

**Butler Chain of Lakes Advisory Board
Windermere Water and Navigation Control District
Regular Meeting – Chain of Lakes Middle School
Monday, April 15, 2019**

Board Members Present: Lloyd Woosley, Ijaz Ahmed, Lorraine Burch, Albert Gallof, Lee Chira

Board Members Absent: None

Staff & Support: David Hansen, Orange County Environmental Protection Division (EPD)
Lt. Jeff Hudson, Florida Fish and Wildlife Conservation Commission (FWC)
David Hamstra, Pegasus Engineering

Guests: Lori Bradford, Emmett Bradford, Bob McKinley (Town of Windermere), Liz Andert (Town of Windermere), George Poelker, Rosemary Hartmann, Catherine Murphy

I. Call to Order:

With a quorum present, Vice Chairman Lloyd Woosley called the meeting of the Butler Chain of Lakes Advisory Board (Advisory Board) to order at 5:37 p.m.

II. Approval of the April 15, 2019 Meeting Agenda:

Upon a motion by Albert Gallof, seconded by Lorraine Burch, and carried with all present members voting AYE by voice vote, the Advisory Board approved the April 15, 2019 Meeting Agenda as presented.

III. Approval of the March 11, 2019 Meeting Minutes:

The draft meeting minutes from the March 11, 2019 meeting were not yet available for approval.

IV. Public Comment on Propositions before the Advisory Board:

There was no public comment.

V. Butler Marine Patrol Report:

The Butler Patrol provided 143 hours of patrol time in March. They inspected 81 vessels and made contact with 296 users. They issued 42 warnings and 2 citations. They made 15 educational contacts this report period.

No noise complaints were reported to the officers.

VI. EPD Report:

1. Current Projects

Dr. Harvey Harper from Environmental Research and Design, Inc. (ERD) gave a PowerPoint presentation on internal nutrient recycling in lakes. He mentioned that nutrient recycling was not normally associated with oligotrophic lakes as in the lakes in the Butler Chain of Lakes. However, the recently completed bathymetric survey and sediment core analysis in the oligotrophic Wauseon Bay had shown that internal recycling was the greatest contributor to the nutrient budget. The results of that survey prompted the suggestion by Lloyd Woosley at the March 11, 2019 Advisory Board meeting to update the 2007 ERD study and recommendations for the Butler Chain of Lakes to re-evaluate the contribution of internal nutrient loading in the entire Chain of Lakes. Dr. Harper concurred with the need to re-evaluate which, he indicated, could prompt a change or changes in the thought process and methods to maintain the water quality in the Butler Chain. He presented a proposal that split the Butler Chain into north and south sections with roughly equal cost and time to complete each section. Mr. Woosley also suggested that it might be worthwhile to develop a depth profile of the muck layer in the lakes to establish a baseline for possible future in-lake treatments to isolate the nutrients in the sediments. Lorraine Burch asked what the purpose might be for measuring the muck layer if only the top few inches was contributing nutrients into the water. Dr. Harper mentioned that the muck depth profile could be indicative of the aging of the lake and would be useful if it was decided to dredge the muck in certain areas. Lee Chira asked if there was any sonar-like equipment that could be used to measure the muck depth. Dr. Harper acknowledged that his firm had such equipment, but he indicated that the by-hand method of using a probe had given better and more accurate results. Dr. Harper closed the presentation with the assurance that he would update the proposal to include the muck depth measurements and profile development.

Lori Bradford asked why it appeared that full lake alum treatments occurred in installments over long periods of time. Dr. Harper responded that there were several reasons including a lowering of lake water pH with the application of alum which necessitated that the applications be spread out over time. He also mentioned that multiple "scrubbing events" of phosphorus in the sediments were achieved with separate alum applications over time.

Ms. Bradford asked why Dr. Harper's Wauseon Bay draft report reflected costs for the full alum lake treatment over a 15-year period in which the same amount of Phosphorus was being reduced for each of the 15 years? David Hamstra explained that the alum cap on the muck lasts for 15 years making this possible.

David Hansen distributed Progress Report #6 from ERD on the Lake Tibet Sub-Basin 1 & 2 Conditions Update. He mentioned that additional water samples will be taken as other outfalls to Lake Tibet from the study area have been found. He noted and received concurrence from Dr. Harper that there would be an increase in study costs to accommodate these additional sample sites. Lloyd Woosley suggested that in addition to these new outfalls, there should be ample wet weather sampling included in the overall study. Dr. Harper noted that he would look at the data so far collected and, if necessary, propose the additional sampling.

David Hansen reported that Geosyntec Consultants, Inc. would be submitting a modified proposal for the Lake Butler Sub-Basin 10 project incorporating comments received.

Mr. Hansen reported that the submersible pump that provides mixing and carry water at the Lake Down Alum Facility had failed. He mentioned that the original pump was being repaired

for about \$2,800 and that a second pump was being purchased for \$4,800 to act as a spare.

Mr. Hansen reported that the sign replacement on Egret (Bird) Island was on hold until water elevations recede in Lake Butler.

Mr. Hansen reported on recent and near future aquatic plant management activities. He mentioned that 10 acres of hydrilla had been treated on Lake Down with 100 acres still to be treated. He reported that Lake Louise was scheduled for a full lake hydrilla treatment on April 23 and Lake Cypress/Estes had a full perimeter treatment on April 11. He also mentioned that the hydrilla treatment on the Sandy Shores Canal was scheduled for April 16.

2. Future Projects

David Hansen mentioned the tentative up-flow filter retrofit project on suitable Orange County stormwater ponds. David Hamstra reported that staff at his firm was preparing a list of the suitable ponds.

Mr. Hansen also suggested potential joint water quality and septic tank projects with the Town of Windermere. Lloyd Woosley reported that he had just been appointed to the Town's Long Range Planning group and would keep an eye out for potential projects.

3. Meeting Schedule

David Hansen mentioned that the next meeting of the Advisory Board is scheduled for Monday, May 20, 2019 at 5:30 PM.

VII. Member Reports:

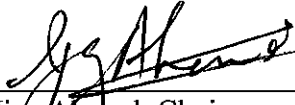
1. **Ijaz Ahmed:** no report
2. **Lee Chira:** no report
3. **Lorraine Burch:** no report
4. **Lloyd Woosley:** no report
5. **Albert Gallof:** no report

VIII. Non-Agenda Items:

None

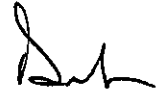
IX. Meeting Adjournment:

The meeting was adjourned at 7:20 P.M.



Ijaz Ahmed, Chair

5/20/19
Date



David Hansen, Minute Preparer

5/20/2019
Date