



Thermal Drone Used to Identify Oil Spill in Huntington Beach

KENT NERHUS

Director of Drone Operations

On the morning of Oct. 4th, 2021 7:00am. at Endemic Environmental Services' drone operations team identified the reminiscence of the recent oil spill off the coast of Huntington Beach, CA using a thermal camera attached to their drone, a new utility that hasn't been done. The oil spill was caused by a leak from a pipeline from an offshore oil platform that is owned by a Houston based company, Amplify Energy. The flight area survey was conducted on the northside of the

Huntington Beach pier at 100 ft. above the surface of the water. "The use of thermal imaging to identify the spill location via drone provides a large area to be surveyed from aerial perspective quickly and invasively, allowing us to see what our naked eye cannot," stated Kent Nerhus, the **Endemic** Environmental Services drone operations team director and FAA licensed drone pilot. Kent was the pilot in command of the Oct. 4th thermal survey at the Huntington "Endemic Beach Pier. Environmental Services committed to assisting the local environments in which we live and work. As local residents of Huntington Beach, we know the importance of assisting in any capacity as possible. We need to overcome this ecological catastrophe, as quickly possible. I believe drones and the discovery of having the ability to identify oil in the ocean is an important step to getting our beautiful coastline back to normal as quickly as possible, so we can save as much wildlife as possible."

Endemic Environmental Services' Founder and Owner, Nerhus further adds "Huntington Beach is my hometown, it is an absolute tragedy to hear that oil spills anywhere. This spill in Huntington Beach hits close to home as my hometown and also as a biologist. Huntington Beach has thousands of acres of unique and endangered wetlands that I love and cherish. I am glad that we have a drone team to add this technology as an essential tool in environmental management."









Endemic Drone Operations Assists with Avian Botulism Response

On Thursday, August 26th, the Wetlands and Wildlife Care Center (WWCC) along with Professional Drone pilot Kent Nerhus of Endemic Environmental Services and Park Rangers with OC Parks, embarked on further surveys to try and locate the origin of the current suspected Avian Botulism Outbreak. "We met up at 7:00 AM, but weren't able to start right away due to a communication breakdown" stated Matthew Gula, WWCC Development Director. But thanks to Orange County Supervisor Katrina Foley, the drone survey was able to resume at 11:00 AM. "We started planning this drone Survey on Monday. There are a lot of forms and other things that have to be completed before such surveys can be performed. And, it was rushed through. What typically takes 10 to 14 days, this survey was approved in three days since it's a wildlife explained emergency" Debbie McGuire, the WWCC Executive Director. The survey team concentrated in a portion of the Aliso Creek and surrounding ponds in the city of Lake Forest. Eight sick Canada Geese were located along with one sick Mallard hen and one deceased Mallard drake. The geese were in a body of water and residents are monitoring them. As soon as they are able to capture them, they will come into care at the Wetlands and Wildlife Care Center. The Mallard hen was rescued by boat from a pond with the help of local residents and the OC Animal Control responding officer. She was nearly drowned. And at first, the rescuers were not sure she was still alive.

The drone used is a very high tech device, equipped with high resolution cameras. infrared and thermal cameras along with many other features. The drone survey identified a concentration of birds in heavy vegetation along the creek. This area will be further inspected by other

agencies. The purpose is to locate sick and deceased birds and remove them from the area in an effort to slow down and halt the progression of the outbreak.

Unfortunately, many birds have lost their lives to this very toxic disease. Many have been captures alive, but pass away on their way to the hospital. "The quicker these patients can arrive at WWCC, the better their chances of survival" stated WWCC Veterinarian Dr. Elizabeth Wood, DVM. We currently have 10 Mallards and two Canada Geese receiving the intensive care this outbreak is requiring. We expect this outbreak to be on-going due to the drought and receding water levels throughout Orange County.









Mallards Held Back Due to Oil Spill Get Green Light to Be Released

Over one hundred mallard ducks have been ready to be returned to the wild since October 4th. Unfortunately, they were indirect oil spill victims. They have been waiting for their habitat to become safe and clean again.

The Wetlands and Wildlife Care Center (WWCC) got the green light for their release last month for Talbert Marsh, but there are still some oil stained riff-raff that they are concerned about. WWCC searched for another appropriate release spot and found one across the Santa Ana River in Newport Beach. Fred Waterfall, of Simple Green corporate offices, had offered up his property that is adjacent to a marsh.



President's Corner

BARRY NERHUS

President

These unprecedented times have allowed the team at Endemic to emerge from a phase of uncertainty into a new era of resiliency, astounding strength, and continued growth.

Despite the obstacles we have encountered due to the pandemic, we continue forward, with renewed efforts to protect our environment, to serve our clients and to expand our presence in our community.

With repeated success, our biologists and stormwater team members have raised the benchmark time and time again! Not only did we continue to serve new projects implemented by public agencies and utilities, we have also taken on new opportunities in Santa Barbara County, established new contracts with private clients, all while continuing to serve the Southern California community.

Endemic is successful thanks to the passionate and driven individuals on our team, who ensure our environment is protected and clients are provided with the highest quality services.

With deep appreciation, to our Endemic Team and our clients, thank you for all you do!

Have a wonderful, healthy, and safe holiday season.

