

## Overcoming the 'Blues Brothers' Principle Integrating onsite wastewater and stormwater management in small communities

*Juli Beth Hinds*

All movie buffs know the line from "The Blues Brothers," when the bar owner informs Elwood and Jake that their audience likes "both kinds of music — country and Western!" Similarly, we take an unnecessarily divergent approach to managing "both" kinds of water — stormwater and wastewater. While small and midsize communities increasingly are embracing management of distributed and onsite stormwater treatment systems, when it comes to wastewater treatment, we continue to struggle both with a sporadic, poorly supported practice of managing onsite systems and chronic conflicts over central sewers.

It's the Blues Brothers principle: Making a distinction where one is not needed. Whether labeled "storm" or "waste," all water that interacts with humans and their settlements is treated in a similar way. It picks up and conveys pollutants, must

be transported away, and requires some human intervention to treat and release it back into the environment. The parallels extend into treatment: For both kinds of water, we use mechanisms to settle out transported solids, as well as to conduct chemical or biological treatments.

Local governments are the critical players in this human-water interaction cycle, and they have the best opportunity to integrate onsite management. Local governments control the overwhelming share of land use and water management decisions that determine how and where the human-water interaction will occur, and — very importantly — who will pay how much money for water treatment. Local governments also decide whether and when to pursue sewers as a wastewater management strategy and directly address the political and financial fallout of our ongoing sewer wars.

In the wake of Phase I and Phase II of the stormwater permitting pro-

gram, local governments have embraced stormwater utilities as a realistic way to manage this system of distributed, land-based water treatment. The number of stormwater utilities — roughly 400 today — is expected to reach 2500 by the year 2015. There has been no hue and cry to replace retention ponds and forebays with pipes and central treatment; the presence and permanence of distributed stormwater systems, and the need to maintain them, are a given. Not so for wastewater, where onsite and cluster systems still are met with suspicion and a desire to replace them with "real" wastewater treatment. Thus, even where onsite treatment could remain a viable solution, the sewer wars begin.

The fact that local governments are embracing distributed stormwater management but clinging to reactionary, expensive, and politically draining sewer-or-bust wastewater management represents a

### 100 Fastest-Growing U.S. Counties, 2000–2005

Urban/Rural Status in 2000:	Number of Counties	2005 Population Estimate	% of U.S. Total	2005 Housing Units Estimate	% of U.S. Total	New Housing Units Added, 2000–2005	% of U.S. Total
No urbanized population in 2000	28	980,462	0.33%	443,860	0.36%	90,430	1.0%
Urbanized population less than 10,000	12	991,187	0.33%	467,096	0.38%	102,756	1.2%
Urbanized population greater than 10,000 and at least 20% rural	39	5,620,032	1.90%	2,253,848	1.81%	522,470	6.1%
Urbanized population greater than 10,000 and less than 20% rural	20	9,284,643	3.13%	3,870,309	3.11%	808,384	9.4%
Total*	99	16,876,324	5.69%	7,035,113	5.66%	1,524,040	17.7%

\*Excludes Broomfield County, Colo., with no comparable 2000 data.

Source: Housing Unit Estimates for the 100 Fastest Growing U.S. Counties between April 1, 2000 and July 1, 2005: Percentage Change between April 1, 2000 to July 1, 2005 (HU-EST2005-05), Population Division, U.S. Census Bureau, Release Date: August 21, 2006.

failure of imagination on the part of regulators, municipal leaders, and water resource managers. New and realistic wastewater management that focuses on the long-term health and functioning of onsite systems is essential. Perhaps it is time for

“Think Management First!” to become a new catch-phrase for local water management, and the success of the stormwater utility experience points to how it can happen.

The typical land use setting where integrated management offers the most

potential benefits happens to be one of the most common fastest-growing segments of the United States. As an illustration, 39 of the 100 fastest-growing counties from 2000 to 2005 had at least 10,000 people in urbanized areas, making some stormwater management need likely, but at least 20% of the population was classified as rural. New housing in these counties represented 6.1% of all new units nationwide. In this land use setting, most wastewater and stormwater infrastructure will be new and incrementally built, with onsite stormwater and wastewater treatment; available sewers are the exception, and rapid growth rates can create a challenging climate for local officials. These are the very places where robust onsite management programs — of both kinds — might make the most sense.

The steps to establishing a stormwater utility are nearly identical to starting a successful local onsite wastewater management program, as evidenced by the experience of the communities who have found themselves on a decentralized management path. But it is only after a community has made a decision to pursue a distributed water resource management program that setting up the management and financial program — the comparatively easy part — can occur.

In short, it is time for the prevailing regulatory and design paradigms in each field to stop pulling in opposite directions. The nation’s small and midsize communities are well on their way to figuring out realistic and financially sustainable methods of managing distributed stormwater, and more and more land development is incorporating water-friendly approaches that minimize the post-interaction treatment needs. The “other kind” of water needs an equally intelligent management approach, and transferring from one to the other is not much of a stretch.

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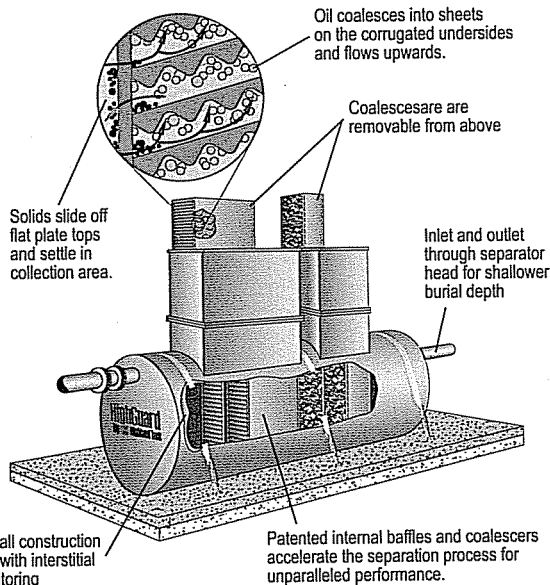


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