

## **Demystifying the Management “Mantra”**

At wastewater conferences around the country, one theme seems to be recurring on a regular basis—onsite system management. In fact, presentations, workshops, and training sessions increasingly are focusing on the subject. It is as if there is some kind of industry-wide “management mantra.”

So, the editors at the Small Flows Quarterly decided to discuss this trend with Graham Knowles, the NODP Program Coordinator leading the national management initiative.

**SFQ:** Is the “mantra” we are hearing at conferences about onsite system management something new, or are we just discussing the topic more these days?

**GK:** Yes and no. Let me explain. Yes in the sense that what we are hearing about at conferences is a new wave of interest with new ideas. No, in the sense that onsite system management has its roots in early initiatives taken back in the mid ‘70s.

The need for and advantages of managing onsite systems is not a new idea. As early as the 1970s, serious efforts were made to address this very topic. A simple random review of literature in the field indicates that management was on the minds of professionals and on the agenda for several years. Now some of us are striving to look at early “ad hoc” efforts from a new perspective.

**SFQ:** What do you mean by a “new perspective”?

**GK:** Simply put, it appears that early management initiatives during the ‘70s focused primarily on managing new and emerging onsite technologies. In a sense, it was a technology driven approach. It’s what I refer to as the technology management era, engineered by professionals and technical experts in the field independently of management experts.

John Mori, our executive director, along with others felt the need to revisit the concept of onsite wastewater management from a new perspective. He believes that we should address onsite wastewater management from a “holistic” community perspective. That’s why I am on the team. My background and experience is in management, communication and community development. Over the past 18 months we have explored all aspects of onsite wastewater management—identifying approaches, themes, trends, and commonalities among onsite management initiatives.

**SFQ:** You say that onsite system management has existed for several years in varying shapes and forms. Could you give us specific examples of early management entities?

**GK:** Absolutely. Early onsite wastewater management efforts that come to mind are documented as far back as the early 1950’s. In fact, the first onsite management system was conceptualized and developed not far from where we are sitting today. It was in Fairfax County, Virginia. A good friend of mine, Dennis Hill, directs that management

effort. Recently, Dennis completed an excellent case study in which he discusses exactly how early management initiatives evolved in Fairfax County. Auburn Lake Trails, managed by the Georgetown Divide Rural Utility District, is another example, along with Stinson Beach and Sea Ranch, all of which are located in California. Lake Panorama, Iowa, also immediately comes to mind when thinking of early efforts.

**SFQ:** Are there more recent examples of onsite management initiatives?

**GK:** As I said, absolutely. For instance, Dr. Richard Rose, a member of the NODP Expert Panel, identified a sanitary district at Pena Blanca, New Mexico formed specifically to manage onsite systems. Other members of the Expert Panel have located good faith efforts in Idaho and Washington State, Florida in the Southeast and New Jersey, New York, Massachusetts and Vermont in the Northeast. Not forgetting, of course, several onsite management systems operating successfully in the Midwest. To be candid, we have worked diligently and tirelessly for over a year exploring, investigating, documenting and learning from some fine community onsite management initiatives.

**SFQ:** Do you have a listing of all of the onsite management systems in the nation?

**GK:** That's our intention. It's a sizable task though. It also is a work in progress. We are building a directory—a database. At the last count we had located more than 125 communities of varying size and scope specifically managing onsite systems with differing degrees of sophistication around the country.

**SFQ:** Did you expect to find so many onsite management initiatives when you started looking?

**GK:** That's an interesting question. You have to remember that I came into this position with no background in onsite wastewater. I was just starting out. Early indications from conversations with EPA officials in Washington, D.C., seemed to indicate that there were very few onsite management systems in place. Some suggested a range of only ten to fifteen entities. At one national conference, I was told that there were hardly any and that many people had tried to develop local initiatives but had failed.

As I reflected on what was shared with me, I quietly set a goal to find 50 good-faith efforts around the country. I was confident that such efforts must be out there. Well, it did not take too long to reach the 50 mark, then 75, and then the triple figures. It has been an absolute delight to be a part of something so dynamic and vibrant.

With the assistance of the NODP IV Expert Panel, the Practitioner Council, and other input, we feel that we have made great strides in covering the country. Of course, we would like to hear about any and all new initiatives.

**SFQ:** You mentioned that the communities differ in size and sophistication of management. Do all onsite management systems have a particular management model that they are using?

**GK:** No. However, some similarities between management entities in terms of their management models do exist. What is so interesting is to learn about the novel approaches developed and tailored to specific community situations. So, we can certainly say there is no one-size-fits-all management model.

Of course, from a management perspective, we never expected one model. In fact, that's what is so exciting. To learn about unique entities across the country that have evolved within differing social settings, economic environments and regulatory realms. I would say that the only real similarity is the application of correct management principles to effect sustainable solutions.

**SFQ:** How many management models are out there?

**GK:** To be honest we do not really know at this stage. Identifying another entity may very well unearth a different management model. I guess it's like asking how many models of vehicles are on the road. The range of options is significant. We have RVs, SUVs, trucks, vans, buses—a myriad of alternatives. What is common is that they are all modes of transport.

Likewise a management model is a means to an end. Onsite wastewater management is a way of doing business. Whether or not it is a public utility model, a sanitary district approach, a homeowner association, an intermunicipal agreement, or a compliance-based model is not entirely important. What is key is whether or not it works. Does the chosen model get the job done effectively? I mean, are community objectives achieved? If so, we must obviously consider it an effective onsite management system.

**SFQ:** What are you doing with all this data?

**GK:** That's a good question. Data gathering for the sake of the exercise would not be at all valuable to the country at large. We are gathering data so as to generate information to add to the knowledge base of the industry. Our intention is simply to put data into context, to generate information. Once we put the information into context we will have knowledge, valuable insights into onsite wastewater management. In this way we are better positioned to assist America's small communities and to fast-track long-term solutions in the context of their individual situation and desired outcomes.

**SFQ:** We understand that you developed something called SepticStats. What is SepticStats, and is there any connection between it and your onsite management activities?

**GK:** Yes, it's true that I did develop SepticStats, and, yes, there is a definite connection between SepticStats and onsite wastewater management. SepticStats has two data sets compiled from U.S. Census data from 1970, 1980, and 1990. It includes information on the means of sewage disposal by state and county as of 1990 and bar charts by state indicating thirty-year trends in terms of the means of sewage disposal. SepticStats is an

effort to heighten community awareness of the number of local housing units utilizing an onsite system as a means of sewage disposal.

Let's face it, if you cannot count it, you sure can't manage it, can you? You would be amazed how many communities know that they need to manage the systems in their jurisdiction yet do not know how many systems are even in their area, let alone where those onsite systems are located.

**SFQ:** What are you currently busy working on?

**GK:** Right now we are wrapping up the first stage of this project—what I refer to as the “hunter gatherer stage.” We are delighted with the outcome and have learned a tremendous amount. We have been working on a management strategy to assist America's small communities develop effective onsite management systems. It's now complete and under review. We are also working on developing a set of tools to assist communities take practical steps in effecting long-term local solutions to onsite wastewater issues. It's a fascinating subject, which has stimulated tremendous interest nationwide.

Graham Knowles directs the National Onsite Demonstration Program onsite management initiatives at the National Research Center for Coal & Energy located on the campus of West Virginia University. Graham has over twenty years of international private-sector management experience, in Europe and Africa. Currently, he heads-up NODP Phase IV addressing all aspects of onsite wastewater management in the United States.