

COMMUNICATIONS

Solutions

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The Dallas World Aquarium (DWA) has become a sanctuary for wildlife protection, ranking alongside the Natural Aquarium of Australia and Marine World in California for housing the largest variety of endangered species in the world. To ensure healthy living conditions for these animals, it is crucial that the water remain at precise depth, temperature, pH and oxygen levels. These levels are maintained by a critical system of pumps, which are monitored by specialized equipment. However, the pump monitoring equipment the DWA had been using was unreliable, and an undetected pump malfunction

could mean the loss of irreplaceable wildlife. After experiencing frequent false alarms and sensor malfunctions, the DWA found a more secure and dependable solution with RACO Manufacturing and Engineering Company.

Finding Security with RACO

Today, RACO's Verbatim® remote monitoring system measures the water level on the basement floor underneath the DWA's River Exhibit. A pump or seal break in the exhibit could cause 100,000 gallons of water to flood the basement within 45 minutes, putting the animals

at risk of injury or death. When any water on the basement floor is detected, the Verbatim system calls a preprogrammed list of authorized personnel numbers until one of the contacts answers and acknowledges the alarm. The on-call person can then reach the site quickly to turn off the malfunctioning valve and stabilize the wildlife.



A long-term RACO project will expand the DWA's ability to monitor the Southern Australia Exhibit, home to the exquisite leafy sea dragons.

The DWA also installed RACO's Guard-It® system to monitor pump flows in the Sacred Cenote Exhibit's shark tank. Pump monitoring is essential when maintaining the high oxygen levels that sharks require, as pump failure would stop the flow of water and prevent the oxygen generators from maintaining proper levels in the tank. Guard-It uses a notification system similar to Verbatim[®], alerting personnel immediately when an alarm situation occurs.

The security, reliability and alert sequence that RACO equipment provides has given the DWA confidence in the safety of their animals. In fact, that peace of mind recently allowed the aquarium owners to take their first vacation in six years! Besides lowering stress levels,



RACO equipment has also drastically lowered the aquarium's costs now that they no longer need personnel to monitor tanks around the clock.

The Future of the DWA

The DWA is extremely satisfied with the dependability of RACO products and has both short- and long-term plans to implement more

RACO systems. This includes expanding the monitoring of the Southern Australia Exhibit, home to the exquisite leafy sea dragons, and upgrading the shark exhibit to monitor dissolved oxygen levels, pH balance and water temperature. The DWA understands the fragile relationship between these animals and their ecosystem, and has turned to RACO to help secure that balance.



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