Testimony of Jeffrey A. Nelson

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Regarding Proposed H.833

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Background

- See my bio previously provided to the Committee which summarizes my professional background.

- In my position with VHB, I have worked for many years with the Agency of Natural Resources, in particular with staff and regulations in areas of water quality, stormwater management, wetlands. I have been asked to participate in numerous VT stakeholder processes through my career as new or revised regulations have been considered.

- We are involved in preparing designs, analyses, and permit applications for a broad range of projects which require various permits in Vermont, including
    - Ski areas
    - Utilities/Renewable Energy projects
    - Commercial developments
    - Transportation projects

- Specific to surface water withdrawals, I have been very actively involved in this issue in Vermont since the 1980s, working on behalf of ski areas to develop projects to enable the areas to provide sufficient water supply for snowmaking operations while ensuring environmental protection. I was a key participant in the stakeholder processes that ultimately led to (statute) and ANR Rule and guidance. I have also been involved in numerous specific cases where such water withdrawals have been proposed and considered.

- Today I am speaking on behalf of the Vermont Ski Areas Association, a non-profit trade association with 20 alpine and 30 cross country member areas. Molly Mahar, the president of VSAA is best suited to speak to the economic and demographic contributions of outdoor recreation and skiing to the State of Vermont, but in summary I will say that these industries bring in $2.5B in consumer spending to VT annually, and directly employ 33,000 people.

Summary of Testimony

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- Consideration of protection of physical, biological and chemical quality of waters in Vermont absolutely includes streamflow as a criterion.

- Certain sectors (e.g. snowmaking, hydropower) are currently more highly regulated than others.
- We believe that the establishment of a Study Group makes sense to take a look at existing conditions, regulations and opportunities, and I'll explain why.

Importance of Water Supplies to Ski Areas

- As we continue to see a rapidly-changing climate and weather patterns in Vermont, the need for reliable and environmentally sound snowmaking systems for alpine and Nordic ski areas in Vermont cannot be overstated. It is absolutely critical.

- As one example, VHB has worked for many years with Mount Snow in southern Vermont to develop a new water supply system for their snowmaking operations to replace a marginal water source that resulted in inadequate downstream streamflows in the North Branch of the Deerfield River. What was ultimately permitted and built was a new intake on Cold Brook which complies with current-day flow standards, along with a 120 Mgal offstream reservoir. When Mount Snow operated under the old system, they were only able to open as little as 20% of their ski terrain before the critical Christmas-New Year's holiday period. Following completion of the new system, they have been able to reliably open 97% or more of the terrain open at the same time and have eliminated the prior withdrawal facilities that resulted in insufficient streamflows.

Current Regulatory Framework

Vermont currently has mechanisms in place that are focused on the projection of streamflow from excessive or "uncontrolled" diversions of water:

- Existing Statutory framework in 10 VSA Chapter 41 expressly includes protection of streamflow from diversions. (see Exhibit JAN-1)
- Subchapter 3 provides statutory basis for regulation of water withdrawals for snowmaking
- Pursuant to this statute, ANR has implemented a Rule titled "Water Withdrawals for Snowmaking" (1996)
- More generally, the Vermont Water Quality Standards include a Hydrology policy (see Exhibit JAN-2) which clearly states the importance of protection of streamflows.
- Any project requiring a federal permit or license (which includes nearly all ski area water withdrawals) must obtain a "401 Certification" from ANR that provides documentation that the project meets these Standards
- VWQS provide authority for ANR to enforce against any activity that is violating water quality standards.

Snowmaking Rule

After a very contentious period in the 1980s when ski areas in Vermont were proposing large investments in new water withdrawal facilities with increased amounts of water diverted from streams and rivers, a very robust stakeholder process was initiated by ANR resulting in:

- Issuance by ANR in 1993 of Agency Procedure for Determining Acceptable Minimum Streamflows (see Exhibit JAN-3)
- Statutory changes (noted above) and adoption of Snowmaking Rule in 1996 (see Exhibit JAN-4).

The Snowmaking Rule has several key elements including:

- A General Standard, known as the February Median Flow
- Requirements for streamflow monitoring and reporting
- Requirement for a Needs and Alternatives analysis before a new or expanded withdrawal can be approved
- Establishment of a robust public process

What the Rule did not include was a permit, which has created some challenges.

In the years that the Rule has been in effect, a number of projects have been permitted and constructed and the monitoring data that ANR collects have shown that the FMF standard of the Rule is protective and that these waters are meeting the State's water quality standards.

Inter-basin transfers

There has been some recent discussion regarding the subject of "inter-basin" transfers of water following the approval last year of a project (that VHB worked on for the application, Killington-Pico), to pump water for snowmaking from the Killington side to the Pico side to enable major improvements in snowmaking capabilities at Pico. While this project is technically considered "inter-basin", it represents moving a relatively small volume of water a relatively short distance from one side of the mountain to the other - from the upper reaches of the Ottauquechee River watershed (which ultimately drains to the Connecticut River) to the upper reaches of Mendon Brook (which ultimately drains to Otter Creek and Lake Champlain).

Certainly, I don't see this type of project as raising the types of concerns that would result from pumping water from the Great Lakes to the U.S. Southwest, for example. Further, I don't see this project as a precursor to others that would involve "inter-basin" transfers.

However, what that project did highlight was that there was no established protocol for such situations to avoid issues of concern, such as the inadvertent transfer of invasive organisms.

Study Group

We believe that the proposed establishment of a Study Group, through this bill makes sense, with a few qualifiers:

- The standard, protocols and precedents established through the Snowmaking Rule must be respected, since this Rule has been successful in protecting water quality and in providing regulatory certainty.
- Consideration should be given to the establishment of a water withdrawal permit process that addresses all diversions.
- Consideration should be given to how to manage potential future proposals that involve inter-basin transfers.

I appreciate the opportunity to testify on this important topic.