

LAKE COUNTY WATER AUTHORITY

Wednesday, December 16, 2020
3:30 pm
Lake County Administration Building

The Regular Hearing of the Board of Trustees of the Lake County Water Authority was held at 3:30 pm Wednesday, December 16, 2020 in the Lake County Administration Building, County Commissioners Chambers at 315 West Main Street, Tavares, Florida.

Members Present-District #

Keith Farnar, Chairman (At-Large)
Courtney Stokes, Vice Chair (At-Large)
Marty Proctor (#1)
Trampis BonJorn (#2)
Tyler Brandeburg (#3)
Butch Hendrick (#4)
Rick Donohue (#5)

Staff Present

Ron Hart, Executive Director
Dr. Jason Danaher, Water Resources Director
Steve Crawford, Water Res. Project Manager
Biago Gugliotti, Land Resources Director
Tracey Percoco, Financial Analyst
Anna Ely, Recording Secretary
Kevin Stone, Attorney

Vice Chair Stokes attended the meeting via phone. A list of others present at the meeting is part filed in the permanent files of the Water Authority.

1. CALL TO ORDER / PLEDGE OF ALLEGIANCE

The meeting was called to order at 3:30 p.m. and everyone stood for the Pledge of Allegiance.

Tab 1 **2. APPROVAL OF MINUTES** - November 18, 2020 - Regular Meeting
December 2, 2020 – Budget Meeting

MR. BONJORN MADE A MOTION TO APPROVE THE MINUTES OF THE LAKE COUNTY WATER AUTHORITY MEETING OF NOVEMBER 18, 2020 REGULAR MEETING AND THE MINUTES OF THE DECEMBER 2, 2020 - BUDGET MEETING. Mr. Donohue seconded the motion.

Motion approved 6-0.

3. PUBLIC COMMENT

Chuck Munson (resident on Sawgrass Island Road, adjacent to the preserve) addressed the Board to inform them that the condition of Sawgrass Island Road is deteriorating and needs a topping of asphalt millings. He stated that if the Water Authority was willing to purchase millings, he would use his tractor to spread it out.

Mr. Farnar asked that staff come up with a plan of action for improving Sawgrass Island Road by next month.

Mr. Proctor entered the meeting at 3:38 pm.

Lake County Commissioner Leslie Campione addressed the Board regarding the condition of Lake Joanna. She stated that she and Jeff Earhart with Lake County Public Works would like to present some ideas to the Board about what could possibly be done to help improve the water quality.

She stated that they are looking somehow stop the flow coming down the hill, slow the flow or treat the water flowing into the lake from the Loch Leven area. She stated that everyone wants to see results as soon as possible, and she is hoping that something can be put in place within the next 9-12 months or to at least have something partially in place and in progress.

It was noted that there are several options the County is looking into, including:

- 1) Obtaining an easement from the Russell's in the ditch and installing a 2nd generation baffle box. It was stated that the County has \$175,000 that could be put toward this project, if the Water Authority could provide the same in matching funds.
- 2) Installing approximately four structures at the outflows of the stormwater ponds at Lancaster and Loch Leven, which would cost approximately \$25,000 each.
- 3) Restoring or reconfiguring the wetland system under 44 B, which would be a bit project with alteration to the wetlands and would also involve mitigation.
- 4) It was noted that a stormwater pond put in place by DOT in 2002, at the same time as the subdivision for potential road widening and improvement and to hold runoff, but it is not being used to treat any current runoff. It was suggested that they could talk to DOT about the possibility of restoring the pond to what it was 20 years ago and get better storage of the runoff currently flowing into Lake Joanna.

Mr. Farner stated that they needed to look at the wetland system restoration and Mr. Earhart stated that a restoration project that size would cost hundreds of thousands of dollars and upward to a million dollars. He noted that such a project would be able to handle 80% of the low flows, so that they wouldn't make it to the lake.

Mr. Hendrick asked about the DOT stormwater pond, and Commissioner Campione explained that the project to widen the road has been set aside and DOT had moved those funds to other projects.

Mr. Farner requested that the issue of Lake Joanna be put on the agenda in February, with ideas for possible projects that would help improve the water quality of the lake.

Ms. Campione stated that they don't have the available funds to consider the retention/stormwater pond option. She stated that the best option at this time is the installation of the baffle box, and it would take at least 9 months to complete the project.

Wes Porak, Lake Joanna resident, thanked the Water Authority and the County for taking the initiative. He also suggested that the possibility of a whole lake alum treatment or alum treatment of the water coming into the lake from the ditch.

4. EXECUTIVE DIRECTOR'S REPORT

Mr. Hart stated that while November is usually the driest month of the year, instead it was a very wet November this year and rainfall had exceeded four inches. He stated that the extra rainfall in

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November helped to make up for half of our deficit in rainfall for the year. He noted that at this time we are three inches below our normal rainfall for the year.

He explained that for a while in November, Lake Apopka exceeded maximum desirable of which 75 cfs we able to be treated and the District also had to send water directly over the spillway. He noted that because of all the rainfall, both Burrell Lock and Dam and the Moss Bluff Lock and Dam had high flows for a time. He noted that currently the flows at all dam structures have been returned to minimum flows.

He stated that the discharge on the Clermont Chain is at 22 cfs. He stated that staff is trying to keep the water level on the Chain at regulation and hope to be able keep it that way through the winter.

Mr. Hart explained to the Board that the Water Authority normally holds a Kids Fishing Clinic in February with about 60 kids participating, but this year the Sport Fishing Agency that normally funds the purchase of fishing rods and provides other support have stated that with the current Covid-19 situation, they will only help fund the event if it is kept to 15 kids. He stated that the sponsor is recommending that we push the event to the following year.

Mr. Hart asked for Board input and Mr. Farner stated that he was of the opinion to push the event back to the next year and Mr. BonJorn agreed. Mr. Brandeburg stated that would hate to postpone the event.

After additional discussion among the Board Members the consensus was to continue with just 20 kids or to handle the whole thing ourselves if we decide to have more.

Mr. Hart informed the Board that the Water Authority's Employee of the Month is Charles Groves. He explained that Mr. Groves has taken over the management of Hickory Point and works hard making sure the facility is maintained and looking good. He also noted that Mr. Groves works every weekend to ensure that everything runs smoothly.

5. CONSENT ITEMS

Item moved to Discussion Items.

6. DISCUSSION ITEMS

Tab 2 a. Authorization to Purchase Tractor for NuRF Steve Crawford

Dr. Danaher stated that he had pulled this from the consent agenda to add on additional authorization to surplus the existing tractor as well as to purchase the new tractor.

MR. PROCTOR MADE A MOTION TO AUTHORIZE THE EXECUTIVE DIRECTOR TO SURPLUS THE FORD TRACTOR LOCATED AT THE NURF IDENTIFIED AS INVENTORY ITEM 365. Mr. Hendrick seconded the motion.

Motion approved 7-0.

MR. PROCTOR MADE A MOTION TO AUTHORIZE THE EXECUTIVE DIRECTOR TO PURCHASE A 5090E JOHN DEERE 90 H.P. TRACTOR OR SIMILAR FOR EVERGLADES GROUP IN LEEsburg IN AN AMOUNT NOT-TO-EXCEED \$55,000.00 FOR THE FISCAL YEAR 2020-2021 BUDGET. Mr. BonJorn seconded the motion.

Motion approved 7-0

Tab 3 a. NuRF Annual Performance Report Jason Danaher

Dr. Danaher gave the Board an update on the different Lake Apopka restoration projects being done by the St. Johns River Water Management District and the Lake County Water Authority.

He stated that the District has several projects on Lake Apopka itself, such as the Marsh Flow-way and a Gizzard Shad removal program, as well as a project with Phosphorus Free Water Solutions to remove nutrients from a portion of the lake. He stated that the District has also participated in projects with the Florida Fish and Wildlife Commission to dredge a portion of the lake and to remove submerged aquatic vegetation. He noted that the TMDL target for Lake Apopka is 55 ppb.

He stated that the Nutrient Reduction Facility (NuRF) located on the Apopka-Beauclair Canal and its main objective is to reduce the total phosphorus (TP) concentration leaving Lake Apopka and entering Lake Beauclair via the Apopka-Beauclair and noted that the facility has removed over 36,800 pounds of total phosphorus from Lake Apopka over the last ten years. He stated the Water Authority's goal is for the NuRF discharge to meet or beat Lake Beauclair's TMDL target of 32 ppb.

Dr. Danaher showed a PowerPoint Presentation showing several graphs of the improvements of the water quality in Lake Beauclair since the NuRF became operational in 2000. He noted that even with the improvements to Lake Beauclair, the NuRF will need to remain operational for the unforeseeable future.

He also informed the Board that staff had recently applied for FDEP state funding through the Rivers and Springs Coast Grant Program and he is happy to report that FDEP had granted the Water Authority a cost-share award totaling \$2,250,000 for NuRF site improvements based on the Pegasus site evaluation.

Tab 4

b. Surplus of LCWA Lands

Ben Gugliotti

Mr. Gugliotti explained that historically the Lake County Water Authority has held lands for conservation and protection and preserve the freshwater resources of Lake County.

He stated that last year Mr. Hendrick had asked staff to look at possible lands to surplus and staff had presented information on five small parcels, M-2, M-3, M-4, the P'ha parcel and Kings Cove Canal in April but Mr. Hendricks wanted to see information on larger properties that actually cost the Water Authority money to maintain.

Mr. Gugliotti stated that there are two parcels that meet Mr. Hendricks requirements, Bear Track Preserve which is 208.8 acres and Eagles Ridge Preserve which is 341.4 acres.

He stated that Bear Track Preserve is adjacent to portions of the Seminole State Forest and while Eagles Ridge is not directly adjacent to Lake Griffin State Park, it is in proximity to some of the outparcels. He explained that he had also contacted the manager of Lake Griffin State Park and he said they were not interested in acquiring Eagles Ridge Preserve, nor was Lake County Parks and Trails interested.

He noted that he had contacted the manager of the Seminole State Forest and he said had stated that they would be interested in acquiring Bear Tack Preserve.

Mr. Gugliotti also informed the Board that he was recently approached by adjacent property owners (the owners of Mathews Point) to Eagles Ridge Preserve about the possibility of entering into a public/private partnership to create a mitigation bank.

Mr. Farner stated that he would like to get more information on the possible partnership with the owners of Mathews Point to create a mitigation bank and Mr. Gugliotti stated that they are looking into it and if (the owners of Mathews Point) are truly interested, staff will bring it back to the board.

Mr. Gugliotti explained the history of the separate acquisition of the different parts of Bear Track Preserve, noting that previous boards had approved of acquiring additional parcels to create improved access to Lake Norris.

He stated that if the Board still has interest in creating additional public access to Lake Norris, maintaining ownership would be important. He also noted that part of the property was acquired as a mitigation donation and much of the property has conservation easements that could possibly limit the surplus of the property and how it could be used.

He stated that currently, there is access to Lake Norris through Blackwater Creek within the Lake Norris Conservation Area, but when the water levels are too low or there is a tree blocking the creek, there is no public canoe or kayak access to the lake.

He stated out that currently the St. Johns District allows two vessels to access their sand mine area with day permits for fishing, while the Water Authority only allows one vehicle on the Lake Norris Conservation Area when camping. He explained that those who want to use our canoes must hike in about a mile from the parking lot to the canoe launch by the lake.

He stated that he had recently spoken to R. H. Davis, the District's Land Manager at Lake Norris, about the possibility of providing day passes for people to drive down to the lake to launch their canoes

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during periods when Blackwater Creek is low. He stated that Mr. Davis said he didn't see a problem with it, and he would look into it and get back with him. The Board were agreeable to allowing the same access to the Lake through the Lake Norris Conservation Area.

Mr. Gugliotti explained that maintenance at Bear Track consists of normal mowing, maintaining the fences, invasive species management and periodic fires. He stated that the average yearly cost of maintenance of the property, which is mostly done in-house, is approximately \$5,000.

Mr. Gugliotti informed the Board that part of the proposed plan was to build a boardwalk to improve access to Lake Norris. He explained that the boardwalk would be approximately 275 feet through the wetlands to allow access the lake. He noted that there is \$90,000 earmarked in the 2020-2021 budget for the project. There was also discussion regarding whether to improve the roads and access to Lake Norris from Bear Track.

Mr. Proctor stated he was particularly interested in promoting the passive recreation of the property through the use of a day pass in order to allow more people to access the lake.

Mr. Farner stated that he was in favor of that and he stated that he would like to have a discussion item on the agenda to look at the plans for the boardwalk. It was noted that there is \$90,000 set aside in the budget, but actual plans hadn't been drawn up yet.

Mr. Farner requested that additional Lake Norris access be put on the agenda for February as well as plans for the boardwalk to Lake Norris at Bear Track Preserve.

No one indicated any interest in the surplus of Bear Track Preserve and Eagle Ridge Preserve at this time.

Tab 5 c. Historical Flows of Loch Leven

Mr. Hart

Mr. Hart presented the Board information regarding the hydrology of Loch Leven and the ditch that connects it to Lake Joanna. He stated that Loch Leven is the highest natural lake elevation in the state of Florida and that water historically and currently exits the lake through a wetland on the northside of the lake to Lake Joanna.

He explained that 1941 aerial photography shows the natural wetland connection to the north and a very small creek that connects to Lake Joanna. He stated that the creek seems to have been recently modified to improve flow and likely assist in lowering water levels in Loch Leven and its nearby wetlands.

He stated that by 1958, improved ditching and draining systems were in place that were effective in permanently lowering and altering lake levels and wetlands in and around Loch Leven, and by 1972, additional ditching and draining had further eliminated local lakes and wetlands.

Mr. Hart stated that over the years there have been numerous references to water historically flowing from Loch Leven to Wolf Branch Sink, however, higher upland ground elevations east of Loch Leven would naturally prevent this transfer of surface water under most conceivable events.

He noted that a small ditch was cut through the upland barrier between the two waterways prior to 1941. He explained that this connection became less likely to convey water and was made inoperable with the lowering of lake levels and improvements to the flow to Lake Joanna.

He explained that by 1972, a second ditch was added to further convey water, but the ditch didn't appear to be excavated all the way into the waters of the lake, and by 1979, an area near the end of the ditch was filled preventing water from possibly exiting from the ditch.

Mr. Hart stated that to the best of staff's recollection that the filled area in the ditch was a regulatory requirement because the new ditch that was dug was not permitted as required under the new rules.

Mr. Proctor stated that it is useful to have this knowledge rather than rumors. He stated that the Water Authority needs to inform homeowners in the area so that they understand what can and can't be done, and the repercussions of what would happen if you were to recreate original flows.

Mr. BonJorn stated that hopefully people would be more receptive of what the Water Authority can and cannot do once they know the history, etc.

Mr. Farner asked that the presentation and information regarding the historic flows between Loch Leven and Lake Joanna and Wolf Branch be put on the LCWA website.

Tab 6 d. Update on the NuRF Dredging Project and Sediment Removal Options

Steve Crawford

Mr. Crawford addressed the Board to give an update on the NuRF Dredging Project and to talk about sediment removal options. He spoke about the size of the property and the areas of wetlands and uplands, and the current uses of different areas of the property.

He explained that in 2017 there was Hurricane Irma along with other significant rainfall events, and between June and September there was a total of approximately 41 inches of rain. He noted that between 2017 and 2019 there was a yearly average of 54.5 inches of rain.

He stated that with the rain came high flows of water through the NuRF and when treated with alum, an abundant amount of floc was produced. He noted that as the ponds filled, floc was also transferred to the wet containment area.

Mr. Crawford explained that the goals of the current project is to remove 250,000 cubic yards of material from the ponds, which in turn will produce 87,000 cubic yards of dewatered solids (4,833 dump truck loads) and return the ponds to the original depth of 18 feet.

He stated that with every project there are always some problems and unfortunately there has been quite a bit of rain which made the containment unusable and a lot of delays. He explained that C and M Dredging brought in quite a bit of fill along with placing timbers to build a road out into the containment area.

He also explained that while dredging the west pond the contractors found that when they got down to the material that had never been dredged, the material had a different charge to it and didn't react the same to the polymer. He explained that this, along with the fact that the water coming into the west pond from the centrifuge also contains polymer and all the different mixtures the contractors were initially having a hard time getting a handle on what kind and how much polymer to use.

Mr. Crawford also explained that the material being pumped into the geotextile bags is very flocculent and fluffy and tends to "blind" the bags and after 5 to 7 days they quit dewatering instead of dewatering for a month. He noted that this produced inconsistent sediments that won't stack.

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He explained the contractor's process, stating that they tear the geotextile bags open and use an excavator to scoop the material of the bags and put it in an off-road dump truck. He stated that the truck then backs up to a sump area and off load the material, where it then goes down a channel that was built from the sump area to the wet containment area and dry containment area. From there the material is ladled into the wet containment area which is now forming a thick delta area and not moving out the way it was supposed to, which necessitated building the berm higher between the wet and dry containment areas.

Mr. Crawford stated that when it looked like they were running out of option, he, C and M Dredging, Mr. Hendrick and Dr. Danaher had gotten together to try and find a way to continue the project.

He explained that the plan is for C and M Dredging to build a containment area on top of the area where the geotextile bags are currently located and to build a second containment area just north of that. He stated that the combined the two locations equal approximately five acres. He noted that originally, they had thought they could use the spoil hill across the road, but the District was more in favor of them using the area to the north of the geotextile bags.

He stated that C and M Dredging will continue to dredge the pond and pump the polymer treated sludge directly into these areas where it will continue to dewater. He stated that not only will this allow the project to continue, it will be much easier and will eliminate all the truck usage on the roads.

Mr. Farner asked why the polymer would be used and it was explained that it would cause the material to shed more water and decant better, so that the overflow of water from the top would be clearer.

Mr. Farner stated that he had suggested something similar a couple of years ago. He stated that he would love to have a couple of ten-acre ponds that they could pump directly into and let the material settle out without the addition of polymer or other additives and allow the sun to evaporate the water. He noted that then they could bulldoze and spread it out during the dry season.

He stated it will probably be months before the centrifuge is repaired and they needed to do something in the meantime, and this is a good idea.

Mr. Hendrick explained that this is only a solution until the centrifuge is repaired, and once the centrifuge is back online, they will have to figure out storage for that. He asked about why it was suggested to use the northern area for containment rather than the spoil hill across the road. Dr. Danaher explained that the District doesn't want to impact any wetlands, and there are a lot of wetland areas surrounding the spoil mounds and it would be difficult not to impact those areas.

It was noted that there are other upland areas on the site, so there are options should they need more containment area, but at this time the dredges would be able to pump to the northern area more easily and more efficiently.

Mr. Crawford stated that C and M Dredging has no problem with constructing the ponds to the north, in lieu of having to go back and forth with the heavy loaders.

Mr. Proctor questioned whether the new containment areas would be able to hold the anticipated and indicated that they would like to know the approximate volume of material the new holding cells would hold and how high sediment would have to be piled if the contractor were to take all the remaining

material out of both ponds. It was noted that currently C and M Dredging has dredged about 60% of the west pond.

Tab 7

e. NuRF Site Evaluation Review

Jason Danaher

Dr. Danaher explained that a site evaluation of the NuRF was completed by Pegasus Engineering in February 2020 which identified several areas of the facility requiring capital improvements costing approximately four and half million dollars including improvements to the treatment and process technologies along with the alum residual storage area.

He stated that in July the Board had authorized the staff to negotiate a contract to review the Pegasus report. He stated that Woodard & Curran is an engineering group that is part of the Water Authority's continuing service contract to review the original NuRF site evaluation and offer a second opinion of Pegasus report and where appropriate offer alternative technologies and their estimated capital improvement costs.

It was noted that staff worked with Woodard & Curran representatives to outline the scope of work and timeline and Woodard and Curran had provided a proposal, breaking it down into sections including data collection and project kick-off meeting with their staff and include the initial review of the Pegasus report and visiting the site and reviewing the current NuRF operation, technologies and records.

Dr. Danaher stated that he and Mr. Crawford are always getting calls and visits from contractors and companies claiming to have the newest and greatest technologies and as part of their contract Woodard and Curran has agreed that if staff wants to note two or three of these companies for further investigation they (Woodard and Curran) would be willing to sit down with those companies and see if their technologies would or would not be applicable to the NuRF.

He stated that once Woodard and Curran receive their Notice-to-Proceed it will take approximately four months for them to complete their evaluation. He stated the results should be ready to present to the Board either March or April of 2021.

MR. PROCTOR MADE A MOTION TO AUTHORIZE THE EXECUTIVE DIRECTOR TO ENTER INTO A CONTINUING ENGINEERING SERVICES CONTRACT WITH WOODARD & CURRAN TO REVIEW THE ORIGINAL NURF SITE EVALUATION AND WHERE APPROPRIATE OFFER ALTERNATIVE TECHNOLOGIES TO CONSIDER AND THEIR ESTIMATED CAPITAL IMPROVEMENT COSTS IN AN AMOUNT NOT-TO-EXCEED \$44,000. Mr. BonJorn seconded the motion.

Mr. Farner stated that he just wanted to make sure that companies offering alternative technologies are taken a good look at. He confirmed with staff how much money had been budgeted and it was noted that \$200,000 had been budgeted.

He stated that he does have a problem with the direction that was suggested, and he would like to see an alternative solution to the problem, but they are going to run with the best direction they can pick. He stated that time is getting short and they are going to have to make a decision.

He asked the timeframe for the repair of the centrifuge and Dr. Danaher stated that it had been delayed approximately twenty days and the estimated date has been moved from early March to late March.

Motion approved 7-0.

7. LEGAL COUNSEL REPORT

Kevin Stone

Attorney Stone reported that it was taking too long to deal with the encroachment issue at the Burrell Lock and Dam Parcel, so we are going ahead and do the transfer of the property to St. Johns River Water Management without dealing with the encroachment. He stated that the adjacent property owners can work things out with St. Johns after the swap takes place.

He also explained to the Board that the Board had previously put a Public Comment Policy in place in August 2019 that limits public comments to three minutes and that recently some board members had voiced having an issue with that.

Mr. Farner stated that he thinks the time limit is up to the chairman and he is not in favor of time limits unless there is an issue.

Attorney Stone stated that he would send the policy out to the Board Members for them to review, and if they wish to make changes to the policy, they can let staff know.

8. BOARD MEMBER COMMENTS AND ITEMS FOR FUTURE AGENDA

Mr. Proctor stated that he would like to have an agenda item on Lake Denham and the possible uses for the land. Mr. Farner stated that he would like to see that as well as he didn't like the previous decision by the board.

Mr. Proctor noted that with the feral pigs on the property they need to have plans in place and see what can be done to protect the levy before it becomes breached and they have an emergency situation. It was also noted that they need to look at renaming the property something other than the Lake Denham Muck Farm.

Mr. Hart explained that the Agency has a contract with Wood Environmental to look at creating a fishery on the site as well as a public boat ramp, etc. and report back to staff. He stated that by allowing the peat to be mined and have the mining company terraform the property, the money the Agency would receive for the mining contract would cover the cost of the site improvement. He explained that the information staff receives will be presented back to the board once Wood Environmental have completed their report.

Mr. Hart also informed the Board that the District is looking at transferring the NuRF property to the Water Authority, He explained that there will be conditions to the transfer that they (Water Authority Board) would need to approve in January that would insure that the Water Authority is not going to be impacting and wetland areas on site, etc., as well as approving the transfer in January so that it can go to the District board in February.

Mr. Proctor asked staff to put any agenda item involving the expenditure of money on regular agenda so that public has opportunity to speak. Mr. Farner informed him that he can always request something to be pulled from consent and put on the discussion agenda.

The Board indicated that would like to know the approximate volume of material the new holding cells would hold and how high sediment would have to be piled if the contractor were to take all the remaining material out of both ponds. The consensus was not to stop the process, but to figure out the capacity and bring that information back to the board.

9. INFORMATION ITEMS

Tab 8

a. Staff Reports

Tab 9

b. Monthly Financial Reports - November 2020

10. ANNOUNCEMENT OF UPCOMING MEETINGS AND EVENTS

Regular Board Meeting - Wednesday, January 27, 2021 (3:30 pm) BCC
Chambers/Admin. Building

11. ADJOURNMENT

Meeting adjourned at 6:15

Anna Ely, Recording Secretary

Gary Cooney, Secretary-Treasurer

Keith Farner, Chairman