senator Jacalyn Cilley and Representative Spang, Co-chairmen

Commission Members:

Senator Jacalyn Cilley

Senator Deborah Reynolds

Senator John Barnes

Representative Judith Spang

Representative Jane Beaulieu

Representative David Russell

Robert Snelling, Society for the Protection of New Hampshire Forests

Jack Donohue, International Bottled Water Association

Bill McCann, Public Representative

Brian Goetz, New Hampshire Water Works Association

Gary Abbott, Associated General Contractors

Michelle Hamm, Business and Industry Association

Mason Westfall, New Hampshire Association of Conservation Commissions

Cordell Johnston, New Hampshire Municipal Association

Sarah Pillsbury, New Hampshire Department of Environmental Services

Terry Swain, Public Representative

David Wunsch, Joint Board of Licensure and Certification

David Mclean, Business and Industry Association

James Griswold, New Hampshire Farm Bureau

Glenn Greenwood, New Hampshire Association of Regional Planning Commissions

Kris Blomback, Recreational Interest

Background

The Groundwater Commission (commission) was created in 2003 pursuant to Senate Bill 155, in response to concerns regarding the laws and regulations in New Hampshire pertaining to groundwater withdrawals. The commission was originally charged with assessing: 1) Ways to clarify the hierarchy of water uses while considering existing private property rights; 2) How to bring a balanced approach to water use among residential, public water supply, industrial, commercial, agricultural, energy, recreational, and other water users; and 3) How to improve the current process by which new water users may reasonably and efficiently use state water resources, including consideration of potential regional impacts and local water management issues, in order to best protect and preserve an adequate supply of water for the state with particular attention to groundwater.

Senate Bill 142 was passed in 2005 and extended the life of the commission established by Senate Bill 155 of 2003 from November 30, 2004 to November 30, 2008. Senate Bill 142 requires that the commission issue interim reports by November 30th of each year, and that a final report be submitted by November 30, 2008. Senate Bill 142 further clarified the topic the commission should assess, including the concept of applying a fee for the consumptive use of water.

The 2006, 2007 and 2008 Annual Interim Reports summarizes the legislative history of the commission as well as its legislative and policy accomplishments through 2008. The 2006 Annual Interim Report also described how the commission developed a work plan in November 2005, and that the commission is using this work plan to guide and its work. The work plan ensures the commission will address the requirements of Senate Bill 155 of 2003 and 215 of 2004.

The work plan (Attachment 1) identifies six key issues for the commission to focus on:

Issue 1. Groundwater Withdrawal Permitting

Issue 2. Clarification of Groundwater Quantity Law and Legislative Authorities

Issue 3. Hierarchy of Groundwater Users

Issue 4. Fee on the Commercial Consumptive Use of Groundwater

Issue 5. Protecting Groundwater Quality to Ensure Availability

Issue 6. Groundwater Management Data Needs

In addition to the six issues being studied, House Bill 1353 was passed in 2008 and extended the life of the commission from November 30, 2008 to November 30, 2010. House Bill 1353 also requires that the commission complete and report on the following:

"The commission shall also study criteria, including public benefit, for the granting of large water withdrawals other than those of RSA 485-C and RSA 485-A. Consideration of this issue shall include appropriate roles for municipalities in the permitting and regulation of large groundwater withdrawals and include input from municipalities and other appropriate entities. The committee shall design an appropriate statewide monitoring plan to ensure long term sustainability of groundwater resources and participation in the development and distribution of public educational materials on the municipal role in large groundwater permitting, including local and state regulations."

HB 1353 required that the Commission report on the municipal role in the large groundwater withdrawal permitting process by November 30, 2009. The bill required that the Commission report on the balance of the report by November 1, 2010.

Summary of Commission Meetings in 2009

The commission conducted five meetings in 2009 up to the November 30th due date for this Annual Interim Report. Additionally, the commission established an HB 1353 Subcommittee which conducted nine state-wide regional meetings in coordination with each regional planning commission to complete the work required by HB 1353.

The commission conducted meetings on the following dates:

- February 2, 2009
- March 16, 2009
- September 25, 2009
- October 19, 2009

- November 9, 2009

Detailed meeting minutes were developed for each commission meeting and are attached as Attachment 2. A history of all commission meetings is summarized in a table also included in Attachment 2.

The HB 1353 Subcommittee conducted regional meetings on the following dates:

- March 24, 2009 in Manchester in coordination with the Southern New Hampshire Planning Commission
- April 30, 2009 in Nashua in coordination with the Nashua Regional Planning Commission
- May 7, 2009 in Hanover in coordination with the Upper Valley Lake Sunapee Regional Planning Commission
- May 11, 2009 in Moultonborough in coordination with the Lakes Region Planning Commission
- May 13, 2009 in Seabrook in coordination with the Rockingham Planning Commission
- June 4, 2009 in Keene in coordination with the Southwest Region Planning Commission
- June 9, 2009 in Conway in coordination with the North Country Council
- June 11, 2009 in Dover in coordination with the Strafford Regional Planning Commission
- June 22, 2009 in Webster in coordination with the Central New Hampshire Regional Planning Commission

Detailed meeting minutes of each of the regional meetings are available on the internet at nhgroundwater.com.

SUMMARY OF WORK COMPLETED BY THE COMMISSION IN 2009

The commission substantially completed its work on Issue 1 - Groundwater Withdrawal Permitting and Issue 2 - Clarification of Groundwater Quantity Law and Legislative Authorities in 2006 and 2007. Ultimately the work of the commission on these two issues will need to be reviewed prior to developing a Final Report by November 30, 2010, as new initiatives required

by the HB 1353, findings of other work plan subcommittees, legal opinions from the Attorney General's Office and opinions of new commission members are considered.

Issue 3 - Hierarchy of Water Users

The Issue 3 subcommittee submitted and presented a draft report to the full commission at the its October 21, 2008 meeting. The commission provided comments on the report during meetings in October 2008 and November 2008. The Subcommittee revised the document based on comments received both of the meetings. Commission members had no additional comments on the hierarchy report. The hierarchy report is in Attachment 3 of this report.

Issue 4 - Fee on the Commercial Consumptive Use of Groundwater

At the January 7, 2008 meeting, a presentation was made to the commission to initiate work on this issue. The presentation included a detailed summary of water use fee structures throughout the country and how the fees were utilized. The presentation also summarized historic attempts to adopt water use fees in New Hampshire. A subcommittee of the commission has not initiated work on this issue at this time, as the commission decided that a subcommittee for this issue should wait until Issue 6 - Groundwater Management Data Needs completes its work prior to meeting. This approach would identify what the groundwater management data needs and associated costs are, prior to assessing if and how groundwater use fees should be developed.

Issue 5. Protecting Groundwater Quality to Ensure Availability

The commission agreed rather than forming a separate subcommittee to study this issue, that members of the commission would work with an advisory group of stakeholders that are assisting DES with updating its Source Water Protection Strategy. Work on updating this strategy has been divided into 1)Groundwater; 2)Private wells; and 3)Surface water. Commission members are currently serving on the Groundwater and Private Well Working Groups. In 2008 and 2009, DES worked with stakeholders to form work groups to address: 1) Private well water quality sampling requirements; 2) Rock blasting impacts on water resources; 3) Management and disposal options for unused medicines; and 4) Appropriate well construction regulations and water quality sampling requirements for geo-exchange wells.

At the commission meeting on September 25, 2009 and October 19, 2009, the commission discussed the recommendations for private well sampling requirements for new wells, deepened wells and for private wells at the time of real estate transactions occurs (see Attachment 4). The commission voted 10-4 at its November 9, 2009 meeting to support legislation that would establish water quality sampling requirements for private wells as described in Attachment 4.

NHDES also worked with stakeholders to develop a white paper and draft best management practices to protect water resources when rock blasting and related activities are occurring. NHDES conducted a meeting with the blasting industry on August 17, 2009 to review the draft materials and is now currently revising the documents.

NHDES also worked with stakeholders to research develop medicine disposal policies for the State. The information and resources developed for this initiative is available on a new state website (www.nh.gov/medsafety).

The commission also worked in 2008 and 2009 to develop legislation (SB 48 - see <http://www.gencourt.state.nh.us/legislation/2009/SB0048.html>) that was passed in 2009 to enable NHDES to develop regulations pertaining to geothermal systems and the protection of groundwater quality. SB 48 also clarifies that only drillers licensed by the Water Well Board may drill geothermal wells.

Issue 6 - Groundwater Management Data Needs

An initial subcommittee meeting occurred in 2008. The subcommittee reviewed a list of existing sources of data for water resources in New Hampshire and elected co-chairmen for the subcommittee (Robert Snelling and David Wunsch). In 2009, the subcommittee distributed a survey to groundwater experts regarding groundwater management data needs and priorities. The subcommittee also reviewed a list of other water resource data needs identified by the SB 162 Water Resources Statutory Study Committee. These needs include additional and expanded geologic mapping initiatives and enhancing the stream gaging network in the state. Based on this information, the subcommittee designed a state-wide water level and quality monitoring network. On May 9, 2009, the subcommittee met with groundwater experts representing academia and consulting firms to review the proposed monitoring network. Based on comments from this meeting, the subcommittee is currently revising the proposed monitoring network and

will present its recommendations to the commission in 2010.

Work Required by HB 1353 of 2008

The a subcommittee of the commission completed the work required by HB 1353 of 2008 (described on page 3) and developed a report by the November 30, 2009. The report is included as Attachment 5 in this report and may be found on the internet at nhgroundwater.com. The commission voted to accept the report from the commission on November 9, 2009 and will consider its recommendations over the next year.

Work Required by HB 1609 of the 2006

HB 1609 of 2006 requires that DES complete a pilot groundwater management plan in a portion of the Seacoast Region of New Hampshire. HB 1609 requires that DES report its progress on this study to the commission. As part of its work with the HB 1353 subcommittee, NHDES completed a draft Groundwater Management Plan for the Bloody Brook Watershed in 2009. It is anticipated that the commission will evaluate the pilot groundwater management plan at an upcoming commission meeting.

In conclusion, the commission is continuing to methodically assess issues pertaining to the management of groundwater in New Hampshire, and its work in 2010 will continue to follow the work plan to assess ways in which New Hampshire can improve its management of groundwater resources.

Large Groundwater Withdrawal Rules

The commission reviewed draft rules developed by DES associated with re-adopting the large groundwater withdrawal rules. As part of this process, members of the public and commission members identified that state law does not allow for a reasonable process for an entity to withdraw more than 57,600 gallons per day on a temporary or emergency basis. Similarly, the commission recognized that large withdrawals associated with geothermal processes that return groundwater directly back to the aquifer near the point of withdraw should not require a large withdrawal permit if no more than 57,600 gallons per day is being displaced from the aquifer. The commission developed suggested amendments to amend RSA 485-C to address these issues

(see Attachment 6). Commission members voted unanimously (14-0) at its meeting on November 9, 2009 to support the proposed amendments

SUMMARY OF WORK REMAINING FOR THE COMMISSION

The following work must be completed by the commission:

- HB 1353. The recommendations contained in the HB 1353 subcommittee need to be considered by the Commission. Additionally, the development of a statewide monitoring plan needs to be developed by November 1, 2010. The development of a statewide monitoring plan is also consistent with the work required by the Issue 6 - Groundwater Management data needs described below.
- Issue 4. Fee on the Commercial Consumptive Use of Groundwater - This issue must be studied by the commission and reported on by November 30, 2010. The commission has researched and summarized water use fee structures for other states. The commission will complete its work on this topic once the work on Issue 6 - Groundwater Management Data Needs is substantially complete.
- Issue 5. Protecting Groundwater Quality to Ensure Availability - This issue must be studied by the commission and reported on by November 30, 2010. Work regarding the protection of private wells and an assessment of land use set backs from public water supply wells was initiated in 2008 with an advisory group assisting DES. DES and the advisory group will complete these tasks and the remaining tasks (protection of future well sites and municipal/local groundwater quality protection assistance) over the next 12 months and report its recommendations to the commission for consideration.
- Issue 6. Groundwater Management Data Needs - This issue must be studied by the commission and reported on by November 30, 2010. As previously summarized in this report, a subcommittee of the commission has developed a draft report is actively working with stakeholders to finalize its recommendations in order to report back to the full commission in 2009.

Respectively Submitted,

Senator Jacalyn Cilley and Representative Spang, Co-chairmen

**Attachment 1 - Summary of the Work Plan Developed by the
Groundwater Commission in 2005**

Groundwater Withdrawal Commission
Issues for Consideration and Proposed Schedule
11/30/05

Introduction: In September of 2005, a subcommittee of the Groundwater Commission (Commission), established and then extended under SB 155, Chapter 305:1, 2003 and SB 142, Chapter 287, 2005, was formed. The purpose of this subcommittee was to develop a list of issues that should be considered by the Commission and to identify key questions and research needs related to each issue. The subcommittee report was presented to the Commission and discussed at two meetings in October and November, 2005. The following documents the subcommittee's membership and goal and provides the list of issues agree upon by the entire Commission. An action plan and schedule for addressing the issues also follows. The order of issues should not be construed as a designation of the priority of the issue, rather they are ordered by the Commission's agreed upon schedule for addressing each of these important topics.

Subcommittee Members: Representative Spang, Representative Cooney, James Griswold, Jack Donohue, Sarah Pillsbury, Brandon Kernen

Subcommittee Goal: To define discussion items for the Groundwater Commission so that future meetings are focused on key questions and specific issues mandated by the statute so that one or more of the following can occur:

- Consensus on issues
- Documentation of how each issue was addressed by the Commission for consideration by present and future legislative committees and other interested parties
- Development of action items or future study related to issues

List of Issues for Consideration by the Groundwater Commission:

The following is a list of issues in the order the commission intends to discuss them. Under each issue are key questions and research needs related to them. It should be noted that some bills proposed for the 2006 legislative session pertain to some aspects of the issues below. The following 2 key questions relate to each of the issues and should be considered and addressed by those working on each issue:

- Why is it important that the commission consider this issue (i.e. Is there enough

benefit to the State for the Commission to spend time on this?)?

- What are the legal, political and technical challenges inherent to the issue, and the economic implications of any actions being considered to address the issue?

Issue 1. Groundwater Withdrawal Permitting:

- Identify and review how other states permit large groundwater withdrawals.
- Are any changes to the existing large groundwater withdrawal permitting program needed? Why and what should they be?
- Should there be additional requirements for commercial applicants under the large groundwater permitting program? If so, who should be subject to them and what should they be?
- Is the role of local government in the permitting process adequate? If not, why and how should it be changed?
- Should local permitting (e.g. site plan review) be obtained prior to a State large groundwater withdrawal permit application being reviewed?
- Does there need to be a requirement to project and protect future water needs and supply when permitting a new large groundwater withdrawal? If so, how should future need be determined?
- Should an applicant have to demonstrate that a proposed large withdrawal is protective of public interest?
- Should there be additional requirements when developing withdrawals that that will result in an inter-basin transfer of water? If so, what criteria should be used to determine which withdrawals should be subject to more scrutiny (e.g. basin size, withdrawal volume, etc.)
- Should “grandfathered” large groundwater withdrawals be subject to regulation or withdrawal limitations?
- What are the loopholes in the current large groundwater withdrawal permitting law and regulations?
- Should the amount of land owned by an applicant be considered as criteria when permitting new large groundwater withdrawals?
- Are the rights of future users adequately addressed in the current system? If not, how could future rights be better accommodated?
- Are surrounding wells and water resources (and the ecosystems dependent upon them) adequately protected by the existing law? If not, what impact criteria should be used instead?

- Do towns need authority to impose water use restrictions for private wells during times of drought or other water supply emergencies?

Issue 2. Clarification of Groundwater Quantity Law and Legislative Authorities:

- Identify and review existing evaluations of NH water law pertaining to groundwater.
- What are the current laws pertaining to groundwater use?
- What authority does the legislature have to regulate the use of the State's groundwater? What authority do/could state agencies have?
- Is there a need to change existing law? If so, why?

Issue 3. Hierarchy of Groundwater Users:

- Identify and review the purpose and structure of other state's hierarchies.
- Review the existing Drought Management Plan to determine if it establishes an appropriate hierarchy in times of temporary scarcity/ drought? If not, what should the hierarchy be?
- Does there need to be a hierarchy of groundwater users for any other purposes (e.g. reserving available water for specific uses in permitting decisions etc?) If so, what should it be and how should it be applied?

Issue 4. Fee on the Commercial Consumptive Use of Groundwater:

- Identify and review what other states are doing in this area.
- Should commercial users of (some threshold amount of) groundwater pay a fee?
- If so, how do you define consumptive (i.e. which users should pay?), what should the fee be, how should it be applied and collected, what should the fee be used for?

Issue 5. Protecting Groundwater Quality to Ensure Availability

Protection of Private Residential Wells:

- Identify and review materials describing state and local protection efforts for private wells.
- Should there be a State requirement for periodic sampling of private wells? Why and what should they be?
- Should the State be doing more to educate private well owners? If so, what?

Land Use Near Wells:

- Identify and review current land use setbacks to protect groundwater

- Are current setbacks and performance standards in regulation and RSAs for entities using large quantities of regulated substances adequate to protect public and private wells? If not, what should be changed and why?

Municipal/Local Groundwater Quality Protection Assistance

- Identify and review what NH and other states are currently doing in this area.
- Should the state be doing more to help municipalities protect ground water? If so, what should it be doing?

Aquifer Protection/ Protection of Future Well Sites

- Identify and review what NH and other states are currently doing in this area
- Should the state be doing more to identify and protect aquifers and potential future well sites? If so what?

Issue 6. Groundwater Management Data Needs:

- Identify and review statewide summaries of current data and data needs analysis and review the Seacoast Groundwater Availability Study.
- What data is needed to effectively manage groundwater resources? Do we have it? If not, how do we obtain it?
- Is the existing monitoring net work consisting of 26 overburden wells and 13 bedrock wells measured monthly for water level data sufficient? If not, why?
- Is there a need for ambient groundwater quality data?
- Should the current stream gage network be maintained and or expanded? How should stream gauging be funded and who should complete the work?
- Is there a need to link water quality data to location and, if so, is well tagging the way to do it?

Action Plan/ Schedule for Addressing Issues:

The Commission has been reauthorized for a three year period, with an interim report due in November, 2006. Taking our charge in one year increments, the action plan is to address each of the six issues listed above, in order, as numbered. The intention is to form six working subcommittees to delve into the issue and then report back to the full commission.

It is recognized that the listed issues vary in complexity and will require a variable level of effort and timeframe to bring the issue to closure: “closure” comprising the attainment of one or more of the items listed above, under Subcommittee Goal.

Hopefully, one or more of the issues can be brought to closure within the upcoming year. That said, it is recognized that there will be issues needing further work after the first year.

Accordingly, the general plan is as follows:

- Discuss each issue with the full commission, sequentially over the course of the next year. The objective will be to hear discussion on the issue at hand, refine the elements to be considered and select a subcommittee to work through it for the following 5-6 months. If we can properly vet each issue in less than one full Commission meeting, this portion of the schedule may be reduced.
- The subcommittee will then report back to the full committee, beginning after the last issue has been vetted.

Each year we will issue our annual report, revisit remaining issues and schedule them for action in the upcoming year.

SB 155 Commission: Subcommittee Volunteers/Members as of November 9, 2009:

1. Groundwater Withdrawal Permitting

Jack Donahue, Rep. Tom Fargo, Glenn Greenwood, Brandon Kernen, Rep. Spang, Dennis Nesbit, Michelle Hamm, and Elizabeth Thomas

2. Clarification of Groundwater Quality Law and Legislative Authorities

Sarah Pillsbury, Rep. Tom Fargo, Glenn Greenwood, James Griswold, Brian Goetz and Michelle Hamm

3. Hierarchy of Groundwater Users

Jack Donohue, Glenn Greenwood, Brandon Kernen, Rep. Spang and Michelle Hamm

4. Fee on the Commercial Consumptive Use of Groundwater

Sarah Pillsbury and Michelle Hamm

5. Protecting Groundwater Quality to Ensure Availability

Glenn Greenwood, Bob Snelling and Brandon Kernen, Terry Swain (Private Well Working Group only), Senator Cilley, and Mason Westfall

6. Groundwater Management Data Needs

Robert Snelling, David Wunsch, Brian Goetz and Sarah Pillsbury

Attachment 2 - Summaries and Minutes of Groundwater Commission Meetings

Summary of SB155 Ground Water Commission Meetings

Meeting Date	Meeting Description	Meeting Materials/ Handouts
August 27, 2003	Organizational meeting. Senator Johnson elected chairman. New Hampshire Department of Environmental services (DES) asked to provide background information at the next meeting.	<ul style="list-style-type: none"> -Agenda -Copy of SB155
September 17, 2003	<p>Meeting focused on groundwater occurrence and quantity regulation. The following presentations were made by NHDES staff:</p> <ul style="list-style-type: none"> - R Chormann – Ground water use and occurrence and the role of the New Hampshire Geological Survey - P. Currier – Status of In-stream Flow Rule - B. Kernen – Large Ground Water Withdrawal Permitting. (LGWWP) 	<ul style="list-style-type: none"> -Agenda -DES Information Packet: -Groundwater in NH Fact Sheet -Drinking Water Source Protection Fact Sheet -LGWWP Fact Sheet -Ground Water & Drinking Water Strategy Update -Eastern Water Law Survey
October 22, 2003	Meeting focused on ground water quality protection. A presentation was made by Sarah Pillsbury and Paul Susca of DES	<ul style="list-style-type: none"> -Agenda -Presentation -DES List of prohibitions in wellhead protection areas -Drinking Water Municipal Resource Map - DES newsletter “The Source”
February 13, 2004	Meeting focused on 2 presentations. These included a Water Use Law presentation by Jennifer Patterson from the AG’s Office and a presentation by Prof. Tom Ballestero from UNH on water occurrence in New Hampshire and issues concerning the current LGWWP law.	<ul style="list-style-type: none"> -Agenda -Professor Ballestero’s presentation - List of issues concerning existing LGWWP law from Prof. Ballestero

Meeting Date	Meeting Description	Meeting Materials/ Handouts
March 12, 2004	Meeting focused on LGWWP Case Studies. Brandon Kernen made the first presentation involving two case studies followed by Brian Goetz of Aquarion Water Company who relayed their experience in obtaining a LGWWP. Sen. Johnson asked for volunteers for a subcommittee to make recommendations by the 11/30 deadline.	<ul style="list-style-type: none"> -Agenda -Binder on the LGWWP process and case studies prepared by DES
June 2, 2004 July 29, 2004 August 30, 2004	Three Sub-committee meetings were held. The meeting focused on discussion of the interim report suggestions and what the committee should focus on. Discussion on the current LGWWP law, data needs, and the hierarchy of water users occurred. NHDES was requested to provide sub-committee members with information concerning grandfathered wells and how new withdrawals would be accommodated in an area of an existing permitted groundwater withdrawal. NHDES was also asked for specific recommendations concerning improvement to the water use reporting program. These meetings resulted in the establishment of a legislation drafting committee to address water use reporting. Subcommittee also provide with information on the capital budget request to increase the current ambient water level well network to include bedrock wells	<ul style="list-style-type: none"> -Agenda -Subcommittee member list -Copy of SB155 Interim Report -DES prepared chart of interim report issues -Current news articles Forwarded after the first meeting: <ul style="list-style-type: none"> - NH Water Data Summary -Summary of SB162 meetings -Link to USGS Aquifer Study -Information on capital budget request for monitoring well network improvements - Explanation of how a new large withdrawal is accommodated in an area with an existing permitted large withdrawal.
September 16, 2004 October 6, 2004 October 19, 2004	Legislative drafting committee led by James Griswold meets to draft legislation for consideration by the full committee which ultimately results in passage of SB215	Numerous drafts were circulated

Meeting Date	Meeting Description	Meeting Materials/ Handouts
November 18, 2004	Full committee meets and decides to endorse legislation to create authority for the water use reporting (i.e. draft legislation developed by sub-committee) and to extend the Groundwater Commission. Committee also decides to support the DES capital budget request to improve the existing ambient water level well network by expansion to include bedrock wells.	Final draft of proposed water use reporting legislation.
September 15, 2004 Note: Commission extended per passage of SB142	Senator Johnson re-elected chair. Review of activities of Commission. Update on recent developments: Water Use Registration rule development, changes to large groundwater permitting, perchlorate, and upcoming meetings. Subgroup formed to define issues that need to be addressed by the commission. Next meeting scheduled for 10/19/05.	Legislation extending commission. Water Use Reporting Legislation Most recent Meeting Summary Chart
October 19, 2005	The subcommittee formed at the last meeting presented a "Report on Issues for Consideration and Proposed Schedule". This report, which presents 6 groundwater related issues and associated key questions for consideration by the Commission, was reviewed by the group. Members were asked for written comments and to identify which issues they would be most interested in working on. Representative Spang provided an overview of current legislative service requests. The group agreed to finalize the approach to issues and begin discussion of the groundwater fee issue at the next meeting. Brandon Kernan gave an update on DES perchlorate public health goal work group.	Subcommittee Report on Groundwater Issues Power Point Presentation on Perchlorate

Meeting Date	Meeting Description	Meeting Materials/ Handouts
November 30, 2005	The Commission further discussed the “Report on Issues for Consideration and Proposed Schedule” and reordered the issues in consideration of what the majority felt should be discussed first. It was agreed upon that the Large Groundwater Withdrawal Permitting process should be discussed first. Senator Green reviewed legislation he was aware of and it was decided that the language of all groundwater related LSRs should be brought to and explained at the next meeting. Next Meeting scheduled for 1/23.	
January 30, 2006 (rescheduled from January 23, 2006)	The Commission initiated its discussion on Issue 1 of its work plan - Groundwater Withdrawal Permitting. A binder of informational resources summarizes the information covered at this meeting.	Binder with numerous information resources to provide background on the topic
March 13, 2006	The Commission received an update on the Seacoast Water Availability project	Agenda Handout of PowerPoint Presentations
May 22, 2006	The Commission completed its discussion initiated on at its January 30, 2006 meeting on Issue 1 - Groundwater Withdrawal Permitting. The Commission then initiated a discussion on Issue 3 - Hierarchy of Groundwater Users	Agenda PowerPoint Presentation Summary of water use priorities in other eastern water law states. Drought Management Plan
June 13, 2006	The Commission initiated its discussion on Issue 2 - Clarification of Groundwater Quantity Law and Legislative Authorities. Three attorneys provided overviews of the topic from the standpoint of municipalities, business and industry, and the state.	Agenda A handout summarizing prior NH water law studies and copies of the studies were provided.

Meeting Date	Meeting Description	Meeting Materials/ Handouts
September 25, 2006	The Commission received an update on the status of Issue 1 subcommittee - Groundwater Withdrawal Permitting. A presentation by the subcommittee was provided to explain proposed legislative initiatives	Agenda PowerPoint presentation Proposed legislation
May 14, 2007	A presentation of the findings made by the Issue 1 subcommittee was provided. New commission members were briefed on the work plan of the commission.	1) Agenda; 2) Commission Membership; 3) SB 155(2003) & SB 142(2005); 4) Commission Work Plan; 5) Chart of Meetings; 6) Draft 2006 Commission Report (without appendices); 7) Issue 1 Subcommittee handouts (PowerPoint presentation, table summarizing findings, and flowcharts summarizing the history of groundwater permitting); 8) Memberships of subcommittee; 9) DES Source Water Advisory Committee (fact sheet)

Meeting Date	Meeting Description	Meeting Materials/ Handouts
June 15, 2007	The status of 2007 legislation was provided. The findings of the Issue 2 subcommittee - Clarification of Groundwater Quantity Law and Legislative Authority were provided. A presentation initiating the Commission's work on the Issue 5 subcommittee - Protecting Groundwater Quality to Ensure Availability was provided.	1) Agenda; 2) 2006 Annual Interim Report; 3) 9/25/06 and 5/14/07 Meeting Minutes; 4) 2007 legislation - HB 318, HB 457, HB 458, and HB 459; 5) Issue 2 - Clarification of Groundwater Quantity Law and Legislative Authority - Draft Subcommittee Report; 6) Summary of DES Source Water Protection Strategy/Advisory Committee - list of stakeholders; and 7) Conflict resolution legislation developed by the Issue 1 Subcommittee.
September 10, 2007	The Commission continued to review of the Issue 1 subcommittee - Groundwater Withdrawal Permitting report. The adoption of local ordinances by towns to regulate groundwater withdrawals was discussed.	1) Agenda; 2) 06/15/07 meeting minutes; and 3) Groundwater withdrawal ordinances for the Town of Barnstead and Atkinson
October 12, 2007	The Commission finalized its review of the Issue 1 subcommittee - Groundwater Withdrawal Permitting report. The Commission met with Richard Head of the Attorney General's office to discuss legal considerations associated with regulating withdrawals from wells sited prior to August 1998.	1) Agenda; and 2) 09/10/07 meeting minutes

Meeting Date	Meeting Description	Meeting Materials/ Handouts
November 5, 2007	The Commission discussed potential issues of concern associated with unregulated groundwater withdrawals and international trade agreements. The Commission also met with a representative from a citizen's group in the Town of Webster regarding groundwater quality and quantity concerns.	1) Agenda; 2) 10/12/07 meeting minutes and 3) Presentation for Issue 4 (fees - not covered at meeting due to time constraints)
January 7, 2008	The Commission reviewed a Draft of the 2007 Interim Report. The Commission then kicked off its discussion on Work Plan Task 4 - "Fees for Consumptive Uses of Water". The remainder of the meeting focused on Commission members discussing four legislative proposals that were pending in the Legislature and how the Commission could adjust its work address the issues raised by these bills.	1) Agenda; 2) 11/05/07 meeting minutes; 3) Draft 2007 Interim Report; 3) Summary of fee structures used by other states- PowerPoint Presentation; 4) Summary of historic NH proposals to establish water use fees 5) Various versions of bills being considered in the 2008 legislative session
February 4, 2008	A continuation of the discussion at the January 7, 2008 meeting regarding 2008 legislation and expanding the duties of the Groundwater Commission occurred.	1) Agenda; 2) 01/07/08 meeting minutes; 3) Various versions of bills being considered in the 2008 legislative session
March 3, 2008	A continuation of the discussion at the February 4, 2008 meeting occurred.	1) Agenda; 2) 02/04/08 meeting minutes; 3) Various versions of bills being considered in the 2008 legislative session

Meeting Date	Meeting Description	Meeting Materials/ Handouts
April 14, 2008	1) Expansion of the Groundwater Commission's duties and schedule was presented; 2) Approach to completing the work required by HB 1609-Groundwater Management Plan was presented; 3) The USGS Seacoast Water Use Report was summarized and discussed	1) Agenda; 2) 03/03/08 meeting minutes; 3) Outline for approach to work on HB 1609 Groundwater Management Plan; 4) Excerpts from the USGS Seacoast Water Use Study
June 30, 2008	The meeting primarily focused on reviewing the initial draft of a Land Use Planning - Large Groundwater Withdrawal Toolkit that was developed in response to the requirements of HB 1353 of 2008. The meeting also included a discussion on proposed changes to the large groundwater withdrawal regulations which expire in 2009.	1) Agenda; 2) 04/14/08 meeting minutes; 3) Summary of Revisions to Large Groundwater Withdrawal Rules; and 4) Draft Land Use Planning - Large Groundwater Withdrawal Tool Kit
August 21, 2008	The meeting focused on reviewing revisions to the Land Use Planning - Large Groundwater Withdrawal Toolkit. The meeting included comments from experts and stakeholders that were asked to attend the Commission meeting to assist with the document. The meeting also focused on developing questions pertaining to groundwater withdrawal statutes that the Commission intends to seek clarification from the Attorney General's Office on.	1) Agenda; 2) 06/30/08 meeting minutes; 3) Draft Land Use Planning - Large Groundwater Withdrawal Tool Kit; and 4) Draft Memorandum seeking opinions from the Attorney General's Office
October 1, 2008	The Commission met with Richard Head to seek his interpretation of various statutes on the ability of a municipality to regulate groundwater in different ways. The Commission also reviewed and commented on the initial draft report issued by the Issue 3 - Hierarchy of Water Users Subcommittee.	1) Agenda; 2) 08/21/2008 meeting minutes; 3) Memorandum requesting legal opinions from the Attorney General's Office; and 4) Draft Issue 3- Hierarchy of Water Users Report

Meeting Date	Meeting Description	Meeting Materials/ Handouts
November 12, 2008	The Commission reviewed the draft Annual Report and the legal opinions provided by Richard Head at the October 1, 2008 meeting. The Commission also discussed revisions to the Draft Issue 3 - Hierarchy of Water Users Report.	1) Agenda; 2) 10/21/2008 meeting minutes; and 3) Revisions to the Draft Issue 3 - Hierarchy of Water Users Report
February 2, 2009	The Commission received an update on the status of the Issue 5 - Groundwater Data Needs Subcommittee. The Commission also discussed the proposed revised large groundwater withdrawal rules and the approach to work for completing the HB 1353 study.	1) Agenda; 2)11/12/2009 meeting minutes; and 3) Outline to the HB 1353 approach to work
March 16, 2009	The Commission discussed pending legislation relative to groundwater withdrawals. The Commission also discussed the approach to work and outreach materials that will be used for the HB 1353 subcommittee. Lastly, the Commission critiqued a PowerPoint Presentation prepared by the HB 1353 subcommittee that will be used at the regional meetings.	1)Agenda; and 2) 2/2/2009 meeting minutes.
March-June 2009	The HB 1353 Subcommittee and other Commission members conducted nine state-wide regional meetings to conduct the work required by HB 1353 of 2008. See NHgroundwater.com for more information.	
September 25, 2009	The Commission reviewed the recommendation of the Private Well Working Group relative to private well sampling and disclosure requirements for new wells or for wells providing drinking water to homes at the time of real estate transactions. The Commission also considered some preliminary recommendations that the HB 1353 Subcommittee has identified.	

Minutes for meetings through November 2004 prepared by legislative staff.

**THE COMMISSION TO STUDY ISSUES RELATIVE TO GROUNDWATER
WITHDRAWAL, SB 155, CHAPTER 305:1 2003**

MEETING MINUTES

Meeting Date: November 12, 2008

Prepared By: Brandon Kernen

The meeting began at 1000 AM in Room 100 of the State House. Below is a list of participants:

Attendance:

Name	Association
Commission Members	
Senator Cilley	
Senator Barnes	
Representative Spang	
Representative Fargo	
Gary Abbott	Associated General Contractors
Mason Westfall	New Hampshire Association of Conservation Commissions
Jack Donohue	International Bottled Water Association
Brandon Kernen	New Hampshire Department of Environmental Services
Sarah Pillsbury	New Hampshire Department of Environmental Services
Bill McCann	Public Member
Brian Goetz	New Hampshire Water Works Association
Glenn Greenwood	NH Association of Regional Planning Commissions
Kris Blomback	Member Representing Recreation
David Wunsch	Joint Licensing Board
Attendees that Signed In	
Dari Sassan	NH Office of Energy and Planning

Peg Foss	Citizen - Town of Webster
Susan Roman	Citizen - Town of Webster
Bill Hounsell	North Conway Water Precinct/Lower Bartlett Water Precinct
Ann Crow	Etna NH
Joyce Noll	ETna NH

The meeting began with a review of the meeting minutes from October 21, 2008. Brandon Kernen noted that Attorney Head from the Department of Justice did have an opportunity to review and comment on the portion of the October 21st meeting minutes that document his conversation with the Commission. Brandon noted that Attorney Head concurs with this section of the minutes. The meeting minutes were unanimously approved by the Commission.

Commission members and other attendees completed introductions. Representative Fargo noted that this would be his last meeting as a Commission member because he did not seek re-election to the General Court. He noted that he had been with the Commission since its inception. Mason Westfall and Representative Spang each noted that Representative Fargo's contributions to the Commission have been very important and that they hope he could continue to attend Commission meetings and contribute. Representative Fargo noted that he may attend some future meetings if he is able.

The Commission next reviewed the 2008 Interim Report. The Commission voted to approve the report subject to the following amendments being made:

- 1) Revise David's Wunsch's affiliation to reflect that he represents Joint Board of Licensure and Certification, not just Professional Geologists.
- 2) The second to last paragraph on page 2 of the document is revised to state the following(see bold for changed text):
*"In addition to the six issues being studied, House Bill 1353 was passed in 2008 and extended the life of the commission from November 30, 2008 to November **2030**, 2010. House Bill 1353 also requires that the commission complete and report on the following by November 30, 2009:"*
- 3) A summary of the Commission's remaining work to be completed is provided.
- 4) A summary of the discussion with the Attorney General's office at the Commission's October 21, 2008 meeting is included in the body of the report.

- 5) The last paragraph on page 4 of the document is revised to state "The commission **developed** a draft approach to work to fulfill the requirements of HB 1353."

Representative Fargo suggested that once the 2008 Interim Report is completed, that is by uploaded on the Commission's website with the 2006 and 2007 reports. DES agreed that it would follow through with this recommendation.

Senator Cilley asked Sarah Pillsbury if she anticipated the state's budget problems would impact the Department of Environmental Services' (DES) work on the Groundwater Commission. Sarah explained that the budget probably should not affect DES' work on the Commission. She noted that DES felt it could focus on the local role/public benefit and data needs issue this upcoming year, and that water use fees and some of the water quality protection work in the Commission's work plan would need to be put off for another year.

Mason Westfall expressed concern that DES has limited resources, and he is concerned that the work required of DES to support the Commission is diverting it from its other duties and priorities. Mason recommended that the Commission wrap its work up. Senator Cilley stated that she believes the Commission ultimately has saved stakeholders a lot of time because it has been a consistent place with expertise assess the merits of different groundwater management policies as the various bills are being introduced. Sarah Pillsbury suggested that that the Commission develop a schedule and work plan to guide its work over the next year, especially for the work items required by HB 1353 which are due next November. Sarah also stated that she has viewed the Commission's work, especially because of the Commission's continuity over the years and knowledge base, as being very valuable for assessing groundwater issues in New Hampshire.

Representative Fargo explained that he feels that the Commission alternates back and forth from being proactive to reactive. He explained that the Commission sometimes spends a lot of time reacting to bills filed with the General Court. He stated that every year, bills are filed to tax bottled water or give more local control over large groundwater withdrawal permitting. Representative Fargo explained that having the Commission there to address groundwater bills in a more holistic context is critical. Senator Cilley suggested that the Commission assign a subcommittee to track legislation and report to the full Commission in the future. Representative Spang agreed with this idea.

The Commission then moved onto the next agenda item - amendments to the hierarchy report. Brandon Kernen explained that four comments were provided on the Draft Hierarchy Report reviewed at the October 21, 2008 Commission meeting. He explained that the comments are:

- 1) The report should include a hierarchy of actions that can be used to mitigate the effects of a water supply shortage.
- 2) The report should summarize what data New Hampshire needs to implement a water use hierarchy (what do we have and what do we need).
- 3) Communities should have a role in developing specific water use hierarchies in their area. Communities understand the local issues better and are in a better position to get the public informed. The State should provide data, guidance and technical assistance with the communities.
- 4) A recommendation was made that a simple list that establishes water use priority based on use categories be developed opposed to the approaches proposed by the subcommittee.

Brandon provided a handout containing proposed addendums to the hierarchy report in response to the first two comments. Commission members had no comment on this information.

Relative to the fourth comment, Brandon explained that the hierarchy subcommittee did not want to develop lists of different water use types as a basis for hierarchy. Instead, Brandon explained that the subcommittee felt like a water use hierarchy, after the protection of human health, should be based on how a particular water user affects water availability during a shortage, efforts the user is making to improving water availability, the value of the water use and environmental protection. Brandon explained that the hierarchy subcommittee researched other eastern water law states with a simple water use hierarchy list based on water use type and found that this approach was not technically defensible. The subcommittee also found that it could not find examples of where the hierarchies were actually implemented.

Mason Westfall explained that he felt a simple list was needed to give examples of how the hierarchy would work. Glenn Greenwood explained that the State would need quite a bit of data to implement a hierarchy as proposed in the subcommittee's report. He explained that less data would be needed if the state just developed a list of water users. Brandon Kernen agreed with Glenn's assessment. Brandon explained that the subcommittee found in its report that the state currently does not have adequate data to develop a technically defensible water use hierarchy. Brandon also explained that the proposed addendum to the hierarchy report included in the handout at the meeting, lists the data that would be needed in the event the State wants to commit resources to developing a technically defensible water use hierarchy. Representative Spang agreed with Brandon. She explained that for certain areas of the state, a certain type of water use at a specific property may be an important economic engine for that area. She explained that the subcommittee did not want to develop disincentives to water users to improve how they manage or conserve their water. She explained that the subcommittee developed a hierarchy approach that would reward and elevate the standing of water users in the hierarchy when they conserve or otherwise optimize the management of water resources.

Representative Fargo explained that the energy grid has economically based systems in place to manage power shortages. He felt that this concept would be interesting to assess in the context of water management. He noted that much of New Hampshire is connected to a regional power grid, but that water infrastructure in New Hampshire is generally not interconnected over very large areas.

David Wunsch suggested that New Hampshire should consider implementing a 2025 Water Conservation Plan much like it is implementing a 2025 Water Efficiency Plan. Senator Cilley explained that legislation requiring the state to develop a 2025 Water Conservation Plan would allay the concerns that many people have about having an adequate water supply in the future.

Representative Spang recommended that the Hierarchy Report include a goal statement.

Senator Cilley asked the hierarchy subcommittee members if any other state has a hierarchy approach that is similar to the approaches suggested in the draft hierarchy report. Brandon Kernen explained that the subcommittee reviewed the hierarchy approaches for approximately 30 other eastern water law states and that no other state

appeared to use this approach. Brandon also noted that for the states that have a water use hierarchy list, it appears that the list has never really been applied in practice. He cited the recent water emergency in the southeastern United States as an example.

Representative Fargo recommended that the Commission make a recommendation that rather than developing a list of who gets water and who does not, that the State start identifying areas of the state that will have shortages during a drought and that these areas be addressed.

Representative Spang explained that the draft hierarchy report does not address how the hierarchy should be implemented. She explained that if New Hampshire does not want municipalities to have authority to regulate water withdrawals how could the state expect them to implement a hierarchy. Brandon Kernen explained that Attorney Head stated at the October 21st meeting that towns do have the authority to management a water supply emergency by citing their police powers. He explained that the toolkit can be updated to include this information. Sarah Pillsbury suggested that the Commission address the municipal role in managing water use hierarchies in a time of drought as part of the work that is being completed for HB1353, which is already tasked with evaluating the local role in the large groundwater withdrawal permitting process.

Peg Foss explained that the toolkit will be very useful to communities, but that the Commission should really work towards clarifying RSA 485-C:20 to clarify to what extent communities can regulate groundwater withdrawals. Peg felt that the document should not be distributed until the ambiguities of RSA 485-C:20 are fixed.

Commission members had a lengthy discussion about how to proceed with the work associated with HB1353. The discussion included approaches for having hearings in communities that have expressed a lot of concern about large groundwater withdrawals. Ultimately, it was decided that a subcommittee would be formed to develop a schedule and a work plan to complete the work required by HB1353. The work plan would include the schedule and approach to work for conducting hearings, circulating a survey, and assessing the local role in the large groundwater withdrawal permitting process and the concept of public benefit. Glenn Greenwood, Sarah Pillsbury, Brandon Kernen, Representative Spang, Representative Fargo, Bill McCann and David Wunsch all volunteered to participate on the subcommittee. Representative Spang recommended that DES update the toolkit for final review by Commission members by its next meeting.

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The next meeting was scheduled for Monday, December 15th at 1000 AM. The meeting was adjourned at approximately 1215 PM.

**THE COMMISSION TO STUDY ISSUES RELATIVE TO GROUNDWATER
WITHDRAWAL, SB 155, CHAPTER 305:1 2003
MEETING MINUTES**

Meeting Date: February 2, 2009

Prepared By: Brandon Kernen

The meeting began at 1000 AM in Room 100 of the State House. Below is a list of participants:

Attendance:

Name	Association
Commission Members	
Senator Cilley	
Representative Spang	
Representative Beaulieu	
Gary Abbott	Associated General Contractors
Mason Westfall	NH Association of Conservation Commissions
Jack Donohue	International Bottled Water Association
Brandon Kernen	NH Department of Environmental Services
Bill McCann	Public Member
Brian Goetz	New Hampshire Water Works Association
Kris Blomback	Member Representing Recreation
David Wunsch	Joint Licensing Board
Dave Maclean	NH Business and Industry Association
Michelle Hamm	NH Business and Industry Association
Attendees that Signed In	
Dari Sassan	NH Office of Energy and Planning
Susan Roman	Citizen - Town of Webster
Bill Hounsell	North Conway Water Precinct/Lower Bartlett Water Precinct

Michael Licata	NH Business and Industry Association
Greg P. Hasevlat	International Bottled Water Association
David Shulock	Brown, Olson and Gould
Erin Hass	Denncy and Bouley
John Boisvert	Pennichuck Water
Bill Hounsell	N. Conway/Lower Bartlett
Christine Bowman	NH Department of Environmental Services
Stephen Roy	NH Department of Environmental Services
Carol Grant	Citizen - Town of Atkinson
Tom Kelsey	HydroSource Associates, Inc.
Bruce Berke	Sheehan Phinney Capitol Group

The meeting began with Representative Spang introducing David Maclean as a new member of the Groundwater Commission. She explained that David is taking the seat formerly held by John Mills as a representative of the NH Business and Industry Association. It was explained that David works for Geoinsight as a hydrogeologist. Each Commission member present introduced themselves.

Next the minutes from the November 12, 2008 Commission meeting were reviewed. The minutes were unanimously approved with an amendment that Bill McCann be added to the list of Commission members that volunteered to participate on the HB 1353 subcommittee in paragraph 1 on page 5 of the minutes.

The Commission next received an update from Stephen Roy regarding the status of the Issue 6 Subcommittee - Groundwater Management Data Needs Update. Stephen explained that in November and December, questionnaires were sent out to academia, regulators and consultants. Stephen explained that the deadline for submitting the questionnaires was January 15, 2009. Stephen explained that the questionnaire responses were currently being compiled and that the subcommittee would likely meet in February. Representative Spang asked Stephen what types of questions were on the questionnaires. Stephen explained the questions ranged from how the different stakeholders use available groundwater data such as current water level monitoring data to if additional data were to be collected what should the focus be? Representative Spang explained that it is important that the subcommittee focus on not only the data that scientists need but also

the data that policy makers need. David Wunsch noted that there was a national study on groundwater data needs and that this report is available.

The Commission next received an update on the readoption of the large groundwater withdrawal regulations. Brandon Kernen noted that Christine Bowman and Stephen Roy are coordinating the readoption of the existing large groundwater withdrawal rules which are set to expire in May 2009. Stephen Roy explained that the New Hampshire Department of Environmental Services (NHDES) coordinated an informal advisory committee meeting in August 2008 to review a draft of the revised rules. Stephen explained that the draft rules were revised after the August 2008 meeting in response to comments. He explained the revised draft rules were sent to the advisory committee again for review and comment, but that no comments have been received to date. Stephen explained that the rules are currently with the NHDES legal unit and will be considered by Water Council in the upcoming months. He explained that the NHDES legal unit does not have the resources to complete rulemaking process for the new rules prior to the May 2008 expiration date so they intend to readopt the existing large groundwater withdrawal rules as interim rules which would extend the expiration date by six months. Representative Spang asked Stephen what type of comments NHDES received on the draft rules. Stephen explained that the comments could be broken into two areas. He explained that some of the comments were very specific and technical in nature. He explained that some of the comments were also policy in nature and were similar to many of the topics that the Groundwater Commission is investigating. Brandon Kernen noted that the most significant change in the rules is that much of the language in the existing rules had to be removed to reflect the changes to the statute in 2006. Brandon explained that SB 386 of 2006 moved much of the permitting requirements for a large groundwater withdrawal permit from NHDES rulemaking to the statute itself. This means that many of the requirements in the existing rules are no longer applicable as they are superceded by RSA 485-C:21.

Representative Spang asked Brandon Kernen to provide a brief update on groundwater related legislation. Brandon explained that there are three bills related to groundwater withdrawals that he is aware of. He explained that there is HB 60 which would remove the pre-emption of municipalities from regulating groundwater withdrawals. He explained the public hearing on the bill was conducted last week in the House's Municipal Committee and that the committee scheduled an Executive Session for the bill

on Wednesday. Brandon explained that another bill, SB 56 sponsored by Senator Cilley, would require that an entity applying for a large withdrawal permit show they have \$1,000,000 financial responsibility in bonding and insurance. Brandon explained that this bill was heard last week and is scheduled for executive session this week. Brandon explained that the third bill, HB 314, would give municipalities the right to conduct an impact study and to require an applicant to pay for the cost of this study. Brandon explained that a public hearing for this bill has not been scheduled to date. Brandon noted that another bill, SB 48 is related to groundwater/geothermal processes.

Gary Abbott asked if HB 314 was needed because he thought municipalities already required that applicants for large withdrawal permits pay the costs the municipality incurs if they hire a consultant to review permit application materials. David Maclean explained that he is familiar with planning boards requiring that applicants pay fees associated with studies that the municipalities complete for proposed projects. Representative Spang questioned if municipalities could really use their existing authority to hire experts to review large groundwater withdrawal permit applications. Glenn Greenwood agreed and explained while it is clear planning boards could recover costs for studies associated with site plan review applications, he does not see how this authority could be extended to review large withdrawal applications. Cordell Johnston suggested that the purpose of HB 314 is to make it clear that municipalities can hire consultants to review large withdrawal materials to complement their existing rights in statute to participate and provide NHDES during the large withdrawal permitting process.

Glenn Greenwood asked Brandon Kernen what were NHDES' positions on the bills. Brandon explained that NHDES opposed HB 60 because the Groundwater Commission is currently investigating the role of municipalities in the permitting process. He explained that for SB 56, NHDES testified that community water systems should be exempt from the bill and that overall the existing permitting process has been effective in addressing environmental impacts that people are seeking to have bonding or assurance for. NHDES explained at the SB 56 hearing that there could be a scenario where NHDES finds a permittee is causing an adverse impact and does not respond to NHDES orders to mitigate the adverse impact. In this instance, NHDES would need to take legal action through the Department of Justice and the mitigation process could be prolonged. Brandon explained that NHDES does not have a position on HB 314 at this time and that the public hearing has not been scheduled.

The Commission next began discussing the work of the HB 1353 subcommittee. Bill McCann, the chairman of the subcommittee initiated the discussion. Bill stated that the handout at the meeting titled "HB1353 - Approach to Work" explains the subcommittee's proposed approach to work. He explained that the handout is self explanatory and what the subcommittee really wants to get at is why people do or do not want to see change to the large groundwater withdrawal regulation in New Hampshire. Bill explained that it is really important that the subcommittee meet with a broad cross-section of stakeholders and as many regions and residents in towns all over the state to really get a good sense of what the public wants relative to the regulation of large groundwater withdrawals.

Glenn Greenwood, an HB 1353 subcommittee member, stated that he has arranged for the Commission to be on the next NH Association of Regional Planning Commission agenda so that we could ask the Regional Planning Commission's to assist with arranging regional meetings.

Representative Beaulieu recommended that the conservation commissions in the region be specifically invited to the meeting.

Brian Goetz recommended that outreach information be placed on the internet prior to the meeting.

Senator Cilley offered to coordinate the issuance of press releases from the legislature.

The Commission agreed that they would encourage the public to review toolkit materials prior to attending the meetings. It was also agreed that at the meetings a presentation summarizing the materials would be provided prior to receiving public comment.

Garry Abbott suggested that that given that there will be nine regional meetings, it would make sense to regroup after the first regional meeting and assess how to improve future meetings.

Carol Grant stated that she is frustrated and concerned with the commission for not taking action to date to change the statute to give municipalities authority to regulate groundwater withdrawals. Senator Cilley and Representative Spang explained that this

issue is being addressed by HB 1353 which is a new mandate for the Groundwater Commission.

The Commission endorsed the approach to work proposed by the HB1353 Subcommittee.

Brandon Kernen next updated the Commission on the development of the State Water Primer. Brandon provided a handout summarizing this document and a web link to the document. Brian Goetz next updated the Commission on a state-wide water survey that was also conducted and that can be found on the same web site as the water primer.

The meeting was adjourned at approximately 1130 AM.

**THE COMMISSION TO STUDY ISSUES RELATIVE TO GROUNDWATER
WITHDRAWAL, SB 155, CHAPTER 305:1 2003**

MEETING MINUTES

Meeting Date: March 16, 2009

Prepared By: Brandon Kernen

The meeting began at 100 PM in Room 100 of the State House. Below is a list of participants:

Attendance:

Name	Association
Commission Members	
Senator Cilley	
Representative Spang	
Representative Spaulding	
Gary Abbott	Associated General Contractors
Mason Westfall	NH Association of Conservation Commissions
Jack Donohue	International Bottled Water Association
Brandon Kernen	NH Department of Environmental Services
Bill McCann	Public Member
Brian Goetz	New Hampshire Water Works Association
Kris Blomback	Member Representing Recreation
David Wunsch	Joint Licensing Board
Dave Maclean	NH Business and Industry Association
Jim Griswold	NH Farm Bureau
Cordell Johnston	NH Municipal Association
Bob Snelling	Society for the Protection of NH Forest
Attendees that Signed In	

Susan Roman	Citizen - Town of Webster
Christine Bowman	NH Department of Environmental Services
Dana Bisbee	Pierce Atwood
James Emery	Emery and Garrett Groundwater
Bill Hounsell	North Conway Water Precinct/Lower Bartlett Water Precinct
Michael Licata	NH Business and Industry Association
Greg P. Hasevlat	International Bottled Water Association
Erle Pierce	Sheehan Phinney Capitol Group
John Boisvert	Pennichuck Water
Stephen Roy	NH Department of Environmental Services

The meeting opened with introductions. The Commission then approved the February 2, 2009 meeting minutes.

The Commission then reviewed the status of 2009 groundwater legislation (SB56, HB60 and HB314). Brandon Kernan provided the following summary of legislative proposals relative to groundwater that are being considered:

- SB56 - Relative to financial responsibility for large groundwater withdrawals - In Senate Environment and Economic Development Committee
- HB60 - Allowing municipalities to enact local ordinances affecting large groundwater withdrawals - House - Inexpedient to legislate
- HB314 - Allowing municipalities to charge fees to an applicant to recover reasonable costs associated with hiring a licensed engineer or geologist to review application materials. Passed Resources Recreation and Development Committee - To be voted on by the House.

Senator Cilley explained that she sponsored SB56. She explained that she is concerned of having a scenario occur where a large groundwater withdrawal permittee is teetering on the brink of bankruptcy and is unable to finance mitigation measures associated with impacts of a large groundwater withdrawal. She cited the current financial status of USA

Springs in Nottingham and Barrington as an example. Senator Cilley explained that the purpose of SB56 is to ensure that there would be bonding and insurance in place to address impacts associated with a large groundwater withdrawal. Senator Cilley explained that because the permitting process is very proactive in preventing the occurrence of adverse impacts and in most instances businesses are financially able to mitigate adverse impacts, it would be somewhat of an anomaly for bonding to be actually needed to address impacts associated with a large groundwater withdrawal. She explained, however, that the occurrence of such an anomaly seems to be more likely given current economic events. Senator Cilley explained that if nothing else, SB56 would calm many of the fears of the public. She explained that one problem that they are finding with SB56, is that the bill proposes to require \$1,000,000 bond. Obtaining bonds of this value cost a lot of money she explained. Senator Cilley explained that given some of the issues that remain with SB56, she may seek to have the bill retained in committee.

Jim Griswold explained that the Farm Bureau was concerned about the cost SB56 would add onto an already expensive permitting process to extract water at a rate of just 40 gallons a minute. Jim asked if there were other ways to ensure there are adequate resources to mitigate impacts without requiring a \$1,000,000 bond? Cordell Johnston asked Senator Cilley if SB56 would only apply to commercial groundwater withdrawals? Senator Cilley explained that she believes the bill has been amended to exempt public water systems and she will verify this because it is her intention to exempt these systems from the requirements of SB56.

Gary Abbott asked Representative Spang if there was a definition for "reasonable costs" in HB314. Representative Spang explained that she believes that this is a common concept that is already accepted and applied in other regulatory applications. Gary explained that it may be worth including a cap in costs associated with the requirements of HB314 to ensure costs do not get out of control.

Bob Snelling explained that HB60 would have amended statutory language (RSA 485-C:20) that is currently ambiguous. He explained that the Groundwater Commission, perhaps as part of its work on HB1353, should clarify the meaning RSA 485-C20 so it can be determined if it applies to all groundwater withdrawals or only large groundwater withdrawals. Brandon Kernen agreed with Bob. Brandon noted that based on inquiries from Susan Roman recently, he has been asking attorneys additional questions about the

legal authority of municipalities to regulate groundwater withdrawals less than 57,600 gallons over any 24-hour period. Brandon noted that up till recently he and the Commission were aware that RSA 485-C:20 could be reasonably interpreted differently to mean that municipalities can or cannot regulate groundwater withdrawals that are less than 57,600 gallons per day. He explained that neither he or the Commission were aware of potential unintended consequences of developing and getting passed in 2006, legislation that allow municipalities to restrict lawn watering during times of declared drought. Brandon explained that during the last drought, many municipalities were frustrated because it was not clear how they could curtail excessive water use as wells were being dewatered. Brandon explained that by developing a law that enables municipality to regulate certain water uses during times of drought, that legally this could imply that municipalities do not have enabling authority to regulate groundwater withdrawals under other circumstances. Brandon explained that until the lawn watering bill was passed, there was no precedent in statute as to what municipalities could or could not regulate relative to groundwater withdrawals. Brandon suggested that the Commission may want to address this unintended consequence as part of its work on HB1353. Cordell Johnston stated it is not clear what the implications of the lawn watering bill are relative to municipal regulation of groundwater withdrawals, but that one could certainly cite the lawn watering statute in making an argument that municipalities have no other authority to regulate groundwater withdrawals. Cordell explained that by being very implicit in the lawn watering bill as to what municipalities can regulate relative to groundwater withdrawals, it could imply to some that municipalities do not have authority to regulate groundwater withdrawals not specifically stipulated in statute.

The Commission then moved onto the next agenda item - HB1353 Subcommittee update. Bill McCann explained that the subcommittee is in the process of arranging meetings with each of the regional planning commissions to discuss what the local role of the municipality should be in regulating groundwater withdrawals. He explained that members of the HB1353 subcommittee met with the Association of Regional Planning Commissions in February to get their support for the regional meeting. He explained they were very receptive to the ideas. Bill directed the Commission to a handout that the subcommittee drafted to use as a template for a meeting announcement. Bill explained that the structure of the meeting would be 1) The moderator (Bill or Susan Roman if available) would open the meeting and provide introductory remarks; 2) Brandon Kernen

would present a twenty minute presentation on Groundwater Law in New Hampshire; and 3) The moderator would facilitate public discussion - always trying to get people to explain specifically their reasons or experiences that cause them to have a particular view on who should regulate groundwater and how it should be regulated.

Brandon Kernen gave a dry run of the presentation proposed for the regional meetings. Commission members made recommendations to the content and sequence of the presentation material for Brandon to revise and post on NHGroundwater.com

The meeting was adjourned at approximately 3:00 PM.

**THE COMMISSION TO STUDY ISSUES RELATIVE TO GROUNDWATER
WITHDRAWAL, SB 155, CHAPTER 305:1 2003**

MEETING MINUTES

Meeting Date: September 25, 2009

Prepared By: Brandon Kernen

The meeting began at 930 AM in Room 307 of the Legislative Office Building. Below is a list of participants:

Attendance:

Name	Association
Commission Members	
Senator Barnes	
Representative Spang	
Gary Abbott	Associated General Contractors
Mason Westfall	NH Association of Conservation Commissions
Jack Donohue	International Bottled Water Association
Brandon Kernen	NH Department of Environmental Services
Sarah Pillsbury	NH Department of Environmental Services
Bill McCann	Public Member
Glenn Greenwood	Association of Regional Planning Commissions
Michelle Hamm	NH Business and Industry Association
David Wunsch	Joint Licensing Board
Dave Maclean	NH Business and Industry Association
Jim Griswold	NH Farm Bureau
Cordell Johnston	NH Municipal Association
Bob Snelling	Society for the Protection of NH Forest
Attendees that Signed In	

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Susan Roman	Citizen - Town of Webster
Paul Worsowicz	GCG
Elizabeth Sargent	Sheehan.Phinney@Sheehan.com
Christine Bowman	NH Department of Environmental Services
Tom Kelsey	HydroSource Associates, Inc.
Bill Hounsell	North Conway Water Precinct/Lower Bartlett Water Precinct
Greg P. Hasevlat	International Bottled Water Association
David Shulock	Brown Olson and Gould
Representative Tupper	
Representative Bucio	
John Boisvert	Pennichuck Water
Stephen Roy	NH Department of Environmental Services

The meeting opened with introductions. The Commission then approved the March 16, 2009 meeting minutes.

The Commission moved on to discuss the second item on the agenda - "Issue 6 - Protecting Water Quality to Protect Availability". Brandon Kernen distributed a copy of a report titled "New Hampshire Private Well Working Group - Report and Recommendation to the Groundwater Commission" dated September 16, 2009. Brandon explained that over a year ago, the New Hampshire Department of Environmental Services (NHDES) briefed the Commission about a formation of a Private Well Working Group to assess the issue of private well sampling and private well water quality. Brandon noted that the Commission identified this topic in the work plan it developed in 2005 as "Issue 6 - Protecting Water Quality to Protect Water Quantity. Brandon stated that Commission members were invited to attend the first meeting and that the work group included a large number of stakeholders that were not on the Commission. Brandon explained that the group met several times and developed a white paper that described the water quality issues with private wells and the fact that state law only requires public water systems sample collect and analyze drinking water samples. Brandon noted that forty percent of the state relied on private wells and that a large percentage of these wells are impacted by natural and manmade contaminants above health standards. Brandon explained that in many cases homeowners are not testing their water supplies or are not aware that they may be drinking water that is unsafe.

Brandon explained that the white paper described these issues as well as historic efforts in New Hampshire to encourage homeowners with private wells to sample their wells. He explained that the white paper also described water quality sampling requirements that other states have implemented as well as sampling requirements some municipalities in New Hampshire are requiring.

Brandon Kernen explained that the Private Well Working has made a recommendation that water quality sampling and disclosure of the water quality data should occur when a new well is constructed or when a real estate transaction occurs. Brandon emphasized that the recommendation is coming from the Private Well Working Group, not NHDES, because senior management at NHDES has not reviewed the recommendation at this time. Brandon stated to the Commission that the New Hampshire Association of REALTORS and the Home Builders and Remodelers Association of New Hampshire opposed the recommendations of the private well working group because of concerns regarding the effect private well sampling requirements may have on transactions associated with transferring ownership of a home. He referenced letters submitted by these organizations in the handout.

Mason Westfall noted that the summary of the recommendations that was distributed to the Commission contained a list of items that required clarification or more details. Mason asked Brandon Kernen when will these issues be addressed. Brandon responded that it depends on the preferences of the Commission. Brandon explained that the Commission could either work to address these issues, or it could relegate these issues to rulemaking. Bob Snelling asked why did the Private Well Working Group leave certain details unaddressed when it made its recommendation. He stated that perhaps the Groundwater Commission should request that the Private Well Working Group meet one more time to address these details. He explained that because the Private Well Working Group has already invested a lot of time on this topic that they are probably more knowledgeable about these issues and in a better position than the Groundwater Commission to address these items.

Representative Spang asked Brandon Kernen if the Private Well Working Group wanted the Groundwater Commission to put its recommendation into draft legislation for the next legislative session. Brandon explained that this is a viable option, but the Commission could decide how to proceed. Representative Spang stated that the Commission should probably work on this issue by the next Commission meeting.

Representative Spang stated that there are two interest groups that have concerns about the recommendations of the Private Well Working Group. She asked if sampling is already commonly occurring at the time of a home sale. Sarah Pillsbury explained that many banks require that wells be tested, but that the testing requirements vary widely. Sarah stated that a handful of municipalities do require testing and at least one municipality requires treatment before allowing occupancy. Sarah suggested that the Commission could ask Paul Susca of NHDES who coordinated the work of the Private Well Working Group, to develop draft legislation with the assistance of Private Well Working Group prior to the next Groundwater Commission meeting.

Representative Spang stated what would be the answer to the question of why should the state be regulating this. Isn't the quality of water from drinking water supply wells on private land a private matter and that people should be able to decide what risks they want to take with their health? Brandon Kernen explained that the state's interest in this issue is related to ensuring a minimal level of public health protection and that this is analogous to requiring children to wear seatbelts or wear a helmet. Brandon explained that the recommendations of the Private Well Working Group are also pretty sensitive and only would be required when a new well is being installed or a when a real estate transaction is occurring. David Wunsch stated that real estate transactions already require that a homeowner disclose known problems regarding the foundation or structure of a home. He stated that the water supply is integral to processes in a home and that it seems logical that information be disclosed about the water supply.

Bob Snelling stated that the recommendation of the Private Well Working Group seems to transition from what now is a due diligence issue to a requirement that a seller of a home must comply with. Gary Abbott asked if the Private Well Working Group made recommendations regarding about what parameters should be analyzed for when a well is tested. Brandon Kernen identified the paragraph in the hand-out that stipulates the parameters that would need to be analyzed. Sarah Pillsbury stated that in addition to the hand-out, the Private Well Working Group developed an in-depth white paper that researched in detail, the various issues associated the quality of water from private wells and different approaches to for ensuring water derived from these wells are sampled.

Senator Barnes explained that there is a concern that private wells are not being sampled overtime after a real estate transfer occurs. He explained that in Raymond, there are

several homes that had good water quality when people first moved in, but that have recently found out that contamination has migrated into their water supply.

David Wunsch recommended that a time limit be stipulated explaining how long water quality test should be considered valid. He stated that water quality can change naturally seasonally or overtime and that everyone needs to understand this so there are no liability issues that arise if future testing shows changed conditions. Michelle Hamm asked if the Private Well Working Group is recommending that water treatment systems be installed. Brandon Kernen stated that the recommendation only would require testing and disclosure. David Wunsch stated that the recommendation of the Private Well Working Group is not unprecedented. He compared it to laws that many southern states have in place that require a termite inspection and disclosure at the time of a real estate transaction.

Bob Snelling stated that the water quality data will be useful in establishing baseline conditions when someone purchases a home or installs a new well. He explained that if they test the well years down the road and find man-made contamination, that the original sample data will be extremely helpful in establishing a point in time where contamination was not present.

The Commission decided to ask Paul Susca of NHDES to address the "remaining issues" listed in Private Well Working Group recommendations hand-out and to draft legislative language for the Commission to consider at its next meeting.

Next, Steve Roy provided an update on the re-adoption of the large groundwater withdrawal rules. He explained that an agency hearing on the rules was conducted on August 28, 2009. He explained that the majority of the comments at that hearing focused on the distinction between pumping storm water and groundwater at quarries, the replacement well requirements and temporary withdrawals. Steve stated that the rules are being revised and that they are anticipated to be on the agenda for adoption at the Joint Legislative Committee of Administrative Rules on October 15, 2009. Steve explained that the statute may need to be amended to address comments pertaining to temporary or short-term withdrawals such as construction dewatering. Representative Spang asked if NHDES could provide suggested language prior to the next Commission meeting. Brandon Kernen stated that NHDES could prepare this information.

The Commission then went on to agenda item 4a. "Update on HB1353 Subcommittee." Bill McCann explained that HB1353 tasked the Commission with evaluating the role of municipalities in the large groundwater withdrawal permitting process. He stated that the subcommittee of the Commission decided to pursue this charge by scheduling nine regional meetings in coordination with the regional planning commissions. He explained that the Commission developed a website (NHGroundwater.com), developed a tool box document for communities to describe how their existing land use planning authorities can affect groundwater withdrawals, and developed a flyer of questions that attendees of the committee should consider in preparation of the regional meetings. He noted that detailed meeting minutes are available for eight of nine of the meetings at nhgroundwater.com. Bill noted that one of the regional meetings had no attendees. Bill noted that the HB1353 has processed the comments provided by the public at the meetings and has made several recommendations regarding the local role in the permitting process. Bill stated that Susan Roman is coordinating an effort to develop a report that summarizes all the comments received by the public, including comments not relating to the just the role of municipalities in the permitting process. Bill pointed the Commission to the outline that Susan has developed for the report (agenda item 4b). Susan explained the contents of the outline to the Commission. She stressed that it is the HB1353 subcommittee's goal to develop a full report that addresses in one manner or another all of the public comments provided at the regional meetings. Susan stated that she felt it was important to get back to the people that took the time to provide comments.

Representative Spang explained that HB 1353 was an attempt to address once and for all the issue of what the role of municipalities should be in the large groundwater withdrawal permitting process. She explained that each year proposals are put before the legislature to deal with this issue. Representative Spang stated that HB1353 is meant to thoroughly investigate the various concerns and interests regarding the issues that have been recommended to the legislature over the last several years.

The Commission then moved onto agenda item 4c, Increased Public Notification Requirements. Bob Snelling explained that it had been noted at several of the regional meetings that people were not aware that an application for a large groundwater withdrawal was being processed. Bob explained that the large groundwater withdrawal permitting process currently creates an inventory of water users and land owners that could be potentially impacted by the large groundwater withdrawal. He explained that the subcommittee recommended providing these entities with direct notification that a

large groundwater withdrawal application had been filed.

Bob noted that the proposed improved notification process would include the applicant sending a notice via certified mail to the following entities at the time that a large groundwater withdrawal application is forwarded to municipalities:

- (a) Public water suppliers within an area that extends a distance of 1000 feet outside cone of depression estimated in accordance with RSA 485-C:21, V, a;
- (b) Water users subject to the requirements of RSA 488 including withdrawals, discharges and transfers, deliveries, and releases within the potential impact area defined by RSA 485-C:21, V;
- (c) Persons discharging to surface water discharges within the potential impact area defined by RSA 485-C:21, V and permitted in accordance with RSA 485A or Section 401 of the Clean Water Act;
- (d) Persons with a groundwater discharge permit located within the potential impact area defined by RSA 485-C:21, V and permitted in accordance with RSA 485A;
- (e) Owners of private wells within an area that extends a distance of 1000 feet outside cone of depression estimated in accordance with RSA 485-C:21, V, a;
- (f) Owners of dams within the potential impact area defined by RSA 485-C:21, V and permitted in accordance RSA 482;
- (g) Owners of property within an area that extends a distance of 1000 feet outside cone of depression estimated in accordance with RSA 485-C:21, V, a; and
- (h) Any other water uses that might be influenced by the withdrawal.

Bob explained that the subcommittee used the inventory of people that already need to be identified in the rules and proposes that an initial notification be sent to these entities when an application is sent to municipalities. Because these entities already must be identified in an application for a large groundwater withdrawal, Bob explained that the increase in work is associated with conducting the mailing. Mason Westfall asked if the proposed changes to the notification process would affect who could request a public hearing. Bob stated that it would not and that it would still be the municipalities or suppliers of water that would have to request a public hearing. Bob noted that NHDES still must respond in writing to any recommendation that any person makes that is contrary to any final decision NHDES makes on a large groundwater withdrawal application.

Representative Spang asked if Bob Snelling thought the Commission should move

forward with legislation on this proposal. Bob stated that the proposal is not ideologically controversial, but that it would be an extra cost for the applicant to complete the mailings. Sarah Pillsbury stated that for the list of entities that will be notified, the broad language in paragraph (h) that states “any other water uses that might be influenced by the withdrawal” would be problematic. Glenn Greenwood asked Brandon Kernen who NHDES notifies when a municipality requests a public hearing. Brandon explained that under the current statute, that the applicant must publish legal notices in two different newspapers in two different weeks. Brandon stated that the applicant must also post public notices in two different locations within the municipality. Brandon noted that while this is a lot of effort to notice a hearing, many people do not comb through legal notices in a newspaper or read postings on bulletin boards in public places. Brandon explained that the current notification process seems most effective when the press picks up the legal notices and completes news stories on the hearing/large groundwater withdrawal application. Glenn explained that he thought that because NHDES required the applicant to develop a list of potentially affected people that he thought NHDES notified these entities when a public hearing was requested. Glenn stated he supports the increased public notification and agrees with Sarah about paragraph (h) in the proposed language.

Bob Snelling noted that all of the other red text on the handout with the proposed amendments to RSA 485-C:21 had to do with housekeeping issues and that the only substantive change had to do with improving the public notification process to include paragraphs (a)-(h). Bill McCann explained that this summarizes the subcommittee’s recommendation on this issue. Brandon Kernen asked the Commission what future steps should be taken. It was agreed by Commission members that Brandon should coordinate with any interested parties to revise the proposed language before the next Commission meeting. Brandon stated that he would coordinate this through e-mail. Gary Abbott wanted clarification that the proposed notification language would only apply to new applications and not renewals of existing large groundwater withdrawal permits. Brandon stated that this was the intent.

The Commission then moved onto agenda item 4d. third party review. Brandon Kernen explained that during the regional meetings, many people from the public provided the recommendation that municipalities have representation from qualified individuals to comment on the documents associated with the large groundwater withdrawal application. Brandon explained that the current statute provides extensive opportunities

to provide comments at public hearings or during a written comment period but that often municipalities do not have the expertise to frame their comments in the context of the science, statutes or regulations. Brandon also stated that a number of people testified at the regional meetings that they would have more confidence in the large groundwater withdrawal permitting process if there was someone in addition to NHDES looking out for their interest. Brandon noted that the idea of a third-party review is not a new concept and that HB314 of the 2009 legislative session proposed the same idea. Brandon noted that HB314 was re-referred and was going to be taken up again by the Senate Energy, Environment and Economic Development Committee in a couple of weeks. Brandon explained that the subcommittee framed this issue in a document that was distributed at the meeting. Brandon explained that the document described the pros and cons of having a third-party review. He stated that the subcommittee reviewed HB314 and provided some recommended revisions to the language proposed in HB314 to clearly limit what the third-party review should consist of. Representative Spang stated that the document the HB1353 subcommittee prepared lists four different reasons why various entities opposed HB314 and asked if the proposed changes to HB314 addressed these concerns. Brandon explained that the proposed changes probably only addressed a minor part of the concern and that some interests still may feel that third-party review is: 1) Redundant and not necessary; 2) Result in uncertain costs being accrued; and 3) Unfair because as proposed would exempt community water systems which represent 80% of the large withdrawals.

Glenn Greenwood commented on the document that the HB1353 subcommittee prepared relative to third-party review. He explained that the document draws an analogy between municipal planning boards being enabled to hire experts at the expense of the applicant and the proposal to allow municipalities to use third party reviewers to comment on a large groundwater withdrawal application at the expense of the applicant. Glenn stated that in the case of the planning boards, they are relying on experts they hire at the expense of the applicant to give the planning board information in which to base their decisions for pending applications. In the case of the large groundwater withdrawal permitting process, the proposal is to only allow municipalities to use experts they hire at the expense of the applicant to provide comments to NHDES, not to approve or deny projects.

Gary Abbott stated that the revised language proposed by the HB1353 subcommittee regarding third-party review is an improvement over the language proposed in HB314.

He suggested that language should be added to make it clear that the provisions proposed, would only apply to new withdrawals and not the renewal of large groundwater withdrawal permits.

Cordell Johnston stated that he agreed with Glenn Greenwood's comment that the proposed third-party review provisions are not perfectly analogous to the existing municipal planning board statutes. Cordell stated that he does believe the third-party provisions are warranted because there has been a lot of disagreement as to should the state or municipality have authority to regulate groundwater withdrawals. He explained the current law represents a compromise that gives the state authority and the municipality a role in the large groundwater withdrawal permitting process. Cordell stated that the municipality's role in the permitting process does not mean much, however, if they do not have the expertise required to provide comments.

Representative Spang asked the Commission if they wanted to take a straw vote on the language prepared by the HB1353 subcommittee for the third-party review. Bob Snelling stated that given there is a hearing on HB314 in a couple of weeks, should not the Commission develop a definitive decision to recommend the third-party review language recommended by the HB1353 subcommittee? Representative Spang agreed. Jim Griswold suggested that the language currently in HB314 as well as the language proposed by the HB1353 subcommittee be amended to remove the exemption for community water systems. Jim explained that it did not make sense to make exemptions for certain categories of large groundwater withdrawals but not others. Brandon Kernen stated that NHDES would not support removing the exemption for community water systems because of 28-A issues as well the fact that these systems and their associated withdrawals are so heavily regulated that the third-party review is not necessary.

Susan Roman asked Jim Griswold what his concerns are about the proposal for allowing municipalities to hire their own expert at the expense of the applicant to review large groundwater withdrawal applications. Jim explained that it is an issue of fairness and costs. He explained that he represents the Farm Bureau. Jim stated that farmers do not use or export large amounts of water and that their use may consist of a withdrawal of 50 gallons a minute to water an apple orchard. He explained that the current large groundwater withdrawal process is too costly for a farmer to even consider undertaking and that the amendments to the law are only making it worse. Jim stated that these efforts are destroying farming in New Hampshire.

David Maclean stated that the large groundwater withdrawal permitting process is working. He explained that many of the smaller community water systems in New Hampshire are struggling and stated his concern requiring community water systems to be subject to the requirement to pay for third party review costs when the process is already thorough.

Susan Roman stated that she wants to emphasize the current permitting process was established as a compromise between municipalities for regulating groundwater withdrawals, and that it has always been intended for municipalities to have a meaningful role in the permitting process. Susan explained that this is a valid point to note. She also explained that at the HB1353 regional meetings, a number of farmers, community water systems and others expressed concerns about the large groundwater withdrawal permitting process being too costly or time consuming. Susan explained that this means we have a larger issue about the permitting process itself. Susan stated that she would not want any new proposal to improve the role of the municipality in the permitting process to be seen as simply adding to the complexity of the permitting process. Susan explained that if the permitting process is too complex, then it should be fixed and addressed as a separate issue.

Representative Spang asked Susan Roman about the use of the term "reasonable costs" to limit what a municipality could charge an applicant for its costs associated with hiring an expert to assist it with providing comments on a large groundwater withdrawal application. Susan explained that "reasonable" is a commonly used term relative to costs and that there is a lot of case law on this. Susan stated that the use of "reasonable" is the best way to address cost limits associated with third-party review. Representative Spang asked Susan Roman if the courts consider the financial capacity of a person that has to pay the costs when determining what reasonable is. Susan stated that the use of the term "reasonable" generally does not assess the ability of a person to pay costs but rather the what it takes to review assumptions, conclusions and recommendations.

Jack Donohue stated that New Hampshire has established 57,600 gallons per day as a threshold in which groundwater withdrawals warrant a high level of scrutiny. He explained that it does not seem logical to parse certain types of water uses from this process.

Sarah Pillsbury asked that given 28-A, wouldn't you have to at least exempt municipal water systems from having to pay the costs associated with conducting a third-party review? Cordell Johnston stated from his perspective which some may consider biased, that it does raise concerns.

The Commission decided to vote on Jim Griswold's suggestion that community water systems not be exempted from the requirement of paying the cost of a municipality to hire experts to conduct a third-party review. The Commission voted 7-4 in favor of removing the exemption for community water systems. The Commission then voted 7-3 to recommend that the revised language prepared by the HB1353 subcommittee with the exemption for community water systems deleted, be forwarded to the Senate Environment and Economic Development Committee for its hearing in October.

The Commission then moved onto agenda item 4e, proposed amendments to RSA 485-C:20 prepared by Bill McCann. Bill distributed a document that summarizes his concern about RSA 485-C:20 pre-empting municipal planning boards from regulating certain aspects of projects they otherwise are able to regulate when a project includes a large groundwater withdrawal. Bill cited two Superior Court case decisions and provided these as handouts. Bill stated that he believes RSA 485-C:20 should be revised to state "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."

Representative Spang stated to Bill McCann that the language he is suggesting seems to do a lot more than just preserve the traditional authorities of the planning board. Bob Snelling stated that Bill McCann's proposed language for RSA 485-C:20 was not an item that was recommended by the HB1353 subcommittee. Bob explained that that the language proposed by Bill would immediately raise the question if municipalities can regulate groundwater withdrawals. Bob stated that it is his belief that the State holds groundwater in the Public Trust and therefore laws should enable the state to regulate groundwater withdrawals.

Susan Roman stated that she read the court cases provided by Bill McCann and agrees that in one of the cases the courts threw out forty-three conditions of approval by a planning board because the court felt that the town not only could not regulate the groundwater withdrawal itself, but also the effects of the groundwater withdrawal. She

felt that this was a broad statement that could impinge on traditional zoning. Susan explained that what she thinks Bill is trying to do is to create a clearer boundary between the state's regulation of groundwater withdrawals and traditional zoning regulation of the municipalities. Sarah Pillsbury stated that she believes Bill is trying to preserve traditional zoning and site plan authorities and that NHDES completely supports that. Sarah explained that she believes the language proposed by Bill requires some work to accomplish this.

Representative Spang suggested that a work group be formed to work on revising RSA 485-C:20. Bob Snelling suggested that the workgroup also add language to RSA 485-C:1 to make reference to water quantity. The Commission agreed that a workgroup would be formed and that the first meeting would occur on September 30th at 1:00PM.

The meeting was adjourned at approximately 11:45 AM.

**THE COMMISSION TO STUDY ISSUES RELATIVE TO GROUNDWATER
WITHDRAWAL, SB 155, CHAPTER 305:1 2003**

MEETING MINUTES

Meeting Date: October 19, 2009

Prepared By: Brandon Kernen

The meeting began at 9:30 AM in Room 305 of the Legislative Office Building. Below is a list of participants:

Attendance:

Name	Association
Commission Members	
Representative Spang	
Senator Barnes	
Senator Cilley	
Gary Abbott	Associated General Contractors
Brian Goetz	NH Water Works Association
Glenn Greenwood	Association of Regional Planning Commissions
Jim Griswold	NH Farm Bureau
Michelle Hamm	NH Business and Industry Association
Cordell Johnston	NH Municipal Association
Bill McCann	Public Member
Dave Maclean	NH Business and Industry Association
Sarah Pillsbury	NH Department of Environmental Services
Robert Snelling	Society for the Protection of NH Forest
Mason Westfall	NH Association of Conservation Commissions
Attendees that Signed In	
Representative Buco	
Jim Hadley	Chair - Neighborhood Guardians
John Boisvert	Pennichuck Water Works
Christine Bowman	NHDES
Steve Roy	NHDES
David Shulock	Brown, Olsen & Gould
Carol Grant	Citizen - Town of Atkinson
Rick Chormann	NHDES/NHGS
John Brooks	Emery and Garrett Groundwater
David Bernier	North Conway Water Precinct
Bob Quinn	NH Association of Realtors
Bruce Berke	Sheehan Phinney Capitol Group
Bill Hounsell	North Conway Water and Lower Bartlett Water
Paul Susca	NHDES
Susan Roman	Citizen - Town of Webster

Paul Warsowicz	GCG Law
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The meeting opened by reviewing and approving the meeting minutes for the Commission's meeting on September 25, 2009.

The Commission then discussed agenda item 3-Large Groundwater Withdrawal Rules Revision Update. Steve Roy of the New Hampshire Department of Environmental Services (NHDES) told the Commission that the Joint Committee of Administrative Rules approved the re-adoption of the rules on October 15th and that NHDES' Commissioner has adopted them so that the new rules are in effect. Steve also noted that NHDES has now uploaded all of the large groundwater withdrawal permits on NHDES' Large Groundwater Withdrawal permitting website.

The Commission then moved onto agenda item 2 - Issue 6: Protecting Water Quality to Protect Quantity - Private Well Sampling in New Hampshire. Paul Susca provided the Commission with the following six handouts:

- 1) PowerPoint Presentation titled "Private Well Working Group - Report to the Groundwater Commission" dated October 19, 2009;
- 2) Recommended Private Well Testing for New Hampshire versus Required Testing in New Jersey and Rhode Island;
- 3) A paper titled "Drinking Water from Private Wells and Risks to Children" dated 2009 and published by the American Academy of Pediatrics;
- 4) Private Well Working Group White Paper dated August 2009;
- 5) NH Private Well Working Group - Report and Recommendation to the Groundwater Commission dated September 16, 2009; and
- 6) Potential language for legislation relative to private well sampling as requested by the Groundwater Commission at its September 25, 2009 meeting.

Paul Susca then presented the information in the PowerPoint Presentation. The presentation is incorporated by reference into these meeting minutes and is not re-iterated. Senator Cilley questioned why building permits would be issued when a water source for a new building has an inadequate yield. Paul Susca explained that New Hampshire does not have regulatory standards for yields associated with private wells. He explained that the New Hampshire Water Well Board does provide recommendations for minimum well yields. Sarah Pillsbury asked Paul if some municipalities have adopted minimum well yield standards? Paul was unsure but felt this issue could be explored. He noted that some municipalities do require water quality testing. Paul stated that the real estate statutes require the disclosure of any known problems with the water supply on the purchase and sales agreement for a home at the time of real estate transactions. Paul stated that if a well was never sampled, that no disclosure would be required. Senator Cilley noted that it was interesting that New Hampshire has regulations covering well construction and pumping installation but nothing regarding water quality or quantity both which directly affect living standards. Senator Cilley noted that Paul's presentation states that New Hampshire has recommended well yield standards and recommended sampling requirements for private wells. She noted that these are recommendations and not a requirement of law. She asked Paul if this means that a seller of a home would have to disclose this information at the time of a real estate transaction as a problem. Paul deferred the question to Bob Quinn of the New Hampshire Association of Realtors. Bob stated that he believes that the seller would have to disclose this information to the buyer. Brian Goetz asked if there were violation of water quality standards, would laboratories completing the analysis have to

report this to NHDES? Paul explained that labs, including the State lab have confidentiality standards and do not report to NHDES. Dave Maclean asked if the Private Well Working Group looked at what other states are doing relative to private well testing. Paul stated that the working group focused on the two other states that require private well testing (New Jersey and Rhode Island).

Paul Susca completed his presentation by summarizing the Private Well Working Group's recommendation that:

- 1) Well testing be required and results disclosed prior to a real estate transaction; and
- 2) Well testing be required for new private water supply wells or newly deepened water supply wells.

Paul Susca noted that some members of the private well working group recommended that water treatment systems should be required if testing results show water derived from a well does not meet drinking water standards. Paul also noted that the NH Association of Realtors and the Home Builders and Remodelers Association of NH both objected to the recommendation for mandatory well testing requirements due to concerns about the effect that such requirements would have on the process of closing home sales.

Paul Susca then reviewed the recommended legislative language for private well sampling to the Commission. This handout is incorporated by reference to the meeting minutes and is not reiterated.

Senator Cilley asked Paul Susca why the proposed legislation would require that the well testing be completed within one year of a real estate transaction, yet NHDES' guidance recommends well sampling every 3-5 years? Paul acknowledged that was a good point to consider. He explained that the original thought was that in a normal market, that a home would not be on the market for more than a year.

Sarah Pillsbury stated that Paul Susca's presentation of the Private Well Working Group (a subcommittee to the Groundwater Commission) reflects the recommendations of the Private Well Working Group and not NHDES. She explained that NHDES' senior management has not considered the recommendation of the Private Well Working Group at this time.

Michelle Hamm asked Paul Susca what was the benefit of testing water quality if treatment is not going to be required when drinking water quality standards are exceeded. Paul explained that homeowners will not treat their water if they do not test and that most people are not testing their water. Paul explained that most homeowners would treat their water if they knew water quality standards were being violated.

Representative Spang stated that Bob Quinn of the New Hampshire Association of Realtors asked the chairman of the Commissions if he could express his association's view on the recommendation of the Private Well Working Group. Representative Spang stated that a minority report from the Association was included in the handouts provided by Paul Susca. Bob stated that Paul summarized much of the Association's concerns about the proposed private well sampling requirements as written. He stated that the first concern is that the proposed sampling requirement would represent the first significant point of sale mandate on existing homes in New Hampshire. Bob stated that

although it may cost a couple of hundred dollars to sample a well, the Association sees this as precedent setting legislation. Bob also stated that the turnover rate for selling homes in New Hampshire may make it so that the proposed sampling may not effectively achieve water testing for a majority of homes in NH for another 15-20 years. Bob also explained that the existing purchase and sales agreement form used by realtors that are members of the association has provisions for disclosure for water quality testing. Bob stated that based on discussions with realtors throughout the state that water quality testing is almost always completed at the time of a home sale. He stated the proposed water testing requirement shifts the burden from the buyer to the seller. Bob stated the Association supports the overall goals of the Private Well Working Group but believes the goals can be achieved through education.

Representative Spang asked Bob Quinn why he is concerned about shifting the burden for testing a well from a buyer to a seller? Bob Quinn explained it is primarily an issue of shifting water testing at the time that a point of sale occurs from a voluntary process to a mandatory process. Bob also stated that making it a mandate could complicate real estate transactions. Representative Spang asked how could this be the case if testing is already being voluntarily completed in most instances as Bob Quinn suggested earlier. Bob Quinn explained that if the seller is responsible for testing the well instead of the buyer, that this could increase liability issues for seller. What if the well is sampled a few years later by the new home owner and the results are not good but are in conflict with the test results that the seller provided? Bob Quinn explained that this could result in a court case. Bob Snelling questioned that scenario. Bob Snelling explained that a buyer for a new home finds out that a well is contaminated with bacteria or radon a year after purchasing a home, and that the seller did not disclose it, that this seems to be more likely a cause for litigation opposed to the scenario Bob Quinn provided. Bob Snelling stated that he thinks the testing requirement protects the seller. Bob Quinn stated that the current process requires the seller to disclose known well problems. He stated that if the seller knows of problems and does not disclose them, that this would be a legal issue. Bob Quinn stated that if the seller does not know about well problems, then that is a different matter. Bob Snelling explained that this approach seems to allow a seller to choose ignorance to avoid this issue altogether. Bob Quinn stated that it is "buyer beware" and has the responsibility for testing the well when purchasing the house.

Glenn Greenwood stated that there are already point of sale mandates such as testing septic systems that are in close proximity to certain surface waters. Bob Quinn stated that these septic system testing requirements apply rarely and what is being proposed with the well testing requirement is much more significant. Glenn stated that there is, nevertheless, precedence for point of sale mandates.

Senator Cilley stated that she is troubled that the real estate industry is comfortable saying that it should be a "buyer beware" situation. She noted that in general, consumers expect that what is being presented to them is safe and secure and this would seem especially true for the largest purchase that they make. Senator Cilley stated that it seems like the real estate industry would want to make sure that buyers are as satisfied as possible and that this ultimately will lead to more sales in the future. Senator Cilley stated that she is sensitive to the state of the industry, but that this issue of transparency could actually be a benefit. Senator Cilley stated that there are ways to overcome the liability issue such as certifying the water quality data for the date that the sampling occurred. Bob Quinn re-iterated that the NH Association of Realtors has encouraged buyers to sample wells and has worked extensively with NHDES to promote water testing at the time of real estate transactions. He explained that this demonstrates that the Association has been proactive in

addressing this issue and that he is not aware of one realtor that does not encourage buyers to test wells and that testing almost always occurs right now. Senator Cilley asked Bob Quinn why would the Association be concerned about a well testing requirement if it is true that wells are already being tested? Bob stated it is primarily an issue of establishing point of sale mandates especially for something that seems to already be covered by education. Bob stated that a mandated testing requirement would just be adding another layer of bureaucracy.

Senator Barnes asked Paul Susca how would the well testing requirement apply to condominiums? Paul explained that if the condominium was not a public water supply that well testing would be required. Paul stated that if the condominium was a public water supply, that well testing would not be required.

Senator Cilley and Representative Spang explained that because the Private Well Working Group was working under the work plan of the Commission and has now made its recommendation to the Commission that the Commission should determine if it is going to accept, reject or alter the recommendation. It was decided by Commission members that all of the material presented at the meeting should be considered by Commission members and that the Commission should vote at its next meeting on if it should accept the recommendation of the private well working group. Senator Cilley noted that recommendations coming from working commissions can be submitted as legislation through January.

The Commission then moved onto item 4 on the agenda – Temporary, emergency and geothermal large groundwater withdrawals. Brandon Kernen referenced a handout provided to the Commission that contains proposed language for large groundwater withdrawals associated with temporary, emergency and geothermal uses. Brandon explained that at public hearings associated with re-adopting the large groundwater withdrawal rules that the public noted the rules and statutes do not contain provisions to allow for temporary large groundwater withdrawals such as construction dewatering. Brandon explained that the rules adopted by NHDES in 2000 had provisions for these types of withdrawals but that legislation passed in 2006 superseded the 2000 rules and now requires a large groundwater withdrawal permit for a large groundwater withdrawal of any duration and under any circumstance. Brandon noted that the proposed language was intended to provide a mechanism to allow for short-term and emergency withdrawals without allowing someone to use these processes to circumvent the large groundwater withdrawal permitting process. Brandon noted that it is very difficult to develop legislative language that contemplates every type of potential emergency or temporary large groundwater withdrawal circumstance. He explained that for this reason, he believes NHDES needs discretionary authority over these types of withdrawals, but he did not propose this as he is aware that the legislature deliberately reduced NHDES' discretionary authority in 2006.

Senator Cilley and Cordell Johnston noted some typographical editorial errors in the proposed language. Senator Cilley noted that she is concerned that there is no public process associated with the allowance of temporary or emergency large groundwater withdrawals and that the entire proposal relies on NHDES' overview alone. Bill McCann and Senator Cilley stated that an appeals process should be added to the process for approving an emergency withdrawal.

Dave Maclean asked Brandon Kernen for an example of when an emergency large groundwater withdrawal would need to be approved. Brandon cited NHDES' experience in needing to approve a large groundwater withdrawal in Seabrook during a drought.

The Commission decided that Brandon Kernen should revise the proposed language based on comments provided by the Commission and that this topic be discussed again at the next meeting.

The Commission then moved onto agenda item 5 – update on the HB 1353 Subcommittee. Brandon Kernen explained the history of HB 1353 and the approach to completing the work over the last year. He explained that the HB 1353 Subcommittee is currently completing its report which is due November 30, 2009. Sarah Pillsbury noted that Commission work sessions were scheduled for October 29th. Commission members asked when will a draft of the HB 1353 report be ready for review because the due date for the report is November 30, 2009. The Commission decided that the next full Commission meeting would be on November 9, 2009 and that a draft of the HB 1353 report should be issued prior to this meeting so that Commission members could review the report prior to the meeting.

The meeting was adjourned at approximately 11:45 AM.

The minutes of the November 9, 2009 Commission meeting will be published in the 2010 report upon being reviewed and approved at a Groundwater Commission meeting.

**Attachment 3 - Summaries and Minutes of Groundwater Commission
Meetings**

Report of Issue 3 Subcommittee - Hierarchy of Groundwater Users

*“APPROACHES FOR DETERMINING GROUNDWATER PRIORITIES DURING A
WATER SUPPLY SHORTAGE”*

The work plan for the **SB 155 – Commission to study issues relative to groundwater withdrawals (Commission)**, dated November 2005, requires a Subcommittee of the Commission to study the concept of developing a Hierarchy of Groundwater Users in New Hampshire.

The Commission’s work plan specifically requires that the Subcommittee consider the following:

- 1) Identify and review the purpose and structure of other states' water use hierarchies;
- 2) Review the existing Drought Management Plan to determine if it establishes an appropriate hierarchy in times of temporary scarcity/drought; and
- 3) Determine if there is a need for a hierarchy of groundwater users for any other purposes (e.g. reserving available water for specific uses in permitting decisions etc?)
If so, what should it be and how should it be applied?

The results of the work of the Subcommittee on these three issues are summarized in this report.

The Subcommittee presented its report to the full Commission on August 21, 2008. At this meeting, Commission members recommended that the report be amended to include the following:

- 1) Actions that Can be Taken By a Water User to Be Prepared to Mitigate the Effect of Water Shortages; and
- 2) Data Needs to Implement a Hierarchy of Water Users During a Water Supply Shortage.

The Subcommittee developed this information in response to the Commission's request and presented it to the Commission on November 12, 2008. This information is now attached to this report as Attachments 1 and 2 respectively.

The Commission also recommended that the subcommittee include a goal statement for the potential approaches to establishing a water use hierarchy that are discussed on pages 11-15 of this report. A goal and limitation statement is included in bold italics on page 11 of this report in response to the recommendation of the Commission.

Item 1: Identify and review the purpose and structure of other states' water use hierarchies

In May 2006, the New Hampshire Department of Environmental Services (NHDES) researched the laws and regulations of other states that manage groundwater under the common law reasonable use doctrine (eastern water law) to assess if and how water use hierarchies have been developed and implemented in these jurisdictions. A document titled "Summary of States with Groundwater Use Priorities Specifically Described in Law" dated May 2006 provides the text of statutes and regulations that pertain to water use priorities that could be identified by NHDES for other eastern water law states. This document is included as Attachment 3 to this document.

While states may have established written statutes or regulations describing water use hierarchies, these written laws may run parallel to, be affected by and in some cases be superseded by common law (law that is based on historic court decisions opposed to written codified law) which establish: 1) The doctrine of reasonable use for eastern water law states; 2) The Public Trust Doctrine; and 3) Police powers of states to protect public welfare. This document does not assess the potential implications of enacting statutes and regulations that establish a hierarchy of water uses relative to what it means to common law. In general, a hierarchy of water uses that is justifiable based on sound technical data, applied in a nondiscriminatory manner, and that is necessary to protect the public water resources and welfare is probably consistent with the spirit of existing common law. Actual application of these ideals may be subject to legal interpretation and require analysis on a case by case basis from legal experts or the judicial system.

The water use hierarchies established by other states are arranged around two different

priority concepts. First, water use hierarchies are established and applied by some states to all water uses when there are competing water uses and a water supply shortage. These "water shortage" hierarchies generally establish a water use category priority list or identifies interests or objectives that should be preferentially protected should a shortage occur. Second, some states establish a hierarchy of water use in statutes or regulations that ensure new water users do not adversely impact existing water users, regardless of the type of water use. This provision essentially gives water users that predate water withdrawal regulations a priority over new users under statutory law. Although statutory law may include provisions whereby new users cannot adversely impact existing users, new users may be able to take court action citing their common law right to reasonably use groundwater beneath land they own.

Figure 1 identifies states that have established water use priorities that identify water use categories or attributes associated with a particular water use that are to be preferentially protected if there is a water supply shortage. Figure 2 identifies states that have established requirements that ensure existing water uses are protected from new water uses regardless of the type of existing or proposed water use. Figure 3 identifies states that have not established water use hierarchies. Table 1 provides a summary of the statutory or regulatory language associated with each eastern water law state that seems to have developed a water use hierarchy to some extent. Attachment 3 of this document provides excerpts of state law and regulation from other eastern water law states that pertains to water use priorities.

Table 1: Summary of Water Use Priorities in Eastern Water Law States

State	Statutory or Regulatory Provisions that Establish Water Use Priorities
New Hampshire	New large groundwater withdrawals that exceed 57,600 gallons/24-hour period may not adversely impact existing or new water users or water resources unless mitigation is provided. Permits for large withdrawals from wells that were sited after July 1998 must be modified if necessary to protect public water supply.
Alabama	Human consumption is considered the highest priority water use.
Arkansas	In the issuance of groundwater rights, the reasonable preference is given first to sustaining life, then to maintaining health, and finally to increasing wealth. Groundwater use for bottled water marketers and public water supplies also cannot be restricted by state law.
Connecticut	Connecticut does not prioritize the use of water. The commissioner may suspend or limit water use during water shortages.
Delaware	Permit applicants must demonstrate that proposed uses will not interfere with existing uses. Permit applicants may be required to supply water to existing users affected by proposed allocation.
Florida	Permit applicants must demonstrate that proposed uses will not interfere with existing uses. Groundwater permitting authority in Florida is administrated jointly by the State and Regional Water Management Districts. Regional Water Management Districts classify permits, and during drought, restrict water uses consistent with the following permit classifications: (1) Indoor Uses; 2) Essential Uses, including a subclassification for Water Utility Use; 3) Commercial and Industrial Uses; 4) Agricultural Uses; 5) Landscape Uses is further classified (see Attachment 3)

Table 1: Summary of Water Use Priorities in Eastern Water Law States

State	Statutory or Regulatory Provisions that Establish Water Use Priorities
Georgia	Georgia has developed a water use classification system. "Older" established water use and farm water use are given preference. In the event of a water shortage, human consumption is given first priority and farm water use is given second priority.
Illinois	Illinois state law gives preference to the domestic use of water.
Indiana	Owners of small capacity water wells are protected against the impacts of high capacity ground-water pumpage if it substantially lowers water levels, resulting in the failure of a small capacity well. A high capacity well (significant ground water withdrawal facility) is defined in the statute as "the ground water withdrawal facility of a person that, in the aggregate from all sources and by all methods, has the capability of withdrawing at least one hundred thousand (100,000) gallons of ground water in one (1) day". A small capacity well (nonsignificant ground water withdrawal facility) has less than 100,000 gallon-per-day pumping capability.

Table 1: Summary of Water Use Priorities in Eastern Water Law States

State	Statutory or Regulatory Provisions that Establish Water Use Priorities
Iowa	<p>Iowa has developed a hierarchy of water uses when there is a shortage. Water use priorities are listed below from lowest priority to highest priority:</p> <ul style="list-style-type: none"> a. Water conveyed across state boundaries. b. Uses of water primarily for recreational or aesthetic purposes. c. Uses of water for the irrigation of hay, corn, soybeans, oats, grain sorghum or wheat. d. Uses of water for the irrigation of crops other than hay, corn, soybeans, oats, grain sorghum or wheat. e. Uses of water for manufacturing or other industrial processes. f. Uses of water for generation of electrical power for public consumption. g. Uses of water for livestock production. h. Uses of water for human consumption and sanitation supplied by rural water districts, municipal water systems, or other public water supplies as defined in section 455B.171. i. Uses of water for human consumption and sanitation supplied by a private water supply as defined in section 455B.171.

Table 1: Summary of Water Use Priorities in Eastern Water Law States

State	Statutory or Regulatory Provisions that Establish Water Use Priorities
Kentucky	<p>Kentucky requires that entities withdrawing more than 10,000 gallons per day obtain a water withdrawal permit. The permit may restrict water usage to protect the environmental or other water users. However, Kentucky exempts the following water users from the obligation to obtain a water withdrawal permit - essentially establishing these as priority water uses:</p> <ol style="list-style-type: none"> 1) Water used for domestic purposes (needs for one household); 2) Water used for agriculture; 3) Water used in the production of electricity by steam generating plants of companies whose retail rates are regulated by the Kentucky Public Service Commission or for which facilities a certificate of environmental compatibility from such commission is required by law; or 4) Water used for injection underground in conjunction with operations for the production of oil and gas.
Maine	Maine has established statutory preference for protecting beneficial domestic uses of water.
Maryland	During a water emergency, preference is given to (1) domestic and municipal uses; (2) agriculture uses; and (3) other uses. Also, new withdrawals may not impact existing withdrawals.
Massachusetts	Preference is based on the use of a water withdrawal, date a water use was established and availability of requested quantity in a river basin.
Michigan	None identified

Table 1: Summary of Water Use Priorities in Eastern Water Law States

State	Statutory or Regulatory Provisions that Establish Water Use Priorities
Minnesota	<p>1) First priority, domestic water supply, excluding industrial and commercial uses of municipal water supply, and use for power production;</p> <p>2) Second priority, a use of water that involves consumption of less than 10,000 gallons of water per day;</p> <p>3) Third priority, agricultural irrigation, and processing of agricultural products involving consumption in excess of 10,000 gallons per day;</p> <p>4) Fourth priority, power production in excess of the use provided for in the contingency plan developed under section <u>103G.285</u>, subdivision 6;</p> <p>5) Fifth priority, uses, other than agricultural irrigation, processing of agricultural products, and power production, involving consumption in excess of 10,000 gallons per day; and</p> <p>6) Sixth priority, nonessential uses.</p> <p>Grandfathered water users with a higher water use priority is protected from impacts associated with new uses of water.</p>
Mississippi	<p>1. Public Supply [including municipal supplies, rural water systems, private water systems, private wells, and institutional uses (such as schools, churches, and military bases)]</p> <p>2. Industrial/Commercial (Including Agricultural and Commercial Livestock Uses)</p> <p>3. Enhancement of Wildlife Habitat and Other Recreational Uses</p> <p>4. Other Uses</p>
Missouri	None identified
New Jersey	A hierarchy has not been developed, but the Commissioner has authority to develop one if a water supply shortage exists.
New York	None identified

Table 1: Summary of Water Use Priorities in Eastern Water Law States

State	Statutory or Regulatory Provisions that Establish Water Use Priorities
North Carolina	None identified
Ohio	None identified
Pennsylvania	None identified
Rhode Island	Rhode Island currently prioritizes agriculture water use. However, a Subcommittee has developed a white paper that proposes enhancements to the state's water use prioritization system
Tennessee	None identified
Wisconsin	None identified
Vermont	None identified

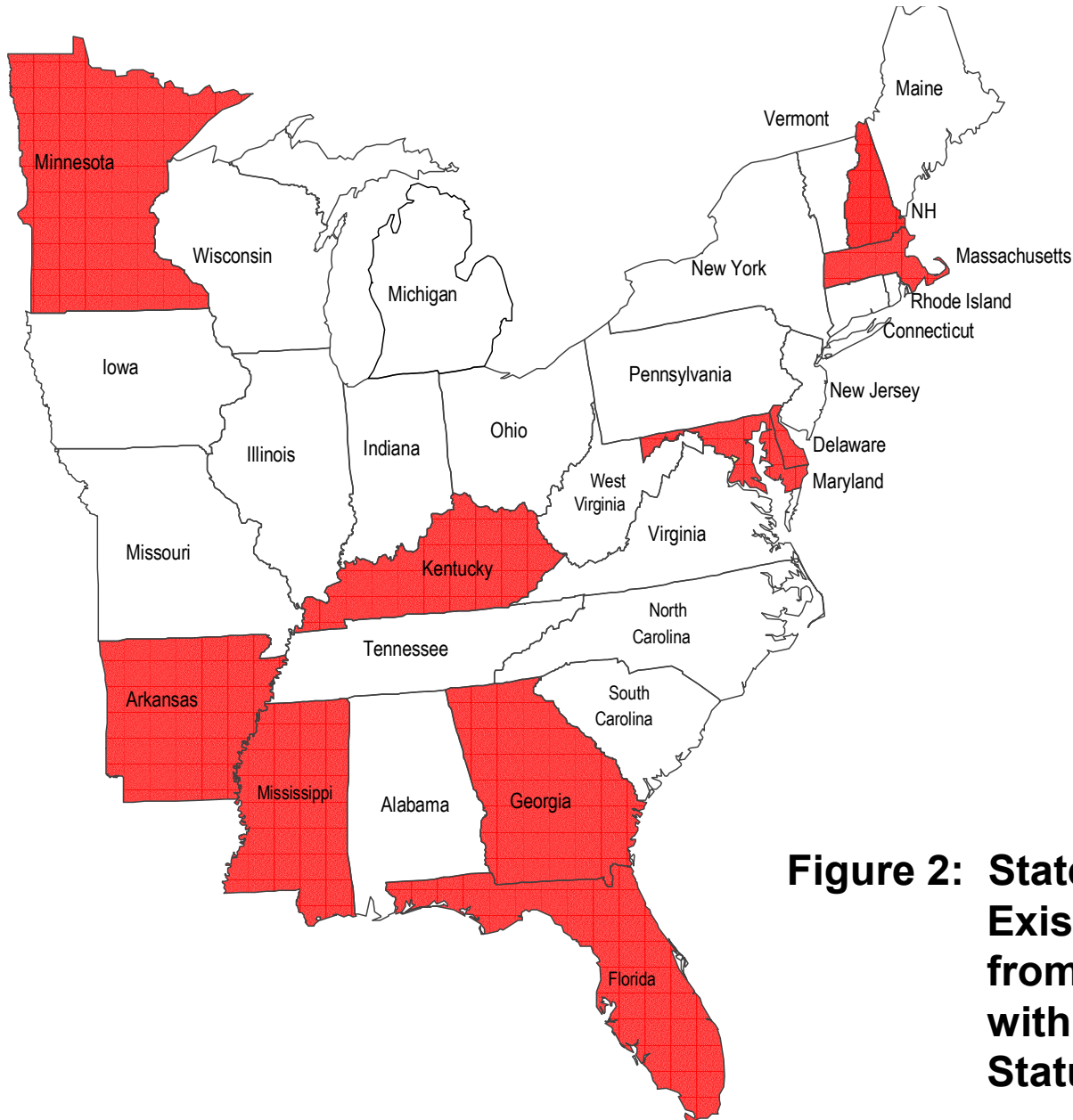


Figure 2: States that Protect Existing Water Uses from Impacts Associated with New Water Uses in Statutory Law

Item 2) Review the existing Drought Management Plan to determine if it establishes an appropriate hierarchy in times of temporary scarcity/ drought? If not, what should the hierarchy be?

The New Hampshire Drought Management Plan was developed in 1990 and has not been updated since that time. The document does not establish a water use hierarchy of any kind. Rather, the plan provides information for classifying the duration and severity of drought as well as recommended conservation measures that can be implemented. Notwithstanding any changes in state law, only the Governor, by declaring a state-of-emergency, could establish a hierarchy of water users if a water supply emergency existed.

Item 3) Does there need to be a hierarchy of groundwater users for any other purposes (e.g. reserving available water for specific uses in permitting decisions etc?) If so, what should it be and how should it be applied?

This document presents two approaches for forming a hierarchy of groundwater water users. It does not prescribe a groundwater-use hierarchy. Both approaches presume application to water supply emergencies arising from events such as droughts or infrastructure failures. The approaches are not designed to reserve water resources for future uses or make long-term water use management decisions based on the merits of a given water use. The Subcommittee understands that the concept of reserving water for future uses is much more complex and that other efforts are underway pursuant to HB 1609-Pilot Groundwater Management Plan to assess this concept. Furthermore, the Subcommittee recognizes that recently adopted legislation, HB 1353, requires the Groundwater Commission to study how to include consideration of "public benefit" in water withdrawal permitting decisions.

The Subcommittee believes that approaches for establishing a hierarchy of groundwater users developed by the Subcommittee lays out criteria and consideration for later use by policymakers, be it municipalities or the Governor's office for applying a water use hierarchy

when a water supply emergency exists. The goal of the Subcommittee was to develop approaches for establishing water use hierarchies that are: 1) Justifiable based on sound technical data; 2) Legally and scientifically justifiable and nondiscriminatory; and 3) Necessary to protect the public water resources. The Subcommittee found that sufficient data does not exist to fully administer a water use hierarchy in New Hampshire that meet these criteria. Accordingly, a simple list of water use hierarchies (by actual water user or water use category) is not presented in this document. Attachment 2 of this document lists the data that would be required to begin to more definitively develop a specific water use hierarchy list.

The approaches for establishing a hierarchy of groundwater users developed by the Subcommittee are:

Approach 1: Water use priority as determined by evaluating the relative: 1) Importance of the type of water use; 2) Effect of the water use on the hydrologic system; 3) Need for and efficiency of the water use; and 4) Magnitude of the water use.

Approach 2: Water use priority as determined by a point ranking schedule that establishes tiers of the hierarchy based on water use type, environmental conservation practices and impact on the local water budget.

In completing its work, the Subcommittee identified the following as the most important outcomes associated with the use of water (not listed in priority):

- Protection of Human Health and Safety
- Economic Prosperity
- Environmental Quality
- Quality of Human Life
- Food Supply

The Subcommittee agreed that water uses associated with meeting drinking water, health and sanitation needs are always the highest priority and that for community water systems, the

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amount of water used to directly meet drinking water, health, or sanitation would be the highest priority. The Subcommittee also identified a number of attributes associated with an activity or entity using water as being important to consider when forming a water use hierarchy. These attributes describe the measures that are being implemented to improve overall water availability and can help mitigate shortages in drought include (not in order of priority) and are summarized as follows:

- Is all the water to be used essential for public health (i.e. drinking water consumption, reasonable bathing, medical requirements and sanitation)?
- Has water use efficiency been maximized by the user (based on water conservation measures specified in Env-Ws 390)?
- Is there no other available alternative water supply for this purpose that is more abundant/protected/safe? Has the water user diversified its water supplies to prepare for droughts?
- Is the water use nonconsumptive? Does the water use result in significant water being returned to the same hydrologic system in close proximity to the source that it is withdrawn from?
- Is the water use a non discretionary consumptive water use of less than 10,000 gallons per day for water uses other than uses associated with public health?
- Does the user utilize lower quality water over a higher quality as much as possible?
- What is the public benefit associated with the water use in terms of employment or state economic impact?
- What concessions or mitigation measures has a water user implemented to assist with mitigating the water supply emergency?

- How does the water user impact stormwater and wastewater within the aquifer and watershed? Are these resources being maintained in a sustainable manner?

The Subcommittee considered the goals and attributes of utilizing water in developing the two hierarchy approaches below. The Subcommittee also recognized that it would only be practical to apply a hierarchy to water uses that meet a minimum volumetric use threshold. The two water use hierarchy approaches developed by the Subcommittee reflect these considerations.

APPROACH 1 - WATER USE PRIORITY AS DETERMINED BY EVALUATING THE RELATIVE: 1) IMPORTANCE OF THE TYPE OF WATER USE; 2) EFFECT OF THE WATER USE ON THE HYDROLOGIC SYSTEM; 3) NEED FOR AND THE EFFICIENCY OF THE WATER USE; AND 4) MAGNITUDE OF THE WATER USE

Approach 1 develops a prioritized list of issues that should be considered by the authority responsible for implementing a water user hierarchy. Approach 1 could be used as guidance by the authority to make water use priority decisions when a water supply emergency exists. Approach 1 ensures that water uses required to protect the public health are the highest priority.

Water users potentially subject to the criteria considered for determining a water user hierarchy would be required to submit Water Use Plans to the State by a specified deadline to document the characteristics of their water use. This information would then be available in the event a water supply shortage exists. Water users that do not submit a water use plan would be ranked at the bottom of the hierarchy. A water user could make improvements to raise its water use priority ranking and resubmit its Water Use Plan. The list of priorities ranked from highest to lowest are shown below:

- a. Water needed to maintain human health (i.e. drinking water, reasonable bathing, medical requirements and sanitation) with an aggregate number for a water system derived by applying some kind of multiplier on population/households served.

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- b. Any nonconsumptive uses of water (Nonconsumptive use means: 1) Water is diverted and returned immediately to the source at the point of extraction in the same quantity as extracted; and 2) Either water quality remains substantially unchanged or the water meets ambient groundwater quality standards.)
- c. Non discretionary consumptive water uses of less than 10,000 gallons per day for water uses other than described in (a) above. (Non discretionary water use is water use that is a necessity to maintain health, life, sanitation or basic business operations. It does not consider luxury water uses or water uses associated with enhancing aesthetics even if that may enhance business)
- d. Consumptive water use essential for food production using efficient water use practices as described by state water conservation standards – This category accounts for the water needed at critical crop growing periods to ensure basic food commodity crops can be cultivated. It is also meant to account for water needed to maintain the life of livestock. This category does not include nontraditional agriculture activities (ornamental fruits & vegetables, turf grass) or crops that cannot be normally be cultivated in NH without the substantial use of irrigation under average precipitation conditions.
- e. Water use for Businesses with a Public Benefit, Non Traditional Agricultural Operations and Water Required for the Environment and Habitat Protection (equal ranking):
 - 1. Water that is essential for a particular ecosystem (including habitat protection for fauna or flora), taking into account ecological tolerance for short-term or single-year drought conditions.
 - 2. Water that is essential for a business with a public benefit as determined by a ratio of economic benefit versus water use (alternatively “public benefit” could be determined in a time of shortage by the Governor by Water Council and/or

Commissioners of DES, DRED, and Dept of Ag) - This category would only include the volume of water used under the assumption that state of the art water conservation practices are being applied - The business would also have to show there are no viable storage options or alternative off-site sources of water available for use (for example, a bottled water facility could use off-site sources of water).

- f. Household, business and other discretionary and inefficient water uses - Inefficient water uses would include outdoor uses of water not listed above and not meeting the minimum conservation measures set forth in state water conservation regulations Env-Ws 390.

APPROACH 2: WATER USE PRIORITY AS DETERMINED BY A RANKING SCHEDULE BASED ON WATER USE TYPE, ENVIRONMENTAL CONSERVATION PRACTICES AND IMPACT ON THE LOCAL WATER BUDGET

Approach 2 combines concepts contained in Approach 1 and applies a point ranking system to determine a priority of water users. Each entity using more than 10,000 gallons a day of water would need to complete a water use plan by a specified time period. Users not completing the plan would have the lowest priority. The water use point ranking schedule would be used to develop different tiers of water use hierarchies. The proposed point ranking schedule is shown in Table 2, below.

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Table 2: Water Use Hierarchy Ranking Schedule

For all water users that exceed 10,000 gallons a day of water use (including customers of community water systems) with some consumptive water use, provide answers to the following questions.

Ranking Criteria		Points
	Life Sustaining/Human Health (drinking and sanitation)	40
a	Is all the water to be used essential for public health? Community water systems shall enter 40 points. Individual customers of community water systems that use more than 10,000 gallons per day shall be evaluated separately	0-40 Based on percentage of water that is used for hydration, reasonable sanitation or other specific health need.
	Environmental Considerations	30
b	Does the water use result in significant water being returned to a substantially the same are of the source that it is withdrawn from?	0-12 based on the percentage of water that is used that is returned to the same aquifer.
c	How does the water user impact stormwater within the aquifer. Is this resource being managed to optimize the recharge of stormwater to groundwater when appropriate?	0-4 based on the degree of stormwater management processes that have been implemented to maximize recharge where appropriate at the facility.
d	What concessions or mitigation measures has a water user implemented to assist with mitigating the water supply emergency? (timing of use, diversification of supply sources, voluntary reductions in water use)	0-7 based on the degree a water user has substantially modified its processes in response to a water supply shortage.
e	Has water use efficiency been maximized by the user?	0-7 based on the degree a water user is implementing water conservation activities as described in Env-Ws 390
	Economic Value	30
f	How many employees does the business employ?	0-15 determined by the ratio of water use to the number of full time equivalent workers whose jobs are tied to the water use
g	What is the direct monetary contribution to state or municipal taxes or fees associated with the water use activity	0-5 determined by the ratio of water use to the amount of revenue that is directly paid to the state.
h	Unless water is use is allowed, the viability of a business activity or agricultural activity may be permanently damaged.	0-10 determined by the degree of irreversible damage that may occur if water use is restricted or not allowed.

ATTACHMENT 1

Actions that Can Be Taken By a Water User to Be Prepared to Mitigate the Effect of Water Shortages

- 1) Demand Reduction/Water Conservation** - Experience has shown that it is possible to reduce water demand by 10%-40% by implementing water conservation measures. Where water is being used to grow grass for aesthetic purposes only, there is an opportunity to conserve 100% of the water that is used. Extensive resources are available for practically every type of water use to assist with identifying and implementing water conservation measures. Reducing the amount of water that is required by a particular water user would assist with abating a water supply shortage as well as reduce the susceptibility of a given water user to any mandatory reductions in use.
- 2) Develop and Utilize Water Storage Structures** - Water users may develop large or small scale water storage structures ranging from holding ponds to tanks. Large water storage structures could be designed to store many millions of gallons of water that could be used when a water scarcity exists and filled when water supply is adequate. Smaller storage structures that hold generally less than a million gallons of water could be used to dampen maximum withdrawal rates during discrete periods of time when water use is peaking and a water supply shortage is occurring.
- 3) Water Shortage Contingency Plans** - All water users, including water systems, businesses, agriculture, and residents with private water supply wells, need to understand that droughts and other water supply emergencies do occur in New Hampshire. Contingency plans, insurance, financial resources, financial planning and mutual aid agreements need to be established to effectively cope with the effects of water supply shortages.
- 4) Interconnect with Other Water Users** - In some instances, water users may benefit from interconnecting with one another and coordinating in the use of multiple water resources to lessen the impact of water supply shortages on both the users and the environment.

- 5) Diversify the Type and Location of Water Sources** - A water user that develops water sources distributed over a broad area will be less constrained by the sustainable yield/competing water uses at a particular point in a watershed or aquifer. Water users that develop different types of water sources will also be more insulated from the effects of a water supply shortage. For instance, water storage reservoirs, rivers, wells constructed in sand and gravel aquifers, and wells constructed in bedrock aquifers would likely not all be impacted at the same time or to the same extent when a drought occurs. Diversifying the type and location of water supply sources also would lessen the susceptibility of a water user to a single contamination event.
- 6) Reactivate Previously Abandoned Water Sources** - Occasionally sources have been abandoned due to water quality issues or high costs associated with operating and maintaining a particular water source. Improvements in water treatment technology or the risks associated with being impacted by a water supply scarcity may make the reactivation of sources previously abandoned prudent or more feasible.
- 7) Identification and Development of Strategies to Access Alternative Supplies** - Potential alternative sources of water can be identified and strategies developed to access those supplies in a time of shortage. For instance, there are numerous examples where water systems utilized water from emergency sources such as a surface water body or wells not previously connected to a water system to abate a water supply shortage. Other users have developed plans to lower water reservoir intakes to gain access to additional water stored within the reservoir.

ATTACHMENT 2

DATA NEEDS TO IMPLEMENT A HIERARCHY OF WATER USERS DURING A WATER SUPPLY SHORTAGE

Criteria for Determining When and Where a Hierarchy of Water Users Should be Implemented - It is assumed that a hierarchy would be triggered when a specific water resource becomes diminished and is no longer able to support existing uses.

If the purpose of the water use hierarchy is to protect organisms on a site specific basis during periods of extreme low flows, an extensive list of hydrologic data will be required to complete the resource evaluation and trigger the implementation of a hierarchy. If the purpose of the hierarchy is to protect organisms in a more generalized manner, the drought emergency or drought disaster criteria in the drought management plan could be utilized.

Information required to implement a hierarchy of water users is listed below. Currently the state identifies water users that withdrawal, transfer or discharge more than 20,000 gallons/day. This is accomplished by enforcing the water use registration and reporting program requirements of RSA 488. Enforcement of the program initiated one year ago and consists of part of one staff person's time. Much of the information listed below can be captured by implementing the requirements of RSA 488. Although data has been collected for twenty years, much of the water user information and use data historically was not verified. Verification of the data is ongoing and likely will be substantially complete in five years. *The information listed in italics below identifies data that currently is not collected by DES at this time.*

- a) *Identification of water users with sources utilizing more than 10,000 gallons/day. (RSA 488 authorizes DES to only track water users with sources utilizing more than 20,000 gallons/day)*
- b) Need for the withdrawal - A detailed explanation of the need for the water

c) Description of withdrawal

- Amount of the withdrawal including typical withdrawal patterns over seasonal, monthly and daily cycles
- Location of water source
- Type of water source
- Destination of water that is used
- Users and facilities related to the water withdrawn
- Population served and category of customers served (if applicable)
- *Alternative Sources of Water*
- *Water storage*

d) Water Use characteristics

- *Water conservation measures implemented by the user*
- Volume of water use that is consumptive and nonconsumptive
- *Is the water use discretionary (does it impact the public health or directly change the financial viability of a user)?*
- *Are lower quality water sources used over higher quality as much as possible?*
- *Concessions or mitigation measures a water user implements to assist with mitigating a water supply emergency*
- *How much of the water use is needed to maintain human health (i.e. drinking water, reasonable bathing, medical requirements and sanitation)?*

e) Other Considerations

- *Public benefit associated with the water use in terms of economic impact*
- *How does the water user impact stormwater and wastewater within the aquifer and watershed?*
- *Is the water use directly affecting the habitat of organisms?*
- *Is the water use directly impacting rare or endangered organism*

Attachment 4 - Issue 6 Report
Recommended Private Well Sampling Requirements

New Hampshire Private Well Working Group
Report and Recommendation to the Groundwater Commission
September 16, 2009

The Private Well Working Group was convened in October 2007 by N.H. Department of Environmental Services as part of the process of revising the department's Source Water Protection Strategy. The Working Group includes a member of the SB 155 Groundwater Commission, and the Commission has expressed interest in private well questions under Issue 5, Protecting Groundwater Quality to Ensure Availability. Therefore, the recommendation in this document is directed to the Groundwater Commission, since it involves legislative changes.

The Private Well Issue

The purpose of New Hampshire's Safe Drinking Water Act is "to provide a comprehensive drinking water protection program for the citizens of New Hampshire." However, at present the statute deals only with the oversight of *public* water systems. Approximately 40 percent of New Hampshire residents rely on private wells for domestic water supply. If the water from these wells is not tested and properly treated, private wells represent a risk to public health. An estimated 20 percent of wells in the state have arsenic above the drinking water standard; in some areas it is as high as one in two wells. An estimated 33 percent of wells statewide exceed the proposed federal standard for radon, and smaller percentages exceed other health-based drinking water standards, which apply to public water systems but not to private wells.¹ Without testing for the appropriate parameters, homeowners are unable to make informed decisions about consuming water from their private wells. Approximately three percent of newly drilled wells also have insufficient yield to support normal household use. Experience in the sanitation field indicates that inadequate water supply is a health concern, since the use of alternate water supplies often involves the transport of water in containers that carry a risk of introducing microbial contaminants.

¹ For further explanation, please see Private Well Working Group White Paper, rev. August 2009 and Estimated Percentages of Private Water Supply Wells Exceeding Contaminant Limits, rev. 7/15/2009

The Process

The Working Group met twice, in October 2007 and March 2008. At its first meeting the Working Group reviewed the nature of the problem (40 percent of N.H. residents using private wells; 20 percent of those with arsenic exceeding the drinking water standard; many others with radon issues), existing programs (Water Well Board, Private Well Initiative outreach, Plumbing Code, the handful of towns with private well testing requirements), issues with the household water treatment industry, and the DES private well testing recommendations incorporated into its outreach materials. The consensus from that meeting was that there is a need to better address the public health issue and that a white paper would be helpful to document the problem(s) and to identify and analyze the policy options.

The white paper, completed in February 2008, was the focus of discussion at the second meeting of the Working Group on March 19, 2008. The white paper summarized the background information including existing programs and gaps, and described seven policy options. **At that meeting, a majority of Working Group members voted to adopt policy option B, requiring testing and disclosure to a prospective buyer at real estate transfer.** Testing would be modeled after the DES Laboratory's Standard Analysis plus radon and gross alpha, which together cost \$165 at the DES Lab (\$174 - \$240 at private labs); VOC and/or beryllium testing would be *recommended* under certain circumstances. Disclosure of available well yield information would also be required. Two people were opposed to mandatory testing and disclosure: representatives of the Home Builders and Remodelers Association (NHHBRA) and the N.H. Association of Realtors (NHAR). Their objections: it would slow real estate transactions, would hurt home sellers, and would not benefit public health because home buyers tend to pocket any reduction in price negotiated on the basis of an unfavorable water test, rather than installing treatment.

The second major policy option discussed at the March 19, 2008 Working Group meeting was a **testing requirement for new drinking water wells.** There was general support for this idea (with the exception of the HBRANH representative; the Realtor was not present), but the well drillers representatives asked to delay a vote until this had been discussed with the Water Well Board and the Water Well Association.

Since the second meeting of the Working Group, the Water Well Board and the Water Well Association met and were generally supportive of a testing requirement for new wells, but they have a number of concerns that would need to be addressed when and if legislation were to be

crafted (see Remaining Issues).

Finally, drafts of this document, the white paper, and supporting documents were circulated during May and June of 2009 among Working Group members, and revisions were made to reflect the sense of the Working Group and to clarify certain background information. The revised documents (this document, the white paper, and others) were circulated among Working Group members once more during June-July 2009 before being finalized.

Recommendations

*After careful study, the Private Well Working Group recommends that the legislature amend the Safe Drinking Water Act to require testing of water supplied by **new** private water supply wells (in connection with the drilling of new wells and the deepening of existing wells).*

A majority of the Working Group's members also recommend that the testing of private wells and disclosure of test results be required prior to the transfer of real estate. Disclosure should also include available well yield information. The N.H. Association of Realtors and the Home Builders and Remodelers Association of N.H. both object to this recommendation, due to their concerns about the effect such a requirement would have on the process of closing home sales, although they do support the overall goal of ensuring safe drinking water for users of private wells. (Please see attached letters.)

Remaining Issues

A number of issues remain that would need to be addressed if the Groundwater Commission were to move ahead with crafting legislation to implement the Working Group's recommendation:

- A number of working group members support a requirement that private well testing data be reported to a state agency. This would greatly improve understanding of the geographic distribution of bedrock well water quality in New Hampshire but would require personnel and resources to implement. A suggestion was also made to designate a voluntary organization to maintain such a database.
- A number of working group members felt that testing and disclosure alone would not be sufficiently protective of public health, and favor some requirement to treat water where indicated, in order to address some or all contaminants of concern.
- Who should be responsible for taking water samples and bringing them to a laboratory, while (1) ensuring the integrity of the testing and disclosure process and (2) avoiding

- unnecessary delays in the process of obtaining a certificate of occupancy (CO) where the municipality chooses to take the test results into account in the issuance of a CO?
- Determining an appropriate sampling point, e.g., after the pressure tank.
 - The health-based standards for radon are confusing, and better materials would need to be developed to help homeowners make sense of water test results.
 - Should the private well testing requirement include additional water quality parameters whose bearing on health are secondary in nature but provide scientific information regarding the occurrence, fate, and transport of other more dangerous natural contaminants?
 - How to ensure that well testing results are conveyed to the homeowner or prospective home buyer in a way that makes it clear that the well driller is not responsible for groundwater quality.
 - Possible requirements for retesting in the event that bacteria is detected.
 - Whether to address the vagueness of the Plumbing Code with respect to water quality. The Plumbing Code states that only potable water sources may be connected to domestic plumbing systems. "Potable" is defined in the Code with reference to "regulations of the public health authority having jurisdiction." The sense among the Working Group is that defining "potable" in terms of specific contaminants and contaminant limits would create a testing requirement for new wells and also create a *treatment requirement* for new wells whose raw water did not meet the standards. The Plumbing Code could be a useful avenue for a testing and disclosure requirement for new wells (although not by defining "potable"), but the Working Group felt that a clear legislative mandate would be appropriate.

Respectfully submitted,

Paul Susca
NHDES Drinking Water and Groundwater Bureau

for the Private Well Working Group

Members of the Private Well Working Group

Name	Affiliation
Joseph Ayotte	US Geological Survey
Patricia Bickford	NHDES Laboratory
Christine Bowman	NHDES-Drinking Water Source Protection Program
Bruce Buttrick	Code Enf. Officer/Building Inspector, Town of Bow
Kendall Buck	Home Builders and Remodelers Assoc. of N.H.
Bart Cushing	N.H. Water Well Board
Patricia Debeer	Fremont Conservation Commission
Tedd Evans	N.H. Plumbing Board
Sherry Godlewski	NHDES Environmental Health Program
Glenn Greenwood	Rockingham Planning Commission
Louise Merchant Hannan	NHDHHS Health Officer Liaison
Eugene Heighton	HERTC
Tal Hubbard	NHDES Waste Division
Brandon Kernen	NHDES-Drinking Water Source Protection Program
Brian Lockard	Health Officer Association
Bernie Lucey	NHDES Drinking Water and Groundwater Bureau
Paul Morin	Home Builders & Remodelers Association of NH
Jack Munn	Southern NH Regional Planning Commission
Julia Peterson	N.H. Sea Grant and UNH Cooperative Extension
Bob Quinn	N.H. Association of Realtors
Keith Robinson	US Geological Survey
Rick Schofield	Water Well Board
Roger Skillings	Skillings & Sons
Paul Sullivan	Home Builders and Remodelers Assoc. of N.H.
Paul Susca	NHDES-Drinking Water Source Protection Program
Terry Swain	Capital Well Co., Inc.
David Wunsch	N.H. Geological Survey

August 21, 2009

Paul Susca
Drinking Water and Groundwater Bureau
NH Department of Environmental Services
Hazen Drive
Concord, NH 03301

Dear Paul,

As a participant in N.H. Private Well Working Group(PWWG), the New Hampshire Association of REALTORS has concerns with the final recommendations which would require testing of wells prior to the transfer of real estate.

While the NHAR supports the overall goal of ensuring safe drinking water to homeowners who rely on well water, the point-of-sale mandate is not clearly defined and could lead to unnecessary and costly delays in the transfer of property. Any proposed legislative efforts are premature until details of the testing process are clarified and demonstrated to have a negligible impact on the right of homeowners to transfer property.

The NH Association of REALTORS commends you and all the members of the PWWG for your diligence and commitment to ensuring safe drinking water to homeowners.

Best regards,

Jeff Keeler

NH Association of REALTORS
Chair, Public Policy Committee



Home Builders & Remodelers Association of New Hampshire

"Building New Hampshire's Future"

The Housing Center • 119 Airport Road • Concord, New Hampshire 03301
603-228-0351 • F: 603-228-1877 • E: info@hbranh.com • W: www.hbranh.com

September 10, 2009

OFFICERS

Mark A. Pederzini,
GMB, CAPS, CGB, CGP
President

Merritt Peasley
First Vice President

Roger Demanche, CGB, CGP
Vice President/Treasurer

Bruce Sullivan
Vice President/Secretary

Jim Ingram
Vice President of Associates

Mark Flanders, GMB, CGR, CGP
National Director

Ron Robichaud
NAHB State Representative

Dianne Beaton, CGA, CAPS
Associate National Director

Roger Bouchard, GMB, CGB, CAPS, CGP
Immediate Past President

Kendall Buck, CAE
Executive Vice President

Dave Bowman
Director of Member Services

Sharon Wayman
Accounting Manager

Denise Mikels
Administrative Assistant

Paul A. Susca
NHDES Drinking Water and Groundwater Bureau
Hazen Drive
Concord, NH 03301

Mr. Susca,

The Home Builders and Remodelers Association of New Hampshire was pleased to participate in the Private Well Working Group and support the effort for a comprehensive drinking water protection program. We must, however, concur with the New Hampshire Association of REALTORS and object to the recommendation to require testing and disclosure to all potential buyers prior to any real estate transfer that involves a private well.

The Association encourages all home builders to test and disclose water quality in new wells to potential buyers and custom home clients and does not object to recommendations to the NH Legislature to consider the requirement of testing certain parameters of such wells. Naturally, that endorsement is dependent upon which parameters are to be tested and what, if any, consequences may ensue.

Our concerns for the testing of existing wells, as recommended in the report draft, are for the chilling effect that it may cause on the closing of home sales which are often an integral part of the new home buying process and the shift of responsibility to the seller that is normally born by the buyer as part of his/her due diligence.

We appreciate the efforts of the Private Well Working Group and particularly your dedication to including all points of view in the work product. We hope that our support of the overall effort and our objection to this particular recommendation will be noted in the final version of the document.

Sincerely yours,

Mark Pederzini, GMB, CAPS, CGB, CGP
President



Attachment 5 - HB 1353 Subcommittee Report

***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,
Laws of 2003 and Chapter 136, Laws of 2005***

November 4, 2009

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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 intervenor 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 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.

Attachment 6 - Recommended Amendments to RSA 485-C

Proposed Amendments to Address Short-term Withdrawals, Open-Loop Geothermal Withdrawals and Emergency Withdrawals

The current statute does not contain provisions to allow for short-term, emergency or open-loop groundwater withdrawals for geothermal processes. The amendments proposed below address this.

These amendments are being proposed to address gaps in the existing statutes, as well as to be responsive to comments received from the public when the large groundwater withdrawal rules were re-adopted in October 2009.

Specifically, the amendments would allow:

- 1) A temporary, short-term (less than one year) large groundwater withdrawal for purposes such as construction dewatering without obtaining a permit from the department. The department could order a temporary, short duration withdrawal to cease and desist if unmitigated adverse impacts occurred.
- 2) The department to approve an emergency withdrawal for use up to a two year period. The water user would have to apply for and be granted a large groundwater withdrawal permit to operate the withdrawal for more than two years. The department would have authority to require appropriate monitoring, reporting and mitigation measures be implemented. The proposed language allows for any party to appeal the reasonableness of the Department's approval. (See proposed RSA 485-C:23, below)
- 3) Exempts open-loop geothermal systems from obtaining a large groundwater withdrawal permit if no more than 57,600 gallons of water is displaced from a given aquifer over any 24-hour period.(see proposed RSA 485-C:25, below).

Section 485-C:2

485-C:2 Definitions. – In this chapter:

VIII. ""Groundwater" means subsurface water that occurs beneath the water table in soils and geologic formations.

IX-a. ""Large groundwater withdrawal" means any withdrawal from groundwater of 57,600 gallons or more of water in any 24-hour period at a single property or place of business, except **withdrawals associated with short-term use.**

XIII-a. ""Replacement well" means a new well installed to replace or back-up an existing well that operates and impacts water users and water resources in substantially the same manner as the well that is being replaced.

XIII-b. ""Short-term Use" means the temporary, non-seasonal withdrawal of groundwater at a specific geographical location over a period of one year or less, except for contaminated site remediation where the duration of the withdrawal may exceed one year and corresponds with the objectives of the remediation.

Alternative Definition

XIII-b. "Short-term Use" means the temporary, non-seasonal withdrawal of groundwater from any well or wells at a single property or place of business over a period of one year or less except for contaminated site remediation where the duration of the withdrawal may exceed one year and corresponds with the objectives of the remediation. Short-term use shall include withdrawals associated with construction

dewatering, hydrogeological studies, or the use of a groundwater source to provide water for a specific need that cannot be reasonably anticipated to re-occur.

XVII. "Well" means a hole or shaft sunk into the earth to observe, sample, or withdraw groundwater.

XIX. "Zone of contribution" means the subsurface volume from which groundwater flow is drawn to a pumping well.

485-C:23 Temporary Exemptions for Large Groundwater Withdrawals required for Emergency Purposes

I. The department may approve a new large groundwater withdrawal without complying with the approval requirements of RSA 485-C:4, RSA 485-C:14, RSA 485-C:21 or RSA 485-C:22 to protect human health and the environment in the event that circumstances beyond the control of the person requesting the withdrawal occurs, such as acts of God, fire, flood, drought, infrastructure failure or similar circumstances.

II. A large groundwater withdrawal approved in accordance with paragraph I, above, shall only be allowed to operate for a duration of two years unless it is approved by the Department in accordance with the requirements in RSA 485-C:21 and RSA 485-C:4(c).

III. A withdrawal that the department approves in accordance with paragraph I, above, may not result in an unmitigated impact as described in RSA 485-C:21, V-c. The department shall require that monitoring and mitigation plans be implemented when necessary to identify and mitigate the occurrence of these impacts.

IV. Any party shall have the right to appeal from the decision of the department to approve a withdrawal in accordance with paragraph I to the superior court of the county in which the large groundwater withdrawal is to be made to determine the validity and the reasonableness of the department's action. The appeal shall be filed within 60 days after the approval of the department.

485-C:24 Short-term Use Large Groundwater Withdrawals

The Department shall require a short-term use large groundwater withdrawal to cease and desist if it causes unmitigated impacts as described in RSA 485-C:21, V-c.

RSA 485-C:25 Exemptions for Certain Large Groundwater Withdrawals Associated with Geothermal Processes

A geothermal system as defined by RSA 485 shall not be considered a large groundwater withdrawal if the volume of groundwater extracted minus the volume of water returned to the same aquifer does not exceed 57,600 gallons over any 24-hour period.