

# CHAPTER NINE: FACILITIES PLAN - BUILDINGS, TRAILS, AND ROADS

## INTRODUCTION

The 1986 Management Plan for Tijuana River National Estuarine Research Reserve (NERR, then an Estuarine Sanctuary) called for five major physical improvements at the Reserve. These improvements included construction of 1) a wetland restoration and enhancement facility, 2) a regional estuarine research facility, 3) a visitor center, 4) trails, and 5) signage. All of these projects were completed by 1993, although the Research facility (located south of the Tijuana River) was abandoned due to problems with vandalism.

The earlier sections of this document have introduced the Reserve-wide programs. These programs are designed to protect and manage the Tijuana River NERR resources, to enhance research and monitoring of the resources, to educate the public on resource values, and to share the resource with the public. This chapter identifies the physical structures needed to advance the goals of those programs.

Consistent with the five-year vision statement established in the Executive Summary, this Facilities Plan emphasizes improvements to the southern end of the Reserve in order to make it more accessible to the public. The Goat Canyon Creek Watershed project is expected to result in plans for stormwater and sediment management, all weather public access, and habitat restoration (See Chapter 5 - Restoration Section). Planning for improved interpretive features and visitor-service facilities will follow.

## I. MISSION

**The facilities mission of Tijuana River NERR is to provide and maintain accessible facilities necessary to fulfill the Reserve's mission.**

## II. GOALS

- Goal 1: Provide accessible buildings that support and facilitate the Reserve's mission.
- Goal 2: Provide and maintain accessible foot, bicycle, and equestrian trails.
- Goal 3: On existing roads, maintain appropriate vehicular access with minimum ecological impact.

Goal 4: Explore linkages with the Tijuana River Valley Regional Park trails system.

### **III. POLICIES**

#### **A. GENERAL POLICIES FOR FACILITY DESIGN AND CONSTRUCTION**

Facilities are constructed and operated to support the Tijuana River NERR programs and achieve the Reserve's goals. Accordingly, Tijuana River NERR will be guided by the following principles in facility development.

Policies applicable to all Tijuana River NERR construction:

- All facilities, at a minimum, will comply with the Americans with Disabilities Act (ADA).
- Facilities and access routes will minimize visual impact or view obstruction both within and beyond the Reserve's administrative boundaries.
- Facilities will be designed and located to support multiple Reserve goals.
- Facility siting will consider impacts from increased site use, including transportation, parking, storm water, wastewater and sewage disposal.
- Construction techniques shall be adapted for minimal environmental impact.
- To the greatest possible extent, construction will minimize soil erosion and compaction.

Policies for on-site building construction:

- Siting of all buildings, vehicular access, and pedestrian access routes will be consistent with Tijuana River NERR stewardship and land-use planning.
- Only native plant species will be used in new plantings.
- Buildings will be designed in an environmentally sensitive manner, and esthetics will be considered in construction.
- Site facilities will encourage pedestrian access.

- Neighbors and interested groups will be encouraged to participate in the planning of new facilities.

#### Policies for Reserve trails:

- Interpretive trails will be designed to accommodate both educational groups and individual visitors.
- Trail construction and maintenance will make use of the best available technical information and adopt techniques for minimal environmental impact.
- Trail construction crews will receive instruction in ecologically appropriate trail construction techniques.
- Trail design will anticipate and discourage “short cuts” or other off-trail excursions.
- In developing new trails, decisions regarding location will take into consideration the valley-wide, grid-mapping system now being developed by the County of San Diego.

#### Policies for Reserve roads:

The Reserve’s continuing policy is to construct and maintain roads and trails only to the extent necessary to meet Reserve goals. Paved and unpaved roads and parking areas compact soils, accelerate runoff rates, exacerbate erosion, disrupt habitat, and impact visitors’ trail experiences. Gravel placed on wetland soils for roads and parking alters percolation and vegetation patterns. Moreover, heavy metals and oil deposited on roads by motor vehicles are ultimately flushed into the ecosystem.

All jurisdictions at the Reserve maintain strict limitations on areas for motorized vehicle use in the Reserve. Roads are necessary in some areas of the Reserve to provide trail access for employees and visiting researchers, as well as for transporting large equipment used by researchers, law enforcement, vector control, and maintenance or construction crews.

## **IV. EXISTING CONDITIONS AND PERCEIVED NEEDS**

### **A. BUILDINGS**

#### **1. Tijuana River NERR Visitor Center**

The visitor center, located along the northern border of the Reserve, is strongly associated with the Reserve's public identity and is frequently used by school groups. The visitor center is used by both of the operating agencies.

The visitor center houses a large public area for interpretive exhibits, a reception desk with a small bookstore, an audio-visual room, a classroom, a small library, public restrooms, and staff office space. The audio-visual room is designed for formal presentations and is also frequently used as a community meeting room. The large classroom is used for education programs, the artist-in-residence program, the water quality monitoring programs, and the coliform lab. The entire public area is fully accessible.

Staff work in two areas: a shared common area within the main visitor center building, and a stand-alone building known as the "block house." The staff area in the main visitor center consists of two offices and a staff common area. The majority of the staff common area is currently occupied by a photocopier, fax machine, closet for office supplies, and small kitchen area. The block house has office space for three staff members.

#### **2. Storage Facilities**

A garage for storage of vehicles and landscaping equipment is located across the parking lot from the visitor center. In the original design, part of this building was designated for use as a small research laboratory. However, due to the need for storage space, there is no longer space for a laboratory.

#### **3. Other Buildings**

Two other buildings exist on the site:

- a kiosk at Border Field State Park, (currently not in use, due primarily to safety concerns), and
- a restroom and storage structure for maintenance equipment at the Border Field State Park Mesa.

#### **4. Perceived Needs for Buildings**

The Tijuana River NERR programs have outgrown their existing structures. Due to the shortage of space, staff must exert extra efforts in order to carry out scientific research, education programs, and administrative functions. Staffing is expected to expand over the next two years to include seven California Department of Parks and Recreation (CDPR) employees, six U.S. Fish and Wildlife Service employees, and several more volunteers (see Chapter 4 - Administrative Framework).

As part of the effort to make the southern end of the Reserve more welcoming, a CDPR presence is needed. A kiosk located in Border Field State Park is not in use due to concerns for the safety of lone employees assigned to staff the building. With the realignment of Monument Road, a safer and more suitable location for a kiosk may be identified. The existing kiosk could be relocated or a new one could be built.

Additional storage area is needed for equipment and vehicles. Space for a variety of community and public meetings would promote and support community relationships.

#### **5. Proposed Improvements for Buildings**

During the 1998-2003 planning period, the most significant building construction or acquisition needed is for additional office space and, if funds become available, a classroom/community room. The operating agencies plan to create office space in the south end of the existing garage building. This will provide up to five workstations. The remainder of existing National Oceanic and Atmospheric Administration (NOAA)/CDPR construction funds will be used to design a community space for the visitor center.

The following is a proposed facilities improvement plan with costs and proposed scheduling:

**TABLE 12: Short-Term Building Improvements at Tijuana River NERR**

Description	Installation Date	Estimated Cost	Funding Source
Create space for large bookstore in visitor center	1998	\$1,000	CDPR/ NOAA
Office space for increased staffing	1998	\$20,000	CDPR/ NOAA
Community room design	1998	\$75,000	CDPR/ NOAA
Renovation and reopening of Border Field State Park kiosk	1999	\$20,000 to \$50,000	CDPR
Small research lab	2002	\$20,000	CDPR

## 6. Long-Term Facilities Improvements

Beyond the near-term improvements described above, there is also a need to promote greater contact with the local community and establish the visitor center as an inviting, accessible public facility. Several modifications to the current facilities could accomplish this.

Should additional funding become available, the following improvements to the visitor center will be considered to create a larger space for gathering or hosting events or ceremonies:

1. Expansion of the public meeting area behind the interpretive area, either by extending the existing concrete patio or constructing an amphitheater in the rear, southwest area of the visitor center.
2. Creation of an observation deck on the roof of the visitor center.
3. Construction of a visitor contact center in Border Field State Park.
4. Creation of temporary housing for interns and volunteers.

### B. TRAIL MAINTENANCE AND CONSTRUCTION

#### 1. Existing Trails

The trail systems at Tijuana River NERR provide the following functions:

- act as a medium for research, recreation, and educational activities;
- provide an integral part of the Public Access and Use Programs; and
- support the Resource Protection Program by controlling pedestrian and equestrian access within the Reserve to minimize visitor impacts on sensitive resources.

Since 1983, volunteer labor from California Conservation Corps, Youth Conservation Corps, scouting groups, Southwest Wetlands Interpretive Association (SWIA), and others have built about four miles of trail. Tijuana River Valley Equestrian Association has contributed to the maintenance. The Tijuana River trail surfaces are predominantly earthen. The locations of all Reserve trails are shown in Figures 6 and 15.

Trails within the boundaries of the Tijuana Slough NWR are designated for pedestrian use and are maintained cooperatively by both operating agencies. All other trails within the Reserve are designated for mixed use.

Both pedestrian and mixed-use trails are closed during times important to the protection of endangered species and their habitats. These closures are coordinated and enforced by the operating agencies. For more description on the public use of the trails, please refer to Chapter 8: Public Access, Involvement, and Use Plan of Action.

## **2. Perceived Trail Needs**

The equestrian community has recommended several improvements regarding access and signage. There is a need for the operating agencies and equestrian community to meet and assess potential realignment of equestrian trails (see also Chapter 8).

### **C. ROADS AND PARKING**

#### **1. Existing Roads and Parking**

Two main roads provide access to the Reserve -- Caspian Way, which leads to the Visitor Center, and Monument Road, which offers access to Border Field State Park. Emergency vehicles also use the 5th & Iris trails and several other trails in the southern end of the Reserve.

In 1992, Monument Road was severely damaged by flooding. Funding from NOAA for reconstruction of the road was approved in 1997, and design and construction will begin in 1998. Pending Management Authority approval,

State Parks plans to realign Monument Road to the south of the existing road at an elevation that should provide for year-round access.

In the areas of the Reserve near the U.S.-Mexico border, U.S. Border Patrol has engaged in road-building independent of the operating agencies. These roads have been linked to problems with erosion and deterioration of habitat. The Management Authority and the operating agencies have agreed to review current and past road-building activities with the goal of reducing these impacts.

## **2. Perceived Needs for Roads and Parking**

The major road improvement proposed for the Reserve is the reconstruction of Monument Road. The final conceptual design for the realignment is expected to be ready for review by the Management Authority in January 1998. Once underway, construction is expected to last 12-18 months. The overall cost is estimated at between \$250,000 and \$300,000.

There is a need to reduce soil erosion tied to road-building activities in the southern end of the Reserve. Operating agencies are now working with U.S. Border Patrol to ensure that road-building techniques minimize potential impacts to habitat. Road placement, the use of erosion control measures, and seasonal factors all help limit the damage caused by building roads.

## **V. FACILITIES PLAN OF ACTION**

**Goal 1. Provide accessible buildings that support and facilitate the Reserve's mission.**

Objective 1: Construct new facilities to improve the Reserve's effectiveness and staff efficiency.

Tasks:

- Create office space for the increased staffing called for by both operating agencies.
- Create space for use as a community room.
- Construct or gain access to a small research laboratory.
- Construct or gain access to additional equipment and vehicle storage.
- Expand the fire cache area.

- Evaluate the value of constructing temporary housing for seasonal and/or short-term staff positions.
- Collaborate with adjacent landowners on facilities development.
- Design and implement a Border Field kiosk relocation/construction plan following the reconstruction of Monument Road.
- Review the feasibility of establishing a visitor contact center at Border Field State Park.

**Goal 2. Provide and maintain accessible foot, bicycle, and equestrian trails.**

Tasks:

- Operating agencies will coordinate trail closures for protection of special-status species or their habitat.
- Operating agencies will publicize trail closures and share enforcement responsibilities.
- Operating agencies and Management Authority will review public proposals for new trails and meet with the equestrian community to assess the potential realignment of equestrian trails.

**Goal 3. On existing roads, maintain appropriate vehicular access with minimum ecological impact.**

Tasks:

- Design and reconstruct Monument Road in new location.
- Work with U.S. Border Patrol to minimize road-building impacts. Convene a panel to review the network of roads within the Reserve boundaries.
- Assess all vehicular roads in the Reserve and designate roads to be maintained, improved, or retired.

**Goal 4. Explore linkages with the Tijuana River Valley Regional Park trails system.**

