Program Plan to Assess Watershed Conditions

Through the Natural Resource Challenge, the NPS Water Resources Division received a base increase to conduct Watershed Condition Assessments on a system-wide basis. Watershed Condition Assessment (WCA) involves applying a set of descriptive and/or quantitative technical methods to describe ecosystem health at the watershed scale. Typically, these methods develop and integrate assessments of discrete ecosystem components at a variety of landscape scales. Over the past 10-15 years, researchers and managers have developed numerous WCA methods for use in various ecosystems, and for a wide range of purposes. A constant element in all of the methods is the use of watershed areas to define landscape-level scales.

The field of resource condition assessments is relatively new and rapidly expanding. There are no widely accepted definitions, approaches, or "methods" for conducting structured, replicable assessments of watershed resources, and a wide variety of methods are available depending upon such things as the assessment purpose or use, habitat type, scale, and degree of quantitative rigor. The first challenge for this new program is to define the concept of watershed condition assessment for the National Park Service and to develop a framework and context for the systematic assessment of park watershed resource conditions. Additionally, sufficient guidance to parks is needed to identify and select appropriate methods to meet individual park needs.

As part of this program a project was recently initiated in cooperation with the Chesapeake Watershed CESU and George Mason University (GMU) to identify, review, clarify, evaluate, and develop a compendium of the many published methods for assessing watershed conditions in general, as well as the broad-scale conditions of various watershed resources such as wetlands, uplands, streams, and riparian resources. The GMU team, as part of the project, has created a website to solicit input from natural resource professionals on landscape health assessment methods. WRD is asking anyone who has been involved in these kinds of planning-level assessments to go to http://ecosurvey.gmu.edu and complete the survey. Additional information on ecological assessment methods is available on this site. If you
Coastal Watershed Condition Assessment

The National Park System includes a major portion of America’s coastal heritage with more than 5,000 miles of coral reefs, barrier islands, kelp forests, estuaries and other resources and over three million acres of ocean and Great Lakes waters. Working through universities in the Cooperative Ecosystem Studies Unit Networks, Water Resources Division plans to conduct baseline Watershed Condition Assessments of 49 ocean and Great Lakes parks in order to determine the condition of coastal watersheds and marine resources. Coastal watersheds or land areas that drain into the coastal zone are nature’s dynamic hydrologic systems that create and sustain coastal ecosystems. Watershed Condition Assessments have been initiated in 26 ocean Parks in 03 and 04 with more planned for 05 and 06. Investigators review and synthesize existing information to determine the status of coastal Park resources including water quality, habitat condition, invasive and feral species, extractive uses, physical impacts from resource use and coastal development, and other issues affecting resource health. Reports from these assessments are characterizing the relative health or status of estuarine and marine resources in the National Park System and revealing factors that may cause impairment. The reports also make recommendations for further studies to address known resource problems and fill information gaps to more fully evaluate conditions.

Coastal Watershed Condition Assessment Fact Sheet

Coastal Watershed Condition Assessment Phase One Reports

Coastal Watershed Condition Assessments Initiated

have any questions please call Gary Smillie at 970-225-3522 or Rick Inglis at 970-225-3517.