

WATERSHED SCIENCE BULLETIN



Journal of the Association of Watershed & Stormwater Professionals
A program of the Center for Watershed Protection, Inc.

SPRING 2011



**Integrating Climate Change Science into
Watershed and Stormwater Management**

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MISSION: The mission of the *Watershed Science Bulletin* (the *Bulletin*) is to synthesize research and experience from the numerous disciplines that inform watershed management and transmit this valuable information to researchers, regulators, practitioners, managers, and others working to protect and restore watersheds everywhere.

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This photo was taken along Young's Bay estuary in Astoria, OR. The Young's Bay estuary is a component of the Columbia River estuary, a nationally significant estuary in the northwest corner of Oregon that supports some of the largest anadromous fish runs in the world and provides unique habitat for sensitive and endangered species.



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CAKE: Your Online Climate Adaptation Destination

Many natural resource managers and planners understand the need for climate change adaptation but feel lost or overwhelmed when it comes to actually doing it. Part of the problem is that they often start with a general question, such as “*what are all of the changes that will result from climate change, and how can I respond?*” rather than a more focused question, such as “*what do I do, and how should I adjust that for the reality of climate change?*” Answering the former question leads to a deluge of information that is difficult to organize and prioritize, while answering the latter triggers a more practical and focused response that is related to an organization’s mission or an individual’s responsibilities. An overarching goal of the online Climate Adaptation Knowledge Exchange (CAKE) is to answer this more focused question by providing a range of adaptation resources and short case studies demonstrating how actual groups are adapting their work to climate change. CAKE was established on the principle that we learn best by sharing and doing.

EcoAdapt is a scientific research and educational 501(c)(3) nonprofit incorporated in the District of Columbia with a goal of bringing together diverse players in the conservation, policy, science, and development communities to reshape conservation and development in response to rapid climate change.

CAKE, a joint project of EcoAdapt and Island Press with initial funding by the Kresge Foundation, aims to build a shared knowledge base for managing natural systems in the face of rapid climate change. Target audiences include natural resource management and conservation professionals, researchers, policymakers, and teachers. It is a free online resource and, while user registration is encouraged to allow fuller participation in the CAKE community, it is not required.

CAKE includes four core components—a virtual library, case studies, a directory, and tools—along with a monthly advice column and resource support pages targeted to individual adaptation workshops. The tools section, which is currently in development, will include web-based mapping, modeling, and visualization programs as well as a range of guidebooks, exercises, curricular material, and more. All case studies and directory entries, as well as many virtual library items, are geo-referenced, meaning that users can search by text, map, or a combination of the two. Case studies to date come primarily from EcoAdapt’s ongoing survey of adaptation efforts in North America, but anyone can submit case

studies. CAKE staff will vet them for completeness and relevance before posting them.

Initial survey funding from the Gordon and Betty Moore Foundation focused on coastal regions; more recent funding from the Wilburforce Foundation has allowed us to expand to western states, territories, and provinces. EcoAdapt seeks to expand coverage and to create targeted collections focused on particular issues, such as adaptive management or watershed-scale adaptation.

One can approach CAKE in a number of ways. A user might do a text or keyword search for a particular climate change impact (e.g., sea level rise or flooding) to see what resources exist or how others have adapted to it. One might also search for a particular management

problem (e.g., stormwater management or water quality) or a particular type of tool (e.g., a visualization or runoff tool). A user could use the map function to find local resources—for instance, to help highlight local case studies at a workshop or to find local experts to assist with planning efforts. Another powerful element

of CAKE is the inter-linkage among its various components. From a case study page, a user may link to the directory entry of a contact person or organization or to related tools, library items, or even other case studies. Likewise, a particular tool or library item may be linked to case studies, illustrating how to put the tool or other resource into practice.

Visit and explore CAKE at www.cakex.org, and put yourself in the directory or suggest case studies, tools, or library items to add.

For More Information

To learn more, contact Rachel Gregg (Rachel@ecoadapt.org) or Kate Graves (kgraves@islandpress.org) or visit www.cakex.org.

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