



The terrestrial and aquatic ecosystems that make up the biosphere provide vital goods and services to humanity, including food, fiber, fuel, genetic resources, pharmaceuticals, cycling and purification of water and air, regulation of weather and climate, recreation, and natural beauty. Recent and ongoing global environmental changes—including climatic change, changes in atmospheric composition, land-use change, habitat fragmentation, pollution, and the spread of invasive species—are affecting the structure, composition, and functioning of many ecosystems, and therefore the goods and services that they provide. In turn, many ecological effects of global environmental change have potential to affect atmospheric composition, weather, and climate through both negative and positive feedback mechanisms. Because many global environmental changes are expected to increase in magnitude in the coming decades, the potential exists for increased effects of climate change on ecosystems and the goods and services that they provide. Improved understanding of potential effects of global change on ecosystems, as well as the feedback from ecosystems to global change processes, is critical priority. The Ecosystems Interagency Working Group coordinates research in these areas.