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DTAP data needs

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Hi Olivia,

My Section is in charge of septic permitting and I happen to be a “data-crazy” guy J… My responses to your request are in blue below:

- Large monitored septic systems: location and number of people on the system.

  Data: Total number of community (residential) large systems in the State is 62, with total design flow of 5,886,855 gallons/day (see the attached file for details, incl. names and locations)
  Interpretation: Requirement for “design flow rate” is 120 gallons/day per bedroom (for residential dwellings); i.e., 49,057 bedrooms are being served with community septic systems (as for how many people being served is up to further interpretation; I can only go this far with what we have. Will one person per bedroom in average be reasonable?)

- Number of unsewered dwelling units/homes, which presumably is the number of dwelling units on septics

As of today, the total number of individual/small onsite septic systems in the State is 67,837. Our record started in 1985; but not very “complete” till after 1991. There are quite a few old septic systems out there that are not in our database. Missing 8-10% is reasonable.

- Septic failure rate. A good guess at a percentage is fine. Something like 10% would work for my purposes of estimating bacteria

  Depends on how we define “Failure”- “sewer surfacing” is widely accepted as a sign of system failure, which should be less than 10% for sure (we do not have enough data to calculate an accurate percentage). We usually find systems “unsatisfactory” through inspections (not necessarily surfacing) and require system replacement. Among the 67,837 systems on our record, 15,654 are “Replacement permits”. Note that a lot (> 50%?) of these replacement systems did not have a record/permit with us (i.e., pre-1985 old systems).

- Percent of septic systems within 100 feet of a waterway. I can calculate this if you know the actual location of systems.

  Our regulations do not allow disposal field of a septic system to be located within 100 feet of a waterway, though there are exceptions that are dealt on a case-by-case basis.

- Agricultural spray irrigation: TN and TP amount applied and location

  Facilities using spray for disposal of treated wastewater (together with designed flow) are listed in the attached Excel table. You may be able to calculate TN and TP loading from the flow rate.

- Rapid infiltration basins: location, area and any information that would help estimate TN, TP, TSS and fecal coliform.

  Large onsite wastewater treatment and disposal facilities are identified (in the database) as Spray or Non-Spray facilities, as shown in the attached table. Besides RIBs (rapid infiltration basins), the non-spray facility group also includes conventional large septic systems. Again, TN and TP loading could be calculated based

on flow rates.

Hope that the above will be of help on what you need. Please let me know if you have any questions.

Thanks,

Ping

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LS Facilities_Flow.xlsx
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