

CVRPC CWAC Municipal Wastewater Assistance & Workshops

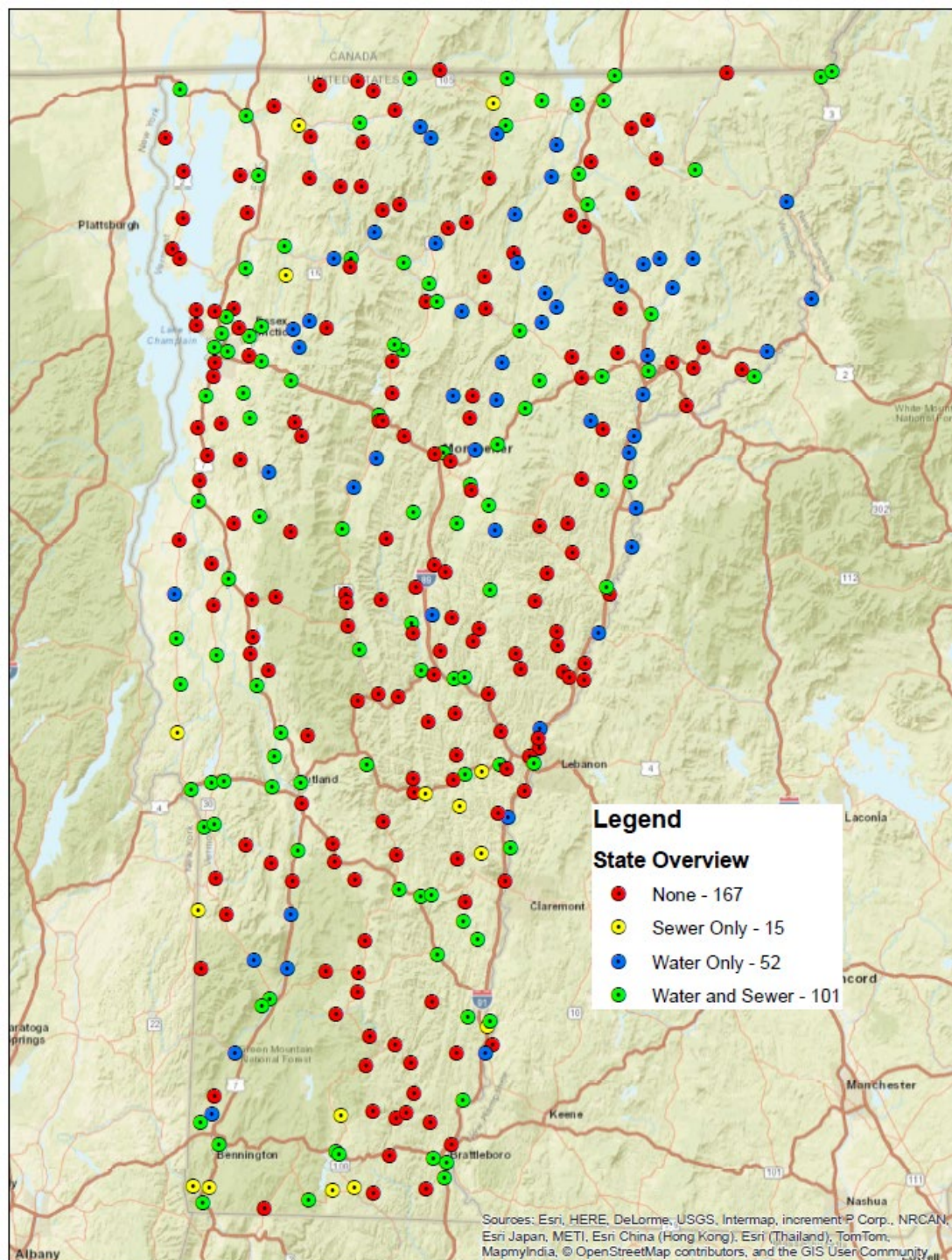
1/9/2025

Lynette Claudon, PE,
Sr Water Infrastructure Engineer, Water Investment Division

Cristin Ashmankas, COOL Team Supervisor
Drinking Water Groundwater Protection Division

Half of Vermont's Villages Lack Municipally Owned Wastewater Systems

- Limits opportunities for redevelopment
- Hard to establish water-intensive businesses like food processing, restaurants and breweries.



Wastewater Programs In Vermont



In ground wastewater disposal (i.e. Septic) thru DWGPD

WW permits, 6,499 gpd and less

- Runs with the land & allows for development once issued
- May require pretreatment

Indirect Discharge permits, 6,500 gpd and up

- Operational Permit and Allows for Construction
- May require pretreatment



Direct Discharge (thru Watershed Management)

NPDES permits for WWTPs to discharge directly to surface water

Industrial Pretreatment

* Operational permit



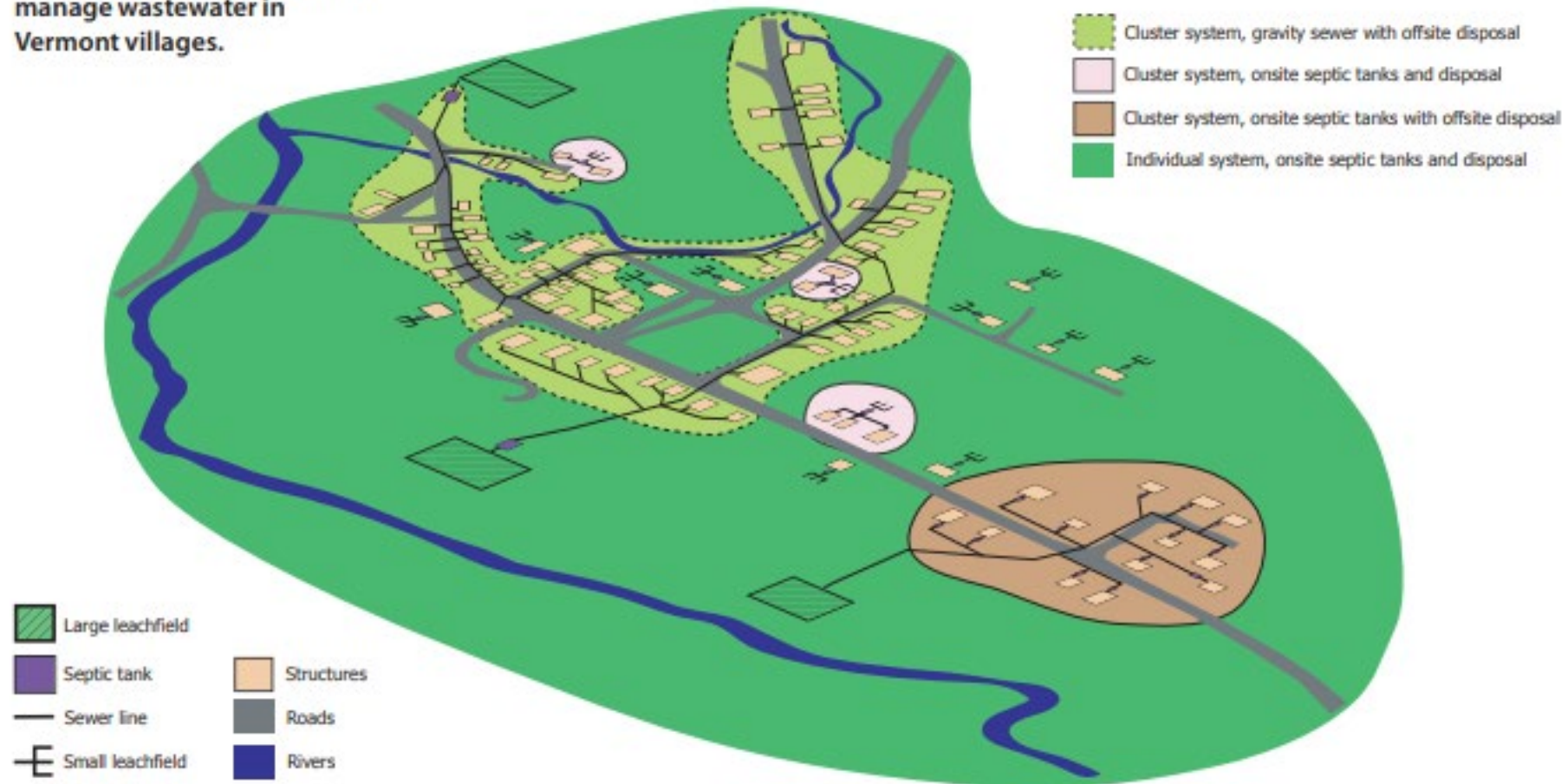
Funding & Technical Assistance

Water Investment Division
Environmental Compliance Division

Future of Wastewater In Vermont

Multiple ▪ Small-Scale ▪ Incremental ▪ In-Ground Disposal

A variety of collection and treatment solutions can be used to manage wastewater in Vermont villages.



Not all wastewater is equal

	Domestic sewage	Brewery process wastewater*	Beer	Dairy process wastewater*	Milk
BOD (mg/L)	250 - 300	2,500 – 12,000+ 10x -48x	>60,000 240x	1,500 – 3,000 6x – 12x	>100,000 400x
TSS (mg/L)	~300	500 - >15,000			
pH	7	5 - 6	4.5		
Oil & grease (mg/L)				300 – 800	~3,600
Phosphorus (mg/L)	<10	20 - 40		35 - 50	>900

* **Varies A LOT** depending upon pollution prevention practices

Examples of Wastewater System Capacities

Alternative Uses	Single Family Residence	School (20,000 SF)
Original Usage (Gallons Per Day)	3 Bedrooms, 420 GPD	200 pupils & 50 staff, 2000 GPD
Nursing Home	3 Beds, 375 GPD	16 Beds, 2000 GPD
Restaurant Use	2 meals, 15 seats, 420 GPD	2 meals, 74 seats, 2000 GPD
Daycare Use	19 children, 2 staff, 420 GPD	2 meals, 100 children & staff, 2000 GPD
Small Dry Goods Store	4 small stores, 400+/- GPD	1- 5000 SF dry goods store or 20 small stores, 2000 GPD
Offices Space	20 employees, 30 clients, 420 GPD	100 employees, 125 clients, 2000 GPD

Funding Opportunities for Wastewater



Department of Environmental Conservation

Clean Water State Revolving Fund, Pollution Control Grants
On Site Loan Program
Healthy Homes ARPA
ARPA Village, CSO, & RI Grants



Agency of Commerce & Community Development

Municipal Planning Grant
Community Block Development Grant
& more



USDA Rural Development



Northern Borders Regional Commission Economic Development Authority

Next steps:

- Get authority from the governing body to start a committee
- Start a committee
- Find out what the local goals & vision are
- Assess what is going on currently
- Find funding for support of the engineering and planning efforts

More resources:

- <https://dec.vermont.gov/village-wastewater>



Questions?