New Hampshire Water Sustainability Commission

July 9, 2012 - Public Session
What Needs to be Done to Have Enough Water for Future Generations – A Gathering for People Whose Work and Expertise Depends on Water
Summary Report

August 28, 2012

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Overview of July 9, 2012 Public Session

On the afternoon of July 9th more than 60 people met for three hours to talk about their priorities, concerns and ideas about water in New Hampshire at a public meeting titled "What Needs to be Done to Have Enough Water for Future Generations – A Gathering for People Whose Work and Expertise Depends on Water." Compiled here is a summary of what was offered by the participants.

The New Hampshire Water Sustainability Commission (NHWSC) hosted the event in partnership with NH Listens of the Carsey Institute at the University of New Hampshire. The goal of the event was to create a venue for people whose work or business depends on water and to take advantage of new knowledge and relationships that can come from mixing cross sector interests on the topic of water.

Outreach for the event was conducted through email and personal contact by the Commission members, a list provided by the Department of Environmental Services, the Commission's outreach list and the Business and Industry Association. More than 65 people registered in advance and, in the end, more than 60 people attended as participants (excluding facilitators and Commissioners). The mix of participants was rich across sectors of public, private and civic interests including: private property owners, public water system operators, water professionals such as wetlands scientists, irrigation specialists, etc.; individuals representing public agencies, municipalities, businesses, academia, and not-for-profits such as lake, river and watershed organizations. An overview of the process is incorporated into the discussion guide that is attached as an appendix to this report. All views and perspectives were recorded and integrated into this summary report. Conversations such as this one help and are intended to augment (not replace) the traditional forms of government and policy-making. This summary will be posted at http://www.nh.gov/water-sustainability/

Following the exploration of background information on water in New Hampshire, participants were asked to focus on key issues and recommendations. This is where they spent the majority of their time in conversation. The findings are a compilation of the data gathered from the notes and oral report out by each of the six small groups' notes. While there were many themes that were common across several groups, several were common across all groups including:

- Expanding and deepening education and engagement on issues related to water and sustainable management of New Hampshire's water.
- Valuing water.
- Investment in and funding mechanisms for the infrastructures that deliver and support the management of the supply and quality of water.
- Information and data needs required for decision-making to support sustainable management of the state's water.
- Planning and management issues related to watershed management, cooperation and management across political boundaries.

I. Introductions/Positive Impacts/Biggest Challenge

Participants were asked to introduce themselves, to describe some positive impacts related to water, and to offer the biggest challenges to achieving sustainable management of New Hampshire's water. Below is a summary of those comments [Editor's note: The italicized comments are direct quotes that were chosen to best illuminate the overall discussion of a section]:

New Hampshire has a lot of water. We take it for granted.

There is a relationship among municipal, state and federal governments around funding for water. The biggest challenge is the many funding cuts.

We have solid data concerning water in some areas. The challenge is that we have data gaps, and the data are not easy to access nor fully integrated into decision-making.

We will not know whether the goal is met if we do not know the current state of our water.

We have new technologies to help us manage water sustainably. The challenge is that we are not always up to date in implementing them and applying them. We do not differentiate among water uses (i.e. flushing toilets with drinking-quality water). ***There is no such thing as wastewater.***

Many New Hampshire residents have a growing awareness about the value of water, extreme weather events and the water challenges they produce, and the relationship between local land use decisions and water protection. The challenge is how to broaden and deepen this knowledge and understanding across all sectors and all age groups.

The participants noted a growing understanding that we must learn to work across traditional jurisdictions when it comes to water. The challenge is that there is a lack of consistency among towns in regulations. There is an appreciation for how land use decisions impact watersheds and the need for integrated watershed planning across the state and with the states that border New Hampshire.

The connection between water and the economy was noted in several groups. It was acknowledged that our data about the economic value of New Hampshire's lakes, rivers, ponds, groundwater, etc. needs updating.

Other related comments included:

- We need to understand that surface waters and groundwater are an integrated system.
- We need to balance urbanization with clean water protection.
- Improve water efficiency.
- Who is managing the water and understanding rights to a common resource.
- Impacts to farmers.
- Better definition/permitting for ski area water.
- Lack of data about private well water quality.

II. Review Data Booklet

Participants were given time to read a data booklet prepared by NH Listens and to review the five challenges identified in the booklet to see if these are the major issues for the NHWSC to address:

⇒ Changing patterns of land use and water use.
⇒ Changing precipitation and temperature patterns.
⇒ Aging and inadequate water infrastructure.
⇒ Need to manage water differently in a new era.
⇒ Financial and political limitations.

III. Key Topics

Participants were asked to consider information in the background booklet about the direction of NHWSC, the role of education, and the challenges that they think are important to achieving the goal of sustainably managing our water, and to discuss what they found noteworthy. They offered the following:

We will not know whether the goal is met if we do not know the current state of our water.

Everything that needs to be done needs to be understood by all.

We need to be proactive about our water instead of reactive.

Protecting water is more cost effective than mitigating problems.

A. Water Use, Ownership and Rights

- The interests of the environment and ecological systems need to be factored into decisions about the use of the state's water.
- There needs to be a balancing of individual needs with needs of business, community, etc.
- There needs to be a different legal framework for water and policy clarification across town boundaries.
- Flexible structures need to be designed.
- Decision-making needs to allow for learning and learning from others.

B. Information and Data Needs

- There are real gaps in science-based data for understanding the quality and quantity of New Hampshire's water (for example, aquifer mapping).
- Knowledge is an economic advantage.
- How much water does NH actually have?
- How much actual data do we have about groundwater in the state?
- Should we treat an apparently abundant resource as if it were scarce?

C. Water Economics

Many issues were raised around water as an economic asset. Suggestions included:

- Link economic objectives to management of water
- The potential of marketing water for revenue; and issues related to incentives, true price of water and perverse incentives (some examples of perverse incentives included taxing shorefront owners for establishing buffers and improving the shoreline and taxing public water systems for open land purchased for source water protection.).
- Provide good models of sustainable water practices, such as the lodging industry program to conserve water and the use of tax credits to encourage good water practices.
- Expand public awareness of the true value/cost of water.
- Determine the best use of the water we have.

D. Education and Engagement

- Emphasize education and awareness – For example, we know that when the watershed has more than 10% of its land area covered by impervious surface it leads to water quality and quantity problems.
- Promote concepts around water efficiency as actions that equate with saving money.
- Develop public awareness about the state of our water, both quantity and quality and the water systems we have.
- Design an ad campaign to change individual consciousness and raise awareness that will lead to individual commitments to behavioral change.
- Evaluate the educational methods and a material being used to know what is effective, who is using the material and what do we have for different audiences.
- Address the lack of public understanding of groundwater use in periods of tight water supply-local regulatory process?
- Develop and raise the level of watershed consciousness.

E. Funding Issues

Funding issues related to water were expressed in a variety of ways including:

- Creating an infrastructure reinvestment policy.
- Developing a 'red list' like the Department of Transportation for water to establish priorities
- Creating a financial plan for the real costs of water.
- Resources for infrastructure including monitoring, sharing of water resources, managing water storage.
- Address water reuse.
- Local/regional differences related to infrastructure investment.
- Designing flexible structures and learning from others.

F. Planning and Management of Water

- Foster municipal cooperation.
- Use regional planning commissions more.
- Build watershed planning into all land use decisions.
- Make the best use of water—for example, you do not need to water lawns with treated, drinking-quality water.

G. Other Related Comments

- Impacts of extreme weather events and climate change.
- Specific issues relating to nutrient loading and road salt were raised.
- Septic system monitoring and management to protect water.
- Public health should lead.

IV. Next Steps and Moving Forward

Participants were asked to describe specific steps that are needed to achieve the goal of having enough water that in 25 years is as good as or of better quality than we have today.

Get the word out.

Keep kicking the ball on water priorities. **[in the sense of "keep at it"]**

A. Investment/Funding

- Water infrastructure funding; is it a state problem or a 250-town problem?
- Rate Structure—the more you use the more you pay.
- How to make investment more palatable; do we need to develop funding without federal help?
- Are we considering future conditions?
- We need an Investment strategy for water infrastructure.
- Public investment on natural resource restoration.
- Adequate funding for water management and environmental monitoring agencies.
- Investing in green infrastructure.
- Find funding to build the data on the state's water—what is our water quantity and quality? Need this information to reach goal of sustainable water management.

B. Education and Engagement

- Help people to change their perceptions about the value of water.
- Watershed perspective.
- Get word out that water is serious- Open letter from commissioners, news briefing.
- Better outreach to advance understanding.
- Take action; do not be paralyzed by uncertainty.
- A public awareness campaign like "Got camping New Hampshire".

C. Management Practices

- Erosion and sediment control.
- Regulations that are protective but streamlined.
- Continue existing buffer protection (impacts property rights).

- Assistance to local organizations to build capacity.
- Resources to help locally.
- Coordination among municipalities, the state and other agencies dealing with water.
- Look at examples of regional systems for water.
- Need to heed the science not bow to political pressure.
- Ensuring that ecological needs are clearly articulated and addressed.

V. Final Priorities

The last exercise for the participants was to identify priorities for action to achieve the 25-year goal. Those identified by the participants are listed below in no order of priority.

A. Watershed Management

- Watershed/regional planning and management of water resources.
- Integration across state agencies/programs regarding water management.
- Work with local planning boards to consider efforts/smart growth measures that would be effective.
- Know where your most important waters <u>are</u> and their condition so you can be proactive not reactive.
- Need to think & act as watersheds instead of little towns.
- Collaboration across political subdivisions.

B. Science and Water

- Gather and disseminate data & information to the public in a way that they can understand and that is <u>meaningful.</u>
- Produce a good base line of information on the state's water quality and quantity.
- Create a statewide water budget.
- Determine the priority of use – individual/public.
- Promote information sharing.

C. Education and Engagement

- Find common ground.
- Advocacy on water sustainability issues for municipalities and general public.
- Train teachers on the value of water issues.
- Continue the "science of conservation".
- To educate people, kids, businesses, adults, town, legislators, more about the value of water
- Education:
  - To who, what about, how delivered (evaluation of what is out there – get the word out).
  - What good is education if you do not have something for people to do?
  - Get information/discussion out.
- A concerted campaign focused on water – multi-media.
- Identify a champion for water to de-politicize the topic.
- Sustained dialogue – make priorities relevant and compelling – champion.
- Need incentives and good models for positive actions relating to water (efficiency and conservation) - WSC host a gubernatorial debate about water – put candidates on the record (legislators too).
- Develop an education strategy – <u>teach value.</u>
- The value of water and what it is worth.
- Education – knowledge.
- Building awareness.
- Science in education.
- Create public awareness to support funding & investment in water infrastructure.

D. Funding

- Create public awareness to support funding & investment in water infrastructure.
- Investment in infrastructure:
  - Drinking/waste/stormwater – culverts/transportation.

    - Create revolving loan program at state level (problem for lower income communities to access) for water system infrastructure – capacity for loan forgiveness for communities – is the current program oversubscribed. Communities can afford even minor portion of cost
- Sustainable infrastructure funding (prioritize).
- Sustainable financial plan.
- Funding mechanisms.
- Establish funding mechanisms for innovation, education, infrastructure, etc.
- Follow other state analysis and best practices.
- Find funding to build the data on the state's water—what is our water quantity and quality? Need this information to reach goal of sustainable water management.

E. Incentives

- Foster technological innovation in managing water/wastewater.
- Develop capacity to reuse water (there is no wastewater).
- Behavioral change – regulation and/or education and/or economic incentives.
- It is more cost effective to protect water than mitigate water problems – if you do not screw it up.

F. Valuing Water

- Drive change in how we value water with broad public interest campaign.
- Value of water.

G. Next Steps

- Use existing frameworks – watershed, lake & river groups, Regional Planning Commissions, state legislature to carry out the plan (build a role for these groups).
- Set up a group – New Hampshire Clean Water.
- Keep the process moving beyond the life of the commission (e.g. transform drought management into water management).
- Foster agents for change.
- Integrate state planning/decision-making among the Department of Environmental Services and other agencies such as the Department of Transportation.

Appendix A – Notes from Individual Discussion Groups

GROUP 1

Positive Impacts	Biggest Challenges
– Growing awareness/changed behavior about invasive species. – PUC permitting water conservation & adjustment return – increased investments in early years. – Town interest in adoption of drinking water protection ordinances-funding for initial steps of watershed management plan. - Adoption of precautionary principle in chemical use authorization. – Increased interest by towns in watershed research/findings. – Adoption of environmentally sound practices in private sector marketing/activities. – New England's increasing consciousness about water quantity issues. – Education of younger generation in schools – Cross-state collaboration on watershed protection efforts. – Rising level of knowledge among consumers about water issues. – Recent smooth permitting experience of well.	– Biggest threat – new invasive on horizon. – Finding new water resources. – Losses of state/federal funding/resources – Slow pace of change. – Doubt/lack of trust in science around water quality issues. – Engagement of public in automatic incorporation of sound water use in daily life. – Lack of interest in water quality issues. – Loss of state/federal funding. – Balancing urbanization with clean water protection. – Engaging public in long-term thinking and regional collaboration. – Managing water in widely varying range of setting and conditions. – State regulation of large ground water withdrawal – complexity and difference of public understanding.

Key topics: ***Direction of NHWSC, Role of Education, addressing challenges***

- Create mechanisms for municipalities to gain funding from commercialization of water resources
- Water use/access/ownership – policy clarification across town boundaries.
- Lack of public understanding of groundwater use in periods of tight water supply – local regulatory process? Watershed level consciousness.
- Policy at watershed level.
- Data gap – aquifer mapping.
- Knowledge is economic advantage.
- Motivating individual commitment to behavioral change – education.
- Education re: true value of water vs. costs willing to pay - treat apparently abundant resource as if it was scarce.
- Represent interests of environment/ecological systems?

Next Steps:

- How to get people to change perception of value of water?
- Ensuring ecological needs are clearly addressed and articulated.
- Invasive species must be held in check – recreational value & enjoyment / property values/infrastructure.
- Infrastructure reinvestment policy/plan to ensure affordability over long-term.
- Articulate issues in terms of trade-offs among choices.
- Nutrient issues, particularly Great Bay.
- Water Quality issues associated with road salt – trade off with safety.
- Tie creation of impervious surface to impacts on water sources and manage accordingly.
- Effects of climate change on water resource management.
- Watershed perspective as the frame of reference for consideration of water issues.

- Newly identified contaminations (e.g. waste pharmaceuticals) & implications for water supply and ecology.
- Protection of water sources/areas.
- Development of technological tools, e.g. desalinization.
- Linking economic objectives/activity to management of water resources.
- Develop cross-state boundary collaborations.
- Map build-out analysis relative to water resources.
- Healthy watershed planning – pro-active stance – regional water/wastewater planning and management.
- Focus public investment on natural resource restoration to generate positive economic activity and improved environment.
- Water issues need to be considered with other municipal issues – all interrelated – towns to plan on this basis.
- Innovative management of wastewater – e.g. gray water reuse, recapture of nutrients in water.

Final Priorities:
- Watershed/regional planning and management of water resources. (3)
- Integration across state agencies/programs regarding water management. (4)
- Behavioral change – regulation and/or education and/or economic incentives. (1)
- Foster technological innovation in managing water/wastewater. (1)
- Establish funding mechanisms for innovation, education, infrastructure etc. (2)

GROUP 2

Positive Impacts	Biggest Challenges
- Recognize the value of water. - Water availability/adequate water for homeowner's landscaping. - Watershed (integrated) watershed basis/silos. - Interest in planning. - No such thing as "waste" water. - Maintain viability of private wells. - Interim rate increases enabling system investment. - Impact of water grant funding programs. - Watershed management approach. - There is greater awareness about water issues and more interest. - Organization of data – one-stop. - Opportunity of water reuse. Notes: where is the emphasis on ecosystems' need for "enough" water? Where is the emphasis on efficiency/conservation	- Shifting perception on value of water. - Data is fundamental. - Funding. - Lack of recognition of value of water. - To many take water for granted. - Emerging contaminants. - Convincing people of the viability of reuse.

Key topics: ***Role of NHWSC, Role of Education, addressing challenges***
- The issues are very broad.
- Agreement with importance of education but needs specific action on shifting conscience about protecting resource.
- Stress keeping water local.
- Address need for more cooperation on use of water resources – shift toward resource based management.
- Resources for monitoring, sharing, storing infrastructure.

- Water/energy nexus (transporting & energy production).
- Address water reuse.
- Land-water connection is not stressed.
- Trade-off: large-lot supported individual wells vs. overall sustainability.

Next steps:
- Actions that must be taken: prioritizing use of water/resolving who decides and how.
- Addressing storage for periods of low availability.
- Conservation – understand hydrologic cycle and national limits.
- Public health should lead the need.
- Prevent contamination of water supply.
- Manage chloride in storm water.
- Control groundwater discharge.
- Adequate funding for water management/environmental monitoring agencies.
- Better outreach to improve overall understanding.
- Septic system monitoring & management.
- What organization to advance goal.
- State has overall responsibility.
- Complex issues – interrelated and overlapping in Federal and local.
- Assistance to local organizations to build capacity.
- Design flexible structures, learn from others.
- A resource for help locally.
- Water resources coordinating entity/agency?
- Do not wait for crisis.
- Source water protection conference is good targeted education model.

Final priorities:
- Common ground
- Advocacy on water sustainability issues for municipalities and general public.
- Drive change in how we value water with broad public interest campaign. (2 stars)
- Create public awareness to support funding and investment in water infrastructure. (1 star)
- Train teachers on the value of water issues.
- Continue the "science of conservation" (like this). (1 star)
- Develop capacity to reuse water (there is no waste water).

GROUP 3

Positive Impacts	Biggest Challenges
- New Hampshire has a lot of water.	- We take it for granted. - Flood events – need for water management (HB 648). - Regulations – that require time but do not improve anything – balance between regulations/science/impacts – adapting regulations to find balance - Performance of infrastructure. - Water supplies/capacity. - North/south differences. - Doing better (not more with less). - Proper use of water. - Non-point sources. - What's not happening – losing water. - No differentiation in treatment of water.

Key Topics: ***Direction of NHWSC, Role of Education, addressing challenges***

- How much water does New Hampshire have – gap in knowledge – research around New Hampshire's water budget (some work – not enough).
- What is the quality of New Hampshire's water – gaps where no volunteers.
- Research needed to gather baseline on New Hampshire's water quality.
- Won't know if goal is met if we don't know current state.
- Importance of this research for groundwater – how much groundwater is out there/model capacity.
- How do we go about doing this – water budgets (quantity)/baseline (quality).
- Change in future (demographic, geographic differences).
- Who does this (US Geological Survey groundwater for coastal region).
- How much does this cost?
- Infrastructure needs: not enough awareness about need to invest/develop infrastructure, not as obvious in New Hampshire as in drier regions – do we know all the types of infrastructure that affects water quality/quantity – what is useful?
- Best use of water: don't have to water lawns with fluoridated water, need studies/methodologies – commitment from state to develop.
- Tools in place – the sources not available to implement.
- Can't assume the state will be there to do/address everything – it is everyone's problem/everyone needs to be involved.
- Everything that needs to be done needs to be understood by all
- Folks are educated - legislators.
- How to reach – get education underway: importance of issues/links to funding; educating may not lead to expanded funding at state level but might filter down to communities.
- General public awareness: survey showed general public didn't value tap water; need to expand public awareness about value of water.
- Local/regional differences related to infrastructure investment.
- More specifics about education: to who, for what, how delivered.
- Long-term process for educating communities that will keep up with changes – evolving, continuous process.
- Evaluate what is being done to know what is being effective – who is using material, know what we have, different for different audiences.

Next Steps:

- Get word out that water is serious issue: think of new ways to get word out – delivery. mechanisms/new group of people – a lot of good information not being used – school systems?
- Identify stakeholders that could be delivery system.
- Put something in water bills.
- How to address present systems designed for another era (existing wastewater systems/storm water/drinking water systems – larger municipalities versus smaller.
- Funding model is broken – needs to be fixed soon.
- Competition with other infrastructure needs (e.g. transportation) and those that connect with water quality.
- Looking at examples of regional systems – thorough examination of regionalization – economies of scale, decrease parochialism – how to promote?
- Research – need to figure out what <u>is</u> today (quantity & quality) in order to know how to reach goal.
- Keep kicking the ball – produce forums so people can influence – enter the conversation.
- Post-commission results – how to keep kicking the ball – citizens action committee – who is moving the ball?
- Water infrastructure – is it state problem or 250 towns problem (s) – if one big problem, then big public solution: public resources, research, and investment. Do you fight this problem once or 250 times? Has to happen in positive way.
- Open letter from commissioner to news people – focus issue.

- Call all newspapers together - briefing.
- Is there a scenario where we can address funding issue without affecting average person's pocket book?
- $2-3 billion infrastructure investment need:
  - Speak to state legislators who may not support state-level solution but might take issue/problem back to town/select boards for solution.
  - Plan better – have less infrastructure? If you aren't going to sustain what you have do you need to have less of it?
  - How to get proactive – find way to make investment more palatable.
  - Rate structure – more you use/more you pay.

Final priorities: ***keep kicking the ball on water issues***

- Education: To who, what about, how delivered (evaluation of what is out there – get the word out).
- What good is education if you don't have something for people to do? Get information/discussion out about the value of water and what it is worth.
- Get good base line of information on state's water quality and quantity.
- Create water budget.
- Investment in infrastructure: drinking/waste/stormwater– culverts/transportation: create revolving loan program at state level (problem for lower income communities to access) for water system infrastructure – capacity for loan forgiveness for communities – is the current program oversubscribed. Communities can afford even minor portion of cost.
- Work with local planning boards to consider efforts/smart growth measures that would be effective.

GROUP 4

Positive Impacts	Biggest Challenges
- Relationship between land use decisions and their impact on watersheds. - How to educate people to use irrigation wisely. - How to work across jurisdictions – to get things done. - Real watershed planning, inter-watershed transfers, more comprehensive water efficiency for large water users. - working across jurisdictions NH "live free or die" ethic re: regulations. - Extreme weather event have made communities more aware of issues. - Groundwater permits now requires well-head protection and or conservation plan. - Working at municipal level – balance private prosperity and shared public resources. - Need for more integrated water planning – recreation, stormwater, drinking, etc.	- People in NH think we have a lot of water& so don't consider it too much. - Getting harder to find groundwater regulations, changing land use, changing ethos of industry – harder to permit now water supplies. - need reminder that land use, surface water and groundwater are integrated.

Key topics: ***Direction of NHWSC, Role of education, addressing challenges***

- How will the Commission push people to action? – who will care? We have no regulatory power, how will a movement for change come about? Posting website not enough.
- Who see the report & what next?
- How to move it forward?
- Who will this be handed off to?
- Local Advisory Committee – no funds, no staff to coordinate efforts) – 20 designated rivers in the state – all volunteers – appointed by DES Commissioner/nominated by towns.

- Get debate together with all gubernatorial candidates to get their thoughts on record.
- Much of what we do about water is reactive.
- Fostering municipal cooperation – very fragmented approach to land use and water.
- do we need statewide control of water?
- Need strong educational component.
- Inefficiencies in educational tools: Website – NH is about water – nhcleanwater.org – a variety of departments – not just DES – a place to share and swap water-related educational tools (EPA ha a good one now).
- We need an ad campaign to show people why we need to think about water – need the materials – PREP has a campaign like this.
- Use the regional planning commissions more (they are underfunded).
- There is not continuity at town level for policy makers.
- How can new governor provide early leadership? (legislation, regulatory leadership, models that work).
- UNH take lead in becoming water efficient.
- Water efficiency/conservation across all sectors.
- How do we show people what is happening to water – what the issues are/infrastructure needs?
- Educate people about the value of water – what is the value of water? How to bridge the disconnect between tap water and water that you "buy" in a store?
- It is not the state that can support all this with current funding, but it could facilitate a grassroots, sharing website and exchange.
- Bring water issues to forefront – goes back to the value of water: water conservation= depriving; water efficiency=saving $$.
- How to streamline information and make it palatable and personal.
- Lakeshore improvements (buffer restoration) can lead to higher property taxes – instead, give credit for good behavior.
- Incentives:
  - Energy sector: tax credits for installing renewable energy/companies that reward.
  - Employees for healthy behaviors; towns doing groundwater surveys/studies to protect critical aquifers & wellhead protection areas.
  - Good models are inspiring – hotel and resort practices to conserve water
  - 3rd bullet – in draft summary – keep it simple – coordinate p 4/p 7 in guide (length of challenges better).
  - Boxes for homeowners/town officials/teachers – here's what you can do.
- Include list of website where you can go for more information – DES site hard to navigate (lots of good info).
- Above 10% impervious surface= water quality/quantity problems (not everyone knows this fact).
- Watershed planning needs to be built into all land use decisions.
- Supporting school systems to educate kids about this.
- Adult education – center for watershed protection in Washington DC/Stormwater Center in Maryland.
- Education about: non-point source pollution & contamination of watersheds – sodium chloride, developers asking for waivers of low-salt use.
- Valuing water – protecting water is more cost-effective than mitigating problems.
- Case study – Milfoil in lakes can reduce property values.

Next steps:

- Green infrastructure.
- Lakes associations did a study about valuing water (2009).
- Got Camping New Hampshire Campaign is a good model.
- Piece of legislation loophole that does not allow water suppliers to conserve land in current use. (David Paris – Manchester Water Works) in another town.
- Role of SRF's in water infrastructure.

Final priorities:
- To educate people, kids, businesses, adults, town, legislators, more about the value of water.
- It is more cost effective to protect water than mitigate water problems – if you do not screw it up.
- Know where your most important waters are and their condition so you can be proactive not reactive.
- A concerted campaign focused on water – multi-media.
- Identify a champion for water to de-politicize.
- Need incentives and good models for positive actions relating to water – efficiency and conservation.
- Need to think and act as watersheds instead of little towns.
- WSC host a gubernatorial debate about water – put candidates on the record (legislators too).
- Use existing frameworks – watershed, lake & river groups, regional planning commissions, state legislature to carry out the plan (build a role for these groups).
- Set up a group – New Hampshire Clean Water.

GROUP 5

Positive Impacts	Biggest Challenges
- We have some data now (over 20,000 gal/day use). - Economic value of New Hampshire lake, rivers, ponds – needs updating but good start.	- Economics of water. - Balance of protection and quantity - Land uses in harms way w/o understanding risks (e.g. Irene). - Complexity of water regulation. - Need more data. - Need expansion of Fluvial Erosion Hazard program to better prepare for events. - Need coordination – especially w/ small towns. - Lack of consistency among towns in regulation. - Commitment to broader public understanding. - Who is managing the water? - Follow through on plan.

Key topics: ***Direction of NHWSC, Role of education, addressing challenges***
- More data – quantity of use – show public it's not an endless resource.
- Find ways to instill in the public the idea that they must care about these issues.
- $ seems to be the only things that grab immediate attention.
- Difficulties arising out of different systems used by public – private vs. public water/sewer systems.
- Recreational users are very conscious of conditions – getting more folks outside would help with appreciation of water – nature deficit disorder.
- How do we address issues head on with most land use locally controlled – broader mechanism.
- Need a legal framework.
- Funding mechanism – water & sewer, septic, dames stormwater - $.
- Adequate buffers to water.
- Prioritize education (who to talk to first, kids, planning boards, etc.).
- Common:
  - Establish "red list" of systems similar to DOT.
  - Marketing municipal water for quality and potential revenue.

Final priorities:
- Getting data & information disseminated to the public in a way that they can understand & is meaningful. Develop an education strategy – teach value.
- Sustainable infrastructure funding (prioritize).
- Keeping the process moving beyond the life of the commission (e.g. transform drought management into water management).
- Collaboration of political subdivision.

GROUP 6

Positive Impacts	Biggest Challenges
- 2005 Water Conservation program – aging infrastructure.	- SCADA (automating technology) impacts staff jobs – aging workforce. - Impacts to farmers and citizens. - Constitutional rights (individual). - More challenges than positive impacts. - Better definition/permitting for ski area water. - Will need more water for snowmaking. - Pending legislation on surface water withdrawals – quality/quantity. - Lack of data on private well water quality. - Impaired understanding and tools for water. - New technology has $, time . - Challenging roles as technology changes.

Key topics: ***Direction of NHWSC, Role of education, addressing challenges***

- Tension/compromise between individual/competing needs: individuals' collective (including businesses).
- Education not enough to overcome fundamental challenge.
- Education may help public be willing to put $ into water.
- Include real costs/financial plan.
- Water use supports economic development (e.g. ski).
- Increased water use is challenging for water utility.
- Stormwater goal – laudable but must consider economic impact.

Next steps:

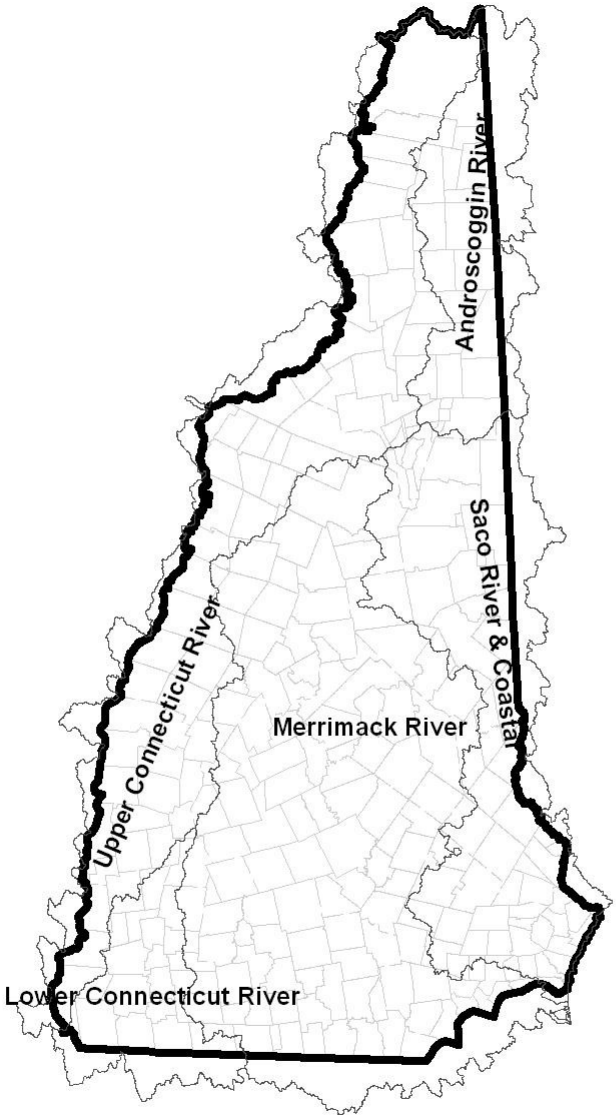
- Infrastructure: invest $, plan, catch up, grants? Fed/state? Or no fed.
- Finding ways to meet water volume/current demands.
- Financial planning – considering future conditions.
- Better integration of existing water quality/quantity information.
- Erosion/sediment control.
- Regulations that are protective but streamlined – e.g. if too complex to implement.
- Continue existing buffer/protection: loss of property rights, $.
- Take action – not be paralyzed by uncertainty.
- Coordination? – next governor/legislature? Political will?
- Price structure for different uses?
- Implications of tighter standards – cost/benefit.

Final priorities:

- Sustained dialogue – make priorities relevant and compelling - champion.
- Follow other state analysis and best practices.
- Sustainable financial plan.
- Education – knowledge.
- Foster agents for change.
- Value of water.
- Priority of use – individual/public.
- Information sharing.

Appendix B – Discussion Guide

Discussion Guide
July 9, 2012



What needs to be done to have enough clean water for future generations?

A gathering for people whose work and expertise depends on water

Compiled by NH *Listens* for the New Hampshire Water Sustainability Commission
www.nhlistens.org
Bringing people together for engaged conversations and informed community solutions

Welcome - Thank you for joining today's conversation!

We look forward to your questions, concerns, ideas and hopes for the future of water in the state of NH and we welcome all perspectives. The New Hampshire Water Sustainability Commission (NHWSC) has asked NH Listens to create this opportunity for people who are more engaged with water issues than the average citizen – be it through work, research, organizations or business. Your input will be compiled by the NHWSC and shared with all of you. NH Listens works at the state and local level to help convene conversations about complex issues. We don't take a position on issues but work to create a fair and open process for everyone. Unlike the conversations which took place on May 8th, this conversation *assumes some knowledge of water issues in NH.*

The New Hampshire Water Sustainability Commission was formed by an Executive Order signed by Governor Lynch in 2011 and is working to identify strategies and management measures for ensuring that the quality and quantity of New Hampshire's water in 25 years is as good as or better than they are now.

Here is a general outline of our afternoon:

1:30 – 2:00 PM	**Registration begins**
2:00	**Welcome and purpose**
2:20	**Small group conversations**
4:15	**Large group reporting out**
4:55	**Next steps and closing**
5:00 PM	**Informal networking encouraged**

This guide is the same for all participants. The large group facilitators will help guide the conversation but we are all responsible for making sure the group is productive. Thank you!

Detailed Outline

1:30 - 2:00 Registration begins

- Welcome and sign in at registration table
- Please join your small group circle for the introduction and to start the dialogue immediately thereafter.

2:00 - 2:20 Welcome

- Welcome from the New Hampshire Water Sustainability Commission
  Chair of the Commission, John Gilbert
- NH Listens facilitators: Michele Holt-Shannon and Bruce Mallory
  - Background of this event
  - ***The goal of this conversation is to:***
    - To bring people together across water interests, specialties and sectors.
    - To preview initial GWSC findings and identify gaps and critical action steps.
    - To identify what needs to happen in order for NH's water to be as good or better in 25 years.

- About the process: This conversation is…
  - Designed to take advantage of expertise related to water interests across sectors.
  - Designed for participants to be here the whole time (please do what you need to do to be most present: phones, breaks, restrooms).
  - About a constructive focus – not about looking back at how things might have been done differently but about looking forward to desired actions and solutions.

- Group agreements for a productive conversation…
  - Share "air time"
  - If you disagree, consider asking a question rather than arguing to prove your point
  - It's OK to disagree, but don't personalize it. Stick to the issue, not the person who is disagreeing with you
  - Speak up if the process doesn't seem fair
  - Speak for yourself, not for others and not for an entire group (use "I" statements)
  - Personal stories stay in the group unless we all agree we can share them outside of the group
  - We all share responsibility for making the group productive
  - Be respectful and use respectful language
  - Respect the facilitator's role
  - Listen first…**2:20 - 2:40 Introductions in small groups**

- Your small group is **self-facilitated**. Bruce and Michele will check in to see that things are going smoothly in order to:
    - help with the process
    - serve as a reminder of our agreements to be fair and respectful, and
    - make sure everyone gets a chance to participate

- Reminder: your group will need someone to **report out** to the large group at the end.

- A member of the NHWSC will **chart notes** for your group on the flip charts (headings are provided to help guide you). Your group is self-facilitated so they are not there to direct the group, only help keep information and ideas charted – and otherwise observe and listen to the issues you raise.

- Participants introduce yourself: Please share your…
    - Name, hometown, and focus of your work or water involvement
    - One thing that has happened in the last 5 years that impacted your water-related work in a positive way…
    - One of the biggest challenges that impacts your water-related work…

After these stories, consider any commonalities or differences you hear.

Chart: *List the positive impacts and biggest challenges*

2:40 - 3:10 **Review of NHWSC Report Summary**

Take the time to look over the NHWSC summary. This is an *initial draft* of areas for action prioritized by the NHWSC. Take a few minutes to read and allow for clarifying questions.

- Knowing there is much to be determined in the details, is the GWSC on the right track? Where are the gaps?
- An overarching finding of the GWSC reinforces the need for public awareness and education for all ages. Is there a role in your work for education? In what ways would a water wise public impact your work? What role might you have in raising awareness and engaging the public?
- Are the major water challenges addressed by the NHWSC?

Challenge 1: Changing patterns of land use and water use
Challenge 2: Changing precipitation and temperature patterns
Challenge 3: Aging and inadequate water infrastructure
Challenge 4: Need to manage water differently in a new era
Challenge 5: Financial and Political Limitations

Chart: *Finalize a list of the key topics raised by your group in answer to the questions above (the direction of the NHWS, the role of education, addressing challenges).*

3:10 - 4:00 **Next steps and moving forward on the 25 year goal**

Next, consider the framing question: *What needs to be done to have enough clean water for future generations?* Given your priorities when you came in and the information we have just reviewed, what are the **most important challenges to address?**

We are especially interested in your thoughts on these questions:

- Are there actions that if not taken in the near term, would lead to irreversible consequences for water and water systems in NH?
- What organization, policy or practice is needed to advance this goal?
- Given who has gathered, what, if anything, could this group find as common cause?
- How does coordination and collaboration get done from your perspective? What is needed?
- What would an effective coordinating body look like? Is one needed? Does one or more already exist?

4:00-4:15 **Final Priorities**

Based on your group conversation, "Are there any common ground recommendations or key ideas in this group? If so, what do we want to say at the end of the day? If not, what diverse points of view do we want to convey?" A single consensus is not required, but if one emerges, or perhaps if the group wants to put forward two or three primary points of view, that is fine. These will represent your key recommendations and comments for the NHWSC and for participants in other small groups.

***Chart*:** *What are your group's specific recommendations for collaboration and coordination across sectors? What is most needed from the NHWSC in order for your work to move forward?*

Your group will need to prioritize their top insights, etc. to report out to large group and *select someone to speak.* The reporting out should include **two or three** specific action statements. To arrive at this point, the group should take a step back and look for *both the unique ideas and those that seemed to recur*. Group ideas together that seem to be related, but don't lose track of the unique ones.

If you have time…

Chart: *Please add any additional information that your group feels is important to pass along to the New Hampshire Water Sustainability Commission.*

4:15 – 4:50 **Reporting Out**

Each group will be asked to provide a brief summary of their most important findings, concerns or recommendations. If asked to speak for your group, please be brief and share what has been compiled *by your group*. Please refrain from editorial comment as your views should be representing the group results.

4:50 – 5:00 **Wrap up comments –**

Michele Holt-Shannon and Bruce Mallory

- Themes
- Please fill out the evaluation – it matters to us! We read these and always work to incorporate your feedback. Thank you!

Final Thoughts from the NHWSC

- Thank you
- Next steps
- If you want to be involved – sign ups on NHWSC table

After words: Please feel free to remain and connect with others informally.

New Hampshire Water Sustainability Commission

http://www.nh.gov/water-sustainability/

New Hampshire Water Sustainability Commission Draft Summary July 9, 2012

The New Hampshire Water Sustainability Commission was formed in April 2011 by Executive Order of the Governor of New Hampshire. It held its first meeting in May 2011, which was largely organizational in nature. Our charge is best summed up by this sentence of the executive order: "…to identify and prioritize actions necessary to ensure that the state's water resources are managed in a sustainable manner so as to protect New Hampshire's economy and quality of life." The Commission has since met monthly to receive briefings from experts in various aspects of water resources management and related issues and reviewed reports prepared by other Commissions and entities engaged in managing water resources. Topics addressed in the Commission's meetings include:

- Overview of water issues in New Hampshire;
- Systems thinking on public policy issues;
- Overview of sustainability as a concept and a management framework;
- Debriefing commissioners from other New Hampshire water-related commissions;
- Water-related infrastructure and related funding issues;
- Dams;
- Extreme weather events and implications for water and watershed science;
- New Hampshire water rights and access law;
- Regional and national policy trends relative to water resources management;
- Water resources management efforts that cross political boundaries; and
- The relationship between land use decisions made at the local level and the implications for water resources at the watershed level.

In addition, smaller working groups of Commission members have been working on public engagement and input and on implementation planning for the Commission's findings. The Public Engagement Working Group focused on both including the public in the process and strategizing how to engage the public in the long-term effort to implement the strategic recommendations developed by the Commission. The Implementation Working Group focused on wrestling with how to accomplish the longer-term needs and structuring a framework to support these efforts.

In May 2012, the Commission partnered with the NH Listens project of the Carsey Institute at the University of New Hampshire to hold public input meetings in the five Executive Council districts in the State. These meetings were designed to obtain input from New Hampshire residents regarding their perspectives and concerns about water issues.

Based upon this work, the Commission is in the process of developing recommendations for action in five specific areas that include:

- Establishing integrated watershed management and planning for both water quality and quantity;
- Minimizing and effectively managing runoff of rain and snow-melt and non-point source pollution;

- Adequately maintaining and improving drinking water, wastewater, storm water and dam infrastructures to protect human health and the environment in a manner that is affordable and sustainable;
- Developing appropriate responses to changing factors (e.g., weather patterns and population demographics) to ensure adequate water supply and to protect water and wastewater infrastructure from
  natural hazards; and
- Developing a flexible and coordinated strategy for fair and equitable access to and management of water to ensure adequate water quantity and quality to support ecological health, human needs and economic activity.

Effective implementation of the strategic recommendations in these areas will require substantial efforts to educate the residents of New Hampshire regarding the value and importance of water to the economy and quality of life in the State and to connect individual and community decisions regarding the use of water to the larger issues affecting the entire State. This effort will have to encompass residents of all ages, including requiring a concerted effort to improve environmental education for school-age children who will be the decision-makers as future New Hampshire adults.

Additional information on the New Hampshire Water Sustainability Commission website:
http://www.nh.gov/water-sustainability/publications/index.htm