Loxahatchee River District

Water Reclamation | Environmental Education | River Restoration

2500 Jupiter Park Drive, Jupiter, Florida 33458-8964 Telephone (561) 747-5700 • Fax (561) 747-9929 • www.loxahatcheeriver.org

D. Albrey Arrington, Ph.D., Executive Director

MEMORANDUM

- TO: D. Albrey Arrington, Ph.D., Executive Director
- FROM: Bud Howard, Director of Information Services

DATE: July 9, 2015

SUBJECT: Monthly Governing Board Update for June 2015

WildPine Ecological Laboratory

Project RiverKeeper



Summer intern Wellsley (left) and volunteer Amanda (right) are preparing sample bottles for the RiverKeeper Project.

Hydrologic/Datasonde Monitoring

Rainfall for June totaled 4.6" across the watershed (5.4" at LRD), well below the 25 yr average of 8.2". The lower rainfall has resulted in below average river flows at Lainhart Dam of 53 cfs. The minimum daily flow for the month was 28 cfs on June 4th and was the only day flow was below 35 cfs, the minimum flow target. The maximum daily flow was 86 cfs on June 11 following a two inch rain event. These rains and subsequent increases in river flows reduced salinity at all tidally influenced sites for approximately 7-10 days. In the downstream, marine sites, the drop in salinity was only evident during outgoing tides resulting in greater variability in daily salinity. This rain event also pushed daily mean salinity back down below 1ppt at Kitching Creek surface instrument (KCT). Daily mean salinities were above 1ppt at KCT for 7 days in a row (and exceeded 2ppt for 3 days) immediately preceding the 2" of rain on June 10.

Gordon M. Boggie Board Member Dr. Matt H. Rostock Board Member

Stephen B. Rockoff Chairman Harvey M. Silverman Board Member

Laboratory staff collected and analyzed samples in June from 15 sites throughout the watershed. Water quality was generally good with the exception of bacteria counts and phosphorus levels above the EPA/DEP water quality criteria at site 107/River's Edge in the Northwest Fork.

> James D. Snyder Board Member



Oyster Recruitment Monitoring

As expected, our June oyster recruitment monitoring showed little spawning following the intense, albeit brief, spring recruitment. Oyster recruitment in the Northwest Fork in June indicated 6 spat/10 shells, compared to the 500+ spat/10 shells in April. Many shells in the Northwest and Southwest Forks had no spat at all.



Left: Intern Wellsley drilling a hole into the oyster shells in preparation for oyster recruitment monitoring. Right: Volunteer Rhiana then strings the shells and ties them to PVC T's. Oyster spat settle on the shells during spawning.

Seagrass Monitoring

Staff completed the seagrass monitoring at our five study sites in June. As anticipated, Johnson's seagrass cover declined in June at all but the upstream site. Conversely, and equally anticipated, Shoal grass increased at all sites. Staff found Shoal grass again at the Northwest Fork site after not seeing any during April monitoring. Manatee grass, typically found at our North Bay and Sand Bar sites, remains stable at the North Bay site at around 20% coverage as it has since February 2013. Only a few sprigs of Manatee grass were observed at the Sand Bar site, where it has yet to recover to coverages between 20 and 40% observed prior to the 2004 storms.



Seagrass coverage measured at the Sandbar site. Results from June 2015 indicate the usual drop in coverage of Johnson's seagrass (red line) following the peak coverage in April, but well above the coverages observed prior to 2013.

Volunteer Water Quality Monitoring

The water quality grade for June was a resounding "A". This high score was due largely to the modest river flows and very clear water ocean water moving into the upper reaches of the estuary during flood tide. Water quality scores showed some degradation at the very end of the month with the increased rainfall and river flows.



Information Technology

Office 365 Conversion

The IT Team, with the help of our consultants, successfully migrated approximately 390,000 email messages and attachments from our local server to Microsoft's Cloud-based email solution. This new solution provides security improvements and simplifies our email/server maintenance and administration. Our next steps with this project are: 1) compatibility testing of the Office 2010 Software suite with our various applications and systems, 2) staff training, then 3) deployment.

Computerized Maintenance Management System (CMMS)

The IT Team continues to work with our consultant and staff on system testing, configuration, and issue tracking and resolution for our new maintenance management system. During June our contractor resolved 11 issues and we added 5, so we presently stand at roughly 39 high priority issues remaining. While the number of resolved issues was low, many were complex so it is good to have those complete.

Customer Service

Digital Payment Processing Tool – As part of our efforts to streamline the data processing of our customers' payments to create a manageable workload for our staff, we have been developing a database tool to process digital payments such as credit cards and online bill pay. This new tool performs a variety of quality control checks to ensure valid account numbers, payment amounts, account status checks, etc., and then creates a data file for loading into our customer management and billing database. With the vast majority of payments passing the quality checks, staff will have the time to focus on researching and resolving other billing and payment issues. During June, we deployed our beta version of the tool and staff has been testing. We anticipate going live with processing card payments in July and will then incrementally add payments from the online bill pay service providers.

Payment Processing – Staff processed over \$257,000 in payments during the month of June as we closed out our billing cycle and made preparations for our July billing.