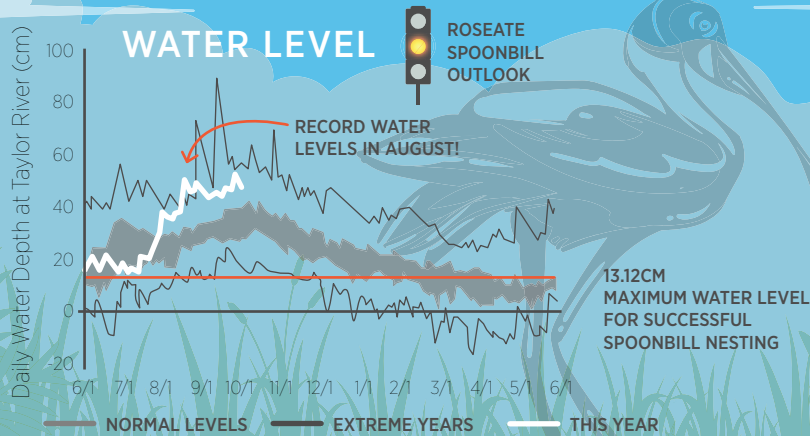


Audubon | FLORIDA STATE OF THE SLOUGH FALL 2021

At the southern end of Everglades National Park, a series of sloughs convey freshwater to the Florida Bay estuary. Audubon researchers track these freshwater deliveries (or lack thereof) and their impacts on the ecology of Taylor Slough and the Bay.

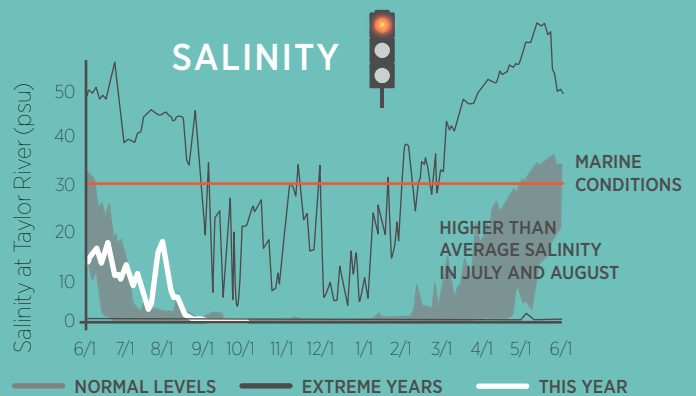
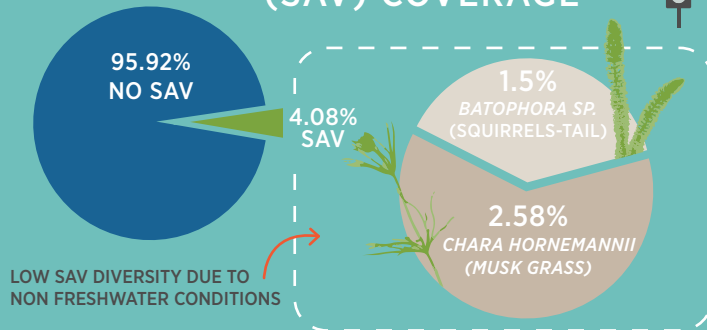


Water levels at Taylor Slough for June and July remained within normal range, but in August broke a new high record. We hope that water levels begin to decline in the next few months, but there are indications that the drawdown might not be significant enough to reach the levels needed by Roseate Spoonbill during nesting season.

Florida Bay used to receive four times more freshwater from the Everglades ecosystem than it does today. As a result, rainfall makes all the difference between a healthy Bay and a hypersaline one, killing seagrass and the species that depend on it. Audubon uses our science to accelerate Everglades restoration projects to deliver much needed freshwater to Florida Bay.

Taylor Slough

SUBMERGED AQUATIC VEGETATION (SAV) COVERAGE



The spike in salinity to nearly 20 practical salinity units (psu) in mid-July to mid-August is well above the normal range and suggests that there has not been enough freshwater flow through the Slough to push the salinity transition zone out into Florida Bay. This high and fluctuating salinity have negative and physiological effects on both plants and fish.

Higher than average salinity earlier in the year caused a significant decrease in diversity of aquatic plants in Taylor Slough, resulting in less than 5% total coverage. The spike in salinity from mid-July to mid-August probably prevented some low salinity plants from germinating, which will likely result in low coverage later in the year.

FISH SPECIES CAPTURED THIS YEAR AT TAYLOR SLOUGH



The Everglades Science Center team caught 341 fish, 15 of which are classified as freshwater species. At just over 75% of the total catch, the oligohaline (low salinity) species dominated the samples. Usually less than 5% freshwater species is troubling, but the overwhelming number of oligohaline species and nearly 5% freshwater species this early in the year is a promising start.