The existing situation strongly influences the kind of business a Responsible Management Entity (RME—Fact Sheet #1) or other service provider may conduct and whether that business can be successful. Given this, it pays to understand the local and regional context before creating a detailed business plan (Fact Sheet #8).

The local context has many dimensions. Key among them is the state of the public mandate. Is there a proven need for wastewater management services based on sound evidence of an existing or impending threat? On the other hand, what is the value proposition? How will prospective customers gain value from this initiative? Some other influential dimensions include:

- Existing infrastructure for wastewater treatment and its management.
- Environmental conditions including climate (temperature, rainfall), soils, drainage, and proximity to water tables and sensitive environments.
- People, groups, and personalities.
- History and norms of the region.
- Demographics and ability to pay.
- Trends in population growth or decline, land use, and settlement patterns.
- Availability of investment capital.
The competition: who provides what services already, and by extension, what is missing?

Regulations, an important topic, addressed further in Fact Sheet #3.

There is a wide range of public and private possibilities for RMEs and service providers, each with their own pros and cons (Fact Sheets #1 and #4). At the outset, all possibilities should be on the table. Decisions about the governance model and structure of your organization are best made by systematically assessing the opportunity through a business planning process (Fact Sheet #8). This process includes:

- Gathering information about what’s needed and what’s available (this fact sheet).
- Recognizing what regulations apply (Fact Sheet #3).
- Identifying what is possible, feasible, and desirable.

Below, these dimensions are organized into a set of core questions, with answers, discussion, and case examples particular to the distributed wastewater sector.

### CORE QUESTIONS FOR MOVING INTO THE DECENTRALIZED WASTEWATER BUSINESS

- **Assess existing wastewater treatment and management.** What is the state of the public mandate? What defines the need and the value proposition (e.g., public health, environment, economics, social equity)?

- **Assess stakeholders.** Is there support for RME services or for centralized sewers? Are there local action groups, regulators, or customers willing to pay?

- **Assess revenue base.** Are there enough customers? Can they pay what you need? Will you have a monopoly?

- **Assess availability of capital.** Can you raise the funds through public or private debt or equity financing?

- **Assess regulatory landscape.** Do local regulations for corporate formation, utility operation, and environment/public health protection support your preferred organizational structure?

### ASSESS EXISTING WASTEWATER TREATMENT AND MANAGEMENT.

What is the state of the public mandate? Is there a need for RME services? Is there a need for some other kind of service provision? What kinds of pressures exist? What type of service matches these contextual factors?

### EXISTING AUTHORITY ADOPTS DECENTRALIZED APPROACH FOR NEW DEVELOPMENTS.

The Mobile Area Water and Sewer System (MAWSS), in Alabama, is a substantial urban water and wastewater utility that operates a centralized sewer system and three treatment plants. The utility was faced with...
the need to make decisions about extending its service area across a topographic divide to serve an expanding suburban area west of Mobile. Developers began to request sewer service in this area, and the MAWSS staff and board determined that providing remote wastewater service could be worthwhile. MAWSS installed several decentralized systems, which are owned and operated by the utility through a collaborative arrangement with developers.

**RESPONDING TO DEVELOPMENT PRESSURE.**
Depending on the situation, centralized management of decentralized systems may be used to encourage or limit growth.

In contrast to the MAWSS example above, residents of Stinson Beach, California, rejected a sewer proposal because of concerns about growth. Instead they embraced the idea of an onsite wastewater management district as a means of managing both wastewater infrastructure and what was viewed as excessive development.

**HIGH SEWER COSTS DRIVE DECISIONS TO SUPPORT DECENTRALIZED SYSTEMS.**
The high capital costs and ongoing operation and maintenance costs of centralized sewers are a factor in many of the examples in these fact sheets.

For MAWSS, an existing utility, it made financial sense to install and operate decentralized systems outside the utility’s service area rather than extend sewers. In Broad Top/Coaldale, Pennsylvania, and Warren, Vermont, the high cost of an initial centralized sewer proposal took serious consideration of any sewer, including lower-cost alternatives, off the table for a period of several years. In both of these cases, decentralized alternatives were eventually implemented with the local municipality as the RME.

**ASSESS STAKEHOLDERS.**

Is there support for an RME or some other kind of service provision? What are the local public perceptions about past or failing systems? If the locals are used to “wearing pegs on their noses in the rainy season,” how will they respond to an increased rate burden? Or to paying for what was formerly a “free” service? What will it take for you to build enough support?

Learn about and develop relationships with those who can help you and those you may need to win over. Engage early and often—and as appropriate to each group’s power and interest. Local decision-makers need to be in favor of RMEs and/or O&M service provision, rather than replacement of onsite systems with centralized sewers.

Stakeholders include those external and internal to your organization. External stakeholders can include homeowners, other landholders and land managers, installers, realtors, developers, regulators, the local health department, environmental groups, and others. Make use of available resources for developing good relationships with these stakeholders, such as the set of communication tools about building partnerships, bringing ideas to the community, and strategies for success on the Livable Communities website administered by WERF at [www.werf.org/livablecommunities/tool_comm.htm](http://www.werf.org/livablecommunities/tool_comm.htm).
Assuming your organization is already up and running, internal stakeholders include employees, supervisors, and contractors already providing services. Ask yourself some basic questions about taking on responsibilities for decentralized systems:

- Can you survive for an extended period of time with minimal income from the proposed business?
- Do you have an adequate labor force already, or will you need to hire?
- Will your staff need training? (See Fact Sheet #8 for incorporating staffing/training needs into your business plan.)
- Will you need additional licenses? (See Fact Sheet #3 to identify relevant regulations and their impact.)

DON’T GIVE UP YOUR DAY JOB.

Getting started as an operation and maintenance (O&M) provider can take some time, and it could easily be years before you break even. Among other things, it depends on whether O&M is mandatory or not, your customers’ willingness to pay, and your capacity to sell your services and build up enough of a customer base to cover your costs.

Trapper Davis is now a successful provider in Virginia. After three years, he employs two maintenance staff and services about 1,200 individual advanced treatment systems. It wasn’t always so.

Initially, the state did not mandate maintenance, and Trapper realized that building up a financially sustainable customer base was going to take a long time. He reduced this through a wise decision to align himself with an equipment manufacturer who required initial two-year O&M contracts. Even so, alternate income was necessary in the early days. Now, however, because Trapper built good relationships with them and delivered a good service, his customers are sticking with him even after the initial arrangement expires, and they are recommending him to others.

ASSESS REVENUE BASE.

There are many dimensions to consider in getting a handle on your revenue base. Refer to the regulatory (Fact Sheet #3) and business planning (Fact Sheet #8) fact sheets, and think about honest answers to these questions:

- Are there enough customers?
- What kind of value proposition will work for them?
- What kind of need do they perceive? If this is different from the real public health, environmental, economic, or social equity need, how will you convince them of that?
- Can they pay you what you need to be paid to provide service?
- Do they pay for wastewater treatment services currently?
- Will they accept paying for increased management? This is especially
relevant to developing a business dealing with existing systems, where historic costs are often unrealistically low due to a lack of maintenance and management.

- Are your services mandated? What will you do if customers don’t pay? Can you enforce collection? Can you work with another service provider (such as electricity or municipal water) that would be willing to enter into a disconnect agreement for non-payment?
- Is there another service that’s needed locally that you can offer to reduce your overhead and increase your revenue (e.g., trash collection, storm-water management, etc.)? What long-range forecasts are available?
- What are the growth projections for your service area? What does the local planning and zoning commission have to say about how they might be serviced? What are the implications for your future customers?

**ASSESS AVAILABILITY OF CAPITAL.**

Is there capital available for this type of activity? What is your access to state revolving funds (SRF)? Some states restrict SRF access to governmental units. Other states allow easy access for property owners to revolving funds. For example, the Ohio Water Development Authority (OWDA) has a range of wastewater loan programs, including programs that target villages and areas of economic hardship. In addition, the OWDA, like many other state agencies, offers linked deposit loans, which are bank loans at reduced interest rates, to provide individuals, private entities, or governmental agencies with low-cost capital for onsite wastewater systems that provide non-point source pollution control outcomes. (See www.owda.org or www.decentralizedcentral.org.)

**INNOVATIVE PHILANTHROPY FOR COMMUNITY DEVELOPMENT FINANCING.**

ShoreBank Enterprise Cascadia’s (SEC) Septic Loan program has a goal to inspire homeowners to invest in their wastewater assets by repairing or replacing poorly functioning systems.

SEC is a not-for-profit philanthropic organization whose mission is to enhance the economic, social, and environmental wellbeing of the Pacific Northwest. Its focus is improving the water quality in Hood Canal by supporting local businesses and residents. Its intent is to follow public policy rather than to make it.

Rates and terms for loans are indexed to homeowners’ income and credit status, and to property sales. Responsibility for choosing designers, installers, and O&M providers rests with the property owner. SEC provides lists of registered service providers and ensures property owners have funds set aside to pay for O&M. Follow-up O&M is a condition of the loan.

The outcome is that all the incentives are pulling in the same direction, so onsite and cluster system performance in the region is improving without unbearable costs to property owners. While SEC is not an RME, its innovative approach creates a demand for high quality, financially viable service providers.
The Rural Utilities Service of the US Department of Agriculture has a revolving fund to assist small rural communities in meeting their water and wastewater needs. These grants are available to legally established, private, tax-exempt, non-profit organizations. (See www.usda.gov/rus/water.)

The Rural Community Assistance Program (RCAP) also administers grants and revolving funds programs from the USEPA and other sources, and works with rural communities at a local level to address their wastewater problems. Check the RCAP in your region.

**ASSESS REGULATORY LANDSCAPE.**

Please refer to Fact Sheet #3 for further detail on what to look for and how to assess this area and local regulatory processes. In the best situation, local regulations for management would already be in place, or at least the regulatory community would be moving in that direction. Decision-makers must be in favor of operations and maintenance for RMEs to be successful.

**BRINGING IT ALL TOGETHER.**

Having assessed these five areas, to assure that they do not preclude adequate technical options, ask:

- Do you know enough to a) make a good decision, and b) effectively start up and run this type of service? If not, what else do you need to know?
- Are there precedents for this type of service in this local area/region or this state? If not, why not? What are the key barriers? What would make them surmountable?

Undertaking a business planning process can help to answer these questions. (See Fact Sheet #8, which also suggests places to go to for help.)