To: House Committee on Resources Recreation and Development
Re: HB 1141
From: Cynthia Walter, Ph.D. cawalter22@gmail.com
Scientist with 35 yrs. of research specialty on water quality. NH resident.

I strongly support this bill for the following reasons:

Expands the protection of our water resources provided by RSA 485-C:21

"Approval for Large Groundwater Withdrawals. –
I. No person may withdraw more than a total of 57,600 gallons of water in any 24-hour period from a well or wells sited at a single property or place of business … without the prior approval of the department." [1]

Regulations like this and others[2],[3] only partly protect NH drinking water. The DES approval and other regulations are there to prevent irresponsible groundwater withdrawals, but these laws do not sufficiently protect water quality <u>after</u> withdrawal.

HB 1141 is needed to protect our water resources, especially as drinking water. Current regulations to limit pollutants in bottled water are inadequate and take years to catch up to the science of pollutants harming our health.

Also, our limited funding for NH DES restricts their ability to monitor bottled water.

See the table below of harmful substances in plastic bottled water, some of which are not regulated at all.

Protects NH Reputation for High Quality Bottled Water and Drinks

A strong reputation for high quality water is essential for any company that sells bottled water or other drinks. Good and bad reputations impact <u>all</u> NH bottling companies.

We now know that plastic water bottles add a wide range of harmful substances to the liquids inside with serious health impacts. Here are just a few examples:

Pollutants *not regulated	**Impacts from Consumption**	**Research Examples**	**Ref**
Micro & nano-plastic Particles (MNP)*	Impair brain, heart, fertility & development as persistent particles. MNP transport toxics into the body.	In 93% of commercial bottled water. 400-10,000 particles/Liter A review of 14 studies: all show MNP in bottled water	[4] [5]
Formaldehyde	Cancer, impair GI tract	Transferred from plastic into water	[6] [7]
Phthalates *?	Impair development, fertility, fetal health	Transferred from plastic into water. Regulated outside the US	[8]

This bill shifts new bottling operations to use higher quality, non-plastic containers. This can improve the reputation of NH water in and out of our state & help business.

Reduces Pollution from Plastic Water Bottles

- Plastic bottles are a major component in municipal waste.
- Only a small portion of plastic bottles are successfully diverted to recycling.
- Plastic bottles are a common component of trash and persist for many years.

In sum, **this bill helps to strengthen the NH economy:**

improves bottled water quality, protects public health and decreases harm from plastic pollution.

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[1] https://gc.nh.gov/rsa/html/L/485-C/485-C-21.htman

[2] https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/2020-01/Env-Dw%20303.pdf

[3] https://www4.des.state.nh.us/OneStopPub/DWGB/pdf/DWRules_TOC.pdf

[4] Mason et al. 2018. Synthetic Polymer Contamination in Bottled Water. Frontiers in Chem., Vol 6.

[5] Gambino et al. 2022. Occurrence of Microplastics in Tap and Bottled Water: Current Knowledge. Int. J. Environ. Res.Public Health 2022, 19, 5283.

[6] Bach et al. 2012. Polymer contamination in water stored in polyethylene bottles. Water Res. Vol46: 3 pp, 571-83.

[7] https://www.epa.gov/formaldehyde/facts-about-formaldehyde;

[8] Wang et al. 2021. Phthalates and their impact on human health. Heathcare. 18(9) 5: 603