Highlights of the IPCC 5th Assessment Report: The Physical Science Basis of Climate Change (WGI) Summary for Policymakers

US Fish & Wildlife Service
December 1, 2013[1]

Introduction

- The **Intergovernmental Panel on Climate Change** (**IPCC**) was first established in 1988 by the World Meteorological Organization and United Nations Environment Programme. Its mission is to provide comprehensive scientific assessments of the most recent scientific, technical and socio-economic information relevant to the understanding of climate change, its potential environmental and socio-economic consequences, and possible options for adapting to or mitigating its effects.

- Approximately every six years the IPCC issues an overall assessment report consisting of reports from its Working Groups I (Physical Science Basis of Climate Change), II (Imapcts, Adapatation and Vulnerability), and III (Mitigation). At the end of September 2013, the IPCC issued the Working Group I (WGI) report of its 5th Assessment Report.

Key Findings[2]

Observed Changes in the Climate System

- Warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. The atmosphere and ocean have warmed, the amounts of snow and ice have diminished, sea level has risen, and the concentrations of greenhouse gases have increased.

Understanding the Climate System and its Recent Changes

- Human influence on the climate system is clear. This is evident from the increasing greenhouse gas concentrations in the atmosphere, positive radiative forcing (balance of incoming and outgoing energy), observed warming, and understanding of the climate system.

Future Global and Regional Climate Change

- Continued emissions of greenhouse gases (GHGs) will cause further warming of the atmosphere and ocean and changes in all components of the climate system. Arctic sea ice will very likely continue to shrink. Limiting climate change will require substantial and sustained reductions of GHGs.

Implications for USFWS

- Changes in temperature and precipitation have affected, and will continue to affect, the distribution, abundance and phenology of fish, wildlife and plant trust resources. Sound management planning must consider direct and indirect climate change impacts to trust species and their habitats.

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[1] Prepared by Kurt Johnson, with Eleanora Babij, Rebecca Fris, Kate Freund, Michael Hudson and Lori Miller

[2] Please refer to the Summary for Policymakers for more details and the location of supporting information within the body of the WGI report. http://www.climatechange2013.org/report/