

## TOOLS AND RESOURCES:

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### Web Resources:

- Sustainable Water Infrastructure for the 21st Century  
[www.epa.gov/water/infrastructure](http://www.epa.gov/water/infrastructure)
- Clean Water and Drinking Water Infrastructure Gap Analysis [www.epa.gov/OW-OWM.html/gapreport.pdf](http://www.epa.gov/OW-OWM.html/gapreport.pdf)
- New Development: Smart Growth  
[www.epa.gov/smartgrowth](http://www.epa.gov/smartgrowth)
- Drinking Water Capacity Dev.  
[www.epa.gov/owm/assetmanage/pdfs/utility\\_management.pdf](http://www.epa.gov/owm/assetmanage/pdfs/utility_management.pdf)
- EPA's Water Efficiency Site  
[www.epa.gov/owm/water-efficiency/index.htm](http://www.epa.gov/owm/water-efficiency/index.htm)
- Reinvesting in DW Infrastructure  
[www.win-water.org/win\\_reports/infrastructure.pdf](http://www.win-water.org/win_reports/infrastructure.pdf)

### Handbooks:

- "Attributes of Sustainably Managed Utilities"  
[www.epa.gov/water/infrastructure](http://www.epa.gov/water/infrastructure)
- An Environmental Management Systems Handbook for Wastewater Utilities  
[www.epa.gov/ow/ems/](http://www.epa.gov/ow/ems/)
- Asset Management Handbook for Small Systems  
[www.epa.gov/safewater/smallsys/pdfs/guide\\_smallsystems\\_asset/mgmt.pdf](http://www.epa.gov/safewater/smallsys/pdfs/guide_smallsystems_asset/mgmt.pdf)
- NACWA's Managing Public Infrastructure Assets to Minimize Cost and Maximize Performance  
[www.amsa-cleanwater.org/pubs/index.cfm](http://www.amsa-cleanwater.org/pubs/index.cfm)
- Setting Small DW System Rates for a Sustainable Future [www.epa.gov/water/infrastructure/pdf/final\\_ratesetting\\_guide.pdf](http://www.epa.gov/water/infrastructure/pdf/final_ratesetting_guide.pdf)
- Case Studies of Sustainable Water and Wastewater Pricing [www.epa.gov/water/infrastructure/pdf/FullCost\\_Pricing\\_casestudies\\_finalversion.pdf](http://www.epa.gov/water/infrastructure/pdf/FullCost_Pricing_casestudies_finalversion.pdf)
- Water Conservation Plan Guidelines  
[www.epa.gov/OW-OWM.html/water-efficiency/wecongid.htm](http://www.epa.gov/OW-OWM.html/water-efficiency/wecongid.htm)
- AWWA WaterWiser Interactive Web Site  
[www.waterwiser.org](http://www.waterwiser.org)
- Watershed-based NPDES Permitting Implementation and Technical Guidance  
[www.epa.gov/npdes/pubs/watershedpermitting\\_finalguidance.pdf](http://www.epa.gov/npdes/pubs/watershedpermitting_finalguidance.pdf)

### Or Contact:

Capacity Development Supervisor  
KY Division of Water  
[water@ky.gov](mailto:water@ky.gov) or 502.564.3410  
The Capacity Development Staff can assist your utility in implementing the SI initiative.

# TOOLS

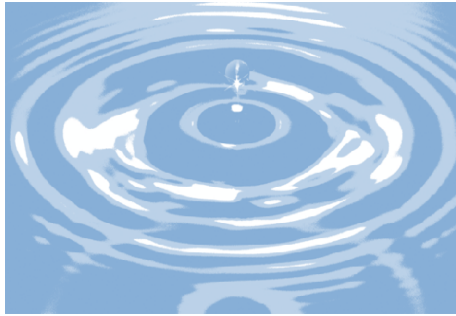
## To Assure the Future of Your System



*Sustainable Infra-  
structure*

2008

*Kentucky Division  
of Water*



## Sustaining Kentucky's Water Infrastructure

Every day we benefit from the environmental, public health, social, and economic benefits that clean and safe water provide. One of the most critical challenges facing Kentucky is how to sustain our water and wastewater infrastructure to ensure that Kentuckians can continue to enjoy these benefits in the future. In the last 20 years, communities such as yours across the country have spent approximately \$1 trillion on drinking water treatment supply and wastewater treatment and disposal. While this spending is significant, it may not be enough to ensure the delivery of sustainable services in the future. In fact, here in Kentucky we anticipate a \$5 billion funding shortfall.

**So, what can you do.....  
.....to close the gap?**

## THE FOUR PILLARS OF SUSTAINABLE INFRASTRUCTURE



### FULL COST PRICING

Full cost pricing can help utilities recognize their full costs for providing service over the long-term and to implement pricing structures that effectively recover costs and promote environmentally sound decisions by customers.



### WATER EFFICIENCY

Utilities should promote water efficiency in the residential and commercial sector through programs designed to market water efficient products and services. Create incentives within your community to encourage more efficient use of water and source water protection.



### BETTER MANAGEMENT

Better management of utilities can encompass practices like asset management, environmental management systems, capacity development, and selection of innovative, cost-effective technologies. Consolidation and public/private partnerships could also offer utilities significant savings.



### WATERSHED APPROACH

Watershed approach looks more broadly at water resources in a coordinated way, which can leverage limited resources. Watershed management tools include source water protection, centralized management of decentralized systems, and smart growth approaches.

#### Sources:

- <http://www.epa.gov/waterinfrastructure/basicinformation.html>
- "Sustaining Our Nation's Infrastructure", Environmental Protection Agency, August 2006.

### JUST ONE EXAMPLE:



### Results...

One utility has made a commitment to addressing their system in a sustainable manner. They implemented a progressive rate structure with conservation pricing and developed an innovative water efficiency program featuring incentives for purchase of water efficient products.



### Savings...

These activities have allowed the utility to reduce overall water demand by more than 20%. The utility has also used asset management techniques to reduce its FY 2004 capital budget by 13% and its operating budget by 7%.



Check out the resources on the back of this brochure!

Contact the KY Division of Water today to learn more about Sustainable Infrastructure!