

## **Santa Ana River Mouth Monitoring Project 2024 Report**



Orange County Coastkeeper (Coastkeeper) is a nonprofit clean water organization that serves as a proactive steward of our fresh- and saltwater ecosystems. We work collaboratively with diverse groups in the public and private sectors to achieve healthy, accessible, and sustainable water resources for the region. We implement innovative, effective programs in education, advocacy, restoration, research, enforcement, and conservation.

The Santa Ana River Mouth Monitoring Project (SAR Project) enlists volunteers, community groups, and local government to monitor human, dog, and bird activity in the Santa Ana River Mouth area, a 13.2-acre parcel of land that is owned by four agencies: the California State Lands Commission, California State Parks, the County of Orange, and the City of Newport Beach. Due to the fragmented ownership of the area, management of activities and law enforcement have been difficult. The entire 2024 SAR Project covered in this report (January 2024 through December 2024) was run as an ongoing project by Orange County Coastkeeper with funding from the California Coastal Conservancy. The goal of the SAR project is to monitor human, dog, and bird use of the area and to provide education and outreach to residents and visitors about the Wildlife Management Area at the Santa Ana River Mouth and the endangered species that reside within it.

## EXECUTIVE SUMMARY

Monitoring of the area for this project began on February 9th, 2021. All subsequent surveys followed a standard protocol. Between January and December 2024, 1,634 surveys at the Santa Ana River Mouth were completed by 19 trained volunteers and 4 staff members. In the surveys collected, 26,191 people and 2,356 dogs were observed. Of the dogs, 1,440 were off-leash and 916 were on-leash. Dogs off-leash accounted for 61% of the dogs observed. There are current regulations in the City of Newport Beach jurisdiction that prohibit dogs from being off-leash on the beach at any time. Dogs are also not allowed on the beach between 10:00AM to 4:30PM to protect the sensitive wildlife area and lessen impacts to visitor traffic. Law Enforcement Officers (LEO) are considered individuals with the authority to enforce the regulations in or around the Santa Ana River Mouth area, including the multi-use trail on CA State Parks property. Law Enforcement Officers were present 361 times throughout all surveys completed in this time period, with the Newport Beach Lifeguard observed most frequently followed by the Orange County Sheriff Deputies. Other public officials that were not law enforcement include Public Works, California State Parks, and OC Parks. 4 citations were observed to be issued, though it is possible not all issued citations were recorded by surveyors. 320 visitors were observed contacted by law enforcement officers and other public entities, a significant increase from the previous year. A visitor contact does not have to include a citation but is simply the observance of communication between a beach visitor and any public entity or LEO.

## MAP AND PROJECT BOUNDARIES

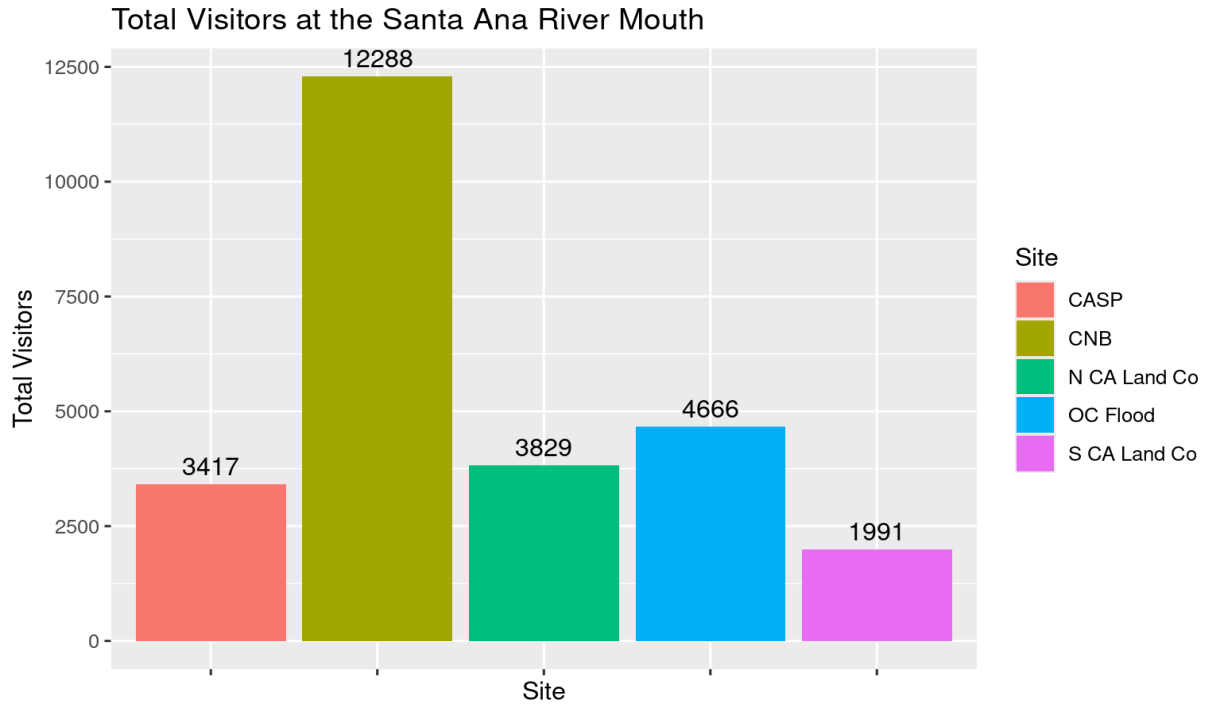
### SAR Project Survey Boundaries



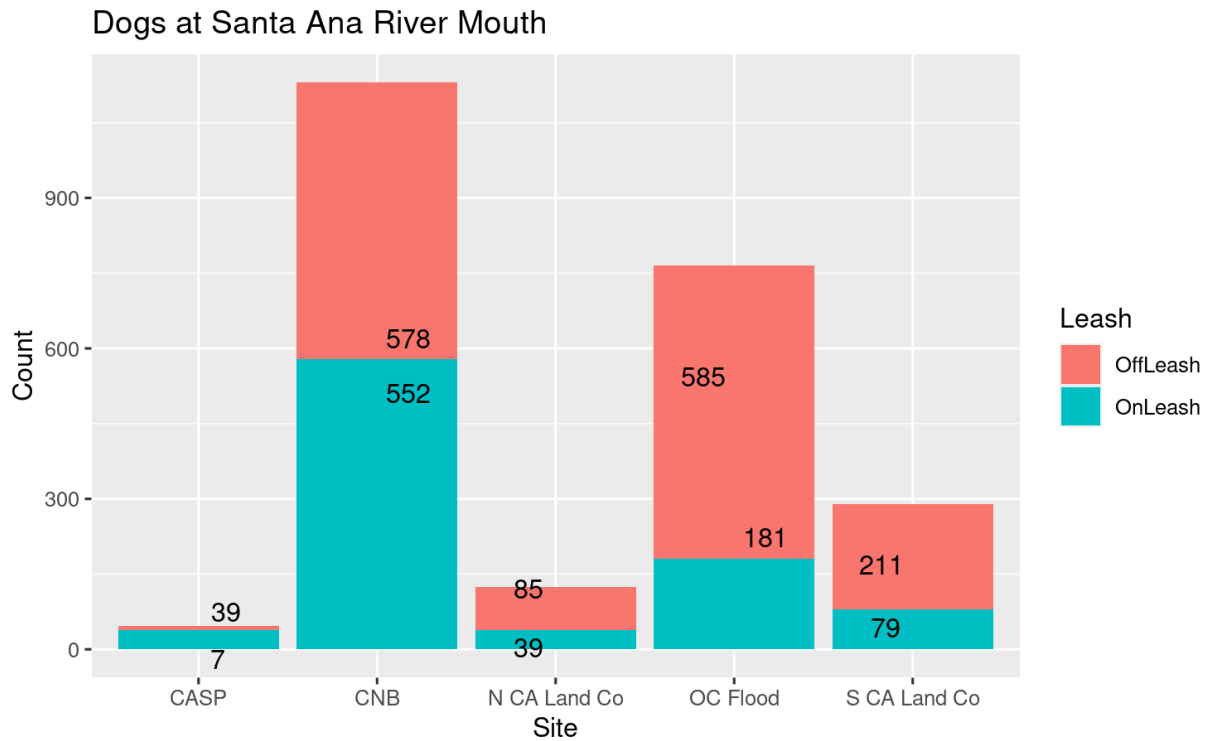
Map of Santa Ana River Mouth with property names overlaid to correlate with data sheets. California State Lands Commission property was split into North and South portions, divided by the location of the river mouth during surveys, to better analyze land use in the area

**CASP**= California State Parks, **CNB**= City of Newport Beach, **N CA Land Co**= North California State Lands Commission, **OC Flood**= Orange County Flood Control (Sensitive Wildlife Area), **S CA Land Co**= South California State Lands Commission. **Law Enforcement**: OC Sheriff, Police, Lifeguard, Park Ranger, and CNB: Animal Control. **Public Officials**: Public Works, OC Parks, CA State Parks. **“Other” LEO**: Unidentified law enforcement or Public Official

**GRAPHS**



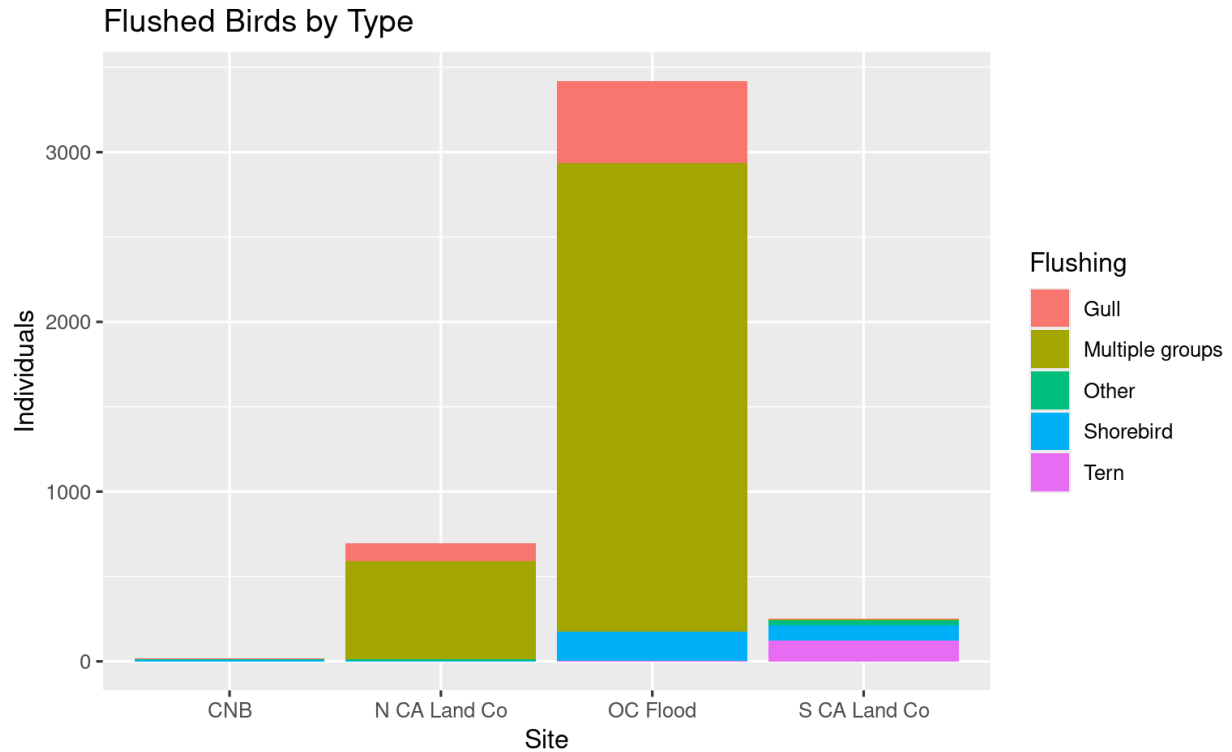
**Figure 1. Visitors Based on Location**



**Figure 2. Dogs Based on Location**

A total of 2356 dogs were observed at the Santa Ana River Mouth; 916 (39%) were on leash and 1440 (61%) were off leash.

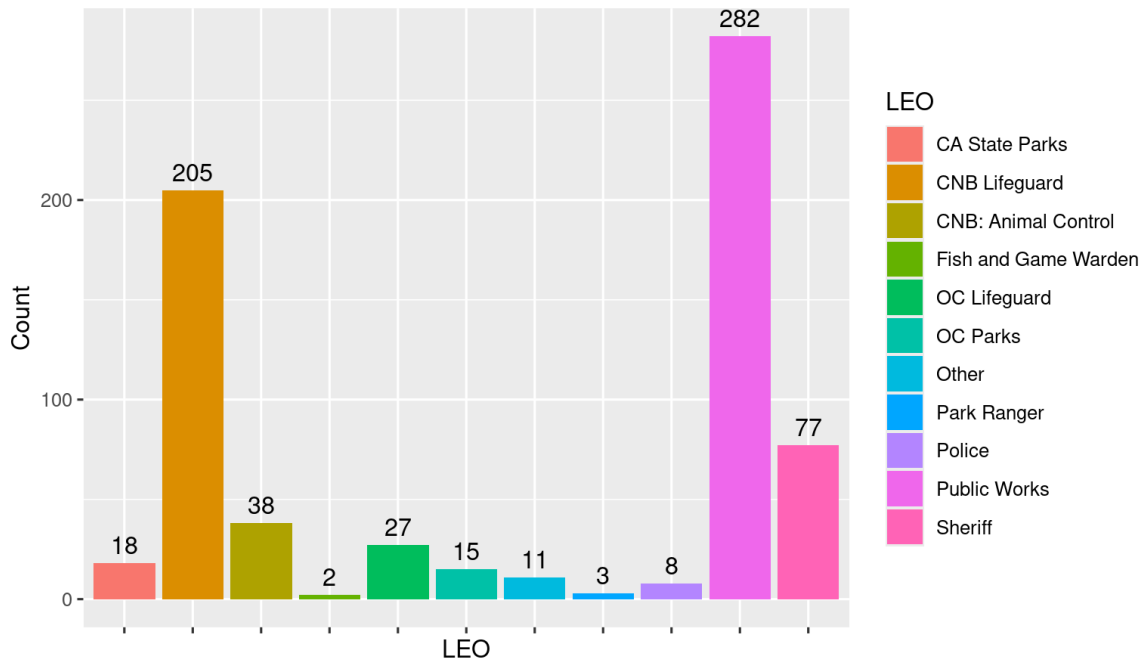
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**Figure 3. Bird Disturbances by Location**

Bird disturbances, also known as Flushing events, are defined by when birds are present on the beach and are approached by humans and/or dogs causing them to depart the area. A total of 153 flushing events affecting 4386 individual birds occurred in our survey area. 76% of birds flushed included a mix of terns, gulls, and shorebirds, 14% of birds flushed were gulls, 6% of birds flushed were shorebirds, 3% of birds flushed were terns, and 1% consisted of other bird species.

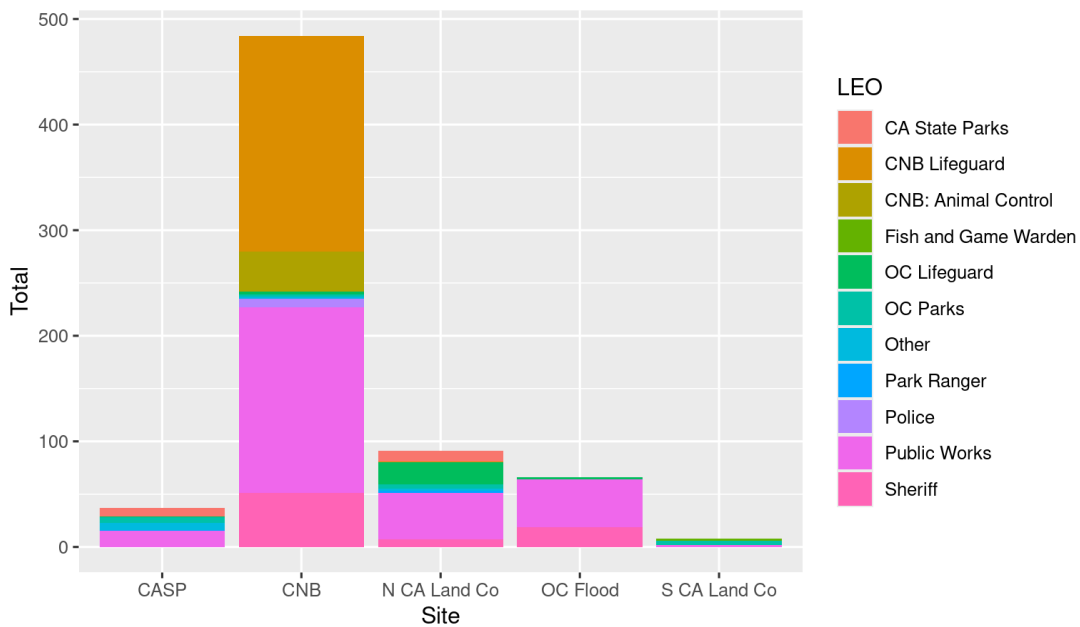
### Law Enforcement Officers and Other Public Entities Presence Frequency



**Figure 4. Law Enforcement Officers (LEO) and Other Public Entities Frequency**

A total of 361 law enforcement officers and 325 public officials were present during observational surveys. There was a total of 320 visitor contacts made by various law enforcement officers.

### Law Enforcement Officers and other Public Entities by Land Owner



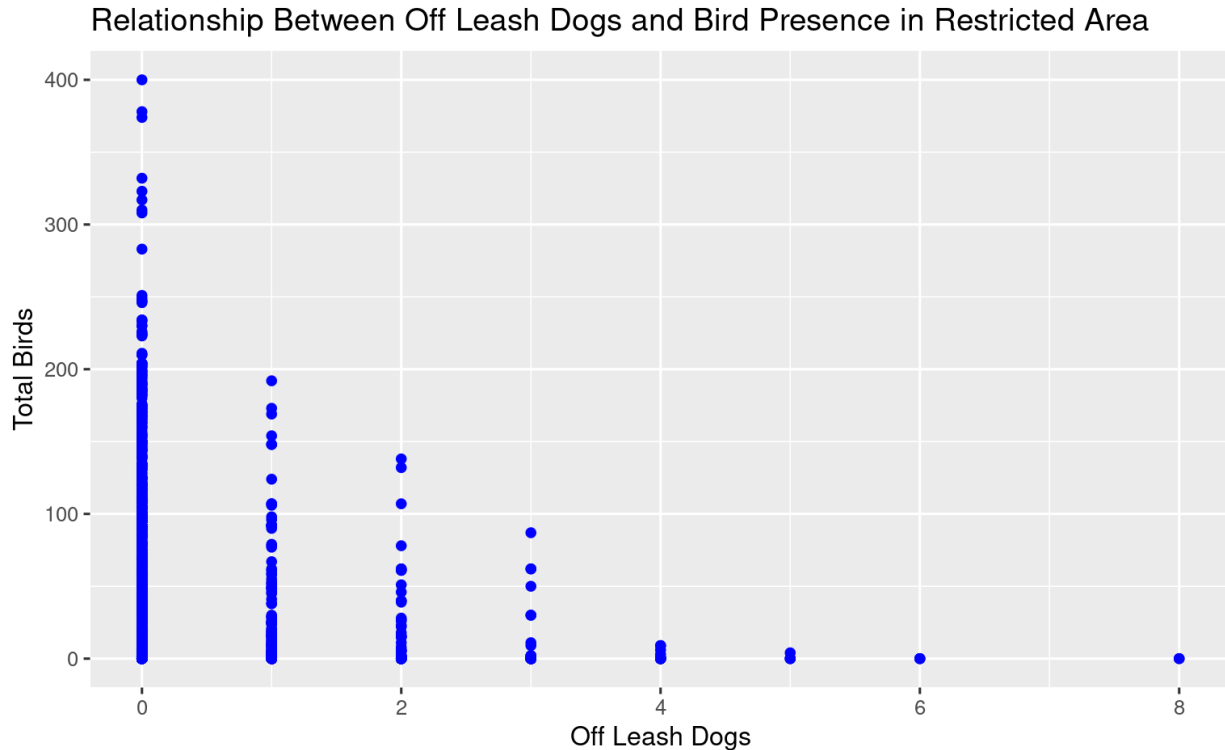
**Figure 5. Law Enforcement Officers and Other Public Entities by Location**

This figure illustrates where LEOs and representatives of public entities were located at the time of observation, which does not imply that is the jurisdiction that they are enforcing.

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**Figure 8. Correlation Analysis of Off-Leash Dog Presence and Bird Presence in the Sensitive Wildlife Area**

We ran a correlation analysis to understand the association between off-leash dog presence and bird presence in the sensitive wildlife area. Off-leash dog presence had a significant association with lower bird presence ( $p\text{-value} < 2.2e-16$ ,  $\rho = -0.33$ ).

## DISCUSSION

Visitors at the Santa Ana River Mouth were most observed within the CNB boundaries followed by the OC Flood boundary (Figure 1). This is reflected with most dogs also being observed in CNB and OC Flood with a majority (61%) of all dogs observed at the river mouth were off leash (Figure 2). Even though it is unlawful for visitors to enter the OC Flood control boundary, they would trespass the jetties with their dogs and disturb the habitat. It is hypothesized that high human and dog traffic to these areas may result in fewer bird observations, as seen in the correlation graph (Figure 8). Most birds were in the OC Flood jurisdiction, away from central beach access, yet the OC Flood area also experienced the highest amount of bird disruptions, as most flushing events took place within this area (Figure 3). According to our data, the OC Flood area had the highest bird observations, since it is a feeding area and parts of it are more isolated from human and dog visitors, however, these birds would face disturbances by visitors nonetheless.

Law enforcement officers (LEO) were most often seen within the CNB boundary (Figure 5); however, the results are an indication of where LEO's were present and not which jurisdiction they were enforcing. Through our observances, we learned that the Sheriff Deputies would park on either CNB or North Lands Commission and enforce only the river mouth regulations. On several occasions, the OC Sheriff Deputies would leave their vehicle to talk to visitors trespassing the OC Flood Channel. The Newport Beach Lifeguard was the most frequently seen LEO followed by the Sheriff (Figure 4). The OC Sheriff Deputies also conducted 61% of the 320 visitor contacts.

According to one of our sources, there was a meeting between Law Enforcement Officers in February 2024 concerning enforcement of the off-leash dog rules and channel trespass rules. The City of Newport Beach is the only jurisdiction that can enforce the dog rules on the Newport Beach side of the river mouth. We observed Newport Beach Animal Control almost 40 times and they would enforce the dog rules by issuing warnings and ticketing individuals with dogs on the beach. However, we only saw Newport Beach police 8 times. On the other hand, we observed the OC Sheriff Deputies 77 times, which is a significant increase from 2023, and they continued to enforce illegal OC Flood channel activities. On July 12<sup>th</sup>, 2024, surveyors noticed the deployment of a "No Dog Beach" sign on the road leading to the Santa Ana River Mouth. The sign was observed to be taken down before October 28<sup>th</sup>, 2024. As seen in Figures 6 and 7, there is a much higher frequency of off-leash dog observations in Summer 2023 when compared to Summer 2024. For example, there were 1,099 off-leash dog observations in Summer 2023 and 269 off-leash dog observations in Summer 2024. Since there was not a posted sign during Summer 2023, we can conclude that the "No Dog Beach" signage and increased enforcement presence in 2024 served as a great way to raise awareness and reduce recurrent off-leash dog violations and threats to wildlife.

In the correlation analysis, high off-leash dog presence was associated with lower amounts of birds present inside the sensitive wildlife area (Figure 8). This graph mainly focused on activities within the river mouth since it is illegal for people and dogs to trespass this area. Nonetheless, most of the flushing events and off-leash dog observations occurred in the restricted area (OC Flood) (Figure 3). When there is a greater number of dogs that are off leash, this poses a potential threat to the birds that inhabit this area. Considering the birds in this area include endangered and threatened birds like the Western Snowy Plover and California Least Tern, caution must be exercised by visitors to prevent threats to these protected species. It is incredibly important for dog-owners to keep their dogs on a leash when they choose to visit this area to avoid scaring birds out of their habitat, causing them to abandon the processes they need to survive.

### **Volunteer Training**

Training started with three educational presentations of the project and wildlife identification information. Trainees were also provided materials relating to the project including past reports and a map of the area. Volunteers then met with Project Manager Christina Giudice at the Santa Ana River Mouth to go over the standard operating protocol and the jurisdiction map in person. Volunteers were then trained on bird identification and monitoring human and dog activities.



## Outreach Table



Figure 9. Outreach Table

During this project, Orange County Coastkeeper was able to conduct an outreach table for beach visitors. Visitors were given pamphlets detailing information about California Least Terns and Western Snowy Plovers. Additional information about the laws regarding dogs in the area and free biodegradable waste bags were provided to visitors as well. Challenges for our public outreach included issues with volunteer recruitment and retention as well as the beach dredging project in the Fall and Winter which obstructed beach access. Overall, OC Coastkeeper has engaged with 445 visitors during observational surveys and outreach events in 2024.

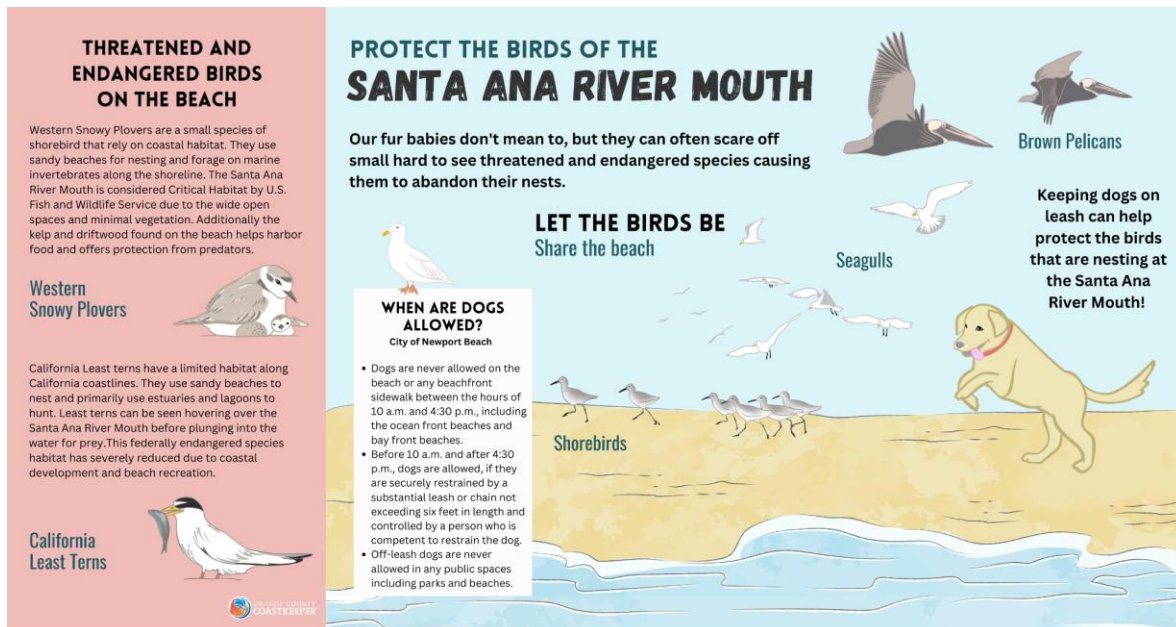


Figure 10. Informational banner used at outreach events highlighting the endangered and threatened species of birds and the City of Newport Beach dog rules.

## Other Updates

We observed many changes at the project site this past year and staff members have exercised several different options as a response. Due to the dredging project continuing into early 2024, there were fences and heavy machinery covering the beach on Mondays through Fridays from 8AM to 5PM which interfered with some outreach and visitation. This project also returned briefly in October. Surveyors have tried alternating locations for survey acquisition by walking over to the California State Parks side in order to gain another perspective and using long-range cameras for better view. However, we were still able to set up for outreach and surveys during this time. Additionally, we observed a substantial increase in law enforcement in the river mouth from the Sheriff and Newport Beach Animal Control. For a two-week period in June and from July 12th to October 28th, there was a posted sign that stated the Santa Ana River Mouth was not a dog beach and that these rules would be enforced. We are looking forward to more enforcement from the City of Newport Beach to protect this precious ecosystem.



**Figure 11: No dogs allowed sign at SAR entrance posted July-October 2024**

## Next Steps

With additional funding from the California Coastal Conservancy, we are thrilled to continue onto our next steps with this project. This includes additional volunteer recruitment from the local community, continuation of the outreach table, various outreach events to spread awareness of this project, and gathering surveys with new updates. We plan on creating more informational presentations for incoming volunteers as well as more interactive forms of outreach in order to connect with the public.