**VTCAC**

**Combined Sewer Overflow (CSO) Talking Points**

Approximately 10- 11 Communities with identified CSO discharge locations

Each is unique in the sources of flow, number of CSO discharge locations, frequency, duration, and volumes

Weather conditions that trigger a CSO:

* Winter snowmelt with rainfall
* Spring – high groundwater table with rainfall
* Summer – Rainfall event with high intensity

Weather conditions during a CSO discharge also significantly degrade the water quality of the receiving water, so would not be suitable for public uses

Combined Systems (sewer and stormwater); Burlington, St. Albans, Rutland, Montpelier

* Burlington is unique as CSO’s are treated, but discharge directly to the Lake and can cause beach closures
* These communities have more frequent CSO discharges and larger volumes

Vergennes

* Separated sewer system but frequent CSO discharges at MacDonough Drive PS caused by roof drains, sump pumps, etc.

Others; Newport, Hartford, Enosburg Falls, Middlebury, etc.

* Sources of flow; Catch basins, building roofs, sump pumps, foundation drains,
* Multiple CSO discharge locations
* Very infrequent CSO discharges, small volumes

Continuous rainfall, and level monitoring for major CSO locations: State funded through CW

Regulatory Requirements

* CSO Rule – adopted 2016
* CSO discharge locations remain on list if not closed, or reclassified, regardless of overflow frequency, duration, and volume
* Monitoring of rainfall and level
* CSO – Comply with design storm and water quality standards
* Most CSO locations have very infrequent discharges so can not sample to determine compliance with WQ standards
* Long Term Control Plan prepared that includes recommended abatement projects, financial plan, implementation schedule, etc.
* Updated 1272 Order issued which includes the minimum controls, the implementation schedule and projects
* CSO Discharge ID listed in Appendix A of Discharge Permit
* Annual CSO progress report submitted in January

CSO Abatement Alternatives

* Monitoring
* CSO elimination/closure
* Reclassify to SSO (sanitary sewer overflow)
* Check Valves
* Rehabilitation of sewers
* Storm/sewer separation
* Sump pump disconnections
* Roof drain disconnections
* Primary treatment and disinfection
* Storm/sewer separation
* Green stormwater infrastructure
* Off-line storage

Success Stories - Village Enosburg Falls

* 3 overflow locations in early 1990’s
* Overflow triggered for any measurable precipitation
* 1992 - Completed large separation project
* Disconnected roof drains along Main Street
* 2011 – Upgraded WWTF to treat more flow and constructed 30,000 gallon off-line storage tank
* 2021 –
  + Bridge - 1 overflow location
  + 1 overflow since 2014 during a 4”- 24 hour rainfall event

Available Funding Sources

* Watershed Investment Division Clean Water
  + Loan forgiveness for monitoring, LTCP
* ANR ARPA Funds
  + Governor approved $25 M to fast-track
  + $10 M FY 22
* USDA/Rural Development
  + Available for communities with population less than 10,000 in form of grant/loan

Closing Thoughts

* CSO’s are a public health and environment concern and receive the most negative public attention, however:
  + In many communities, there has been great progress over the past 30 years in reducing CSO’s
  + Of the remaining CSO discharge locations, a majority of the CSO locations have very infrequent and low volume discharges
  + Many older VT communities have competing public infrastructure challenges with 100 year old pipes, so available funding needs to be invested in replacing original waterlines, sewer lines, etc.
  + With climate change, it is not reasonable and/or affordable to eliminate CSO’s
  + To improve water quality, funding is better spent addressing urban stormwater treatment