

**FINAL**

**MINUTES OF THE MEETING  
of the  
HARRIS CHAIN OF LAKES RESTORATION COUNCIL  
May 1, 2015**

The regular meeting of the Harris Chain of Lakes Restoration Council (Council) was held at 9:04 a.m. on May 1, 2015 at the Lake County Board of County Commissioner Chambers, 315 West Main Street, Tavares, Florida.

**Members Present**

Skip Goerner, Chairman  
Robert (Bob) Johnson, Vice Chairman  
Keith Truenow, Secretary  
Sid Grow

**Members Absent**

Hugh (Dave) Davis II  
Dr. Ed Schlein  
Stephanie Bishop  
Don Nicholson

John Stump, ex officio member

**1. CALL TO ORDER**

Chairman Goerner called the meeting to order at 9:04 a.m.

**2. INVOCATION AND PLEDGE OF ALLEGIANCE**

Chairman Goerner called for a moment of silence. The Pledge of Allegiance followed.

**3. COUNCIL ROLL CALL; REMINDER FOR OTHERS TO SIGN IN**

Chairman Goerner called the roll. Council members Bishop, Nicholson, Davis and Schlein were absent. Stephen Tonjes (DOT) of the Technical Advisory Group (TAG) was absent.

**4. APPROVAL OF MINUTES**

Chairman Goerner called for comments on the April 2015 minutes. Bob Johnson noted several changes to the minutes. The Council members present unanimously approved the meeting minutes (with stated corrections) from April 2015. However, since a quorum was not present, the revised meeting minutes will be placed on the June agenda for consideration. Chairman Goerner commented that he was getting the hard copy of the minutes about ten days after mailing. He queried Steve Fitzgibbons (SJRWMD) about trying to get the hard copy out sooner. Mr. Fitzgibbons responded that the hard copies of meeting materials are mailed ten calendar days prior to the meeting, but that he would try to mail them out earlier.

**5. PUBLIC COMMENTS**

Linda Bystrak addressed the Council. Ms. Bystrak commented on the St. Johns River Water Management District (SJRWMD) minimum flows and levels (MFL) workshops, commending SJRWMD on the MFL presentations made during the peer review field trip. She indicated that she is looking forward to the results, which are about a year away. Ms. Bystrak discussed an Orlando Sun Sentinel article about the United States Environmental Protection Agency (USEPA) letters to the United States Army Corps of Engineers (USACOE) regarding Goose Prairie peat mining permitting.

She noted that she, as well as 1,300 other people who signed a petition, hoped the project will be stopped.

## **6. PRESENTATIONS / ACTIONS**

### **A. Perspective from Robert Hendrick of Lake Apopka dredging**

Chairman Goerner noted that Robert Hendrick was unavailable to do his presentation.

### **B. Update on bass spawning research**

Chairman Goerner welcomed Mike Allen, University of Florida (UF). Dr. Allen gave an update on black bass research that UF has been doing in collaboration with the Florida Fish and Wildlife Conservation Commission (FWC). He noted that four years ago FWC initiated a black bass management plan. As part of that plan they undertook an angler survey, in which aquatic plant management issues were the first topic. The second topic was whether there were population effects on catching spawning bass off nests. State biologists did not think this was an issue, but because the angling public thought it was an issue, they decided to move forward with some research. Dr. Allen and his group have undertaken a number of studies at UF and with the FWC group in Eustis. His goal in the presentation was to highlight some of the studies, noting that the research was approached from several different perspectives. He discussed a slide showing a number of different collaborators on the projects including UF students, United States Geological Survey (USGS) staff, Illinois Natural History Survey, and FWC staff.

Dr. Allen presented a slide describing the range of black bass species in Florida, which he noted represents a billion dollar recreational fishery. Many anglers come to Florida in the spring to fish for bass that are spawning. Male black bass will create and defend nest areas and, subsequently, are relatively easy to target for capture. He showed a series of graphs of the voluntary release rate of legal-sized black bass by anglers, by year, from 1980 to 2005 for four major reservoirs (Fork, Monticello, Sam Rayburn, and Toledo Bend) from Texas. The graphs indicated that about 80% of fish that are now caught are released. The graphs show a change in angler behavior, where in the 1980s many fish were harvested. But since the 1980s, with the advent of catch and release fishing, most anglers now release their fish, rather than harvest them. Dr. Allen showed a slide containing information on voluntary release rates for two lakes in the Kissimmee chain, Lakes Kissimmee and Tohopekaliga (Toho), for 1975 through 2005. The research shows the same increases in angler release rates over time. This was a positive outcome since historically (in the 1960s) in Florida there was widespread overfishing and harvesting

Dr. Allen noted that, in contrast, too many fish in a population can reduce overall size of fish. Thus, too much catch and release might cause growth to decline. Dennis Renfro confirmed that FWC is considering an upper size catch limit to encourage the harvest of smaller fish to maintain both population and the larger trophy size fish that anglers seek.

A slide on the effects of fishing on black basses was presented, and Dr. Allen noted that male fish are the nest builders, and that they exhibit parental care. Existing research has shown that if male bass are caught and removed from the nest for any length of time, that there is good evidence that the nest will be lost to predators. There is also data to show that if the male is immediately released in the vicinity of the nest, he will return and protect the nest. It is known that fishing on spawning nests does result in nest loss. However, the question that then arises is does it have an effect on recruitment. Are the numbers of fish that survive to age one and enter the population affected by these losses due to angling during the spawning season? The first experiment that was performed

was a pond experiment at the USGS ponds in Gainesville in which six, one acre ponds were populated with 6 to 40 adult bass to establish a natural population, and control the number of successful nests. The purpose of the experiment was to test whether the number of fish recruits related to the number of adults and, presumably, the number of nests. The group undertook snorkel surveys to establish the number of nests. Dr. Allen showed a slide of bass eggs and larvae associated with vegetation, where most anglers assume that bass are nesting over sandy areas. While that is common, nesting in other areas also occurs.

Adults in the six ponds were allowed to spawn, with predators including small bass present in the ponds. The goal was to establish as natural a setting as possible. The experiment was run for two one-year periods, then the ponds were drained and the number of fish of all size classes counted. Dr. Allen showed a graph depicting Age-0 Density versus Number of Adults. The graph indicated that ponds with the least amount of adults (6 adults) had very low numbers of recruits produced, but also had the second highest number of recruits. The overall result showed that the average number of recruits was invariant with the number of adults in the pond. The data indicates that the success of every nest is not critical. The loss of some nests does not result in a direct reduction in recruitment. Part of the reason is density dependence in both survival and growth. If large numbers of larvae are produced, then there is much more predation by larger larvae on smaller larvae that limits recruitment. The inference is that the loss of some nests to fishing would not directly reduce recruitment. The Eustis hatchery has undertaken an extension of this study in nine ponds, where they fished five of the ponds while the other ponds were left alone. Nick Trippel, FWC, is the lead on that project which is in its second year. When the ponds are fished, they have found some reduced nest success, but no recruit loss.

Dr. Allen introduced a slide on vulnerability to fishing, noting that the Florida bass is not a separate species, and not considered a largemouth bass. They are now commonly called black bass. They look similar, but their growth patterns and behavior are different. In snorkel studies with colleagues in Illinois, they noticed that northern fish are aggressive on the nest, whereas in Florida, the fish are much more timid. In Florida, they never saw the male when approaching nests. They would move off and away from the nest. These differences in behavior may vary with latitude, so the group wanted to compare the capture of spawning black bass on two lakes in Gainesville and spawning largemouth bass in two lakes in Ontario. In the experiment, a bass was located on a nest and then baits were cast at the fish with five casts each, using three different baits. The numbers of strikes were then recorded. A graph of fish striking the first cast (%) for the Gainesville and Ontario lakes showed the fish in Florida never struck on the first cast. Whereas, the fish in Ontario lakes struck the lure 40% and 20% of the time on the first cast. A graph of fish striking on one or more casts (%) was similar, with fish in Ontario lakes striking nearly twice as often fish in Gainesville. The study provided evidence that it is harder to catch black bass on nests in Florida, than it is to catch largemouth bass on nests in Ontario. The ecological hypothesis for this result is that because the spawning season is so short in Michigan (3 weeks), the males must be much more protective of the nests. They only get one chance to spawn over that three week period. They are going to guard that one brood, and that is it. In Florida, bass may raise up to three separate broods during a season. Since they have more than one chance to raise a brood, they do not have to guard each nest as vigorously.

The final study that Dr. Allen discussed was a project coordinated by Brandon Thompson (FWC) that looked specifically at the Harris Chain of Lakes and Lake Eustis to assess what fraction of total bass nests could be impacted by fishing. Mr. Thompson undertook a creel survey on 17 Harris

Chain lakes. Dr. Allen discussed the results of the survey that showed the angling hours per lake area (hectare) per week demonstrates that Lake Eustis is heavily used for fishing. The angling effort in Lake Eustis is higher than lakes Toho, Lochloosa, Istokpoga, and Rodman. Overall, the results show that the Harris Chain is subject to high fishing effort. On Lake Eustis, Mr. Thompson used a creel survey to estimate the total bass catch on an annual basis. A slide of the creel survey listed the annual catch at 36,000 bass caught per year. Of those, only 2,500 were harvested. The slide also showed that about 39% of the annual catch was caught during the spawning season. This does not imply that all fish were spawning, just that they would be part of the total catch for that time period. In addition to the creel survey, Mr. Thompson performed a tagging study as another method to assess what fractions of the fish were caught during the spawning season. A slide of the results showed that 94 of 211 tags were returned, representing a 53% catch rate. Of those, only 8% were harvested. The tagging study showed similar results to the creel survey, which indicated that about 40% of the bass caught on Lake Eustis could be caught during the spawning season. The question then arises, is whether that is a significant factor considering that since not all bass spawn at same time, that they are not all impacted.

The Eustis group then ran the data through a population simulation model to see if restricting fishing during the spawning season would have an impact on recruitment. A slide of the model output showed the results of four potential regulations; open - no spawning impact, open - spawning impact, catch and release, or spawning season closure. The model results showed that there is not a significant impact on either the number of adults or recruitment between the different regulations schedules. In conclusion, Dr. Allen noted that there are probably low impacts of nest fishing on bass recruitment, closures during the spring spawning season are not strongly beneficial to populations, even if they were wanted by anglers, and that the results are based a good science in Florida.

Chairman Goerner noted that the bass fishing method in the past was to catch the male off of the nest, then go after the female. Dr. Allen noted that anglers would hold the male (many still do that) and that if eggs had been deposited, then female would leave. Chairman Goerner remarked that one could actually see the female bass, indicating that eggs had not been deposited. In this case, both fish might be caught.

Councilman Grow questioned Dr. Allen about whether other males would move onto a nest from which a male had been removed. Dr. Allen reported that in a study of lakes in the Hawthorne area, that other male bass would use abandoned nest sites. He noted that they have measured up to 3.7 spawnings per male, per year, in some small lakes. He also noted that as the spawning year progresses, and water temperatures increase, the nests get deeper, down to 10 feet of water depth, and, therefore, area harder to see.

Chairman Goerner reiterated that it made sense that the Florida spawning season, being long and capable of multiple spawns, that protection was not so critical. Whereas, up north with single spawns, there is a need to protect the spawning season as there is an effect. Dr. Allen remarked that it is somewhat of a trade-off because of catch and release. There is definitely a potential for damage up north. Chairman Goerner noted that when he lived in Michigan, he did a lot of fishing and one could catch many smallmouth bass, up to 200 in a day, but largemouth bass were more difficult. He also noted that the season did not open until May 25, after the spawn was completed.

Councilman Grow queried Dr. Allen about the data on the creel survey. Dr. Allen clarified the information that was presented. Mr. Stump asked for clarification on how creel survey data was obtained. Dr. Allen described the process as a randomized design, counting anglers, interviewing individuals about fishing time, and recording how many bass were captured and how many bass were released.

**C. Briefings by LCWA, DEP, FWC, and UF (TAG members) on involvement with minimum flows and levels (MFLs)**

Mike Perry (Lake County Water Authority [LCWA]) discussed the MFL listing and de-listing of the Harris Chain. He noted that when the City of Apopka requested a permit to augment their reuse system by withdrawing water from the lake Apopka, that LCWA had concerns since an MFL had not been established. He indicated that the outcome was that SJRWMD would not permit direct withdrawal from the lake without certain limitations. In addition, he noted that SJRWMD put MFL development back on the five-year schedule. The length of time to start the MFL process has apparently been due to efforts to develop the modeling for the process, and to include both recharge and discharge. He remarked that it appears that the MFL process is between a year and a year and a half away from completion. LCWA has asked SJRWMD staff to keep them plugged in to the process. LCWA staff wants to know up front what is being proposed. LCWA is still waiting for information to be presented. Mr. Perry remarked that the MFL may be applied as part of consumptive use permit (CUP) process and that it has been reported that in Lake Harris there is not enough water in the system, so no CUP would be allowed. He noted there are current CUP withdrawals from Lake Griffin. LCWA wants to ensure that no additional withdrawals are made out of the lake system until the MFLs are established. He also noted that the next step in the process will be establishment of a regulation schedule, though that would not happen until the MFL was complete. Chairman Goerner commented that it was great to see that LCWA is participating in the process. He hoped that the Council members would stay engaged in the process because it could have a big impact. Chairman Goerner noted that everything should be taken into consideration, including navigation, and equal weight given to environmental concerns versus economic concerns. His impression was that environmental issues were primarily discussed during the peer review tours, with little mention of economic concerns, or fishing industry access.

Mr. Perry remarked that MFLs established for other lakes considered potential withdrawals. It was his perception that the Harris lakes were not being considered as a source for drinking water anytime in the near future. The traditional MFL model was for drinking water regulations, and those lakes typically do not have a regulation schedule. It is a different process here and the question is whether it will have more impact on lake levels.

Chairman Goerner reiterated his concerns that the MFLs are to maintain minimum withdrawals that effect ecosystem, and that they will ignore other considerations like economic value. He noted that downstream lakes will also establish MFLs and that there could be lawsuits if an MFL downstream could negatively affect water levels upstream.

David Whiting, DEP, remarked that his agency does not have any MFL-related documents because such documents have yet been released or circulated by SJRWMD. He reported that Kathy Greenwood, DEP Office of Water Policy, is the DEP staff person that would be reviewing the MFLs once they are presented. Mr. Whiting noted that he was aware of the MFL methodology of SJRWMD, and that DEP had confidence in that methodology.

Chairman Goerner remarked that he wanted to ensure that DEP is engaged in the MFL process. He noted with the Bayou project, although though it was never permitted, SJRWMD would have allowed lower quality water. He expressed concern about what would have exempted them from permitting, as it is all related to MFLs. He further noted that DEP has much to offer to the MFL process, as they regulate what water can go where in relation to water quality, reconnection of marshes, and restoration projects.

Chairman Goerner noted that future restoration projects should be included in the MFL process as they are not currently included. He reiterated that the engagement of the entire technical advisory group is needed. He noted that the process is very complicated and that they needed to get it right.

Dennis Renfro, FWC, presented a slide presentation on FWCs role in MFLs. Mr. Renfro commented on the presentation on black bass, noting that the snorkeling surveys were completed using Go-Pro cameras mounted on tripods so as not to interfere with the fish.

Chairman Goerner noted that he was surprised and disappointed that FWC was not represented at the two-day peer review field trip. Mr. Renfro commented that he was not aware of the trip, noting that he may have been on the SJRWMD mailing list, but that he may have missed it. Chairman Goerner requested that SJRWMD ensure that FWC is on the mailing list. Chairman Goerner indicated that although SJRWMD has spoken to the Council about MFLs previously, that there was more information given at the peer review tour meetings, including a series of handouts, that would be useful to DEP.

John Stump remarked that it would be useful to DEP to see some of the documents presented by SJRWMD's modeler. He described many of the input parameters and boundary conditions for the model. It could be helpful to get copy of his discussion and the many input parameters included in the model. He noted that perhaps FWC could provide input before model draft is run. Mr. Stump then queried Dr. Fulton as to the schedule for the modeling process.

Dr. Fulton noted that Sonny Hall (SJRWMD) gave a schedule at the beginning of the peer review trip, showing further tasks to be accomplished over the next year and a half. That is the only new information to the council. The technical information presented at the peer review field trip was the same information that has been previously presented to the Council by himself, Mike Cullum (SJRWMD), and Dale Smith (SJRWMD) over the last several months. Chairman Goerner agreed, but noted that there was still information presented in the packets that were handed out that would be useful. He requested that all TAG members receive a copy of the handouts. Dr. Fulton remarked that he would check on the noticing of TAG members of the peer review trip.

Mr. Renfro continued with his slide presentation describing the establishment of the five Water Management Districts through the Water Resources Act of 1973 and that they were mandated to set MFLs. The two areas where FWC is involved with MFLs are whether they impact fish and wildlife habitats, and fish passage. If navigation is involved it would be through FWCs law enforcement section. Mr. Renfro presented a slide defining MFLs, indicating that they are calculated using "best available information," and that the water management districts generally use multiple flows and levels (ecological flows) to arrive at a rule. Chairman Goerner inquired as to what constituted an ecological flow. Mr. Renfro described in the next several slides the concept of ecological flow. He noted that water management districts evaluate multiple flows from infrequent low to infrequent high to develop what is termed an ecological flow that will not cause harm. They maintain timing,

duration, and magnitude of flows, and return interval of flows to protect ecosystem function. Mr. Renfro described a slide of water level and flow versus the percentage of time a specific water level or flow is exceeded. He discussed a slide of FWCs role in MFL development and noted that they have no statutory authority. They provide data, and review and comment on proposed MFLs, and build partnerships during project design. The FWC position of MFLs is that they support flow and level management of Florida's waterbodies and they encourage innovative measures for conservation and management of water resources that balance human and ecological needs.

Councilman Grow questioned Mr. Renfro as to whether FWC was stocking crappie or bluegill in the Harris Chain of Lakes. He reported that bass and bluegill are not being stocked. FWC is stocking sunshine bass on Lake Harris to augment the existing fishery, and that 10,000 fish were released in the last week. He noted there were untold miles of shoreline that are fished and it is a popular fish to catch.

Mike Allen, UF, addressed the council regarding the MFL process. He commented that in the Harris Chain of Lakes that the MFLs are complicated. Consideration as to how lake levels are managed will influence water clarity, which influences submerged aquatic vegetation. He noted he had no data specific to the Harris Chain, but in Florida prairie lake systems, bass year class strength is directly related to water level. The Harris Chain is a more managed system, so lake level changes do not have as much of an influence. It is important to know how lake level management will influence phytoplankton populations and water clarity. Chairman Goerner noted that is why he wanted to ensure that UF is engaged in the MFL process, and because they have access to tremendous amounts of lake data with over 20 years worth of records. It is important economically to maintain the fishery. He noted that UF's engagement in the MFL process is of vital importance to the Council.

Chairman Goerner invited Dr. Fulton to the podium, commenting that he had been a tremendous benefit to the education of the peer reviewer team, and that he appreciated his efforts. Dr. Fulton responded that he was not aware that he was to make a presentation; nonetheless he reported that he had been working for several years doing fieldwork, and wetland surveys, and was just starting in on the public MFL process. He noted that the peer tour was part of that process, and on getting peer reviewers oriented to the Harris system.

Dr. Fulton discussed the MFL schedule, with the peer review tour being the kickoff to the process. The next step will be the placement of the hydrologic modeling report on SJRWMD website, currently scheduled for the middle of July 2015. It will be disseminated to the peer review team at the same time. A modeling workshop will take place in October 2015. They intend to publish draft report on the MFLs in July and Water Resource Values (WRV) in October. Dr. Fulton remarked that economic values were not discussed during the peer review tour, as Chairman Goerner had previously noted. The WRV study is a whole separate report that focuses on economic aspects, including navigation, recreation, public water supply, and other public uses of the lakes. Chairman Goerner noted that since the Harris Lakes are the headwaters of the Ocklawaha system, and that MFLs are being set downstream that might include consumptive use, that the MFLs might have an upstream impact. Dr. Fulton acknowledged Chairman Goerner's concern, but did not think there would be a problem. The major concerns are the flows out of the Silver River, not the Ocklawaha River. Chairman Goerner questioned whether flow out of the Harris Chain would be reduced to help downstream. Dr. Fulton stated his concerns would be taken into consideration as the process moves forward.

Dr. Fulton continued discussing the MFL schedule, reporting that after the initial peer review and workshop, SJRWMD staff would revise the models and reports as necessary. Another workshop in December 2015 would focus on the WRV and MFL reports. A third workshop on hydrologic modeling would occur in March 2016, with a final workshop in May 2016. SJRWMD would then initiate rulemaking, which would start around October 2016. Dr. Fulton noted that the schedule is tentative and that it could change. Chairman Goerner reiterated that most of presentations at the peer review trip consisted of items that the Council had already seen. He noted that the process is only beginning and that there will be much interaction between stakeholders and citizens. He anticipated that the Council would be kept informed of MFL developments at every meeting. Chairman Goerner also hoped to deliver something regarding MFLs, however preliminary, in the Council annual report to the Legislature.

## **7. COUNCIL AND AGENCY QUESTIONS AND ANSWERS**

Mike Perry (LCWA) discussed the lake levels in the Harris Chain. He noted that Lake Apopka was 0.7 feet below regulation and about 0.3 feet below the minimum desirable level. He reported that there was a steep decline in last couple days that was likely related to wind. Overall, he was not too concerned with the slight declining trend. He noted that the middle lakes were below regulation schedule, with minimum discharges for Moss Bluff and Burrell Dam. He reported that Lake Griffin was the closest to its regulation schedule. He also reported that the LCWA still has \$15,000 budgeted for the Council.

Dennis Renfro (FWC) reported that he had made a presentation at the Villages to their 200 member fishing club who had helped with the installation of fish attractors. He also met with the City of Apopka mayor, commissioners, and businessmen who are looking into a fishing tournament on Lake Apopka at Magnolia Park. The City of Apopka is excited about the prospect and considering adding docks on the waterfront. FWC staff went out on Lake Yale at some of the old fish attractor sites to see if any could be located, but nothing was found. FWC is considering placing new fish attractors in the lake in the vicinity of the Baptist retreat.

Dr. Fulton reported the lake level for Lake Eustis was 61.92 feet. Dr. Fulton also mentioned that the Wildlife Drive along the north shore of Lake Apopka was now open. Wildlife Drive is a one-way drive going from Lust Road and ending at the Jones Avenue Stormwater Park.

Chairman Goerner questioned Dr. Fulton about a recharge/discharge map presented at the peer review trip, as it seemed that some of the recharge areas were discharge areas in the north shore area of Lake Apopka. Dr. Fulton clarified the various elements of the map. John Stump inquired as to whether a permit was required to drive on Wildlife Drive. Dr. Fulton reported that it was open to the public and that no permit was needed.

## **8. COUNCIL MEMBER COMMENTS**

### **A. Comments**

Councilman Grow commented that NBC Channel 2 reported about how \$200 million had been spent on Lake Apopka, and that the water was still green. However, the report did not discuss the issues. They reported that, basically, to solve the problem they needed rain.



Dennis Renfro (FWC) reported that legislative restoration funding for Lake Apopka is currently at \$20 million. \$15 million is slated to come from the general fund, with \$5 million from the land trust fund.

Chairman Goerner recalled that the Council requested changes to its own legislation that was submitted during legislative delegation meetings and carried by Senator Hayes and Representative Metz. He noted that it was passed on the floor, but the water bill to which it was attached was still in limbo.

Vice Chairman Johnson introduced a book titled *Countdown to Agriculture* by Henry Swanson. He noted that the book included a chapter on Zellwood muck farming and provided an interesting agricultural history of the county. He noted that muck farming did not really take off until 1948-1949, when Beechnut came into the area. Vice Chairman Johnson then presented a second book titled, *Toxicity of Pesticides to Wildlife*, dated 1970, by USFWS. The book presents the toxicity of toxaphene on various avian species. He reported that it shows, consistent with Exponent and EPA reports, that toxaphene did not kill the pelicans (at the Lake Apopka Marsh Flowway). He noted that there is no direct comparison to pelicans, but there are to various other species. He expressed concern that much money was spent because of the USFWS report. Vice Chairman Johnson had copies of the book information for SJRWMD to place in their files for reference in case of another bird kill. Chairman Goerner noted that a bird kill could happen again and that this is still an issue on the north shore. He questioned whether it was toxicity of pesticides from the farms or avian disease that caused the bird kills. Vice Chairman Johnson reported that there are numerous LD50 dosage studies on birds with no observable effects. He remarked that there was plenty of data (from Lake Apopka) to show that the conclusion was wrong by USFWS and, then, SJRWMD.

Linda Bystrak addressed the Council and commented that she worked in a pesticide lab testing for LD50s and that a big problem there was interaction of drugs. She noted that in the Lake Beauclair project six chemicals of the list of the 12 worst pesticides were identified. She noted that, when combined, there is no way to know what the synergistic effects might be. Vice Chairman Johnson questioned whether a toxicologist from the UF's Institute of Food and Agricultural Sciences could come out and discuss this topic. He noted that there is a "dirty dozen" list of chemicals that comes out every year. Newspapers never publish the absolute amounts and do not refer to the multiple studies completed by companies to get their products labeled. He further noted that the Exponent report did analyze for combined chemicals and did broad spectrum analysis on the species that were killed.

Chairman Goerner remarked that no bird kills have happened since the first event and believes that the bird had a disease. Vice Chairman Johnson offered copies of the report to the audience and forwarded a copy for the record to Denis Frazel.

## **B. Discussion of Next Scheduled Meeting**

Chairman Goerner requested updates on MFLs for next month. Chairman Goerner remarked that information regarding toxicology never seems to be complete. Green water in Lake Apopka is still an issue and people do not understand the constraints that were placed on SJRWMD with restoration. He noted that someone from USFWS and SJRWMD who was involved in the event needed to speak to the Council so that the Council could finally put the issue to rest. Dr. Fulton responded that from the SJRWMD perspective, there is really nothing further to provide to the Council beyond the presentations that Dr. Mike Coveney already provided. Mike Allen remarked

that he would try to contact Mark Hoyer to give an update on MFLs from the LAKEWATCH perspective. David Whiting remarked that he would try to have Kathleen Greenwood available to comment once the MFL report was submitted.

Chairman Goerner requested that Dr. Fulton keep the TAG informed of MFL developments and receive the materials from the peer review trip. Dr. Fulton responded that SJRWMD staff would distribute the information to the TAG.

Chairman Goerner asked John Stump whether he needed a geology presentation. Mr. Stump remarked that the potentiometric data he received at the peer review tour was sufficient. Mr. Stump noted that there was some question about the deeper layers of the geology of Lake Apopka. He would like to see some geologic or boring logs to better understand the fracturing in the area of Lake Apopka.

Chairman Goerner remarked that he may look at another process for dredging material by Dan Canfield, and that he may add that topic to the agenda for next month. Councilman Grow inquired as to whether Robert Hendrick would present next month. Chairman Goerner remarked that since it had been postponed three times already, that they would hold off on the Hendrick presentation.

**9. ADJOURNMENT**

The meeting adjourned at 11:17 a.m.