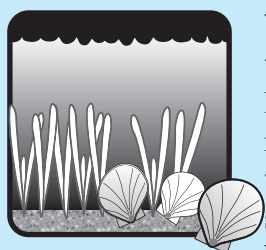


# Quantifiable Objectives

The following 15 quantifiable objectives address specific problems associated with water quality (WQ) degradation, hydrologic alteration (HA), fish and wildlife (FW) habitat loss and stewardship gaps (SG). These quantifiable objectives were used to develop the priority actions for this management plan. All of these objectives are measurable and have an ambitious time line to provide incentive for action. Progress will be measured against these quantifiable objectives.

## Water quality degradation



**WQ-1:** Maintain or improve water quality from year 2000 levels. By 2011, bring all impaired water bodies into a watershed management program such as reasonable assurance or basin management action plan.

By 2015, remove at least two water bodies from the impaired list by improving water quality.

**WQ-2:** By 2015, develop and meet site-specific alternative criteria that are protective of living resources for dissolved oxygen, *chlorophyll a*, turbidity/total suspended solids, salinity and pesticides.

**WQ-3:** By 2025, reduce severity, extent, duration and frequency of harmful algal blooms (HABs), including macroalgae, phytoplankton and periphyton, through the identification and reduction of anthropogenic influences.

**WQ-4:** By 2025, meet shellfish harvesting standards year round for the Myakka River conditionally restricted area and the conditionally approved areas of Lemon Bay, Gasparilla Sound, Myakka River, Pine Island Sound Western Section and Pine Island Sound Eastern Section.

## Hydrologic alterations



**HA-1:** By 2015, identify, establish and maintain a more natural seasonal variation (annual hydrograph) in freshwater flows for: Caloosahatchee River. Peace River and its tributaries.

- Myakka River, with special attention to Flatford Swamp and Tatum Sawgrass.
- Estero Bay and its tributaries.

**HA-2:** By 2020, restore, enhance and improve where practical historic watershed boundaries and natural hydrology for watersheds within the CHNEP study area, with special attention to Outstanding Florida Waters and Class I water bodies.

**HA-3:** By 2020, enhance and improve to more natural hydrologic conditions water bodies affected by artificially created structures throughout the CHNEP study area, including:

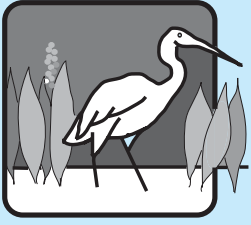
- Sanibel Causeway in Lee County.
- Franklin Lock (S-79) in Lee County.
- Dams on the Myakka River that flows through Manatee, Sarasota and Charlotte counties.
- Causeway between Lovers Key State Recreation Area and Bonita Beach in Lee County.
- Water-control structure on the south end of Lake Hancock in Polk County.
- Structure on Coral Creek in Charlotte County.
- Gator Slough canal collector system in Lee and Charlotte counties.
- Peace Creek canal system in Polk County.
- Cow Pen Slough in Sarasota County.

Reduce negative hydrologic effects of artificially created structures such as weirs, causeways, dams, clay settling areas and new reservoirs.

**HA-4:** By 2010, for each watershed, identify the linkages between local, water management district, state and federal government development permitting and capital programs affecting water storage, flood control and water quality. By 2012, identify and recommend reforms through tools such as comprehensive watershed management plans. By 2015, implement the reforms.



## Fish and wildlife habitat loss



**FW-1:** Meet the stated objectives for the target extent, location and quality of the following habitats in the CHNEP study area:

- Native submerged aquatic vegetation should be maintained and restored at a total extent and

quality no less than caused by natural variation.

- Maintain the existing extent and location within range of natural variability of submerged and intertidal unvegetated habitats, especially mud flats and sand flats, and improve the habitat quality.
- Manage natural mangrove habitats to their historic extent (1980) to enhance and improve their ecological functions and, where feasible, restore mangrove habitats in urban areas.
- Restore and maintain saltwater marsh habitats where feasible (e.g., public lands or undeveloped areas) and prevent loss or conversion of existing salt marsh habitats.
- Restore, maintain and manage freshwater wetland systems in current extents and to a quality capable of maintaining all natural functions within the range or natural variability.
- Restore, manage and improve the habitat quality of oyster bars in the CHNEP area based on the existing historic data.
- Protect, enhance and restore native upland communities vital to the ecological function of the CHNEP study area.
- Restore, manage and improve the habitat quality of the water column.

**FW-2:** By 2025, achieve a 100 percent increase in conservation, preservation and stewardship lands within the boundaries of the CHNEP study area. The increase will be based upon 1998 acreage of existing conservation, preservation and stewardship lands.

**FW-3:** By 2020, on conservation, preservation, stewardship and other public lands, achieve controllable levels of invasive exotic plants, as defined by the Florida Exotic Pest Plant Council, and exotic nuisance animals, as defined by the Florida Fish and Wildlife Conservation Commission. Encourage and support the removal and management of invasive exotic plants on private lands.

## Stewardship gaps

**SG-1:** By 2025, a minimum of 75 percent of all residents will have recalled attending a watershed event, reading watershed material or hearing watershed/estuary information on radio or TV. A



minimum of 50 percent of all residents in the CHNEP study area can recognize estuaries and watersheds. A minimum of 10 percent of all residents will be able to claim personal actions that protect the estuaries and watersheds.

**SG-2:** By 2010, the CHNEP will serve as a recognized resource to elected officials or their agents from local, state and federal government for policy advice.

**SG-3:** By 2010, the program long-term monitoring strategy and data management strategy will be implemented and resulting informational websites maintained systematically.

**SG-4:** By 2010, key geographic and scientific information will be presented in ways that are meaningful to the majority of the CHNEP study area population.



# Priority Actions

**P**riority actions describe the necessary management activities to attain the quantifiable objectives. Most of the quantifiable objectives are broad aims that require many individual tasks to be accomplished. Often tasks will address multiple objectives. The priority actions detail these tasks and key information about how they might be carried out. The priority actions included in this chapter were written by the Management Conference through a series of workshops and retreats.

The actions are grouped into the four priority problem areas: water quality degradation (WQ), hydrologic alterations (HA), fish and wildlife habitat loss (FW) and stewardship gaps (SG). Each priority action describes the key elements of management action including:

**Priority action statement** is the activity that is needed to achieve the quantifiable objective.

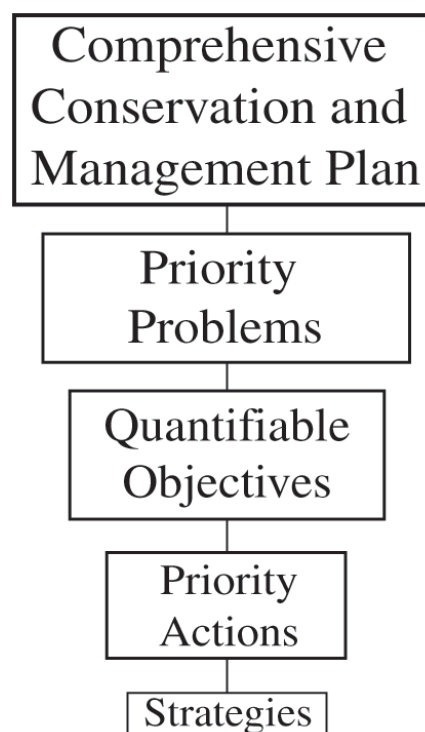
The **background** section explains the priority action, how it will satisfy its quantifiable objective and the rationale for its implementation. The background may include a description of how the priority action will fit with past or ongoing management activities, how the priority action will achieve the objectives and expected benefits of the action.

Carrying out this priority action is progress toward achieving the **quantifiable objective**. Many priority action strategies support more than one quantifiable objective.

**Strategy** provides specific steps about how the priority action could be carried out. Some of the priority actions will require several steps to be accomplished. The strategy details the steps that could be taken, but there may be shorter methods or more steps that will be necessary. This information was provided by the committees as suggestions for the project managers and implementing organizations on how this action could be carried out. The actual steps must be determined based on the location and the actual projects being carried out by the coordinating and implementing organizations.

**Potential coordinating organizations** is a list of the entities that may implement each priority action. These groups may include local, regional, state or federal government agencies, nonprofit groups, private organizations, industry or other private interests. Each listed organization may play a role in only one part of the strategy or region.

Our success in carrying out each of these priority actions will be measured and tracked. To achieve complete implementation of these actions, more projects, in addition to the ones listed, will be needed. Therefore, the regional management activities will require consistent measurement and evaluation as the benefits are realized and projects are completed. All of the priority actions describe timely, needed management actions to fulfill the *Comprehensive Conservation and Management Plan*.



*Diagram of Comprehensive Conservation and Management Plan (CCMP) structure*

