

Land Use for Clean Water Resource Directory



Water Infrastructure Capacity Building Team | Capacity Building for Sustainable Communities | August 2013

Background and Purpose

Conventional land development has a number of harmful effects on water resources in communities and regions, including impaired water quality, diminished groundwater supply, and increased flooding. But smarter development patterns and practices help protect the water resources on which that development depends. The documents listed in this directory provide guidance to help communities make land use decisions that ensure clean, safe, and adequate water resources.

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Title	Link	Author	Date	Type	Description
Our Built and Natural Environments: A Technical Review of the Interactions Between Land Use, Transportation, and Environmental Quality (2 nd Ed)	http://www.epa.gov/smartgrowth/built.htm	US EPA	2013	Report	Discusses the status of and trends in land use, development, and transportation and their environmental implications; articulates the current understanding of the relationship between the built environment and the quality of air, water, land resources, habitat, and human health; and provides evidence that certain kinds of land use and transportation strategies can reduce the environmental and human health impacts of development.
Creating Equitable, Healthy, and Sustainable Communities: Strategies for Advancing Smart Growth, Environmental Justice, and Equitable Development	http://www.epa.gov/smartgrowth/equitable_development_report.htm	US EPA	2013	Report	Provides a menu of land use and community design strategies that bring together smart growth, environmental justice, and equitable development principles that community-based organizations, local and regional decision-makers, developers, and others can use to revitalize their communities.
Water Management Learning Modules	http://louisville.edu/cepm/hud-sustainable-communities-capacity-building.html	EFC, University of Louisville	2013	Learning Modules	Modules on Watershed Planning, Low Impact Development, and Green Infrastructure share tools to help communities manage development for water resource protection.
Achieving Hazard-Resilient Coastal & Waterfront Smart Growth: Coastal and Waterfront Smart Growth and Hazard Mitigation Roundtable Report	http://coastalsmartgrowth.noaa.gov/resilience.html	NOAA & US EPA	2012	Report	Presents research, tools, services, and approaches to integrate smart growth and hazard mitigation strategies on the coast. The report's findings emerged from a meeting organized by EPA and three state Sea Grant College Programs on how coastal and waterfront communities can create economically and environmentally sustainable neighborhoods while minimizing risks from flooding and related natural hazards.

Maryland Clean Water State Revolving Fund Sustainable Communities Pilot Project Report	http://water.epa.gov/grants_funding/cwsrf/upload/FINAL-MD-SRF-Pilot-Project-Report-05-18-12.pdf	US EPA	2012	Report	Describes how EPA worked with Maryland's Clean Water State Revolving Fund program to consider ways to focus public wastewater infrastructure resources in existing communities and infrastructure systems to leverage past investments and support sustainable communities.
Opportunities to Advance Sustainability in California's Clean Water State Revolving Fund Program	http://water.epa.gov/grants_funding/cwsrf/upload/CA-SRF-Pilot-Report-09-10-12.pdf	US EPA	2012	Report	Describes a pilot project to help California direct Clean Water SRF resources to projects that support sustainable communities.
Smart Growth for Coastal and Waterfront Communities	http://coastalsmartgrowth.noaa.gov/smartgrowth_fullreport.pdf	US EPA; Smart Growth Network	2009	Practice guide	Provides an overview of smart growth principles to create coastal and waterfront-specific strategies for development. Offers examples, tools, and techniques for applying smart growth approaches in communities on the water.
Your Water. Your Decision: How Today's Land-Use Decisions Can Protect Tomorrow's Water Supply	http://www.sourcewatercollaborative.org/downloads/PlannerGuide_23members.pdf	Source Water Collaborative	2009	Fact sheet	Identifies opportunities to put drinking water into the planning process, listing tips for each major stage of the process from long-range visioning to public investment.
Water Quality Scorecard: Incorporating Green Infrastructure Practices at the Municipal, Neighborhood, and Site Scale	http://epa.gov/smartgrowth/water_scorecard.htm	US EPA	2009	Tool	A program evaluation tool that local governments can use to collaboratively identify the barriers to green infrastructure in local codes and ordinances. The scorecard guides municipal staff through 230 policies, codes, and incentives that could be adapted to promote sustainable stormwater management. Also provides extensive references and case studies.
Kentucky Wet Growth Tools For Sustainable Development: A Handbook on Land Use and Water for Kentucky Communities	http://louisville.edu/landuse/healthy-watersheds-land-use-initiative.html	Environmental Finance Center, University of Louisville	2009	Handbook	Provides a variety of tools for cities, counties, multi-stakeholder groups, watershed groups, and other interested members of the public to manage or control growth and development for water resource protection. Appendices include the Center for Watershed Protections Codes & Ordinances Worksheet to help localities to evaluate their local regulations, and examples of ordinances, regulations, and other legal documents from many communities throughout Kentucky and the US.
Smart Growth Guidelines for Sustainable Design and Development	http://epa.gov/smartgrowth/sg_guidelines.htm	Jonathan Rose Companies et al	2009	Practice guide	Presents guidelines that can serve as a checklist to ensure that programs, plans, and proposed developments incorporate the elements needed at the location, site, and building levels to result in more sustainable, affordable housing.
Essential Smart Growth Fixes for Urban and Suburban Zoning Codes	http://epa.gov/smartgrowth/essential_fixes.htm	US EPA	2009	Practice guide	Offers 11 "essential fixes" to help local governments amend their codes and ordinances to promote more sustainable development.
Policies that Work: A Governors' Guide to Growth and Development	http://govinstitute.org/policyguide/index.html	Governors' Institute on Community Design	2009	Practice guide	Provides state policymakers with samples of policies, administrative actions, and spending decisions that have helped other states grow smarter.

Do You Want Utilities With That? Avoiding the Unintended Economic Consequences of Poorly Planned Growth on the Provision of Water and Sewer Service	http://cepm.louisville.edu/Pubs_WPapers/practiceguides/PG14%20-%20with%20pictures.pdf	Environmental Finance Center, University of Louisville	2006	Practice guide	Considers the economic costs of poorly planned growth on the provision of linear utilities (including electricity, natural gas, telephone, cable and drainage), but focuses on water and sewer service because they are most likely to be key to project approval.
Growing Toward More Efficient Water Use: Linking Development, Infrastructure, and Drinking Water Policies	http://www.epa.gov/smartgrowth/pdf/growing_water_use_efficiency.pdf	US EPA	2006	Practice guide	Focuses on the relationships among development patterns, water use, and the cost of water delivery, and includes policy options for states, localities, and utilities that directly reduce the cost and demand for water while indirectly promoting smarter growth.
Protecting Water Resources with Higher-Density Development	http://www.epa.gov/smartgrowth/pdf/protect_water_higher_density.pdf	US EPA	2006	Practice guide	Helps communities better understand the impacts of higher and lower density development on water resources. Findings indicate that low-density development may not always be the preferred strategy for protecting water.
Talking to Your Decision Makers: A Best Practices Guide	http://www.epa.gov/ogwdw/smallsystems/pdfs/guide_smallsys_decision_makers_08-25-06.pdf	US EPA	2006	Practice guide	Tips for working successfully with decision makers in your community to meet your water system's needs.
Water Protection Toolkit for Local Officials: Connecting Land Use with Water Quality	http://www.npscolorado.com/toolkit.pdf	AWARE	2006	Toolkit	Provides information for Colorado communities on the water quality impacts of land use, water-protective planning and zoning tools, strategies to reduce polluted runoff, ways to improve landscaping practices, state and federal programs that affect local governments, and resources for more guidance.
Smart Growth Scorecards	http://epa.gov/smartgrowth/scorecards/index.htm	US EPA	2006	Tool	Sample scorecards used by communities to evaluate policies and development projects.
Growth and Water Resources	http://www.epa.gov/smartgrowth/pdf/growthwater.pdf	US EPA	2005	Fact sheet	Explains how land use affects water resources and offers resources and tools for communities.
Using Smart Growth Techniques as Stormwater Best Management Practices	http://www.epa.gov/smartgrowth/pdf/sg_stormwater_BMP.pdf	US EPA	2005	Practice Guide	Reviews nine common smart growth techniques and examines how they can be used to prevent or manage stormwater runoff.
Stormwater Guidelines for Green, Dense Development	http://www.epa.gov/smartgrowth/pdf/Stormwater_Guidelines.pdf	City of Emeryville CA & US EPA	2005	Practice Guide	Geared specifically to developers and designers, these guidelines offer ways to meet requirements to treat stormwater from development projects.
Protecting Water Resources with Smart Growth	http://www.epa.gov/smartgrowth/pdf/waterresources_with_sg.pdf	US EPA	2004	Practice guide	Suggests 75 policies that communities can use to grow in the way that they want while protecting their water quality. Intended for audiences already familiar with smart growth concepts who seek specific ideas on how techniques for smarter growth can be used to protect water resources.
Smart Growth for Clean Water: Helping Communities Address the Water Quality Impacts of Sprawl	http://www.nalgep.org/publications/PublicationsDetail.cfm?LinkAdvID=42157	NALGEP	2003	Report	Offers five strategies to improve water quality: land conservation, waterfront brownfields revitalization, urban and community forestry, low impact development, and watershed management. Profiles several local partnerships that have successfully used these approaches.

Potential Roles for Clean Water State Revolving Fund Programs in Smart Growth Initiatives	http://www.epa.gov/owm/cwfinance/cwsrf/smartgro.pdf	US EPA	2000	Practice Guide	Describes options for states to use their Clean Water State Revolving Funds to support more environmentally sound growth and development.
Coastal & Waterfront Smart Growth	http://coastalsmartgrowth.noaa.gov/welcome.html	NOAA	Ongoing	Website	Website with resources and guidance to help coastal and waterfront communities use smart growth strategies to manage growth and development while balancing environmental, economic, and quality of life issues. The site is targeted to anyone who plans, designs, builds, approves, or has an interest in development at the water's edge.