Wastewater Solutions for Vermont Communities

Technical and Funding Options

Steps for Problem Solving: Getting your ducks in a row…

The Steps	Description
Step 0	Definition: What's the problem?
Step I	Planning: What can we do?
Step II	Design: What should we do?
Step III	Construction: Let's do it!
Step IV	Repayment: It's not over yet…

Step 0: Definition
What is the problem?

- Order from ANR: CSOs, Illicit Discharges
- Order from Health Officer
- Failed Systems
- Poor Water Quality or Contaminated Water
- Poor Soils, High Ledge, High Groundwater
- No Capacity for Growth or Redevelopment
- Cost of Repairs
- New nutrient loading requirements (N & P)
- What's your problem?

Who can help?

- Facilities Engineering Division (FED) of ANR
  - Assistance to get you going.
  - Planning Loans and Grants.
- RCAP Solutions – Robert Morency Jr., PhD
- The Right Consultant
  - Use your own consultant
  - Put out an RFP or RFQ (FED or RCAP can help you.)
- Town Staff – if you have them…
- Your Regional Engineer at ANR
  - Knows your area and can make suggestions.
- Other Funding Agencies

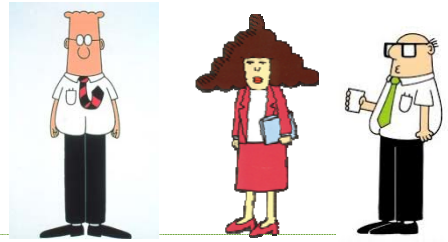
Stepping Up: What do we need?

- a sewer committee or commission
  - active, dedicated volunteers
- help from your planning commission
  - solutions need to be in line with your town plan and your local ordinances
- help from your regional planning commission
- support from your selectboard
- support from your community
  - public approval and a bond vote are required

Project Team

Planners

Consultants



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State Officials

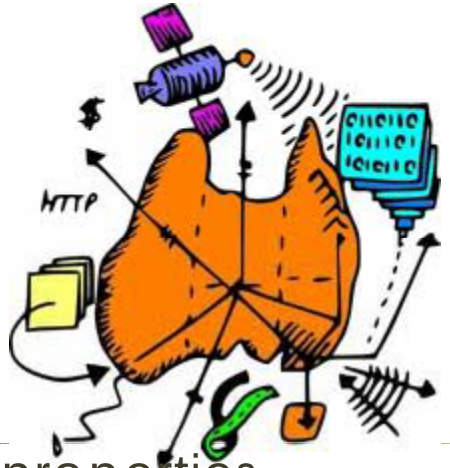
You!

Selectboard

Sewer Committee

Town Staff

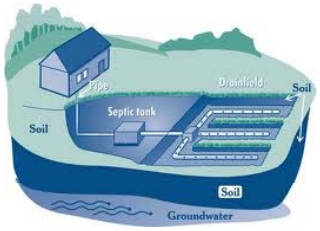
Step I: Planning
What can we do?



- Get funding: grant, loan, or other $$
- Get your consultant going
- Identify the good soils & town-owned properties
- Inventory existing wastewater systems
- Explore complementary projects (water, sidewalks)
- Figure out the alternatives
- Figure out what the deal-breakers are
- Gain public support
- Complete a Preliminary Engineering Report (PER)
  - Not just any old study

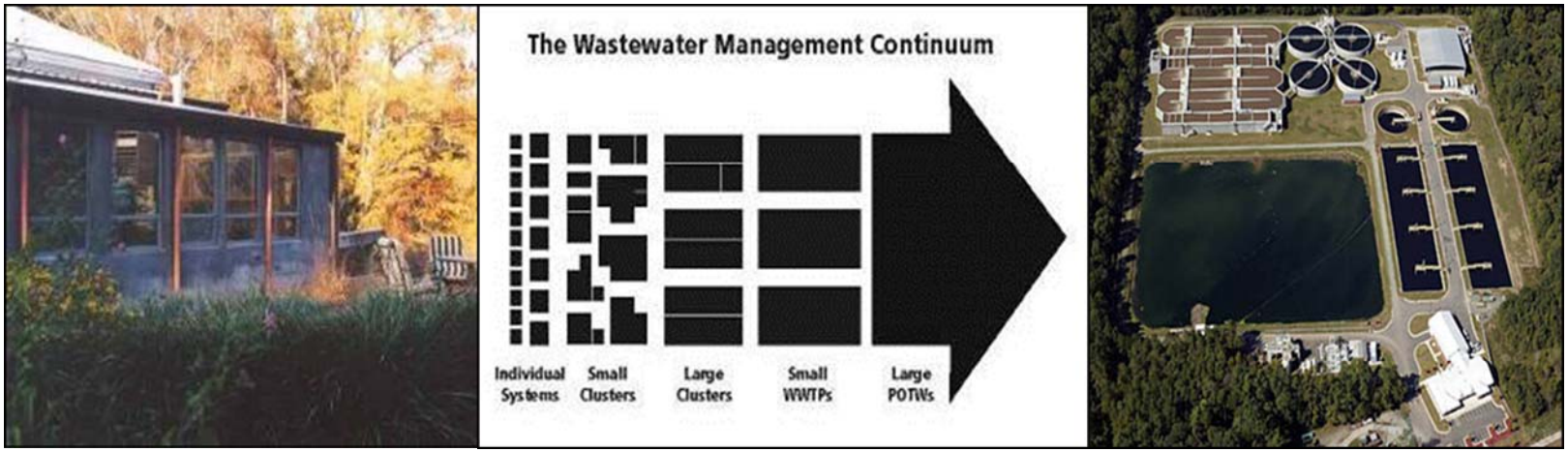
What are the alternatives?

- Best Fix solutions for individual land owners
- Community decentralized wastewater options
- Community centralized wastewater options
- Policy options?
- What fits our community?
- Pick the solution that best solves the problem



Decentralized Solutions: What are they?

- Soil based wastewater disposal systems
- Shared systems, 2 or 3 users
- Clustered systems, multiple users and multiple fields in a neighborhood
- Community systems, for whole village or subdivision



Graphic by WEF.org

Indirect Discharge Systems

- Soil based: (leachfields or sprayfields) for 6,500 gpd or more
- Community solution: centralized approach or decentralized approach
- Indirect systems designed for future growth must meet specific stringent environmental standards protecting water quality

On-Site and Cluster Options

http://wastewater.vt.gov/powhatisaww.htm

Regional Engineer's Office, ANR:
http://wastewater.vt.gov/poregionaloffices.htm#romap

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Complementary Projects: Thinking Outside the Box…

- Public drinking water system – where there are good soils , replacement of many wells with a public drinking water system will free up land for use in wastewater disposal
- Policy Changes –
  - Community pump out program
  - Pretreatment requirements
  - Grease traps and interceptors

Yikes! What about growth?

What can you do to have a successful project?

- Have an up to date & RPC approved town plan
- Have written, planned growth areas:
  village, downtown, neighborhood, or growth center
- Have a sewer ordinance with defined boundaries
- Have a coordinated zoning ordinance
- Identify opportunities to reduce loading to the system (i.e. green stormwater infrastructure)
- Decide what works for your community

Step II: Design
What should we do?

- Bond vote to ensure local support and funding
- Work out the design details with your consultant
- Work out final design details with individual landowners, including easements and legal issues
- Maintain public communication about the project: public meetings, articles, etc.

Step III: Construction Let's do it!

- Get ready for construction.
  - Dust, noise, traffic.
- Keep community members informed and engaged with the project:
  - Front Porch Forum , Twitter, List Serve
  - Remind folks to be flexible & patient
- Going live with your project
  - Education about the new system

Step IV: Repayment
It's not over yet...

- Loan payments
- Audits
- Budgeting to cover your financial needs
- Asset management for long term financial health
- Maintenance to keep costs down

Funding Options
Show me the money!

There are a number of project funding options available.

Your consultant will help you to navigate the funding requirements.

Facilities Engineering Division State Revolving Fund (SRF)

- Clean Water SRF (CWSRF) – January P-List
  - Sewer & Stormwater (MS-4)
- Drinking Water SRF (DWSRF)
- State & Tribal Assistance Grants (STAG)
  - Require US congressional earmark
- Planning Advances
  - May require VT legislative earmark
- State Grants: CSO, Phosphorus, Dry Weather Flows
  - Require VT legislative earmark
- On Site Water & Wastewater Loan Program

http://www.anr.state.vt.us/dec/fed/fed.htm

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Facilities Engineering Division
Drinking Water SRF

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- All public community water systems & non-profit non-community water systems are loan eligible
- Priority List is developed on an annual basis to prioritize projects based on public health risk and compliance with the Safe Drinking Water Act Regulations
- Standard rate and term is 3%, 20 years but systems qualifying for the disadvantaged system program may qualify for a rate and term as low as negative 3% over a 30 year period
- Planning loans are also available for municipal public community systems with populations <10,000, municipal non-transient, non-community (NTNC) water systems, private non-profit community water system with populations <10,000
- Currently there is no priority list for planning loans and loans are available on a first come first serve basis
- Planning loan rate and term is 0%, 5 years with delayed repayment provision so this loan can be consolidated with construction financing

USDA Rural Development

- For communities with populations of 10,000 or less according to the last census
- Have both loans and grants for water and wastewater projects, however, not all communities and projects will qualify for grants
  - Must have Median Household Income (MHI) below statewide MHI
  - User rates "post project" must support need for grant
- Loan interest rate is lower if MHI is below the statewide MHI

Community Development Block Grant (ACCD)

- Gap funding for municipal infrastructure projects
- Must directly benefit Low & Moderate income (LMI) persons
- Federal compliance (NEPA, Davis Bacon, Procurement) and timing considerations
- Competitive Grant Process

http://accd.vermont.gov/strong_communities/opportunities/funding/vcdp

Municipal Planning Grant (ACCD)

- Annual grants up to $20,000 with small cash match
  - up to $8,000 with no match
- Eligibility: RPC confirmed planning process
- To be competitive:
  - The need for the project is clearly articulated in town plan
  - Project includes public participation and outreach
  - Facility/infrastructure planning is in support of compact centers (villages/downtowns/walkable neighborhoods and not sprawl)
- Contact MPG staff before beginning work plan/scope
- Applications due Sept 30. Grants awarded in December for 18 month projects

http://accd.vermont.gov/strong_communities/opportunities/funding/municipal_planning_grants

Other Funding or Co-Funding Sources:

- VT Municipal Bond Bank
- VT Dept of Public Safety – Flood Hazard Mitigation Grants (for infrastructure damaged 3 or more times by storm event flooding)
- Efficiency Vermont (efficiency upgrades for existing infrastructure)
- VT Ecosystem Restoration Program Grants (green infrastructure)
- VT Home Ownership Centers (VT NeighborWorks) – loans & grants to low income households for onsite water and septic repairs
- USDA Rural Development Home Repair Loan and Grant Program www.rurdev.usda.gov/NHVTHousing.html

How do we get started? Let's roll!

- Get selectboard to appoint a committee
- Identify the problem
- Meet with FED to make a plan
- Secure funding for planning

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