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8-2 Developing a Pilot Indicator System for  
U.S. Climate Changes, Impacts,  
Vulnerabilities, and Responses

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The National Climate Indicators System is being developed as part of sustained assessment activities associated with the U.S. National Climate Assessment (NCA). The NCA is conducted under the U.S. Global Change Research Program, which is required to provide a report to Congress every 4 years. The National Climate Indicators System is a set of physical, ecological, and societal indicators that communicate key aspects of the physical climate, climate impacts, vulnerabilities, and preparedness for the purpose of informing both decision makers and the public with scientifically valid information.

The Indicators System will address questions important to multiple audiences including (but not limited to) nonscientists (e.g., Congress, U.S. citizens, students), resource managers, and state and municipal planners in a conceptually unified framework. The physical, ecological, and societal indicators will be scalable, to provide information for indicators at national, state, regional, and local scales. The pilot system is a test of the Indicators System for evaluation purposes to assess the readiness of indicators and usability of the system.

The National Climate Indicator System has developed a pilot given the recommendations of over 150+ scientists and practitioners and 14 multidisciplinary teams, including, for example, greenhouse gases, forests, grasslands, water, human health, oceans and coasts, and energy. The pilot system of indicators includes approximately 20 indicators that are already developed, scientifically vetted, and implementable immediately. Specifically, the pilot indicators include a small set of global climate context indicators, which provide context for the national or regional indicators, as well as a set of nationally important U.S. natural system and human sector indicators. The purpose of the pilot is to work with stakeholder communities to evaluate the system and the individual indicators using a robust portfolio of evaluation studies, which provides a data driven approach to further develop and improve the National Climate Indicators System.