

# From Poor Planning to Sustainability A New Direction for America's Water Resources

*In November 2007, Congress directed our country's federal water management agencies, including the U.S. Army Corps of Engineers and the Bureau of Reclamation, to put environmental protection and restoration first when planning water projects.*

## A New Water Policy In-the-Making

Federal agencies, including the Corps, the Bureau of Reclamation, and US Department of Agriculture use a document known as the "Principles and Guidelines" (P&G) to formulate, evaluate, and implement water resources projects. The current P&G guidelines, developed in 1983, are based primarily on maximizing "National Economic Development." When Congress passed the Water Resources Development Act in 2007 (WRDA), it broadened the objectives of federal water projects to include a variety of public benefits and elevated environmental protection and restoration to primary objectives for all federal civil works water projects.

### WRDA 2007:

1. Established a new national water policy with environmental protection and restoration at its heart, and
2. Requires the Corps and other federal water agencies and departments, to revise the 25-year old P&G in a way that gives greater priority to environmental protections, responsible floodplain management and public safety.

The Obama Administration is now beginning the process of revising the P&G. It is considering making the P&G explicitly applicable to all federal water agencies, including those beyond the traditional water agencies, and is soliciting suggested ideas and revisions.

## Restoration: Green Infrastructure



Restoring the Mississippi River, Coastal Louisiana, Great Lakes, Puget Sound, Everglades, Chesapeake Bay, San Francisco Bay and other aquatic ecosystems throughout the country should be a fully funded national priority for the Corps. America's waters provide clean drinking water, fish and wildlife habitat, economic wealth and abundant recreational opportunities. But these systems are on the verge of collapse, and global warming is making the need to restore them even more urgent. To protect and restore these treasured resources we must ensure that the Corps places environmental protection and restoration front seat when formulating water projects.

## The Current P&G Planning Formula Favors Large Structural Projects

During the 25 years since the current P&G were adopted in 1983, demands on our water resources have grown, and global warming impacts are placing more people in harm's way and creating more stress on both water supplies and our natural systems. Congress recognizes that these changes mandate a fundamental transformation in the direction of water resources planning.

The revised P&G should shift the primary objective for water planning away from its exclusive emphasis on "National Economic Development" (NED) towards environmental protection, restoration, climate-change resiliency and sustainable management. The NED formula fails to assign sufficient value to the benefits of intact and functioning natural systems. Clean water, flood protection, ground water recharge, healthy fisheries, hunting, and other recreational activities are not given sufficient weight in the equation that the Corps uses to decide whether there is a net economic gain by, for example, draining wetlands, dredging a river, or building a dam. This failure to account for economic-environmental benefits has created an institutional bias favoring large structural projects that can damage the environment and last for generations.

## Large Structural Projects Can Damage America's Aquatic Ecosystems

Although large structural water projects can produce some economic benefits and flood protection, they also can harm the environment and the economy. Relying on large structures like dams, levees and pumps is increasingly unreliable during a time when patterns of river flow, storms and flooding are changing unpredictably due to climate change. Flawed Corps planning and construction led to the catastrophic flooding of New Orleans following Hurricane Katrina. Water agency planning has failed to take into consideration the impacts of global warming, including rising sea levels, salt water intrusion, and more frequent extreme weather events.

### Wetlands Buffer Global Warming Impacts



Restoring Gulf Coast wetlands protects key resources from global warming impacts.

### Healthy Ecosystems Protect People and Property

Restoration projects and other ecological engineering solutions help fish and wildlife thrive, provide clean water, improve economies, and help communities withstand the more severe weather linked to global warming. Healthy, functioning natural systems absorb flood waters, protect homes and people from storm surges, store global warming pollution, recharge ground water, and provide critical wildlife habitat. However, federal water agencies often overlook non-structural solutions such as land use planning, demand management and restoration projects as solutions to water challenges.

The P&G revision process included in WRDA 2007 offers the best opportunity in 25 years to shift Corps and other federal water agencies' project planning and construction towards non-structural, sustainable solutions to meet our 21<sup>st</sup> century water challenges, while better protecting the environment and people from the effects of global warming.

## Smart Water Planning Starts with Smart Revisions to the P&G

The Obama Administration is starting over in revising the P&G, rejecting an initial effort by the Bush Administration. The White House Council on Environmental Quality (CEQ) is soliciting general suggestions from which they will develop a proposal for more comments in the fall. These are the kinds of points that should be raised to comments to the CEQ:

- All water projects should make protecting and restoring the environment a primary objective.
- Federal water agencies should utilize up-to-date global warming science in project planning and management.
- Projects should recognize the value and use of ecosystem services, such as the role of functioning floodplains and wetlands in reducing flood damage, and the benefits forests provide in water retention and improving water quality.
- Federal agencies should use nonstructural approaches whenever possible, like wetland restoration projects that buffer the effects of global warming whenever practical.
- Federal agencies should fully and comprehensively evaluate all projects to ensure that they will not put the public at risk.
- Flood control projects should avoid encouraging building communities in harms-way and rather allow rivers to overflow in unpopulated floodplains.
- Federal agencies should integrate restoration, especially recovery efforts under the Endangered Species Act, into project planning.
- The Corps of Engineers should institute a meaningful framework to reevaluate existing projects to ensure that the projects protect aquatic resources.