

Burrowing Owl Survey – 2009

Purpose: The purpose of the survey was to determine where Burrowing Owls were located in 2009 on Kern Water Bank acreage. The survey covered all Kern Water Bank acreage. Owls were counted and nest locations determined. A Burrowing Owl Survey was conducted in 2007 for the Institute for Bird Populations. The acreage surveyed in 2007 did not cover all Kern Water Bank acreage but did cover much of it. Beyond locating current Burrowing Owl locations, some comparisons between where they are now and where they were in 2007, might be made.

Methodology: Most easily passable roads were driven. Where likely habitat for Burrowing Owls exists, the surveyor stopped and using binoculars scanned the area. A spotting scope was used to further determine distant objects or owls. Areas where Burrowing Owls were found in 2007 were carefully surveyed to determine if Burrowing Owls currently used those locations. Digital photographs were taken of most observed owls and owl locations. Most locations coincide with Burrowing Owl nest sites, but a few locations may only be where an owl was present when the area was surveyed. Some locations were observed multiple times on different dates. Locations of observations were noted in the field on a Google aerial photograph. Locations on Kern Water Bank acreage were numbered consecutively. Locations on non-Kern Water Bank acreage were marked alphabetically by letter. All locations were then transcribed onto a Kern Water Bank Roads map. When Burrowing Owls were observed, the number of adult and/or juvenile owls was determined. Surveys of the area were conducted in the mornings between 7 and 11 AM.

The first survey date was 5/20/09 and the last survey date was 6/9/09. For comparison, the 2007 survey occurred starting 5/31/07 and ending 6/12/07.

Differences between 2007 and 2009: The few years preceding 2007 experienced good rainfall amounts. Many of the recharge ponds at Kern Water Bank had been filled during the 2006-07 winter and lush vegetation was widespread. In the spring of 2007, the recharge basins mostly dried up but when the survey was done tall tumbleweeds remained.

2009 followed two years of low rainfall. Plant growth at the Kern Water Bank had been substantially reduced both by lack of rainfall and by grazing livestock. An observer in 2009 could survey a large area without as many intervening tumbleweeds or other plants.

Uncertainties of Observations: There is always the possibility that a Burrowing Owl is not seen by the observer. There is also the possibility that an owl might move to a different location. The appearance of juvenile owls at a nest location can dramatically increase the number of owls observed.

Burrowing Owls observed:

In 2009, 47 Burrowing Owls (31 adult and 16 juvenile) were observed at 20 locations on Kern Water Bank acreage. In addition to those owls, 15 owls (5 adult and 10 juvenile) were observed at 3 locations close to Kern Water Bank acreage. Total number of Burrowing Owls observed in 2009 was 62 (36 adult and 26 juvenile).

If only those areas observed in 2007 are tallied for 2009 observations, 40 Burrowing Owls (26 adult and 14 juvenile) were seen. In 2007, 53 Burrowing Owls (47 adult and 6 juvenile) were observed in the same area.

Figure 1 is a Kern Water Bank road map depicting Burrowing Owl locations that were observed in 2009.

Figure 2 is a Kern Water Bank road map depicting Burrowing Owl locations that were observed in 2007.

Comparison of Maps and Conclusions:

In some areas where Burrowing Owls were present in 2007, no Burrowing Owls were observed in 2009. This is particularly true east of the intersection of I-5 and the Cross Valley Canal. No Burrowing Owls were observed just south of the Cross Valley Canal east of Enos Lane. There has been extensive construction and grazing and some oil field work in these areas where no owls were found.

At other locations, very similar numbers of owls were observed in 2009 as compared to 2007. This is especially true in and near the oil field immediately north of the KWB canal and west of Enos Lane.

At a few locations, such as 2009 locations 1 and 2, no owls were observed in 2007 but some owls were observed in 2009.

In conclusion, fewer Burrowing Owls and nest locations were observed in 2009 than were observed in the same area in 2007. Areas which have been relatively undisturbed, maintained approximately the same number of Burrowing Owls and nest locations.

For Questions and Comments: If you have any questions or comments about the 2009 survey, you can call me at (661)900-8595 or (661)664-1174, send me an email at wlydecker@bak.rr.com, or send mail to 2800 Trengate Way, Bakersfield, CA 93311.

Thank you for allowing me to look for Burrowing Owls at the Kern Water Bank.

Bill Lydecker
June 19, 2009

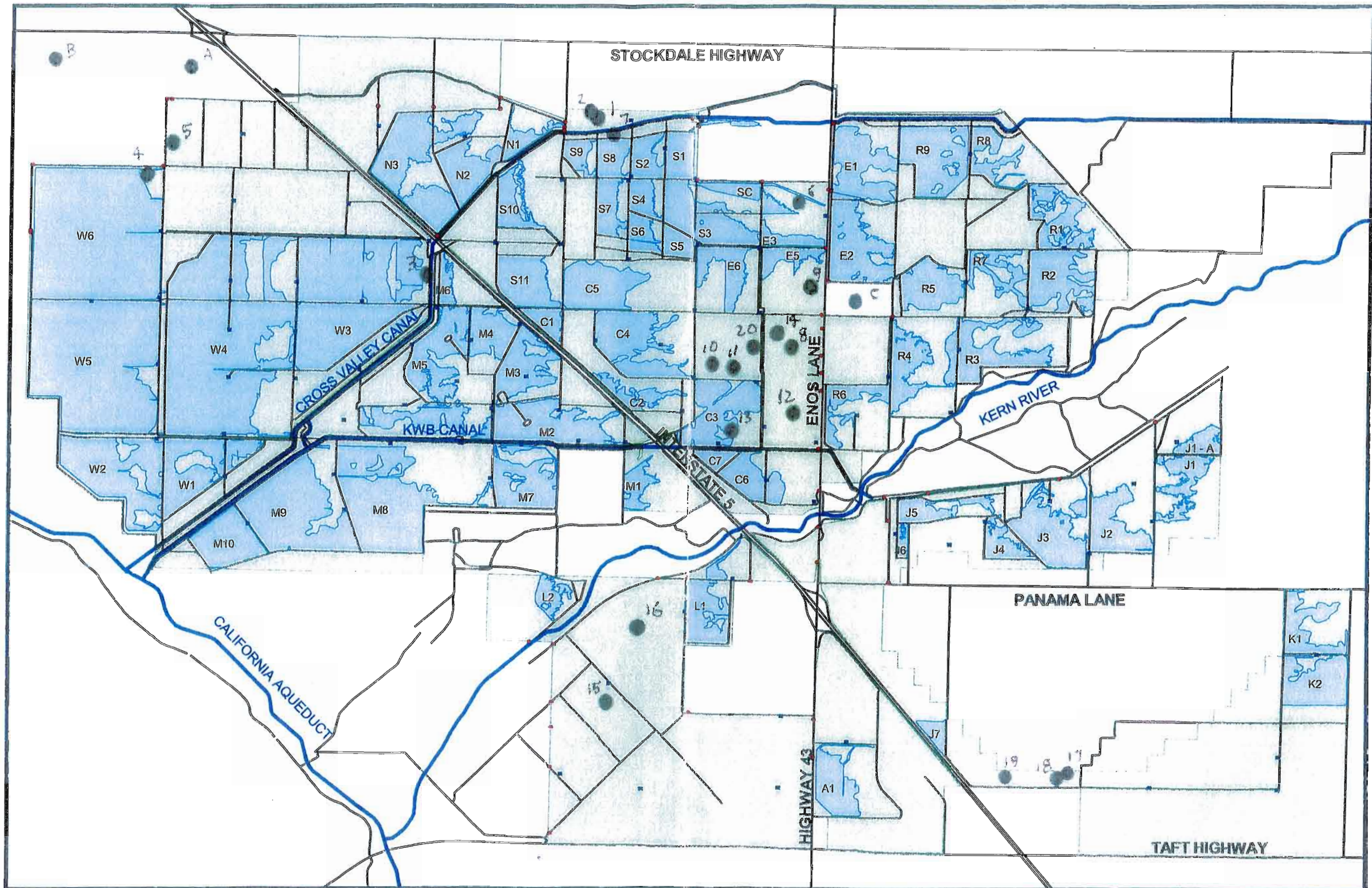


Figure 1
2009

Kern Water Bank

BURROWING OWLS

● locations where
Burrowing Owls were
seen in 2009



KERN WATER BANK AUTHORITY

- Gates
- Wells
- Roads
- Recharge Ponds
- Kern Water Bank Property

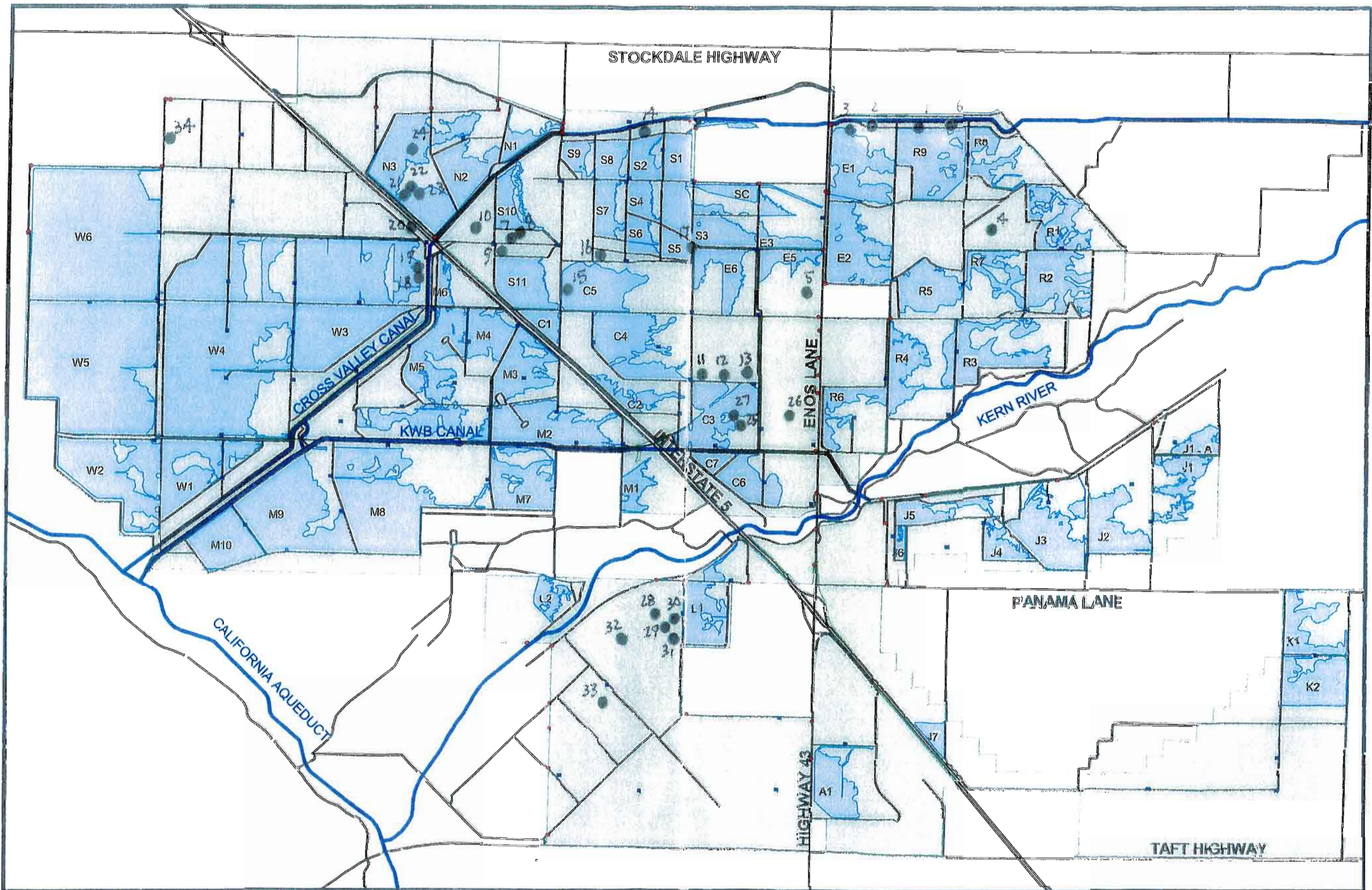


Figure 2
2007

Kern Water Bank

BURROWING OWLS

• locations where
Burrowing Owls were
seen in 2007

- Gates
- Wells
- Roads
- ▭ Recharge Ponds
- ▭ Kern Water Bank Property



KERN WATER BANK AUTHORITY