

5:20 – Are there best practices for septic design in re: climate change?

There have been significant advancements in septic (or onsite wastewater) systems over the past twenty or so years. The main issues regarding how onsite wastewater systems’ designs and installations address a changing climate, are: adaptation to increased surface water flooding and decreasing depths to the water table; and climate change mitigation, as briefly summarized below:

- **Flooding** - New and replacement wastewater systems are required to be located, designed, and constructed in a manner that avoids impairment to the system and contamination from the system during flooding. This approach addresses a wetter climate to the extent that climate change is incorporated into current and future mapping of flood hazard areas.
- **Depth to the water table** - There has been very limited research done on the impacts of climate change on groundwater in inland areas such as Vermont, although we can infer that in a wetter climate water tables may become generally shallower. Subsurface leachfields and mound systems are designed based on seasonal high water table conditions, which approximate the seasonally shallowest depths to the water table. Therefore, there is a significant safety factor in designs throughout most of the year. Changes in peak groundwater conditions due to a generally wetter climate will be very localized and highly variable from year to year. Therefore, we do not currently require adjustments to the design requirements.
- **Mitigation** of climate change is also an issue that can be addressed by onsite wastewater system siting, design, construction and operation, by evaluating the greenhouse gas emissions related to both construction and operation/maintenance of the various types of onsite wastewater systems. These life-cycle assessment issues are being researched around world and, although currently not included as regulatory criteria in Vermont, developments in this field are is being closely tracked by our staff.

Overall, the Drinking Water and Groundwater Protection Division’s Wastewater Program is planning to collaborate with stakeholders to incorporate evolving science, siting/design methods, technologies, and operational practices into the Vermont onsite wastewater rules to optimize performance of these systems, mitigate climate change and adapt to a changing climate, as tools to do so become available.

6:45 – What is the geographic distribution of onsite wastewater systems installed/replaced by the Healthy Homes Initiative?

ARPA HH Onsite WW system awards from 2022 application period

County	Households Receiving Awards
Addison	13
Bennington	9
Caledonia	15
Chittenden	13

Essex	8
Franklin	18
Grand Isle	3
Lamoille	7
Orange	16
Orleans	23
Rutland	13
Washington	16
Windham	18
Windsor	21
Grand Total	193

8:35 – Does DEC conduct outreach out to town health officers to inform them of the Healthy Homes Initiative?

VTDEC has coordinated with Vermont Department of Health who oversees the Town Health Officers (THOs) about the HH program and sent them notices in the past about the program. The program has also done a substantial amount of general public outreach with press releases and emails to state partners (e.g. USDA Rural Development, Vermont Housing & Conservation Board, Vermont Housing Finance Agency, ACCD, etc.). There was no direct outreach with THOs but that is a great group to add into future communications.

14:30 – Give us a sense of the need for MHCs (how many MHCs statewide in total, in program?)

Below is a table with MHCs by county including the # that applied for ARPA funding, # that were selected, and total registered MHCs with DHCD. It’s important to realize that this is the snapshot from the 2022 application period. Many of the awards can be for initial planning and thus there will be subsequent construction project needs in future years of the HH MHC program. Simply put, the needs present in 2022 and funding awarded is not going to solve MHC problems in the long term as an ongoing financial commitment as projects develop is necessary.

County	Count of MHCs Proposed to Receive ARPA Funding	Count of MHCs that Applied for ARPA Funding	Total Registered MHCs in the County
Addison	4	4	15
Bennington	3	3	25
Caledonia	3	3	12
Chittenden	5	5	24
Essex	0	0	2
Franklin	3	3	27
Grand Isle	0	0	2
Lamoille	1	2	7

Orange	1	1	15
Orleans	1	1	6
Rutland	4	6	25
Washington	4	4	24
Windham	2	2	16
Windsor	5	5	36
Grant Total	36	39	236

36:30 – Total staffing for the Healthy Homes program?

Currently there are 4 limited-service positions allocated to the Healthy Homes program overall (1 administrative services manager and 3 environmental analysts). Current limited-service end dates are listed below:

- (1) Environmental Analyst – June 2023 *Please note that the Gov’s budget proposal is to provide funding to extend this position to 2026
- (2) Environmental Analysts – June 2024 *Please note that the Gov’s budget proposal is to provide funding to extend these positions to 2026
- (1) Administrative Services Manager – June 2026
- *Please note that the Gov’s budget proposal requests adding (1) additional Environmental Analyst position (through 2026) to address staff capacity issues to be able to provide technical assistance, administrative support, and customer service for the additional \$10M of one-time general funding requested to augment the HH program (specifically the HH MHC program).

The anticipated breakdown of HH Onsite staff time vs. HH MHC staff time is approximately 2 ½ FTE vs. 1 ½ FTE; however, employees flex during funding cycle times of need across the two different programs for efficiency purposes. VTDEC is actively recruiting and in the hiring process for two of the ARPA HH Environmental Analyst positions.