

San Francisquito Creek Flood Control Project
2015 Ridgway Rail Surveys
April 21, 2015

The San Francisquito Creek Joint Powers Authority proposes to modify San Francisquito Creek between San Francisco Bay and U.S. Highway 101. As part of the regulatory approval process the U. S. Fish and Wildlife Service Ecological Services Division requested the Santa Clara Valley Water District (SCVWD) investigate the presence of Ridgway Rail within the project area and to avoid construction activities within 600 feet of nesting areas.

Study Area

The surveys were conducted on the lower 1 mile of San Francisquito Creek, the Faber Tract Marsh, and the adjacent pickleweed marsh adjacent to Palo Alto Airport (Figure 1).

Methods

Prior to conducting the surveys the SCVWD reviewed existing information on Ridgway Rails in the project vicinity. Data reviewed included previous surveys conducted by the SCVWD, the California Department of Fish and Game's California Natural Diversity Data Base (CNDDDB), and surveys conducted for the invasive spartina control project. The SCVWD identified potential areas where Ridgway Rails may be found and developed surveys to document Ridgway Rails in these areas.

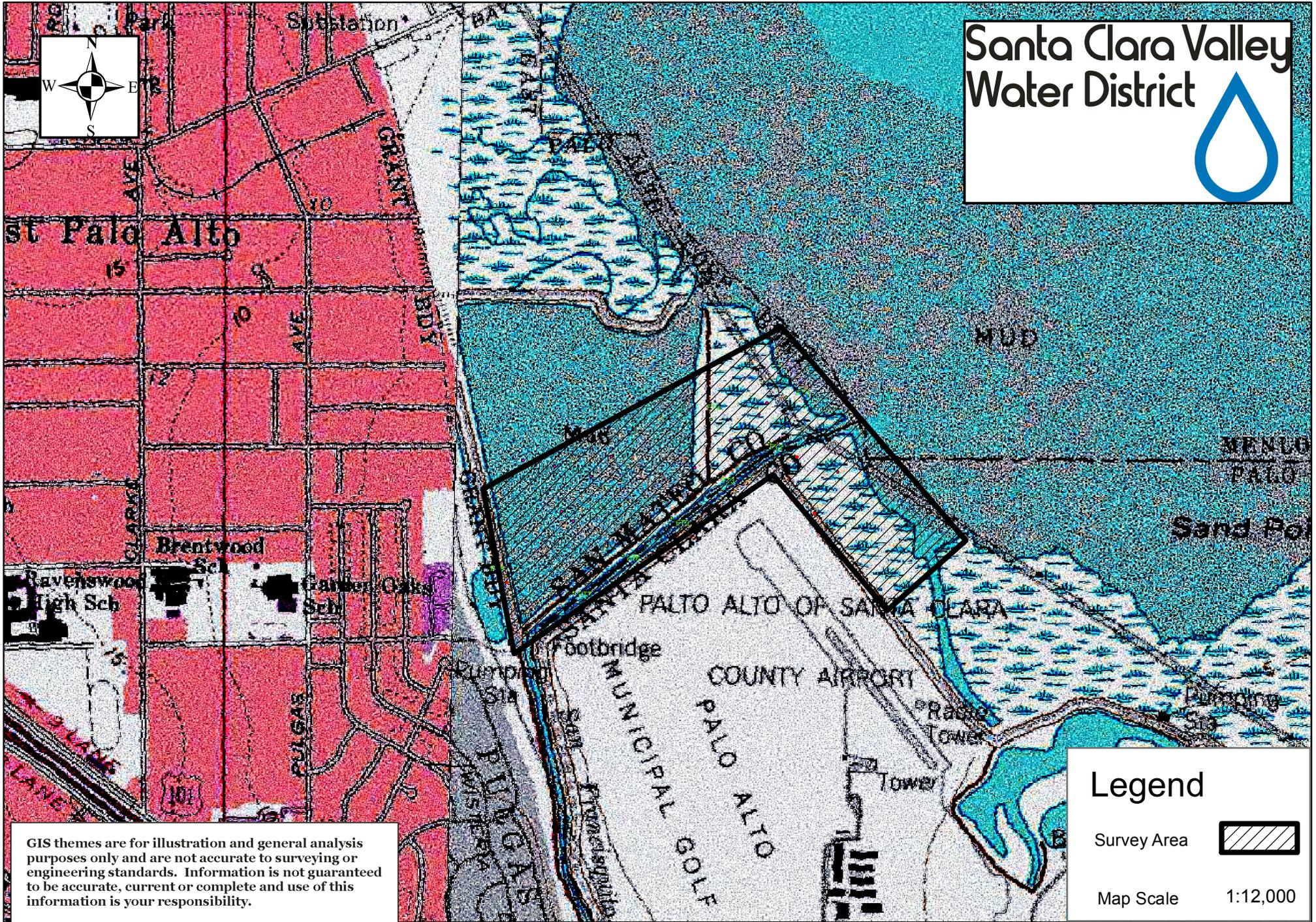
Surveys were conducted based on established protocols developed by the U. S. Fish and Wildlife Service (undated) and the SCVWD (2009). The SCVWD conducted passive point count surveys from the San Francisquito Creek Levee downstream of Friendship Bridge and the Palo Alto Baylands Levee adjacent to the Palo Alto Airport.

Surveys were conducted from known survey locations and lasted 10 minutes at each location. Each rail heard or observed was recorded on data sheets. The time and compass direction to the calling bird were also recorded. Surveys on January 21, 2015 were conducted as part of a training program with all observers located at the same point for each survey bout. Surveys on January 22 and February 17, 2015 were conducted by multiple observers located at multiple survey points. All other birds, wildlife, and disturbances in the area were recorded on the data sheets.

Following the surveys all the data was compiled in the office. The survey data was plotted on the SCVWD GIS system. From each survey point a line was drawn from the survey point in the direction of the documented call. Where surveys were conducted from multiple points simultaneously the overlap in lines indicated rail positions. Where lines did not intersect with other survey locations the most likely location along the line was plotted on the GIS map. Most likely locations were within 300 m of the survey point along a channel in the marsh. Where multiple birds were calling at the same time, duets for example, the numbers of birds heard were recorded along with the likely location. Where multiple bouts of calling were heard from the same location each series of calls were documented separately on the GIS by placing the number heard next to the location plus the number heard during the next bout.

Results

On January 21, 2015 surveys were conducted from the mouth of San Francisquito Creek extending upstream 300 meters (3 locations) and one location on the levee between Palo Alto



2015 Ridgway Rail Survey Area San Francisquito Creek Flood Control Project.
Mountain View and Palo Alto 7.5 min Quadrangles

Airport and San Francisco Bay (Figure 2). A total of 25 rail calls were heard during the survey period from 13 distinct locations. Approximately 19 individual rails were heard calling during the surveys. Four rails were found in the Palo Alto Baylands Marsh between the Palo Alto Airport and San Francisquito Creek. Fifteen rails were heard calling from the Faber Tract and the bayside marsh on the north side of San Francisquito Creek.

On January 22, 2015 surveys were conducted from the levees on the southwest corner of the Faber Marsh (Figure 3). Three locations were surveyed concurrently. A total of 14 rails were heard during the survey and were plotted on the map. Three rails were heard from a distance but could not be plotted on the map. Twelve additional rails were heard before or after the survey but were not plotted on the map.

The final surveys were conducted on February 17, 2015 (Figure 4). Multiple observers were used to conduct the surveys from the levee between San Francisquito Creek and the Faber Tract Marsh. Two additional survey points were located 150 meters north of the levee on the PG&E catwalk and on the levee between the Faber Tract Marsh and San Francisco Bay. Each surveyor conducted their surveys at two different locations and the surveys were timed to start at 7:00 am and 7:30 am.

One hundred and three distinct rail calls were recorded on the data sheets from 30 distinct locations. The data indicates there were approximately 54 rails were observed in the Faber Tract Marsh.

No free ranging mammalian predators were observed during the survey. A peregrine falcon was observed flying over the marsh on January 21, 2015 and again on February 17, 2015. A man was observed walking a dog on levees or the PG&E catwalk outside the survey area. Aircraft taking off from the Palo Alto Airport made it difficult to hear some calls.

Discussion

The Faber Tract Marsh and Palo Alto Baylands continue to be a major breeding area for Ridgway Rails. Surveys conducted in January and February along San Francisquito Creek showed consistent usage of the marsh. Approximately 50-55 Ridgway Rails were documented using areas within 300 meters of the San Francisquito Creek Levee. The plots of locations within the marsh environment indicate the rails are using the smaller channels within the marsh during the breeding season to make contact with each other. Both individuals and groups of multiple birds were heard calling during the surveys. Males (keks), females (kek-burs) and duets were heard during each survey.

Construction work on the San Francisquito Creek Levee at the mouth of the creek should be delayed until after the nesting season. Work in the vicinity of Friendship Bridge is farther than 200 meters from Ridgway Rails observed during these surveys and may proceed without disturbing nesting Ridgway Rails.

Literature Cited

SCVWD. 2009. California Clapper Rail Surveys. Ecological Monitoring and Assessment Program, Work Instruction No. 30266. 10 pp.

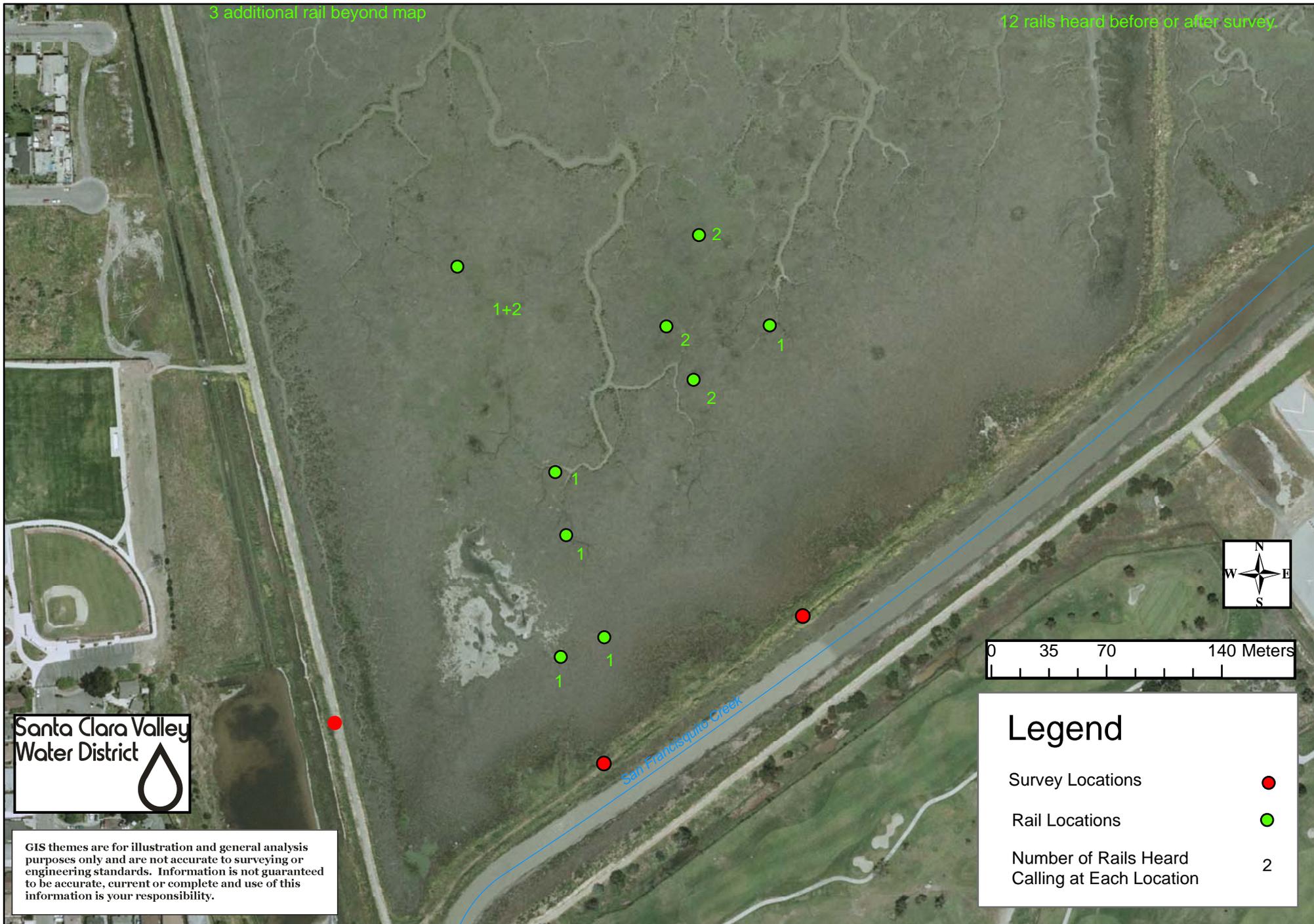
US Fish and Wildlife Service. Undated. Draft California Clapper Rail Survey. 3 pp.



January 21, 2015 Ridgway rail surveys at the mouth of San Francisquito Creek including Faber Tract and marsh adjacent to Palo Alto Airport.

3 additional rail beyond map

12 rails heard before or after survey



January 22, 2015 Ridgway Rail surveys on San Francisquito Creek, East Palo Alto, California.

