## Post Development Bat Monitoring

- Pre & Post development monitoring for the presence/absence of covered bat species.
- Provides data for the adaptive management process and to develop management guidelines for created habitat sites

### **Monitoring Plan Components**

- Quarterly acoustic monitoring with anabat bat detectors
- Mist netting & Sonobat acoustic sampling
- Long term stationary monitoring

# Study Design Quarterly Acoustic Sampling

- Palo Verde Ecological Reserve Phase II
  - 4 sites
- Cibola Valley Conservation Area
  - 8 sites
- Lake Havasu National Wildlife Area
  - Beal Lake 9 sites
- Imperial National Wildlife Area
  - -12 sites
- Pratt 2 sites

9 to 12 Anabat Bat Detectors Deployed Simultaneously In Each Area

Sampling Conducted From Dusk to Dawn for 2 Consecutive Nights

Control Site Established for Each Area (Untreated)

Exploratory Acoustic Survey April 2006

First Quarterly Acoustic Survey Conducted November 2006

Second Survey Conducted January 2007

#### PALO VERDE

November – moderate #'s (15 – 49) calls of Mexican free-tailed bats, western pipistrelles & some big free-tailed bats in Field 2

60 calls of mostly western pipistrelles, big free-tailed bats, some big brown bats and some 50 khz myotis along the river corridor.

In January sampling calls greatly reduced – 2 calls

## CIBOLA VALLEY CONSERVATION AREA

November: from 3 to 18 calls of big free-tailed bats, 50 khz myotis, pocketed free-tailed bats, western pipistrelles in each of the sample sites. Also a red bat and a few greater mastiff bats.

January: 27 social calls of California leaf nosed bats in Field D – & a 50 khz myotis at the Nature Trail

#### **Pratt Restoration**

No calls obtained even though units functioning properly

### Imperial National Wildlife Refuge

November: From 40 to 70 calls of western pipistrelles, 50 khz myotis & Mexican freetails at Butler & McAllister Lakes & Ponds 1 & 2. 80 calls of 50 Khz myotis along the river. 270 calls of mostly 50 khz myotis on the edge of the nursery.

January: # calls drops - 15 to 20 calls of mostly mexican free-tails, & 50 khz myotis along with a few pipistrelles, some California leaf-nosed bats, big brown bats & pocketed free-tails.