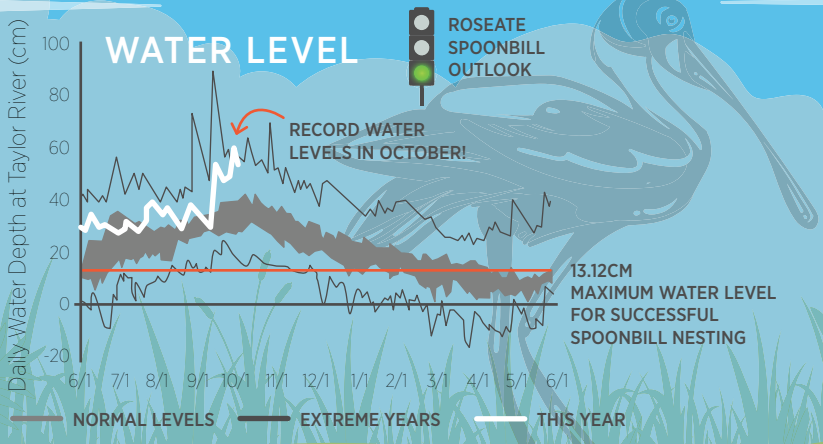
Audubon | FLORIDA STATE OF THE SLOUGH

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. This data provides critical feedback to Everglades Restoration — measuring whether we are getting it right and prescribing how water management could improve.

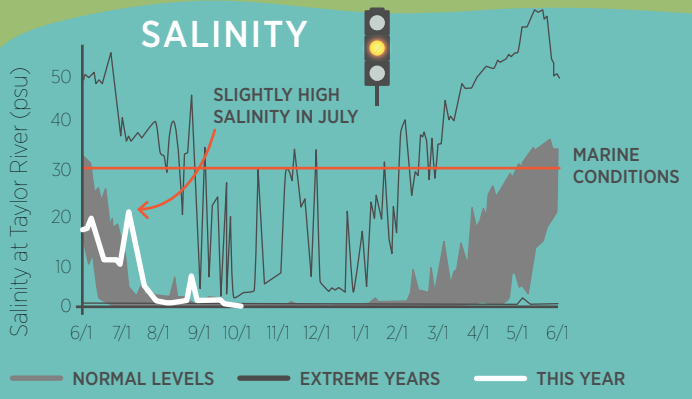
WATER LEVEL



Higher water level in the wet (non-nesting season) is a good thing. This provides more habitat for fish and plants. It also provides fish and plants more three dimensional habitat to reproduce and forage in. These high water levels lead to a greater abundance of prey for spoonbills. In the next quarter, we hope that water levels will begin a slow but steady decline sometime in November or early December.

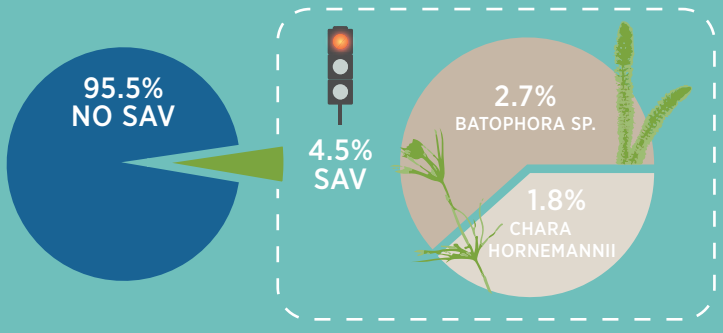
Florida Bay does not receive enough freshwater through sheetflow. When combined with the absence of rainfall, the bay becomes hypersaline and crashes. The natural system used to receive four times more freshwater from the Everglades ecosystem. Audubon's team works tirelessly to accelerate Everglades restoration projects that will bring freshwater south to rehydrate Florida Bay.

SALINITY



Salinity remained high and above the normal range well into July. The good news is that salinity levels steadily dropped to freshwater conditions in late July. A steady gradual decline is much better than an abrupt drop or a drop with a lot of fluctuations (imagine the line being saw-toothed) because it gives the flora and fauna time to acclimate. Having nearly freshwater conditions through beginning of October plus high water level really suggests that biological productivity will increase. We hope that freshwater conditions persist through the next quarter.

SUBMERGED AQUATIC VEGETATION (SAV) COVERAGE



We recorded very low coverage in September. Although this is not good, there is still plenty of time before nesting season for SAV to rebound.

A promising sign: a good portion of the SAV that was present was Chara, a species that has the capacity to quickly explode production under warm, freshwater conditions. Don't be surprised to see an exponential growth in Chara in the next quarter if salinity stays low and does not have any upward spikes.

FISH SPECIES CAPTURED THIS YEAR AT TAYLOR SLOUGH

Given the high salinity in June and most of July, we would not expect any freshwater species to have colonized the wetland from upstream areas by September. We will have to wait for the November fish collection to determine if further colonization will occur, but if salinity stays low, there is a good chance of at least some freshwater species making the journey. If freshwater condition persist into January, they may even have time to produce a few generations before salinity starts to increase.