

Watershed Investment Division

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<http://dec.vermont.gov/water-investment>**To:** Chair Emmons, Vermont House Committee on Corrections and Institutions**From:**

Gianna Petito, Grants Supervisor, Clean Water Initiative Program, Water Investment Division, DEC;

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Kevin Burke, Program Manager, Stormwater Program, Watershed Management Division, DEC;

[kevin.burke@vermont.gov](mailto:kevin.burke@vermont.gov)**Re.** Questions received during Three-Acre testimony on 4.4.2024

Dear Chair Emmons,

Thank you for the opportunity to testify in your committee. Please find below answers to questions and inquiries we offered to follow-up on.

1. What site is depicted on Gianna's cover slide?
  - a. The image is of a stormwater infiltration system completed at the Cambridge Elementary School on 3/12/2019. The system includes underground chambers, an infiltration basin, and an overflow swale to capture additional runoff during flooding events. The chambers allow the system to treat runoff from the majority of impervious surfaces on the school campus. The system was designed to prevent direct discharge of runoff to the Brewster River.



2. Existence of any estimates on the life-cycle costs of the stormwater infrastructure including Operation and Maintenance (O&M).
  - a. Gianna can confirm that the 2017 Office of the State Treasurer's Clean Water Report excluded some but not all O&M from its cost of compliance estimates.
    - i. *"Costs include capital and technical assistance needs, planning, and partner support for public (municipal) and private (farmers, business parking lots, etc.) entities. **Costs do not include operation and maintenance over time, with one exception.** When modeling capital investment costs, labor costs were included. For example, the capital costs for a wastewater treatment facility upgrade would include all planning, engineering, labor and material costs associated with the capital improvement. No other operations, maintenance, and labor costs were included."* (page 18, [Office of the State Treasurer's Clean Water Report](#))
  - b. In 2020 the DEC contracted with a team of consultants to compile and assess the latest information available to develop a cost database in support of requirements under Act 76 of 2019 which required DEC to establish standard costs per unit of pollutant reduction for non-regulatory clean water projects. This was to include costs per project type for each project step, including identification, design, implementation, and Operation and Maintenance (O&M). The effort reflected a comprehensive collection of information from VT DEC, the consultant team, and allied state and federal agencies, incorporating available data from the VT DEC Clean Water

Database, USDA NRCS EQIP program, information from the VTDEC Rivers program, Chesapeake Assessment Scenario Tool (CAST) and the US EPA OptiTool. Ultimately, a key finding was that there was very little cost data available on O&M which the consultant team highlighted as a major limitation & future reporting/study need for VT DEC.

- c. Since this report VT DEC has worked to refine the Operation and Maintenance cost data reporting standards that are placed on the Clean Water Service Providers and expects more consistent and accurate data on O&M costs as the Water Quality Restoration Formula Grant program matures.
3. Exact universe/number of public three-acre schools.
  - a. Greenprint Partners estimates 71 total public schools were eligible to participate in the Green Schools Initiative, meaning they were within the eligible area and met the three-acre threshold. Of the 71, 63 participated in Phase 1 and 66 are participating in Phase 2.
4. How much LCBP-EPA funding supported the Green Schools Initiative?
  - a. A total of \$13,181,339.00 of LCBP-EPA funding supports Phases 1 and 2 of the Green Schools Initiative although this is not the only initiative supported by this funding source. Committee members can learn more about all investments into the state from federal sources (including the US EPA ) by reviewing the 2023 Report on Federal Funding Related to Water Quality Improvement Efforts in Vermont, available at:  
[https://dec.vermont.gov/sites/dec/files/wsm/erp/docs/2023\\_Vermont%20Federal%20Clean%20Water%20Funding%20Report\\_V.2.pdf](https://dec.vermont.gov/sites/dec/files/wsm/erp/docs/2023_Vermont%20Federal%20Clean%20Water%20Funding%20Report_V.2.pdf)
5. Gianna testified no Public-Private Partnership (P3) projects will be constructed this year. As a point of correction, at least one is hoping to proceed with construction this field season.
6. How are impact fees managed - where do the dollars go and what do they get used for?
  - a. Whether a site is subject to payment of an impact fee is dependent on whether the site can fully meet or partially meet the treatment standard. In the latter cases, the applicable impact fee would be calculated by Department staff, and this amount would be due by the permittee prior to their permit being issued, at the conclusion of public notice. Impact fees would be deposited in a watershed-specific account managed by the Department. In the case of Lake Champlain, the watershed-specific accounts are further broken down by lake segment. Impact fees accrued in this deposit account would then be available, by request, to sites that are able to exceed applicable treatment standards on 3-acre sites by a certain amount. These fees therefore fund the treatment elsewhere in the same watershed, where treatment may not have otherwise been able to be met on another regulated site. This provides assurance that developed land pollutant reduction targets can be met even when one site has feasibility constraints.
7. What are the total treated acres and phosphorus reductions projected to come out of the three-acre site regulations?
  - a. Regulatory load reductions for developed lands have been estimated by staff in the DEC Stormwater Program, most recently in support of the [Water Quality Restoration Formula Grant Target and Fund Allocation Methodology](#) in 2022. Sites and activities encompassed by the estimates include those governed by the Municipal Roads General Permit (MRGP), the “3-acre permit,” as well as the Municipal Separate Storm Sewer System General Permit (MS4) and Transportation Separate Storm Sewer System General Permit (TS4). A summary of this analysis is included in the table below which highlights estimated total annual phosphorus reductions that stormwater permit programs will achieve by 2036 by basin. The “3-acre permit” load reductions were calculated based on an estimated 35% reduction efficiency applied across the currently identified 3-acre properties in each basin, which accounts for meeting approximately 13% of the overall developed lands reduction target for phosphorus loading:

Total regulatory phosphorus reduction estimates (kg)	3-acre	MSGP	TS4	MS4	Total
Basin 2 & 4 or South Lake A&B, Port Henry segments (TS4)	84.1	1031.4	158.2		1273.7
Basin 3 - or Otter Creek segment (TS4)	318.7	1504.6	248.3	30.5	2102.1
Basin 5 - or Shelburne, NE arm, St Albans, Isle le Mott (TS4)	390.1	206.1	103.8	451.0	1150.9
Basin 6 - Missisquoi, Rock, Pike OR Missisquoi Bay segment	62.4	1335.5	412.1	0.0	1810.0
Basin 7 - Lamoille- OR Mallets Bay lake segment (TS4)	189.6	1546.8	247.9	71.4	2055.7
Basin 8 - Winooski - OR Main Lake Segment (TS4)	677.8	3676.2	463.4	209.6	5027.0
Total	1722.7	9300.5	1633.7	762.4	13419.4