

## OVERVIEW OF THE PLANNING PROCESS

The Habitat Plan for the Lower St. Louis River was developed using a modified version of The Nature Conservancy's "Site Conservation Planning" methodology (TNC 2000). The steps of this process are described here in a linear sequence; however, the completion of several steps for a subset of conservation targets often took place in a single workshop or discussion, and subsequent discussions often refined the results of earlier efforts. All aspects of this plan were extensively reviewed by appropriate biologists and other individuals with expertise in this region.

This Habitat Plan is intended to be a dynamic document. As new information and technologies are developed and circumstances change, this plan should be periodically reviewed and revised to ensure that it remains an effective and up-to-date guide for 1) estuary-wide resource management and conservation actions that provide for adequate representation, function, and protection of ecological systems in the Lower St. Louis River, thereby sustaining biological productivity, native biodiversity, and ecological integrity; 2) conservation and management objectives that reflect a consensus of the CAC Habitat Committee; and 3) a suite of specific, obtainable conservation and management actions that address specific threats and can be prioritized and implemented.

### 1. Identify conservation targets.

The first step in the development of this plan was to identify the "**conservation targets.**" Conservation targets are the native **species, plant communities, aquatic habitats, and ecological systems** that are the focus for conservation in the Lower St. Louis River. The CAC Habitat Committee chose to focus on a variety of communities and ecological systems that can be broadly grouped in five general categories: estuarine wetlands, estuarine open water habitats, baymouth bar communities, upland forest systems, and small tributary systems. Plant communities and aquatic habitats were assumed to serve as coarse filters, representative of a broad array of most species native to the estuary. In some cases, the needs of individual species or species assemblages would not be adequately met solely by targeting plant communities and aquatic habitats. In these cases, specific bird, fish, and mussel species or assemblages were also identified as conservation targets.

### 2. Assess the health of the conservation targets.

Participants in the planning process then provided a range of information on the targets that focused on the following questions:

- Where are the conservation targets located?
- What constitutes a healthy or viable example of the conservation target?
- What is the current health of each conservation target in the Lower St. Louis River?

This information was gathered through experts workshops in March and April of 2001, through vegetation and aquatic habitat mapping efforts, and through numerous individual communications with various biologists. This information indicated the locations of good examples of conservation targets and suggested where restoration and other projects might be appropriate.

### 3. Develop goals for the conservation targets.

Goals, or desired future conditions, were developed based on the definition of a healthy, viable example for each conservation target.

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#### **4. Analyze threats to the conservation targets.**

Threats are factors that have a direct and negative impact on the health of conservation targets or that have a direct and negative impact on the ecological systems and processes that support and maintain the conservation targets. Threats are described in two parts: a stress, and a source of the stress. Stresses are the processes or events that have direct impacts on the conservation targets. The sources of stress are the entities that cause the stresses. Stresses are what need to be eliminated or minimized to protect the conservation targets, but this can only be done by acting on the **sources** of the stress. For example, in the Lower St. Louis River, degraded water quality is a stress to fish, mussels, and other conservation targets. However, that stress is caused by a number of sources, including erosion from urban development projects, pollutants from historical industrial sources, nutrients from residential and agricultural runoff, and pollutants from sewage treatment plant discharges. Once identified, threats were prioritized based on the severity, scope, immediacy, and irreversibility of their impact on the conservation targets. Information on threats was gathered during the March and April 2001 experts workshops and reviewed during a Threats and Strategies meeting in May of 2001. Subsequent communications with individual experts further refined the identified threats.

#### **5. Develop strategies to lessen or eliminate the threats to the conservation targets.**

Strategies were developed to address the significant threats. Strategies focus on stresses from current sources—such as sedimentation due to ongoing urban development—as well as past sources of stress—such as habitat degradation due to contaminants released in the past and still present in the soil and sediment. Some strategies focus directly on lessening or eliminating current sources of stress, and others involve active restoration to remedy problems caused by historic sources of stress. Strategies that engage important stakeholders or enact policy changes that may not have a direct and immediate impact on the conservation target were also important in this plan.

Once strategies were identified, they were evaluated based on several criteria:

- Which strategies address the most critical threats?
- Which strategies are most practical, given the human context of the project area?
- Which strategies can provide the greatest leverage?
- Which strategies are most cost-effective?

Strategies for addressing threats in the Lower St. Louis River were developed during a Threats and Strategies meeting in May of 2001 and refined and prioritized during subsequent meetings and discussions.

#### **6. Define measures of success.**

The Habitat Plan also includes measures for determining whether the critical threats are being abated, and whether the health of the conservation targets is being maintained or improved. The measures do not necessarily address each target individually; some measures address the entire project area.