



Proposed Black Bass Regulation Changes
Draft Rules
June 25, 2015
Florida Fish and Wildlife Conservation Commission
Division of Freshwater Fisheries Management



Over the past two years staff has reviewed fisheries data and scientific literature, conducted public workshops and internet/email surveys to develop proposed changes to Florida's Black Bass Regulations. Based on these efforts, staff recommends significant changes to how harvest should be managed for five black bass species throughout the state.

Presentation prepared by: Tom Champeau, May 27, 2015

Black Bass species in Florida



Largemouth Bass



Suwannee Bass



Shoal Bass



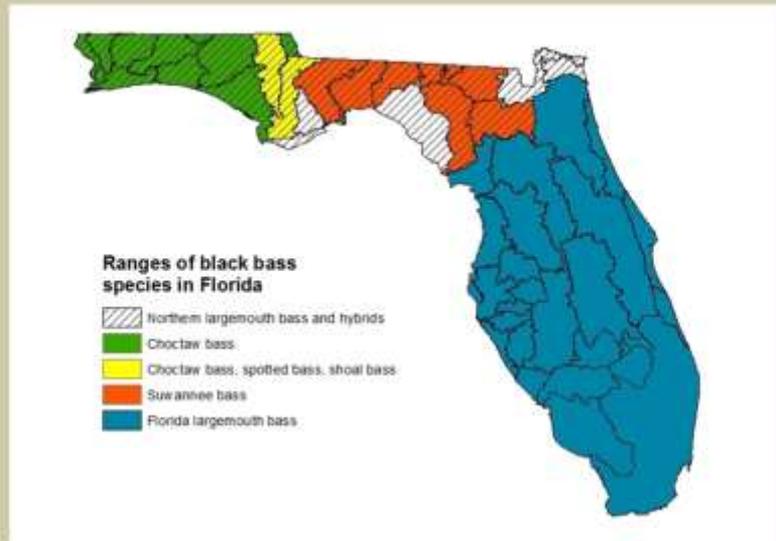
Choctaw/Spotted Bass



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Florida has five separate species of black bass. The best known is the genetically unique Florida Largemouth Bass, which is native to the peninsula. In the northern and western part of the state, the largemouth bass exhibits a distinctly mixed genetic heritage; often referred to as “intergrades” due to populations having genes from both the Florida largemouth and the northern largemouth bass. The Suwannee, shoal, and spotted bass also occur but in much more limited geographic ranges. Newly-described is the Choctaw bass which looks very much like a spotted bass to all but a trained eye.

Ranges of Black Bass Species in Florida



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While largemouth bass are found all over the state, south of the Suwannee River exists a genetically-distinct species known as Florida Largemouth Bass. North of the Suwannee, four separate species of black bass occur in Panhandle rivers. These populations are limited geographically and special conservation programs are underway to protect their populations and genetic integrity.

Social and Economic Value of Bass Fishing in Florida



- 1.2 million anglers fish freshwater and 60% of the effort is for black bass
- Bass fishing generates an annual economic impact of \$1.7 billion
- Florida attracts more non-resident anglers than any other state
- High interest in tournaments



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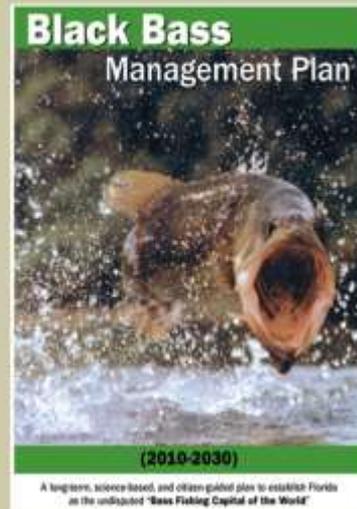
Fishermen spend nearly 15 million days pursuing bass in Florida. Bass fishing is a huge economic engine for Florida generating \$1.7 billion per year in direct revenues. Florida's bass fishing draws a tremendous number of non-resident anglers and provides economic benefits to our tourism industry. Organized bass tournaments generate a lot of interest and some controversy among anglers. For communities hosting large events, the economic impact can be in the millions of dollars. Sponsors are focusing on high school and college tournaments which also helps generate interest in fishing among youth.

Black Bass Management Plan: 2010 - 2030

- Commission Approved 2011
 - Agency-wide Effort
 - Freshwater Fisheries Management
 - Fish and Wildlife Research Institute
 - Habitat and Species Conservation
 - Community Relations
 - Law Enforcement
 - Stakeholder Input
 - Technical Assistance Group
 - Integrate science with social values
- Goal: “Bass Fishing Capital of the World”
 - Ecological, social, and economic benefits



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From 2009 – 2011, FWC staff worked with stakeholders and did extensive review of existing data, scientific literature, hosted workshops, and conducted many public surveys to evaluate the status of Florida’s Black Bass Fisheries. The result of this science-based and citizen-guided effort was the Black Bass Management Plan (BBMP) approved by the Commission in February 2011. The BBMP provided the basis for a comprehensive regulation review.

Black Bass Management Plan Components



▪ **New opportunities**

- Access, hatcheries, partnerships, Upper St. Johns River Project



▪ **Habitat management**

- Enhancement, restoration, aquatic plant management, collaboration



▪ **Public engagement**

- Citizen-science, corporate partnerships, TrophyCatch, youth and family fishing camps, tournament economics/impacts



▪ **Fish management**

- Genetics, stocking protocols, harvest management



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Public input and plan management actions are focused into four sections:

New opportunities: Identify new or special opportunities to create or substantially enhance black bass fisheries, and ensure FWC is proactive about opening new fisheries for the public. Successfully implementing new opportunities will require an aggressive, proactive, science-based approach that also involves local citizenry.

Habitat management: Habitat management is the most important component of maintaining good fisheries.

Public engagement: Human interactions are critical to effective implementation of the black bass management plan. The BBMP includes development of volunteer programs and partnerships, communication, education, outreach, influencing, ethics, marketing, tournament management, and coordination with law enforcement.

Fish management: Black bass management generally involves actions that affect rates of recruitment, growth, natural mortality, and fishing mortality for bass. Harvest management is the focus of this presentation and recommended Commission actions.

Bass Regulation History

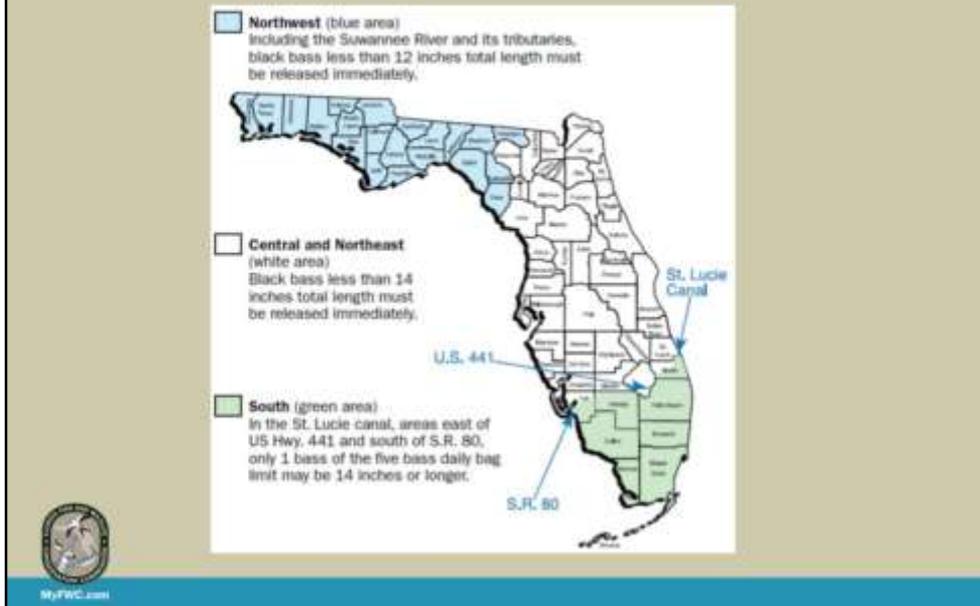
- Pre - 1943: Counties, state commissions
 - Closed seasons, minimum size limit, daily limit 8-12 bass
- 1943 - 1992: GFC
 - Closed season and minimum size limit until 1947
 - Daily limit increased to 15 bass in 1963
 - Daily limit decreased to 10 bass in 1970
 - Maximum Sustained Yield Model
- Since 1992: Three geographic zones
 - 12 inch and 14 inch minimum lengths
 - Suwannee River divided north/south
 - Five fish daily limit with only one bass over 22 inches
 - South Florida: five fish with only 1 bass allowed over 14"



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Black bass regulations have evolved over the last century. Prior to the GFC, bass were regulated by counties and several state game commissions that were created and dissolved by the legislature. Without much science, regulations were adopted from other states where protecting young fish and spawning adults was believed to be necessary. The GFC started hiring fisheries biologists who determined that these traditional regulations had little impact in most Florida waters and recommended liberalized regulations. Harvest was managed under the popular Maximum Sustained Yield model until 1990 when biologists and the outdoor media became concerned that Florida's bass fishery could not be sustained under increasing fishing pressure and environmental impacts. An Optimal Sustained Use approach was taken for the development of new statewide regulations in 1992. While many biologists favored increased protection of quality-sized bass, minimum size limits were recommended as social tolerance to restrictive harvest regulations was perceived to be low and most anglers already supported the protection of smaller bass. In South Florida, the extensive canal system within the Everglades and Conservation Areas warranted a different approach. Flooding of the large marshes during the summer produced a tremendous amount of young bass that crowded into canals during the dry season. Fisheries managers saw little value to protect these abundant, smaller bass and recommended a regulation that would encourage harvest of small bass while reducing harvest of quality-sized fish.

Current Black Bass Regulation Zones



Current black bass regulation zones.

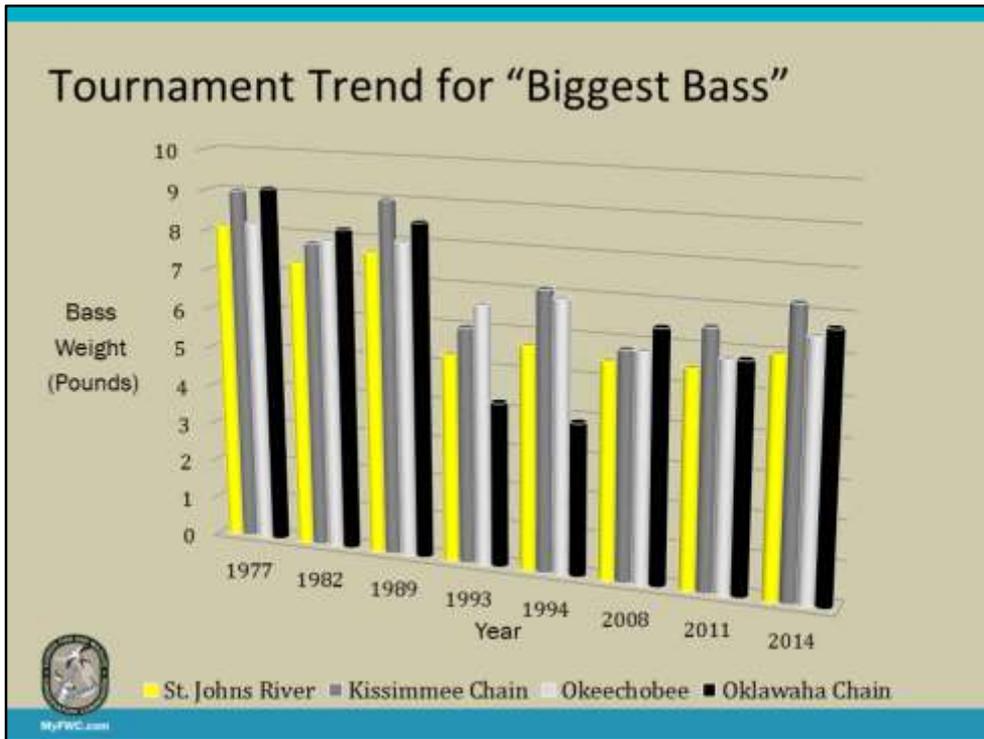
Specialized Management Regulations

- Experimental regulations from 1984 – present
 - Slot limits, catch-and-release, maximum size limits
 - Tiered approach to provide harvest, quality, or trophy fisheries
- Led to increased complexity
 - Three geographic zones and 58 areas with special regulations
- Greater understanding of how harvest affects fish populations
- Size-selective harvest
 - Protecting smaller, abundant sizes can cause stunting
 - Harvest of older, larger bass can shift size structure and decrease abundance of quality size and trophy bass
- Changing behavior of anglers for voluntary catch-and-release
 - Recent application of human dimension research

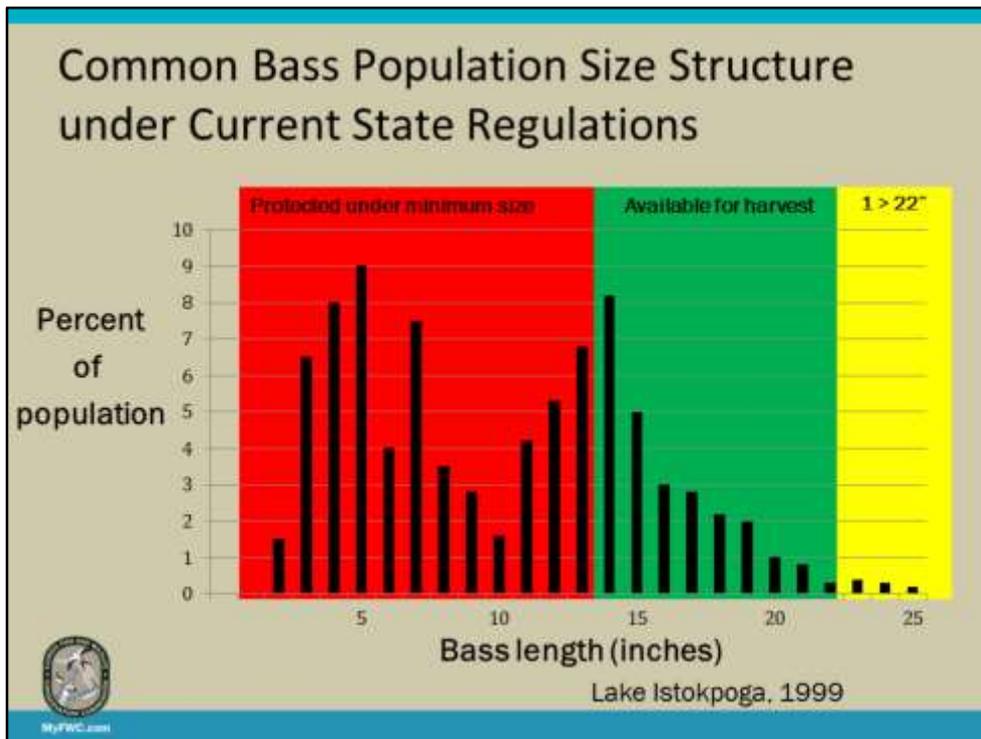


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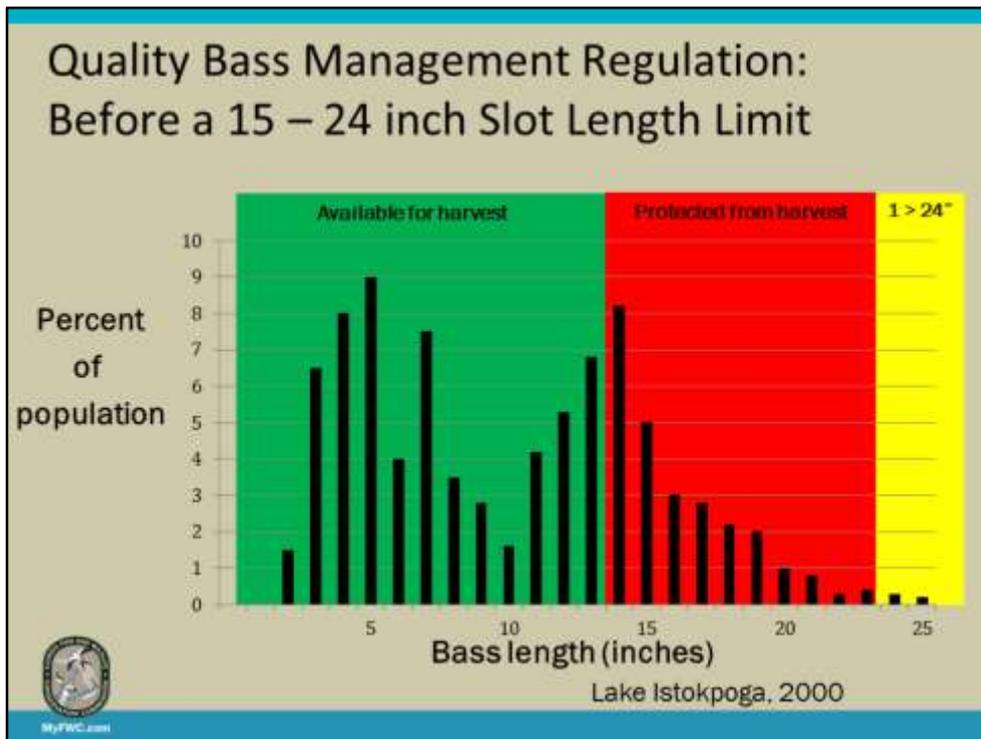
Florida has been a leader in the nation researching for better ways to manage harvest. Work done at Tenoroc Fish Management Area, lakes Jackson, Okeechobee, Istokpoga, Walk-in-Water, Starke, and many others has enriched our knowledge and informed managers. Integrating social science with biological research allows us to develop regulations that are justified biologically, while accommodating angler opinions, attitudes, and behaviors. Commission direction and public opinion favor the simplest approach possible to protect and enhance bass fisheries.



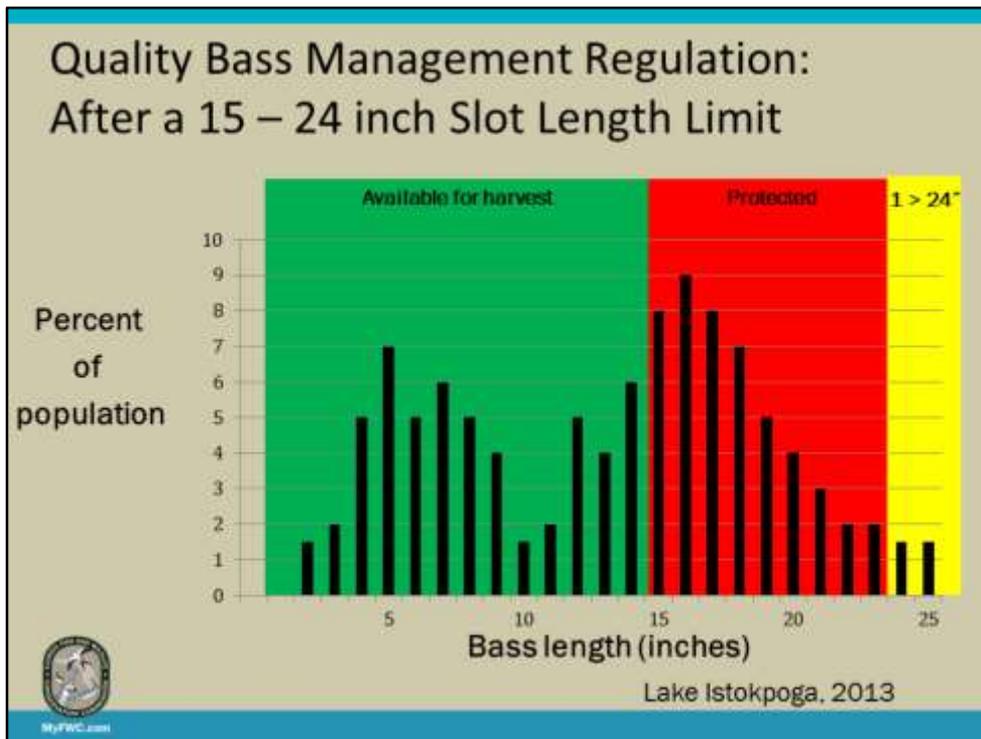
Tournaments carefully weigh the biggest bass caught during tournaments as anglers can win valuable awards. We have worked with bass clubs for decades to evaluate the impacts of tournaments both economically and biologically. This graph shows the average weight of the “Big Bass” weighed in at tournaments from 1977 to the present for four major bass fishery resources. This represents a huge data set with hundreds of tournament events each year and thousands of hours of intense fishing. The trend shows declines in the average weight of “Big Bass” in each fishery for the past 37 years; however, 2014 showed an increase from this trend.



This is a graph showing the distribution of sizes in inches for bass in Lake Istokpoga. While all lakes are different, this representation is typical of many lakes under our current state regulations: Minimum size limit of 14 inches, daily bag limit is five bass, of which only one can be over 22 inches. Note high abundance of younger bass and rapid decline of bass over 14 inches. When reproduction and recruitment of young bass into the fishery are not limiting and smaller fish abundance is high, minimum length limits have little impact and “stockpiling” of smaller bass can cause stunting. Anglers that want to take fish home to eat must kill the larger, older fish in the population, potentially reducing the abundance of bass greater than 14 inches.



Three regulation options or tiers were used since 1995 to manage largemouth bass fisheries: minimum size (protecting smaller fish), slot length limits (protecting quality sized bass), and catch-and-release (manage for maximum abundance and full protection of trophy size bass). We have evaluated over 20 years of data on many lakes managed under all these options and modeled population structures under other options such as maximum size limits where smaller fish are available for harvest and harvest of quality sized bass is limited to one fish per day. In 2000, a 15 – 24 inch slot length limit was implemented at Lake Istokpoga to protect quality sized fish. Daily limit was reduced to three fish with one allowed over 24 inches.



Fifteen years under this regulation the bass population size structure shows a significant shift towards larger bass (16-25 inches). Smaller bass are still abundant but percentages are down relative to the increase in quality and trophy size bass. The “bell shaped curve” of the adult population (over 10 inches) is more natural and achieves a better predator/prey balance in the lake improving the overall ecology of the system.

Lake Istokpoga: 1999 - 2013

- Pre (1997 - 1999) vs Post (2006 - 2013)
 - Harvest of bass declined
 - Bass over 18 inches increased from 8% to 22% of the population
 - Tournament catch for bass over 18 inches increased by 48%
 - Tournament catch of bass over 24 inches increased by 150%
- With lower harvest, size structure shifted to an increase of larger fish



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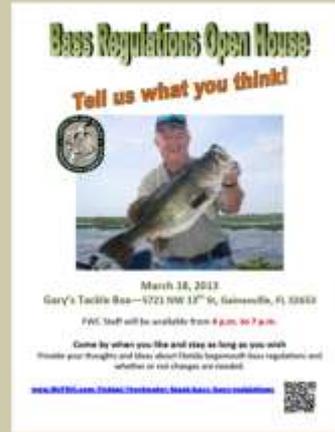
The slot limit regulation in Lake Istokpoga was successful in increasing the frequency of larger fish in the population, provided the abundant smaller fish for anglers desiring to keep fish, and both biologists and anglers considered the regulation a success. When we input data from Istokpoga into regulation scenario models, the proposed 16 inch rule predicted a similar outcome as was achieved with the slot limit. While not all lakes will respond to the regulation as is predicted by the Istokpoga data, we anticipate that similar results will occur in many lakes across the state.

Public Input to the Proposed Changes

- Surveyed anglers over two years
 - Outreach via media
 - On-line
 - E-mail
 - Distributed paper surveys
 - Public workshops
 - 10 before proposal
 - 15 for proposal reaction
- 8,000 + responses



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Concurrent with the through review of our data and the scientific literature, we conducted a diverse public engagement program to understand angler's opinions and desires. We conducted open house workshops first to understand angler's desires and opinions about our current regulations. Over 5,000 responses were received from these efforts. We also held meetings and posted web-based surveys on the proposed regulation changes and received an additional 3,000 web-based and 711 paper surveys responses.

Proposed Black Bass Regulations

Daily Bag Limit:

- All species included in five (5) fish daily aggregate black bass bag limit (no change)

Largemouth Bass:

- Only one (1) per day may be 16 inches or longer in total length



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Summary of all proposed statewide regulations for largemouth bass. Staff recommends no change to the daily possession limit, elimination of the minimum size limits and geographic zones, and the establishment of a 16 inch limit, where only one bass longer than 16 inches may be possessed per angler per day.

Benefits of Proposed Regulation

- Streamlines regulations
- Aligns with angler desires
- Improves population size structure
- Allows harvest of smaller, abundant bass
 - Increase growth rates
 - Lower concentrations of mercury in smaller bass
 - Meet expanding “locavore” movement
- Reduces harvest of quality sized bass
 - Manage for abundance of larger fish
 - Increase recruitment to trophy size
 - Better predator/prey ecological balance



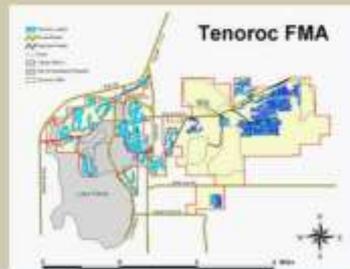
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Besides simplifying bass regulations (one geographic zone instead of three and special regulations drop from 58 to 16), meeting angler desires, and managing harvest to protect more quality sized bass, the proposed regulation makes it more desirable for anglers to harvest smaller bass. Encouraging the harvest of smaller bass may help thin populations, resulting in improved growth rates and ecological balance in many lakes and rivers.

Not only are small bass in abundance, but small bass typically contain lower amounts of mercury than occurs in the flesh of most larger freshwater and marine fish species. The locavore movement is expanding to the taking of wild fish and game for social and health reasons. The proposed regulation may encourage people to fish more and take home this sustainable resource to eat and enjoy. (See K. G. Tidball, M. M. Tidbass, and P. Curtis. Extending the locavore movement to wild fish and game: questions and implications. 2014. Accessed on-line: <https://www.agronomy.org/publications/nse/pdfs/42/1/185>)

Special Regulations

- Joe Budd Pond
- Orlando Urban Lakes (4)
- Wildcat
- Stick Marsh
- Kenansville
- Jackson (Osceola Co.)
- Tenoroc lakes
- Mosaic lakes
- Caloosa
- Perdido River – Alabama regs
- Jackson (Walton Co.) – Alabama regs
- Seminole – Georgia regs
- St. Mary's River – Georgia regs



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42 lakes with special regulations for largemouth bass will change to the proposed statewide regulations (72% fewer lakes managed under different regulations). Four of these waters (2 each in Georgia and Alabama) are border waters where most of the waterbody lies outside of Florida. We have discussed our options with GA and AL along with anglers and recommend that the best option is for Florida to adopt GA/AL regulations. Special regulations (mostly catch-and-release) will remain on 12 lakes and the primary factor for this recommendation is strong angler opinion to keep existing special regulations.

Wildlife Management Area Fishing Regulations – No Changes

- Northwest Region
 - Eglin AFB
 - Econfina Creek – Fitzhugh Carter

- Northeast Region
 - Tiger Bay
 - Lake George (Seminole Forest)

- Southwest Region
 - Hilochee



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Some fishing regulations are contained in rules pertaining to Wildlife Management Areas. These smaller lakes and ponds on some of our WMA's offer unique fishing experiences. All of these will remain unchanged, largely due to angler preference for catch-and-release.

Proposed Rules for Panhandle Bass Species

Suwannee Bass, Shoal Bass, Choctaw Bass, and Spotted Bass: 12 inch minimum size limit, only one (1) per day may be 16 inches or longer in total length, bag limit of 5 bass

Shoal Bass Conservation Zone: Establish catch-and-release zone in the Chipola River between Peacock Bridge and Johnny Boy Landing



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Species of black bass other than largemouth include Suwannee, shoal, Choctaw, and spotted. These species do not grow as big as largemouth and population sizes tend to be small in the waters where they exist. Protection of these smaller fish is warranted and strongly favored by local anglers.

The shoal bass state record was broken three times this past year. A five mile run in the Chipola River contains prime habitat for shoal bass and supports the most robust population. The concept of a catch-and-release zone in this run was widely supported by local anglers.



This map shows the upstream and downstream extents of the recommended Shoal Bass Conservation Zone in the Chipola River. Public support is high for this approach. FWC boat ramps provide the boundary markers and staff will erect display boards to advise anglers of this regulation.

Note: Harvest of largemouth bass within this Conservation Zone is allowed.

Public Support for Largemouth Bass Rules

- 71% support, 22% oppose, 7% neutral
 - Why opposed?
 - Statewide catch-and-release
 - Tournaments will be impacted
 - Small bass need protection
 - Current rules are effective
 - Face-to-face interactions increased support
 - Helped define outreach and education plan
 - Refine tournament exemption program



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Angler support to the proposal has been high with 71% in favor. When our biologists had opportunities to engage with anglers during meetings and workshops, often their concerns were addressed and support was over 80%. Tournament anglers thought the regulation would restrict the opportunities to hold events where fish are released after the weigh in. When told about our on-line bass tournament exemption program, these concerns were often alleviated. The opinions and beliefs of anglers helped formulate our outreach and education campaign that will commence if the Commission approves the regulation change. We are also using input from tournament anglers to refine and improve our on-line self-issuance program for permits that allow tournament participants temporary possession of bass outside established size limits until after weigh-in. This program also provides valuable data about bass fisheries and enables staff to communicate with tournament directors regarding best management practices for tournaments to increase fish survival and help reduce social conflicts with non-tournament anglers using boat launch areas during tournaments.

Public Support for Panhandle Bass Rules

- 12 inch minimum with 1 over 16 inches
 - 72% support, 7% oppose, 21% neutral
- Catch-and-release zone on Chipola River
 - 82% support, 15% oppose, 3% neutral



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Responses from anglers in the Panhandle area who fish rivers with the four other species of black bass indicate strong support for the proposed regulations. Both the limited harvest of bass over 16 inches and the catch-and-release zone for shoal bass on the Chipola River was supported by over 80% of anglers.

Documenting Desired Outcomes

- Fish population assessments: Index lakes and rivers
- Angler surveys
 - On-the-water = Effort, success, and harvest
 - Web-based, email, blog sites
- Tagging study
- Tournament data
- TrophyCatch data
- Annual report



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DFFM and FWRI will evaluate the effectiveness of the regulation by conducting fish population assessments statewide using selected index lakes. We also conduct surveys of anglers both on-the-water to document effort, harvest, and success along with web-based tools to assess angler opinions and attitudes. One key research tool we are using is a tagging study of trophy bass that provided the basis for the proposed regulation changes. Together with data provided by tournament directors and the TrophyCatch program, the tagging study has provided estimates of overall trophy bass population size and total catches of trophy bass.

Requested Action: Approve Proposed Rules

Daily Bag Limit:

- All species included in 5 fish daily aggregate black bass bag limit (**no change**)

Largemouth Bass:

- Only one (1) per day may be 16 inches or longer in total length
- Two new special regulations on Alabama border lakes
- 42 areas change from special to new statewide regulation

Suwannee Bass, Shoal Bass, Choctaw Bass, and Spotted Bass:

- 12 inch minimum size limit (**no change**), only one (1) per day may be 16 inches or longer in total length

Shoal Bass Conservation Zone:

- Catch-and-release section of the Chipola River



Effective date: July 1, 2016

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Summary of all the statewide regulations if changes are made as proposed. Existing special regulations will remain at 14 areas and two new special regulations are proposed to provide consistency with Alabama and Georgia regulations.

If Commission approves, Staff will develop a Notice of Proposed Rule, continue to work with stakeholders, and seek final approval at the February 2016 Commission meeting.

Proposed rules to be amended: 68A-20.005 and 68A-23.005

Rule language provided as attachment.

The following slides are background information and will not be presented.



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**Proposed Statewide Largemouth Bass
Regulation: “Five largemouth bass, only
one of which may be 16 inches or longer”**



These images help illustrate to anglers what sizes they are allowed to keep within the five fish daily limit: either five bass all less than 16 inches or four bass under 16 inches with one fish greater than 16 inches.

Tracking *TrophyCatch*®

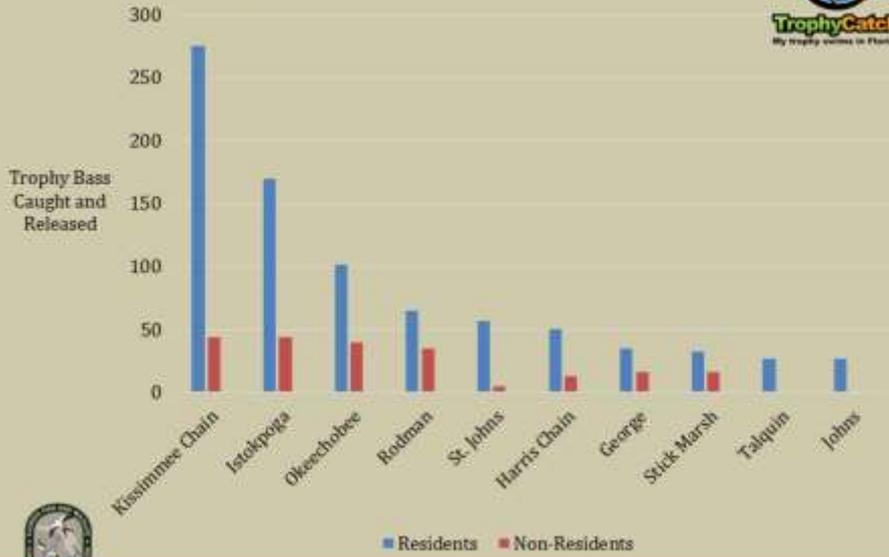
- Total registered anglers –
 - 5% from 41 states
- Total bass verified –
 - Non-residents submitted 23% (increasing each year)
- Impact of guides/tourism
 - \$1.2 million from TC fish
- Worldwide exposure



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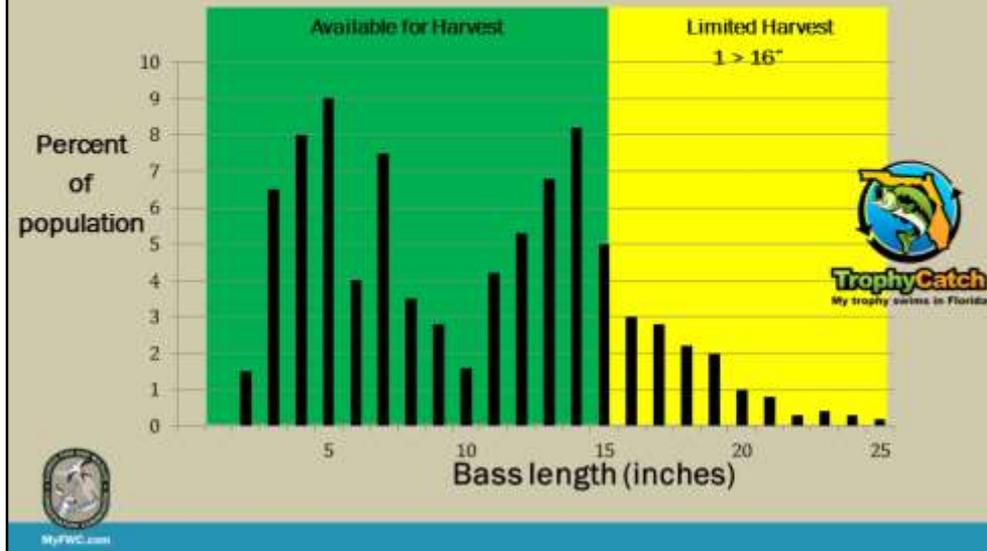


Top TrophyCatchSM Lakes



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Proposed Largemouth Bass Regulation: Daily bag limit of 5 fish with one over 16 inches



The proposed regulation allows for harvest of smaller, abundant bass under 16 inches in length; reduces harvest of bass over 16 inches by allowing only one bass over 16 inches; and maintains a daily bag limit of 5 fish. Increased protection of trophy bass (over 25 inches or 8 pounds) is being encouraged through the TrophyCatch Program. The TrophyCatch program is also designed to help evaluate the effectiveness of these new regulations in producing more trophy bass.

Region	Change to New Statewide Regulation	No Change	New Special Regulation
Northwest	Piney Z Lake Jackson (Leon County) Lake Talquin	Lake Seminole Joe Budd	Perdido River (AL regs) Lake Jackson (Walton Co.; AL Regs)
North/Central	Lochloosa and Orange Lake St. Augustine Rd Baymeadows Oceanway Hannah Park Pope Duval Bethesda Huguenot Pond Crystal Springs Ronnie Vanzant Park Savannah Lake Montgomery Lake Watertown Lang Lake	St. Mary's River	
Northeast	Secret Lake Lake Kerr	Turkey Lake Lake Underhill Shadow Bay Park Hal Scott Lake Wildcat Lake Stick Marsh Lake Keenansville Jackson (Osceola Co.)	

Lakes with special regulations drop from 58 to 16 largely to due public input and special biological considerations.

Region	Change to New Statewide Regulation	No Change	New Special Regulation
Southwest	Istokpoga Saddle Creek FMA Webb Lake Walsingham Park Lake Hardee County Park (2,3,4) Weohyakapka Gadsden Park Pond Web Marl Pits 1, 2, 3 Hardee County Park Derby Lake (Tenoroc) Freedom Lake Park Dover District Park Lake Steven J. Wortham Park Lake Al Lopez Park Lake Walsingham Park Lake Bobby Hicks Park Pond Largo Nature Preserve	Tenoroc (all other) Mosaic	
South Region	Okeehetee Plantation Heritage Tropical Lake Trafford Lake Okechobee	Caloosa	

WMA Special Regulations

- **Northwest Region**
 - Eglin AFB WMA
 - Duck Pond and Indigo Pond
 - 1/4, 24" MLL
 - Econfina Creek WMA
 - Fitzhugh Carter Area
 - Catch and Release
- **Northeast Region**
 - Tiger Bay WMA
 - Rattlesnake Pond and adjoining canals
 - Catch and Release
 - Lake George WMA
 - Jenkins Pond
 - Catch and Release
 - Seminole Forest WMA
 - Bear Pond
 - Catch and Release
- **Southwest Region**
 - Hilochee WMA
 - Peat Lake, Little Peat Lake, Stock Lake, Hidden Lake, Turtle Pond, and Osprey Unit
 - Catch and Release



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All of these will remain unchanged, largely due to preference of stakeholders.