Water Resources, Population Growth, and Land Use Change

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Water is essential to maintain human and environmental health, agriculture, energy, and industry – in short, water is essential for the economic vitality of communities and the Nation. In its early history, U.S. water management focused on alleviating or controlling the impacts of floods and droughts. Investments in water infrastructure such as dams and canals provided safe, abundant, and inexpensive sources of water, aided flood management, and dramatically improved health and economic prosperity. The U.S. water resources, infrastructure, and technologies became the envy of the world.

The dawning of the 21st Century brings a new set of water resource challenges. Aging infrastructure and rapid population growth, mining of finite ground-water resources, reduced water quality associated with particular land uses and land covers, water needed for human and environmental uses, and climate variability and change determine the amount of fresh water available at any time. Water shortage and water-use conflict have become more commonplace in many areas of the U.S. – even in normal water years – for irrigation of crops, for growing cities and communities, for energy production, and for the environment and species protected under the law.

Authority to manage water resources is largely delegated to States, Tribes, and municipalities. To effectively address water-supply challenges, Federal, State, local, and Tribal governments must collaborate to expand, conserve, and protect supplies to meet increasing demands, find out how much water we have, and plan for the Nation's water future.