



## Water Resources and Growth Management

### Key Points:

- ➔ *Uncertain or inadequate water supplies are beginning to constrain growth and development, mostly in the West, but increasingly across the country.*
- ➔ *It is more cost-effective for a community to protect its waterbodies from becoming polluted than it is to treat water after it is polluted.*
- ➔ *Water protection techniques can save taxpayer money. The trees in the Washington, D.C., area have saved the city \$4.74 billion in stormwater infrastructure cost.*
- ➔ *The EPA encourages states to use the federal Clean Water State Revolving Funds for smart-growth approaches to improve water quality.*

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### AIA Position

Careful growth management planning policy is becoming more and more critical to state and local governments as the nation seeks to preserve its water resources. By partnering land conservation programs with growth management tools such as waterfront revitalization, land-use regulations, and greenway buffers, communities can improve water quality and water supplies.

### Action Sought

The AIA urges state legislators and governors to craft policies that offer incentives for livable communities that preserve water resources and water quality.

### Explanation and Justification

Across the U.S., decreasing water supplies, population booms, and sprawling development are hurting communities' ability to provide safe and reliable drinking water. States have started protecting their water resources by combating sprawling development.

Uncontrolled development results in the loss of natural watersheds and increases rainwater runoff. Runoff, or non-point source, pollution is caused by rainwater taking with it pollutants from roads, rooftops, and other impervious surfaces. The pollutants are not filtered out naturally, so they flow into surface water. Impervious surfaces also prevent rainwater from sinking into the soil to replenish the groundwater supply and create a greater volume of runoff at a more rapid pace than under natural conditions. This may result in a higher frequency of flooding and erosion, which contributes to more runoff. All these factors increase pollutants in our waterways and water supply. Examples of state programs that use growth management strategies to protect their water include:

**Maryland** In 1999, Anacostia Watershed Toxic Alliance was developed to control runoff and sewer overflow into the Anacostia watershed. The Alliance plan includes using Low Impact Development (LID) techniques, a strategy that replicates the natural hydrology of the area by using green space to manage runoff. Washington, D.C., and Maryland use LID techniques such as rooftop gardens, porous pavements and stream buffers to reduce stormwater runoff. D.C. also uses trees along the trouble areas of the sewer system to slow stormwater flow. Reduced stormwater flow decreases the amount of pollutants that wash into waterbodies since pollutants are absorbed naturally into soil and vegetation. Texas, Indiana, Arkansas, and South Carolina also use LID techniques to reduce stormwater flow.

**Iowa** In 2002, Iowa enacted a "Smart State Revolving Funds (SRF) for Iowa Clean Water" program, allowing Clean Water SRF to be used for smart-growth initiatives. Clean Water SRF is managed by the Environmental Protection Agency and provides \$1.35 billion annually to states in the form of low-interest loans for wastewater treatment infrastructure. In recent years, EPA has encouraged states to use Clean Water SRF loans for smart-growth approaches to improve water quality. New Jersey, Ohio, and California also use their Clean Water SRF loans for smart-growth projects.