



St. Johns River Water Management District

Kirby B. Green III, Executive Director • David W. Fisk, Assistant Executive Director

4049 Reid Street • P.O. Box 1429 • Palatka, FL 32178-1429 • (386) 329-4500
On the Internet at www.sjrwmd.com.

November 19, 2008

The Honorable Jeffrey Atwater, President of the Senate
Florida Senate
312 Senate Office Building
404 S. Monroe Street.
Tallahassee, FL 32399-1100

Re: Harris Chain of Lakes Restoration Council's 2008 Report to the Florida Legislature

Dear Senate President Atwater:

Pursuant to Section 373.467, *Florida Statutes* (F.S.), enclosed is a copy of the Harris Chain of Lakes Restoration Council's (Council's) 2008 Report to the Florida Legislature. Also enclosed are the St. Johns River Water Management District's (District's) responses to a number of the conclusions and recommendations contained in the Council's report.

While in previous years it has not been the District's practice to comment on the Council's reports, we are compelled to do so because the 2008 report contains factually inaccurate and misleading conclusions that are the basis for a number of the Council's recommendations. The report also fails to provide an accurate and complete picture of the District's restoration work in the Harris Chain of Lakes, including Lake Apopka. During the Council's report drafting process, District staff provided the Council with detailed comments on the draft report; however, the Council chose not to address those comments. Any action taken to accept and implement the Council's recommendations would result in significant setbacks in the restoration of the Harris Chain of Lakes.

The following are three examples that illustrate the District's concerns with the Council's report; excerpts from the Council's report appear in quotes followed by the District's respective responses.

1. *"Based upon a review of 7 years of water quality data, the Council concludes that restoration efforts on Lake Apopka have not resulted in any improvement in water quality."*

This conclusion is incorrect. The District's restoration efforts on Lake Apopka began well over 7 years ago and a review of the long-term water quality records shows that the District's restoration program has improved water quality in Lake Apopka by approximately 50 percent (total phosphorus and transparency). Also, the 7-year period selected by the Council for review included two significant drought periods, which caused temporary decreases in water quality that are not reflective of the overall trend.

GOVERNING BOARD

Susan N. Hughes, CHAIRMAN PONTE VEDRA	W. Leonard Wood, VICE CHAIRMAN FERNANDINA BEACH	Hersey "Herky" Huffman, SECRETARY ENTERPRISE	Hans G. Tanzler III, TREASURER JACKSONVILLE
Douglas C. Bournique VERO BEACH	Michael Ertel OVIEDO	David G. Graham JACKSONVILLE	Arlen N. Jumper FORT MCCOY
			Ann T. Moore BUNNELL

2. *“The Council concludes that the harvest of gizzard shad is not a viable restoration technique.”*

This conclusion is incorrect. The Council concluded that gizzard shad harvesting would not improve water quality and that the harvesting of gizzard shad would damage sport fisheries. These conclusions were based upon the Council's misinterpretation of a report by a researcher from the University of Florida/Institute of Food and Agricultural Sciences. In addition to misinterpreting that report, the Council ignored other information that demonstrates that water quality is improved by the removal of gizzard shad from a lake, including research findings regarding recycling of nutrients in a lake by gizzard shad and District reports on previous successful restoration projects involving gizzard shad harvest. Further, fisheries data and anecdotal information on lakes where gizzard shad have been harvested have shown that sport fish populations have actually improved as a result.

3. *“The Council concludes the restoration of Lake Apopka must involve dredging at least some portion of the bottom sediments.”*

The District previously investigated the feasibility of dredging the lake and found it to be cost-prohibitive.

The District restoration program at Lake Apopka has several major components: (1) control of external nutrient loading from the muck farms; (2) harvesting of gizzard shad; and (3) removal of nutrients using the marsh flow-way. In addition, the District implemented a program to plant beneficial aquatic plants in Lake Apopka and monitor the growth of hydrilla to control this invasive, exotic plant. The District is in the process of restoring approximately 8,000 acres of former muck farms to marshes along the north shore of Lake Apopka to reduce external nutrient loading and improve water quality in Lake Apopka. Even before that project has been completed, water quality in the lake has significantly improved in a relatively short period of time, which strongly contradicts the Council's position regarding the District's lake restoration plan.

The Council's withdrawal of its support for the District's Lake Apopka restoration project is completely inconsistent with its stated goals for restoring the lake, especially in light of the District's extremely successful restoration efforts at Lake Griffin during the past 10 years. In the late 1990s, Lake Griffin suffered more severe algal blooms than Lake Apopka. The District implemented a restoration program at Lake Griffin that included control of external nutrient loading from muck farms and gizzard shad harvesting to remove nutrients from the lake and reduce nutrient recycling. These efforts successfully lowered phosphorus levels, which led to a reduction in algal blooms and an increase in desirable, submersed vegetation. It is important to note that the restoration strategies for Lake Griffin and Lake Apopka have the same basic elements. The District's proven success with the restoration of Lake Griffin is further evidence that the restoration strategy for Lake Apopka is sound.

As a further example of the District's successful control of nutrient loading, in the early 1990s the District conducted a pilot project to harvest gizzard shad from Lake Denham. The water quality in

Lake Denham was poor and the algal levels were high. The lake was green and turbid. After the gizzard shad were removed from the lake, the water quality improved so much that the bottom of the lake became visible at a depth of more than 3 feet. However, when fish barriers were eventually removed and the gizzard shad returned to Lake Denham, the water quality in the lake worsened. If the District were to abandon its current restoration plans for lakes Apopka and Griffin, these lakes would likely suffer the same fate as Lake Denham.

In summary, the District remains dedicated to successfully restoring Lake Apopka and the Harris Chain of Lakes through the implementation of the Surface Water Improvement and Management (SWIM) plans for these water bodies. In the SWIM Act (Section 373.451, F.S.), and the Lake Apopka Improvement and Management Act (Section 373.461, F.S.), the Legislature directed the District to develop and implement SWIM plans to address the declining water quality of surface waters such as Lake Apopka and the Harris Chain of Lakes. The Lake Apopka and Harris Chain of Lakes SWIM plans were developed in an open and public process and only after consultation with the Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Florida Department of Agriculture and Consumer Services and many other state and local governments. Implementing many of the recommendations in the Council's 2008 Annual Report to the Legislature would be contrary to the District's SWIM plans and would likely result in significant harm to the water bodies within the Harris Chain of Lakes. Thus, many of the recommendations in the Council's 2008 Annual Report to the Legislature are contrary to the intent of both the SWIM Act and the Lake Apopka Improvement and Management Act.

Thank you for your consideration of our objections. If you should need to discuss any of the information presented here or if you need additional information, please contact me.

Sincerely,



Kirby B. Green III
Executive Director

Enclosures

c: The Honorable Ray Sansom
Lake County Legislative Delegation
Harris Chain of Lakes Restoration Council
Harris Chain of Lakes Restoration Council Technical Advisory Committee
Lake County Water Authority
St. Johns River Water Management District Governing Board



St. Johns River Water Management District

Kirby B. Green III, Executive Director • David W. Fisk, Assistant Executive Director

4049 Reid Street • P.O. Box 1429 • Palatka, FL 32178-1429 • (386) 329-4500
On the Internet at www.sjrwmd.com.

November 19, 2008

The Honorable Ray Sansom, Speaker of the House
Florida House of Representatives
420 Capitol Building
402 S. Monroe Street
Tallahassee, FL 32399-1300

Re: Harris Chain of Lakes Restoration Council's 2008 Report to the Florida Legislature

Dear House Speaker Sansom:

Pursuant to Section 373.467, *Florida Statutes* (F.S.), enclosed is a copy of the Harris Chain of Lakes Restoration Council's (Council's) 2008 Report to the Florida Legislature. Also enclosed are the St. Johns River Water Management District's (District's) responses to a number of the conclusions and recommendations contained in the Council's report.

While in previous years it has not been the District's practice to comment on the Council's reports, we are compelled to do so because the 2008 report contains factually inaccurate and misleading conclusions that are the basis for a number of the Council's recommendations. The report also fails to provide an accurate and complete picture of the District's restoration work in the Harris Chain of Lakes, including Lake Apopka. During the Council's report drafting process, District staff provided the Council with detailed comments on the draft report; however, the Council chose not to address those comments. Any action taken to accept and implement the Council's recommendations would result in significant setbacks in the restoration of the Harris Chain of Lakes.

The following are three examples that illustrate the District's concerns with the Council's report; excerpts from the Council's report appear in quotes followed by the District's respective responses.

1. *"Based upon a review of 7 years of water quality data, the Council concludes that restoration efforts on Lake Apopka have not resulted in any improvement in water quality."*

This conclusion is incorrect. The District's restoration efforts on Lake Apopka began well over 7 years ago and a review of the long-term water quality records shows that the District's restoration program has improved water quality in Lake Apopka by approximately 50 percent (total phosphorus and transparency). Also, the 7-year period selected by the Council for review included two significant drought periods, which caused temporary decreases in water quality that are not reflective of the overall trend.

GOVERNING BOARD

Susan N. Hughes, CHAIRMAN PONTE VEDRA	W. Leonard Wood, VICE CHAIRMAN FERNANDINA BEACH	Hersey "Herky" Huffman, SECRETARY ENTERPRISE	Hans G. Tanzler III, TREASURER JACKSONVILLE	
Douglas C. Bourmieu VERO BEACH	Michael Ertel OVIEDO	David G. Graham JACKSONVILLE	Arlen N. Jumper FORT MCCOY	Ann T. Moore BUNNELL

2. *“The Council concludes that the harvest of gizzard shad is not a viable restoration technique.”*

This conclusion is incorrect. The Council concluded that gizzard shad harvesting would not improve water quality and that the harvesting of gizzard shad would damage sport fisheries. These conclusions were based upon the Council’s misinterpretation of a report by a researcher from the University of Florida/Institute of Food and Agricultural Sciences. In addition to misinterpreting that report, the Council ignored other information that demonstrates that water quality is improved by the removal of gizzard shad from a lake, including research findings regarding recycling of nutrients in a lake by gizzard shad and District reports on previous successful restoration projects involving gizzard shad harvest. Further, fisheries data and anecdotal information on lakes where gizzard shad have been harvested have shown that sport fish populations have actually improved as a result.

3. *“The Council concludes the restoration of Lake Apopka must involve dredging at least some portion of the bottom sediments.”*

The District previously investigated the feasibility of dredging the lake and found it to be cost-prohibitive.

The District restoration program at Lake Apopka has several major components: (1) control of external nutrient loading from the muck farms; (2) harvesting of gizzard shad; and (3) removal of nutrients using the marsh flow-way. In addition, the District implemented a program to plant beneficial aquatic plants in Lake Apopka and monitor the growth of hydrilla to control this invasive, exotic plant. The District is in the process of restoring approximately 8,000 acres of former muck farms to marshes along the north shore of Lake Apopka to reduce external nutrient loading and improve water quality in Lake Apopka. Even before that project has been completed, water quality in the lake has significantly improved in a relatively short period of time, which strongly contradicts the Council’s position regarding the District’s lake restoration plan.

The Council’s withdrawal of its support for the District’s Lake Apopka restoration project is completely inconsistent with its stated goals for restoring the lake, especially in light of the District’s extremely successful restoration efforts at Lake Griffin during the past 10 years. In the late 1990s, Lake Griffin suffered more severe algal blooms than Lake Apopka. The District implemented a restoration program at Lake Griffin that included control of external nutrient loading from muck farms and gizzard shad harvesting to remove nutrients from the lake and reduce nutrient recycling. These efforts successfully lowered phosphorus levels, which led to a reduction in algal blooms and an increase in desirable, submersed vegetation. It is important to note that the restoration strategies for Lake Griffin and Lake Apopka have the same basic elements. The District’s proven success with the restoration of Lake Griffin is further evidence that the restoration strategy for Lake Apopka is sound.

As a further example of the District’s successful control of nutrient loading, in the early 1990s the District conducted a pilot project to harvest gizzard shad from Lake Denham. The water quality in

Lake Denham was poor and the algal levels were high. The lake was green and turbid. After the gizzard shad were removed from the lake, the water quality improved so much that the bottom of the lake became visible at a depth of more than 3 feet. However, when fish barriers were eventually removed and the gizzard shad returned to Lake Denham, the water quality in the lake worsened. If the District were to abandon its current restoration plans for lakes Apopka and Griffin, these lakes would likely suffer the same fate as Lake Denham.

In summary, the District remains dedicated to successfully restoring Lake Apopka and the Harris Chain of Lakes through the implementation of the Surface Water Improvement and Management (SWIM) plans for these water bodies. In the SWIM Act (Section 373.451, F.S.), and the Lake Apopka Improvement and Management Act (Section 373.461, F.S.), the Legislature directed the District to develop and implement SWIM plans to address the declining water quality of surface waters such as Lake Apopka and the Harris Chain of Lakes. The Lake Apopka and Harris Chain of Lakes SWIM plans were developed in an open and public process and only after consultation with the Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Florida Department of Agriculture and Consumer Services and many other state and local governments. Implementing many of the recommendations in the Council's 2008 Annual Report to the Legislature would be contrary to the District's SWIM plans and would likely result in significant harm to the water bodies within the Harris Chain of Lakes. Thus, many of the recommendations in the Council's 2008 Annual Report to the Legislature are contrary to the intent of both the SWIM Act and the Lake Apopka Improvement and Management Act.

Thank you for your consideration of our objections. If you should need to discuss any of the information presented here or if you need additional information, please contact me.

Sincerely,


Kirby B. Green III
Executive Director

Enclosures

c: The Honorable Jeffrey Atwater
Lake County Legislative Delegation
Harris Chain of Lakes Restoration Council
Harris Chain of Lakes Restoration Council Technical Advisory Committee
Lake County Water Authority
St. Johns River Water Management District Governing Board