

New Hampshire Water Sustainability Commission 2011-2012

Background Information Other States' Water Plans and Updates

Prepared 5/24/11 by NHDES Drinking Water and Groundwater Bureau

- **California Water Plan** (2009)
- **Delaware River Basin Water Plan** (2004) - Annual Reports 2005-2010
- **Florida Water Plan** (2001) - Annual Report 2010
- **Georgia State Water Plan** (2008)
- **Hawaii Water Plan** (2000) - Updated 2008
- **Kansas Water Plan** (2004) - Updated 2009
- **Massachusetts Water Plan** (2001) - 2004 MA Water Policy developed
- **Minnesota Water Sustainability Framework** (2011)
- **Nevada Water Plan** (1995) - Updated 2011
- **New Mexico State Water Plan** (2003) – Updated 2008/2009
- **Ohio Water Plan** (2002) - Updated 2009
- **Pennsylvania State Water Plan** (2009)
- **Texas State Water Plan** (2007)
- **Utah Water Plan** (2001) - Individual basin plans 2004, 2009, 2010
- **Wyoming Framework Water Plan** (2007)

California Water Plan

California Department of Water (2009)

<http://www.waterplan.water.ca.gov/cwpu2009/index.cfm#volume1>

Overview

Purpose

Updated every five years, the California Water Plan provides a framework for water managers, legislators and the public to consider options and make decisions regarding the state's water future. The goal is to meet state requirements, receive broad support among those participating in the state's water planning, and create a useful document for the public, water managers and planners throughout the state, legislators and other decision-makers.

Scope

The plan serves as the master plan for the state's water resources and guides the orderly and coordinated control, protection, conservation, development, management and efficient use of water in California. The plan does not make project or site-specific recommendations, and requires lawmakers to adopt the recommendations and actions and develop funding sources for implementation. Highlighted aspects of the plan include:

- Integration of information and recommendations of related state plans and initiatives.
- Incorporation of uncertainty, risks and resource sustainability into management of water supply, flood management and ecosystems.
- Integration of flood and drought management plans.
- Advancing climate change adaptation and mitigation strategies.
- Development of a plan for improving data, analytical tools and information management and exchange.
- Acknowledgement that the water plan must continue to evolve and adopt integrated water management.

Objectives

- 1) **Expand integrated regional water management.** Promote, improve, and expand Integrated Regional Water Management to create and build on partnerships that are essential for California water resource planning, sustainable watershed and floodplain management, and increasing regional self-sufficiency.
- 2) **Use and reuse water more efficiently.** Use water more efficiently with significantly greater water conservation, recycling and reuse to help meet future water demands and adapt to climate change.
- 3) **Expand conjunctive management of multiple supplies.** Advance and expand conjunctive management of multiple water supply sources with existing and new surface and groundwater storage to prepare for future droughts, floods and climate change.
- 4) **Protect surface water and groundwater quality.** Protect and restore surface water and groundwater quality to safeguard public and environmental health and secure California's water supplies for beneficial uses.
- 5) **Expand environmental stewardship.** Practice, promote, improve and expand environmental stewardship to protect and enhance the environment by improving watershed, floodplain and instream functions and to sustain water and flood management systems.

California Water Plan, continued

- 6) **Practice integrated flood management.** Promote and practice integrated flood management to provide multiple benefits including better emergency preparedness and response, higher flood protection, more sustainable flood and water management systems and enhanced floodplain ecosystems.
- 7) **Manage a sustainable California Delta.** Set as co-equal goals a healthy Delta ecosystem and a reliable water supply for California and recognize the Delta as a unique and valued community and ecosystem to promote and practice management for a sustainable California Delta.
- 8) **Prepare prevention, response and recovery plans.** Prepare prevention, response, and recovery plans for floods, droughts and catastrophic events to help residents and communities, particularly disadvantaged communities, make decisions that reduce the consequences and recovery time of these events when they occur.
- 9) **Reduce energy consumption of water systems and uses.** Reduce the energy consumption of water and wastewater management systems by implementing the water-related strategies to mitigate greenhouse gas emissions.
- 10) **Improve data and analysis for decision-making.** Improve and expand monitoring, data management, and analysis to support decision-making, especially in light of uncertainties, that support integrated regional water management and flood and water resources management systems.
- 11) **Invest in new water technology.** Identify and fund applied research and pilot studies on emerging water technology to make them attainable and more cost-effective.
- 12) **Improve tribal water and natural resources.** Develop tribal consultation, collaboration and access to funding for water programs and projects to better sustain tribal water and natural resources.
- 13) **Ensure equitable distribution of benefits.** Increase the participation of small disadvantaged communities in state processes and programs to achieve fair and equitable distribution of benefits. Consider mitigation of impacts from the implementation of state government programs and policies to provide safe drinking water and wastewater treatment to all California communities and to ensure that these programs and policies address the most critical public health threats in disadvantaged communities.

Delaware River Basin Water Plan

Delaware River Basin Commission (2004) – Delaware, New Jersey, Pennsylvania and New York

Annual Progress Reports (2005-2010)

<http://www.state.nj.us/drbc/BPSept04/index.htm>

Overview

Purpose

To provide a unified framework for addressing and redressing new and historic water resource issues and problems in the Delaware River Basin. The plan emphasizes an *integrated* approach: recognizing, for example, that water supply and water quality cannot be managed separately; that ground water and surface water are two aspects of the same resource, separated in time and space, but fundamentally interrelated. Integrated management means considering all aspects of the water resource in decision-making. Conversely, it means recognizing that a wide range of decisions – not just those traditionally associated with water management – can affect our water resources.

2010 Annual Report Update

The 2010 update highlights major plan-related achievements and describes accomplishments and progress within five key areas. The examples included are illustrative of a wealth of activity across the basin to protect, enhance and restore water resources.

Updates on activities related to major goals of the plan include:

- 1) Sustainable use and supply.
- 2) Waterway corridor management.
- 3) Linking land and water resources.
- 4) Institutional coordination and cooperation.
- 5) Education and outreach stewardship.

Florida Water Plan

Florida Water Congress, Florida Dept. of Environmental Protection (2001)
Sustaining our Water Resources (Florida DEP) - Annual Report (2010)
<http://www.dep.state.fl.us/water/waterpolicy/>

Overview

Purpose/ Scope

In accordance with Florida state law, the plan summarizes the water management districts' progress on the following:

- Regional water supply plans.
- Five-year water resource development work programs.
- Development of alternative water sources through funding provided by the Water Protection and Sustainability Program.

Objectives

- 1) Analyzing and estimating trends in water use.
- 2) Developing and implementing regional water supply plans.
- 3) Funding the development of alternative supplies.
- 4) Developing and implementing effective water conservation strategies.
- 5) Incorporating climate change considerations in management decisions.

Georgia State Water Plan

Georgia Water Council (2008)

http://www.georgiawaterplanning.org/pages/technical_guidance/state_water_plan.php

Overview

Purpose

To guide Georgia in managing water resources in a sustainable manner to support the state's economy, to protect public health and natural systems, and to enhance the quality of life for all citizens.

Scope

The plan outlines the statewide policies, management practices, and guidance for regional planning. The plan is intended to guide river basin and aquifer management plans and regional water planning efforts statewide in a manner consistent with existing state laws.

Objectives

- 1) Develop a flexible and adaptable plan that is able to accommodate the differences in water resources, water needs, and future growth and development of different regions of the state.
- 2) To obtain better information regarding water quality and quantity, including assimilative capacity of various waterbodies.
- 3) Develop regional water plans. Regional forecasts of future needs for water and wastewater will be completed. Then, regional plans will be developed to identify the management practices to be employed, following state policy and guidance, to ensure that the anticipated demands can be met.

Hawaii Water Plan

Commission on Water Resource Management (2000)
Commission on Water Resource Management (2008 Update)
http://www.state.hi.us/dlnr/cwrm/planning_wrpp.htm (Scroll down)

Overview

Purpose

Initially prepared in 1990, the updated plan reflects the latest efforts in water resource planning as part of the state's mandate to protect and sustain water resources for the benefit of the citizens of the state of Hawaii.

Scope

The update of the plan is intended to provide for more successful coordination and integration of state and county efforts related to sustainable water resource development and to enable the Commission to more effectively implement statutory objectives.

Objectives

- 1) Study and inventory the existing water resources of the state and the means and methods of conserving and augmenting such water resources.
- 2) Review existing and contemplated needs and uses of water including state and county land use plans and policies and study their effect on the environment, procreation of fish and wildlife, and water quality.
- 3) Study the quantity and quality of water needed for existing and contemplated uses, including irrigation, power development, geothermal power, and municipal uses.
- 4) Identify rivers or streams, or a portion of a river or stream, which appropriately may be placed within a wild and scenic rivers system, to be preserved and protected as part of the public trust. The commission shall report its findings to the legislature twenty days prior to the convening of each regular legislative session.
- 5) Study such other related matters as drainage, reclamation, flood hazards, flood plan zoning, dam safety, and selection of reservoir sites, as they relate to the protection, conservation, quantity and quality of water.

Kansas Water Plan

Kansas Water Office (2004 Update)

Kansas Water Authority (2009)

<http://www.kwo.org/Kansas%20Water%20Plan/Kansas%20Water%20Plan.htm>

Overview

Purpose

For 25 years, the plan is the tool that has allowed citizen groups and water professionals from state, federal and local levels to coordinate and identify the water problems and issues that Kansas must address.

Scope

The plan outlines the following:

- The water planning process and purpose and highlights a history of water planning and the physiographic characterization of Kansas.
- Statewide water management policies and objectives.
- The 12 basin sections and their priority issues.
- Maps and graphics depicting the resource conditions for each basin.
- Various state and federal water resource programs.

Objectives

A major focus of the update has been on the water resource needs in each of the state's 12 river basins. The plan provides a framework for water resource professionals and citizens to propose solutions that address statewide and regional issues. While work on all aspects of water resource management is ongoing, certain projects because of their urgency move to the forefront. These projects are reflected as basin priority issues within the water plan.

These priority issues have been identified by members of the basin advisory committees. The various priorities reflect the basins' climatic, physiographic and demographic conditions. The plan and the priority issues contained within it are intended to help guide implementation efforts over the next 5 years, targeting resources to areas perceived to be the highest priority by local communities.

Massachusetts Water Policy

Executive Office of Environmental Affairs (2004)
http://www.mass.gov/Eoea/docs/eea/water/waterpolicy_2004.pdf

Overview

Purpose

Massachusetts faces a number of significant water resource management challenges - water quantity, quality, and habitat. These challenges will only be exacerbated by new development unless the Commonwealth develops new approaches that promote effective management of its water resources and sustainable patterns of growth. To reach this goal the state needs to work in partnership with cities and towns, as they are vested with the responsibility of oversight over growth and either directly or through regional bodies manage important water resources.

Scope

To move both the state and its partners to a proactive stance, by providing local and regional partners with greater clarity through wider use of performance standards and regulatory improvements, flexibility to manage their resources, technical assistance, better science, and incentives.

Objectives

The water policy seeks to advance the following priorities:

- 1) Keep water local and seek to have municipalities live within their water budgets by addressing issues from a watershed perspective
- 2) Protect clean water and restore impaired waters
- 3) Protect and restore fish and wildlife habitat
- 4) Promote development strategies consistent with sustainable water resource management

Minnesota Water Sustainability Framework

University of Minnesota Water Resources Center (2009)
<http://wrc.umn.edu/watersustainabilityframework/index.htm>

Overview

Purpose

To develop a framework designed to describe and implement tasks needed to ensure sustainability of Minnesota's water resources. The Minnesota Legislature defined sustainable water use as that which "does not harm ecosystems, degrade water quality, or compromise the ability of future generations to meet their own needs."

Scope

Aspects of water sustainability to be addressed included drinking water, stormwater, agricultural and industrial use, surface and groundwater interactions, infrastructure needs, and within the context of predicted changes in climate, demographics, and land use. The framework contains long-range plans and recommended actions based around major water sustainability issues. Not included in the framework, were potential or identified funding sources for implementing recommendations.

Objectives

The framework outlines a step-by-step guide towards water sustainability by identifying problems and recommending actions based on current science and best practices. The following are the objectives those recommendations aim to achieve:

- 1) A high quality, sustainable water supply for all water users.
- 2) All state waters meeting water quality standards.
- 3) No additional toxic contaminants entering the environment.
- 4) Coordination of all land use decisions/planning with water use/planning.
- 5) Healthy ecosystems that foster economic opportunities and maintain or improve water quality and aquifer recharge needs.
- 6) Maintenance of all aspects of water distribution and treatment that enhances long-term water quality and quantity sustainability.
- 7) A society that values, understands, and treasures the state's water resources and acts accordingly.
- 8) Governments, institutions and communities that work together to achieve the objectives outlined above.

Nevada Water Plan

Nevada Water Plan - Nevada Division of Water Resources (1995)
Nevada State Water Plan - Nevada Division of Water Planning (2011)
<http://water.nv.gov/programs/planning/stateplan/part1/>

Overview

Purpose

To develop a state water plan, as mandated by statute, in which the “[State] continues to recognize the critical nature of the state’s limited water resources” and acknowledges the increasing demands placed on these resources by growth. Legislative review and consideration of the state water plan will also provide additional legislative policy guidance to ongoing planning efforts.

Scope

The plan assesses the quantity and quality of the state’s water resources, and identifies constraints and opportunities which affect water resource decision making. Along with providing data about water supplies and water use, the state water plan identifies pressing water management issues and recommends policy directions and actions designed to assist water managers throughout the state and all levels of government.

Objectives

Following are results Nevada hopes to achieve through the water planning process and development of the state water plan:

- 1) **Water Supply:** Enough water of sufficient quality for future generations.
- 2) **Water Rights:** Protection of existing water rights.
- 3) **Economic Efficiency:** The preferential use of water for greatest economic gain to the state.
- 4) **Conservation:** More conservation and less waste of water
- 5) **Water Quality:** Protection and enhancement of water quality.
- 6) **Rural Water Supplies:** Protection of water supplies for current and future development in rural areas.
- 7) **Environmental Quality:** Protection and enhancement of the environment.
- 8) **Efficiency:** Agency actions which are coordinated and integrated to save money and time, reduce duplication in projects or services, address gaps in resource protection, and result in better decisions.
- 9) **Decision making:** Less litigation and more cooperative decision making to resolve water resource issues.
- 10) **Effectiveness:** More informed water resource decision making, with a greater awareness of aesthetic, cultural and ecological values.
- 11) **Sound Science:** Water resource projects which are technically, environmentally and economically sound.
- 12) **Public Involvement:** A better educated citizenry and more public participation in water resource decision making.
- 13) **Quality of Life:** A higher quality of life for all Nevadans.

New Mexico State Water Plan

Interstate Stream Commission (2003), Update in progress since 2008
http://www.ose.state.nm.us/publications_state_water_plans.html

Overview

Purpose

To serve as the strategic management tool used to:

- Promote stewardship of the state's water resources.
- Protect and maintain water rights and their priority status.
- Protect the diverse customs, culture, environment and economic stability of the state
- Protect water supply and water quality.
- Promote cooperative strategies, based on concern for meeting the basic needs of all New Mexicans.
- Meet the state's interstate compact obligations.
- Provide a basis for prioritizing infrastructure investment.
- Provide statewide continuity of policy and management relative to water resources.

Deleted:

Scope

The plan lays the foundation and provides guidance for the state's effort to maintain administrative authority over its water resources. It is a living document, gaining detail and new emphasis as new technologies and new water needs enter the picture.

Objective

The primary objective is to protect current water users while allowing continued development of the resource to meet the needs of the future. The plan does not attempt to identify and resolve region-specific water management issues, because resolution of those issues must include local decision-makers.

Ohio Water Plan

Ohio Water Resources Council (March 2002)

Ohio Water Resources Council Strategic Plan (2009)

<http://www.building-collaboration-for-water.org/Documents/StateSummaries/OH%201209.pdf>

Overview

Purpose/ Scope

- To guide the development and implementation of a dynamic process to advance the management of Ohio's water resources.
- To be the premier state in managing water resources to benefit public health, ecological integrity, and economic vitality for Ohio's present and future generations.

Objectives

- 1) Preservation and management of Ohio's water resources is fundamental to human existence and the ecosystem, and must be balanced between human needs and environmental protection.
- 2) Access to safe, potable water supplies at reasonable cost is a right of all Ohio citizens, now and in the future.
- 3) The interests of all stakeholders, including government, public and private organizations, and individuals, in water-related issues deserve fair and objective consideration and must be recognized and respected so that benefits are maximized and detrimental effects of plans and decisions are minimized.
- 4) Watersheds and smaller natural drainage units within them form the geographic and hydrologic basis for successful water planning, protection, management, and restoration programs at the state, regional, watershed and local levels.
- 5) Working partnerships among stakeholders must be recognized as essential to the cooperation, collaboration and shared responsibilities needed to successfully manage Ohio's water resources.
- 6) Preventive measures to maintain high quality waters and stem further damage to degraded waters must receive top priority in management plans and programs, followed by restoration/remediation of degraded waters to the extent feasible.
- 7) Accessibility to water information combined with good science must underlie research, standards and decision making in all resources programs.
- 8) The cost of the development and implementation of water-related plans, programs, and projects must be shared as equitably as possible among the beneficiaries.

Pennsylvania State Water Plan

Pennsylvania Water Resources Committee & Dept. of Environmental Protection (2009)
<http://www.elibrary.dep.state.pa.us/dsweb/Get/Document-76834/3010-BK-DEP4227.pdf>

Overview

Purpose

To provide tools and guidance for decision-makers regarding the state's water resources. The plan is intended to provide information for those who wish to locate and to design their projects so that the availability of water resources does not constrain them; those who wish to preserve high environmental quality where it exists and to achieve it where it does not; local governments with planning, conservation, and economic development responsibilities; and commonwealth and interstate compact agencies.

Scope

The plan is based on the following three principal priorities:

- The efforts initiated in the plan to collect, interpret, and disseminate water resources information should continue into the future.
- An integrated approach to managing water resources should be encouraged and sustained.
- The commonwealth should adopt policies that encourage technological advances designed to conserve and enhance water resources.

Objectives

To reflect the variations in Pennsylvania's six major drainage basins, six Regional Water Resources Committees were created by the Water Resources Planning Act to ensure that individual regional priorities were highlighted in the plan. The following are examples of the water resources management priorities established by these six committees:

- 1) Support legislation and other measures that will protect the quantity and quality of water.
- 2) Maintain the hydrologic integrity of the region by evaluating and addressing land use changes and their effects on point and non-point source pollution, recharge, flow, and the surface and groundwater regimes and establishing the capacity to do so.
- 3) Reclaim water resources impaired by abandoned mines.
- 4) Identify water resources needed to promote and facilitate economic development and provide job opportunities, while maintaining watershed integrity and recreational benefits.
- 5) Link land use decisions and water resources management.
- 6) Protect "at-risk" water resources and reduce or prevent point and nonpoint source pollution with a focus on impaired streams.
- 7) Develop land use programs that protect water quality and quantity and preserve the ecological integrity of groundwater and surface water, including springs, streams, lakes, and wetlands.

Texas State Water Plan

Texas Water Development Board (2007)

<http://www.twdb.state.tx.us/wrpi/swp/swp.asp>

Overview

Purpose

To provide for the orderly development, management, and conservation of water resources and preparation for and response to drought conditions, in order that sufficient water will be available at a reasonable cost to ensure public health, safety, and welfare; further economic development; and protect the agricultural and natural resources of the entire state.

Scope

The planning process included 16 planning groups, one for each regional water planning area, made up of individuals representing a wide variety of water-related interest. Each planning group evaluates population projections, water demand projections, and existing water supplies during drought. Based on this information, the planning group identified who will not have enough water, and recommended strategies and projects that could be implemented to conserve or obtain more water.

The plan focuses on the following areas concerning water management in the state by region:

- Population growth and future water demands.
- Climate issues.
- Surface water resource.
- Groundwater resources.
- Water reuse.
- Water supply needs.
- Water management strategies.
- Implementation strategies for the plan recommendations.
- Challenges and uncertainties in water supply planning.

Objective

To implement the recommendations of regional planning areas in the following areas:

- 1) Financing water management strategies
- 2) Reservoir site designation and acquisition
- 3) Interbasin transfers of surface water
- 4) Environmental water needs
- 5) Water conservation
- 6) Expedited amendment process
- 7) Indirect reuse

Utah Water Plan

Division of Water Resources (2001)
Individual Basin Plans Developed in 2004, 2009 & 2010
<http://www.water.utah.gov/waterplan/>

Overview

- **State-Wide Plan**

Purpose

To bring the issues to light and to put together the pieces that are required to obtain balanced and efficient water management.

Scope

Discusses the major issues facing Utah's water resources and provides valuable data and guidance that will help in the important effort to efficiently manage one of the state's most precious resources. Summarizes key data obtained through the previous water planning documents, introduces new data where available, and addresses issues of importance to all future water planning efforts. Where possible, it identifies water use trends and makes projections of water use. The document also explores various means of meeting future water demands and identifies important issues that need to be considered when making water-related decisions.

Objective

To provide guidance for the stewardship of its water resources in Utah. The state recognizes the urgent need to implement effective water conservation measures. These, coupled with other innovative water management technologies, must be implemented to safeguard the ability of existing water supplies and new developments to meet future needs and lessen impacts of drought. The state will continue to develop water supplies, as necessary, to meet projected water needs.

- **Individual Basin Plans**

Purpose

The purpose of these documents is to provide planners with a snapshot of the current use of water throughout the [Individual] Basin, and a projection of how those uses may change over the next 20 to 50 years. Through the years it is anticipated that social, technologic and economic changes will all have an impact on the basin's water-related issues and concerns.

Scope

As a part of the state water planning process, detailed plans are prepared for each of the state's eleven hydrologic basins. Each Basin Plan has been prepared at a reconnaissance level, and gives a general assessment of water related problems, issues, and concerns within the basin.

Objectives

See State-Wide Plan objectives above.

Wyoming Framework Water Plan

Wyoming Water Development Commission (2007)
<http://waterplan.state.wy.us/frameworkplan-index.html>

Overview

Purpose/Scope

- To inventory the state's water resources and related lands, summarize the state's present water uses, project future water needs, and identify alternative decisions to meet the indicated future water needs.
- To provide future water resource planning direction to the state.

Objectives

- 1) **Basin-wide plans** – Plans will be developed for the state's major drainage basins. The plans' purpose is, in part, to quantify existing uses and to project future needs. The basin plans should also serve to identify and prioritize water development opportunities. The plans shall document the State's plan to utilize its compact and decree allocations.
- 2) **Project planning** – The planning program will assist municipalities, irrigation districts, and other public entities' efforts to plan for the future. This assistance should typically come through the development of reconnaissance and feasibility-level studies, which will serve to identify water supply requirements and prioritize water system improvements.
- 3) **Federal funding** – Presently, there are federal programs which provide funding assistance for some types of water development projects. However, in order to access these funds, costly feasibility/environmental studies are often needed. The Water Commission shall consider participating in these studies if a proposed project alleviates a water development, management, or rehabilitation problem, or allows the continued beneficial use of water.
- 4) **Research** – The planning program should continue its participation in research projects which serve to clarify economic, environmental, water development, and management issues.
- 5) **Coordination** – The Water Commission will strive to keep informed on proposed state and federal rules and regulations that may affect water use, development, and management.