This presentation summarizes actions taken by the Florida Fish and Wildlife Conservation Commission (FWC) in response to impacts from the 2017 Hurricane Season.

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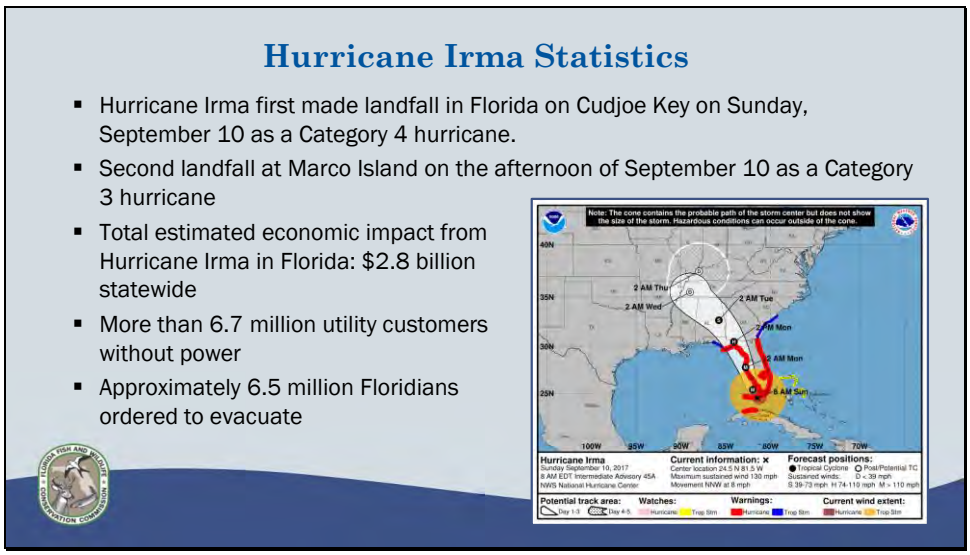
Photo courtesy: Weather Underground



On Sept. 4, 2017, Governor Scott declared a state of emergency in all 67 counties within the state of Florida to ensure that local governments would have ample time, resources, and flexibility to prepare as Hurricane Irma approached Florida.

Hurricane Irma fist made landfall in Florida on the morning of Sunday, Sept. 10, 2017 on Cudjoe Key as a Category 4 hurricane with sustained winds of 130 mph and peak recorded wind gusts ranging from 120-142 mph.

After crossing over the Florida Keys, Hurricane Irma made a second landfall later that afternoon on Marco Island as a Category 3 hurricane, and moved along the Florida peninsula as a Category 2 hurricane. North Florida and the Big Bend experienced Category 1 or Tropical Storm force winds through Sept.11.

Impacts from Hurricane Irma were felt throughout most of Florida, with a total estimated economic impact of approximately $2.8 billion statewide. The Florida Department of Environmental Protection estimated impacts related to marine debris of approximately $80 million.

Hurricane Irma caused widespread power outages throughout most of the state, and left more than 6.7 million utility customers without electricity by noon on Sept. 11.

More than 675 hurricane shelters were opened statewide, capable of housing a total population of more than 217,000 individuals. Approximately 6.5 million Floridians were ordered to evacuate.

FWC Law Enforcement Response

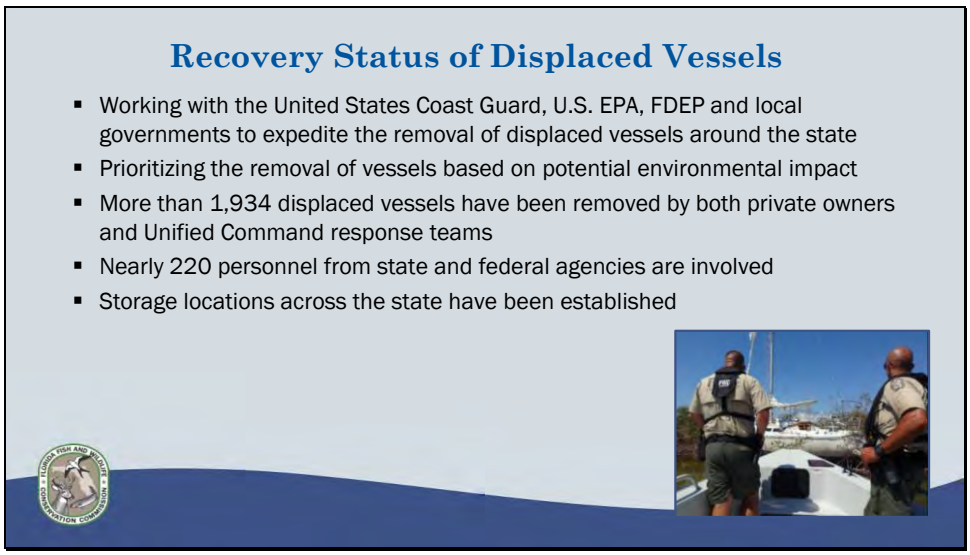
- 264 officers and operational support staff mobilized
- 92 law enforcement vessels mobilized
- Coordinated with Urban Search and Rescue teams consisting primarily of National Guard, State Fire Marshall, and Department of Financial Services
- Conducted reconnaissance immediately following the storm
- Conducted search and rescue missions
- Conducted humanitarian efforts and welfare checks
- Provided security patrols and law enforcement assistance
- Cleared debris
- Responded to flooding and high water events
- Conducted damage assessments
- Nearly 200 additional conservation officers from neighboring states were sworn in to assist with the response

Special Recognition

Florida Fish and Wildlife Conservation Commission
Medal of Valor with Lifesaving

"For extraordinary actions which result in the saving of a human life during a rescue operation in which the sworn member was exposed to peril beyond the call of duty."

Lieutenant James Yetters



FWC is working with the U.S. Coast Guard (USCG), U.S. Environmental Protection Agency (EPA), Florida Department of Environmental Protection (DEP) and local governments to expedite the removal of storm displaced vessels around the state, especially those hindering navigation, impacting commerce, and posing a threat to the environment.

A Unified Command to manage this response has been established between the FWC, USCG, and the EPA. The Unified Command is focused upon assessing, prioritizing, and recovering vessels displaced by Hurricane Irma wrecked upon the public waters of the state. This effort is being coordinated through the State's Emergency Support Function 10 (ESF10).

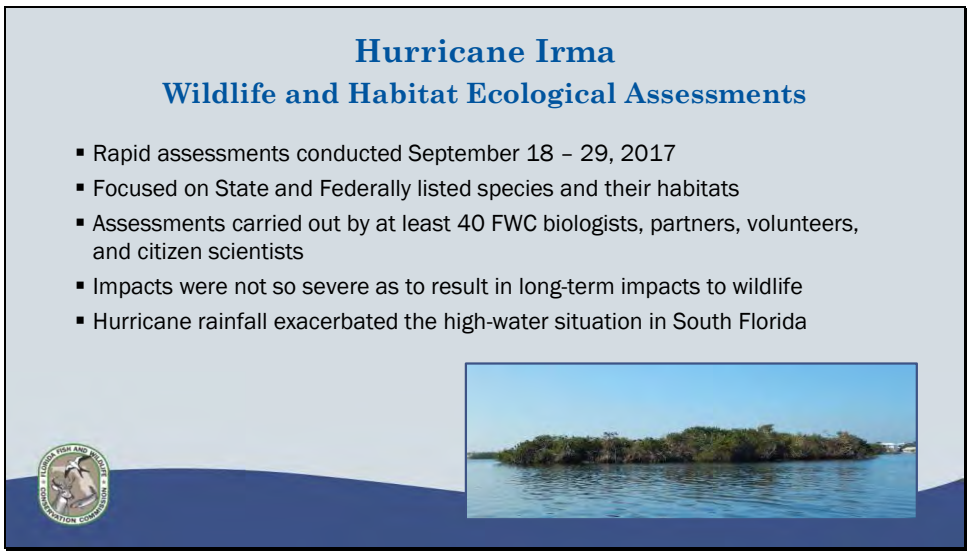
The ESF-10 is the framework by which federal support is coordinated with state agencies in response to oil spills or hazardous material releases. Partner agencies, including Florida DEP, National Oceanic and Atmospheric Administration, and Florida Keys National Marine Sanctuary, are contributing expertise and experience to the assessment and removal efforts.

Cleanup efforts and removal operations of displaced vessels have been divided in four USCG Sectors. These include Sectors, St. Petersburg, Key West, Miami, and Jacksonville with operations being completed in Sector St. Petersburg on November 16th. FWC Teams continue to be deployed to Monroe County, the most affected area of the state, to help evaluate and remove wrecked and displaced vessels.

Currently, 1,934 displaced vessels have been removed from Florida waterways by both private owners and Unified Command response teams.

Recovered vessels are being stored in temporary storage facilities were a diligent effort is being made to return them to their owners. Unclaimed vessels will be disposed of after 30 days from the notification of each vessel's owner.

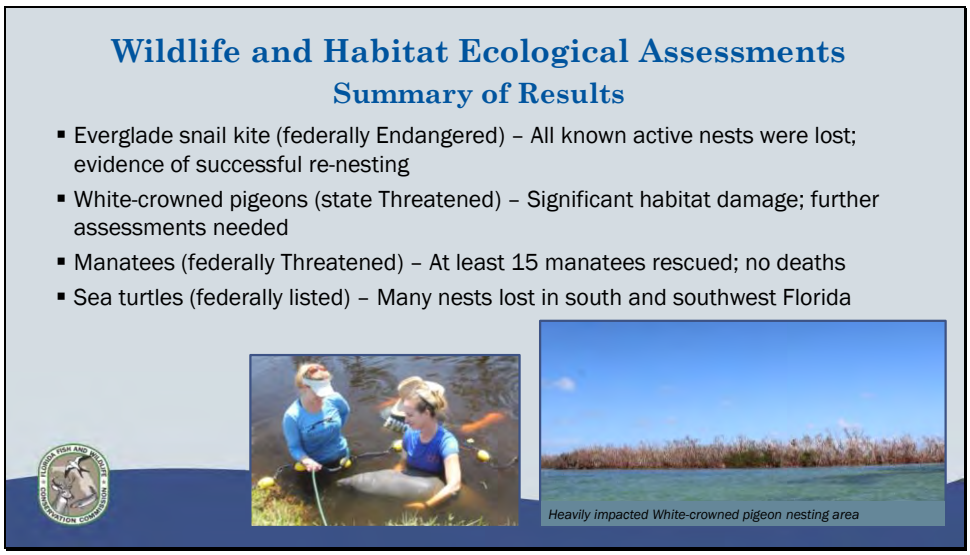
Nearly 220 personnel from state and federal agencies have been involved in this disaster response.



As soon as the conditions were safe, FWC's Biologists and managers started to asses the wildlife and habitat impacts associated with the passing of Hurricane Irma. This was an agency wide effort conducted between September 18-29th involving at least forty FWC biologists and coordination with our partnering agencies, volunteers and citizen scientists.

What we learned reinforces our knowledge that Florida's fish and wildlife species have experienced natural weather events such as hurricanes for thousands of years, and are generally well adapted for survival.

The majority of observed direct impacts were characterized as being not severe enough to result in long-term impacts to our wildlife. However, indirect impacts from the significant rainfall exacerbated the already high water conditions we were experiencing throughout the South Florida ecosystem.



The storm passed during the active breeding season of the Everglade snail kite, and there were 48 known active nests with 44 of those nests located in the Moonshine Bay area of Lake Okeechobee, where the FWC has used vegetation management, and prescribed burning to enhance the habitat in recent years. Unfortunately, all of the known nests were lost or failed due to the storm, but within weeks there was evidence of re-nesting and 18 new nests were established in the Rotenberger Wildlife Management Area.

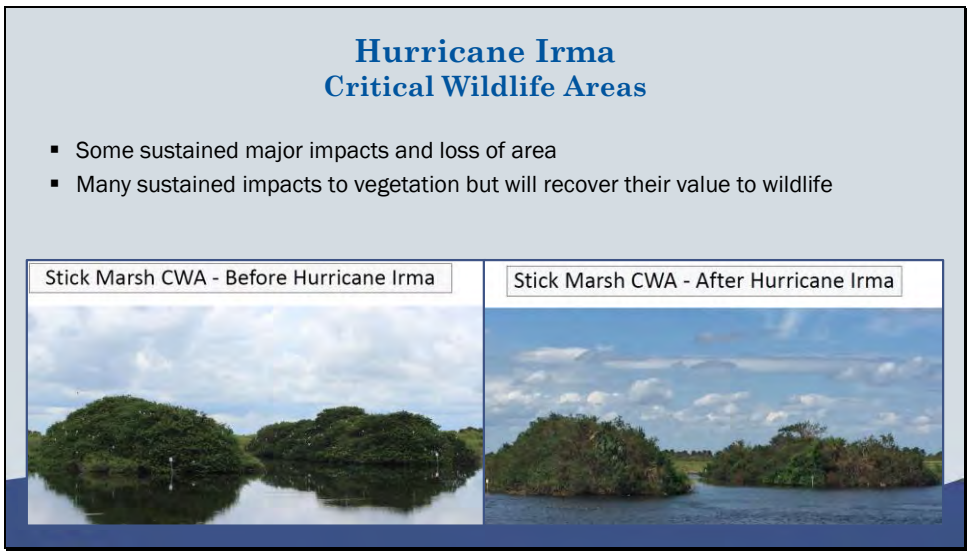
Approximately 240 Bald Eagle nests were checked and about 60-70 nests were lost due to the storm, but the storm hit prior to the breeding season and it is believed that no eggs or chicks were lost. Overall there are about 1,500 nests in Florida and the vast majority were not impacted by the storm.

Red-cockaded woodpeckers in South and central Florida did suffer some casualties. There were several lost cavities reported, one dead specimen, and an unknown number of eggs or hatchlings lost. Birds in the more northern reaches were not significantly impacted by the storm.

White-crowned pigeon habitats in the Florida Keys were heavily damaged by the storm. Fortunately, By September, the nesting season is mostly complete and there were no egg, chick or bird losses reported. This picture shows a heavily impacted nesting area, where the mangroves have been mostly defoliated, and many branches are broken. Our Biologists will revisit these nesting and foraging habitats during the upcoming nesting season to get a more complete picture of the impacts.

There were no Manatee deaths associated with the storm, and thanks to responsive FWC staff and volunteers at least 15 manatees were rescued from ponds, roadside ditches or other inappropriate places after the storm.

Unfortunately, sea turtle nests in the Florida Keys, Collier County and southern Miami-Dade County were lost due to the storm. However, many nests close to the dune from north Miami through Indian River County on the east coast survived the storm, and new crawls and nests were observed in these areas. Additionally, most of the nests in Lee County north through Pinellas County on the west coast survived, and nests in Northwest Florida had very little impact.



Our Critical Wildlife Areas did sustain some major impacts and loss of area. Our biologists observed vegetation impacts in many CWA's but it is thought that these areas will recover their value to Florida's wildlife. These photos show the Stick Marsh Critical Wildlife Area before and after the storm and are a good representation of the vegetation impacts.

Around the state by region, here are some of the more significant impacts.

In the North Central Region, many dunes were flattened and this may make nesting areas more vulnerable to tidal inundation and wash over. Fort George Inlet (Huguenot) CWA is an important area for nesting and it is estimated that 5,000 Royal Terns and 3,000 Laughing Gulls, along Willets and Wilson's Plovers, fledged from this site this year. FWC staff are working with our partners to determine if the damage to nesting areas can be addressed through vegetation management (herbicide and prescribed burning) to ensure suitable available habitat for next nesting season.

In the North East Region, the Stick Marsh CWA suffered the greatest vegetation damage to the canopy, and the photo examples will provide a good benchmark to monitor recovery.

In the Southwest Region, our Biologists observed mostly vegetation impacts, but birds remain present.

In the South Region the Second Chance CWA suffered the greatest damages to habitat. This CWA is an emergent coastal sandbar that is important for nesting shorebirds. Before and after comparisons of the CWA inform us that nearly all of the vegetation was lost and a blowout of the sandbar in the central area of the island has reduced the nesting area by approximately 40-50%. Additionally, on the nearby Big Marco Pass CWA, the status of 100+ recently fledged skimmers remains unknown.

Hurricane Irma
Wildlife Management Areas – Statewide Impacts

- Almost all areas in the North Central, Northeast, Southwest and South Regions closed to public access preemptively
- 30 lead WMAs reported an estimated $2.1 million worth of damage
- Wind and flood damage to infrastructure and roads
- 23 WMAs have individual roads still closed due to storm-related washouts
- Everglades Complex of WMAs remains closed to most public access

Fisheating Creek WMA

In our Wildlife Management Areas, almost all areas in the North Central, Northeast, Southwest and South Regions were preemptively closed to public access for safety purposes. At some point before, during or after the storm 116 of the 147 areas within the statewide WMA system were impacted by storm related closures. 30 lead WMA's reported an estimated $2.1 million in damages mostly associated with the wind and flood impacts to infrastructure, and 23 WMA's still have roads closed due to washouts.

In general, the costliest damages are associated with damaged structures in the in the South and Southwest Regions. These include:

- flood damage to structures at Fisheating Creek WMA camp ground as pictured,
- numerous buildings at Dinner Island WMA that sustained wind damage
- field house and stables at Babcock-Webb WMA that sustained wind damage
- roof damages at Hilochee WMA
- State owned residence at CREW WEA sustained severe wind damage.

Hurricane Irma
WMA Access and Public Hunting Impacts

- Quickly assessed and reopened WMAs to minimize loss of access, hunting opportunity
- Mitigated impacts to affected hunters who held limited-entry permits (e.g., quota permits, alligator tags)

With the statewide nature of the storm we recognized the impacts and inconveniences to our stakeholders and as soon as it was determined safe, our staff worked quickly to assess each WMA and get them reopened as soon as possible to minimize the loss of access or hunting opportunity.

Additionally, staff conducted a statewide assessment to determine the impacts on scheduled limited entry hunts, and for those hunts that were affected, preference points were restored to the quota hunt permit holders. Alligator hunts in many areas were also impacted, and permit holders were given the option of taking part in a 30-day season extension or requesting a refund of their license and tag fees.

Hurricane Irma Impacts
Everglades Complex of Wildlife Management Areas

- Widespread moderate impacts
  - Vegetation defoliation
  - Broken branches
  - Uprooted smaller trees
  - Vegetation wrack lines
- Localized areas of higher impacts
  - Uprooted larger trees
  - Uprooted large cypress trees
  - Damage to planted trees on restoration islands
  - Additional islands inundated

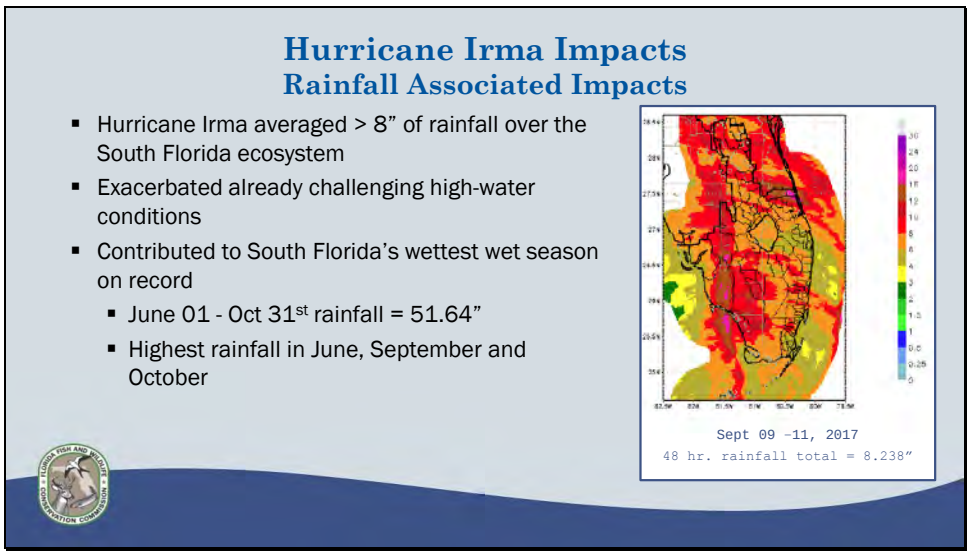
tree island WCA-3AS

In the Everglades and Francis S. Taylor WMA, collaboration with our local water management district provided an opportunity to participate in a helicopter survey of the area to observe habitat impacts, known bird rookeries and water control structures.

The aerial survey methods provided an excellent way to rapidly assess the remote areas of the Everglades and view key nesting and foraging areas. What was observed was widespread but moderate wind impacts, which were characterized by defoliation, broken branches, uprooted smaller trees and sizable wrack lines of dead vegetation distributed throughout the sawgrass ridge ecosystem.

All of the colonial wading bird nesting sites we observed were moderately impacted and it is thought the impacts are not likely deter future nesting.

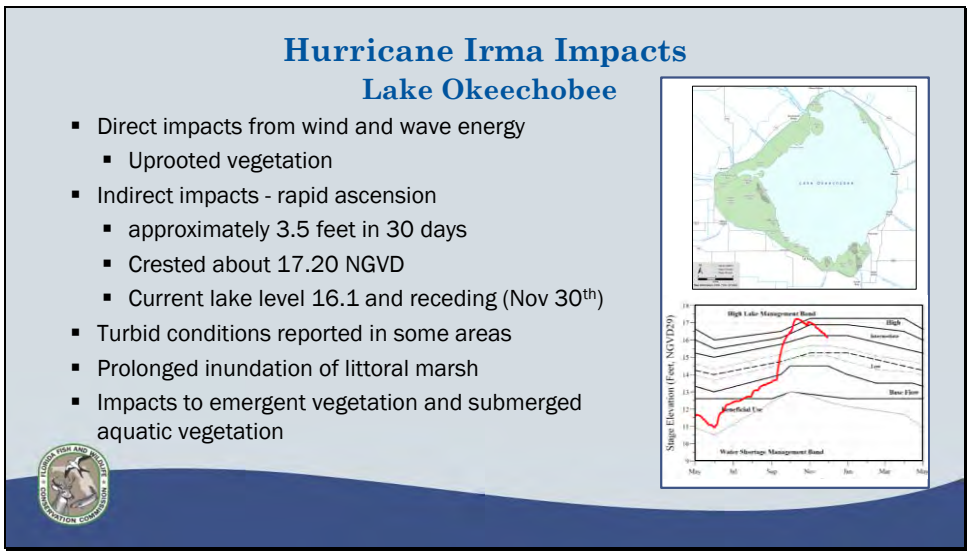
There were areas of localized higher impacts, where singular large tress, grouping of trees, or trees that were plated by our staff were uprooted. On these islands, FWC Biologists and managers have already started a more detailed assessment of tree mortality and they are taking action where possible by standing up pushed over trees, and clearing debris as a preventative measure to reduce the opportunity for exotic plants to colonize the impacted areas.



The major indirect impact of Hurricane Irma was associated with the significant rainfall that accompanied the storm. Hurricane Irma’s rainfall average exceeded 8” across the entire South Florida ecosystem, with many local areas receiving significantly higher rainfall. This image provided by the South Florida Water Management District, shows the rainfall patterns and totals for a 48-hr period during the storms passing, with the darker reds and purples corresponding to the highest totals. Most notably, the highest rainfalls were received along the western side of peninsular where the storm made its second landfall, and unexpectedly in north east St Lucie County.

Hurricane Irma’s rainfall contributed significantly to our record setting wet season, and created challenging high water conditions in Lake Okeechobee and exacerbated the high water situation the Everglades.

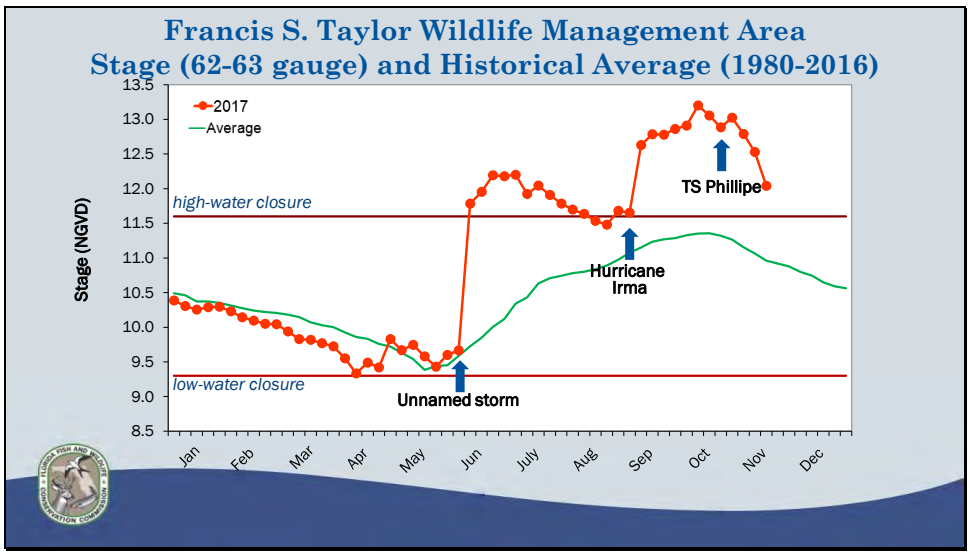
All told and measured, the 2017 wet season was the wettest on record and surpassed the previous record set in 1947. Looking over a longer period of time, the 2016-2017 years comprise the wettest 24 month period on record since 1994-1995. Not coincidently, the 1994-95 season was also a year in which the FWC had considerable challenges with prolonged high water in the Everglades.



In Lake Okeechobee, the direct impacts from the wind and wave energy uprooted nearshore vegetation and created extensive wrack lines of dead vegetation that average about 20-meters wide. As the storm passed, wind forced water in the Lake northward, and water level recorders inform us that north and south side of the lake displayed an differential up to 10.5 feet while the storm passed.

The heavy rainfall associated with the storm drove water levels up rapidly and the Lake rose 3.5 feet in elevation in 30-days, ultimately cresting at a level of 17.20 feet on October 13th. This is the highest level on record since the adoption of the current regulation schedule in 2008 (highest since 2004).

At lake levels above 15.5 feet the entire 125,000 acre littoral marsh, which is shown on the map in green along the western shoreline of the Lake are inundated. The littoral marsh provides ecosystem services for the Lake, and provides important nesting, forage and breeding areas for a wide variety of Florida's wildlife. Prolonged, deep inundation of the of the littoral marsh impacts the quality of this important habitat.



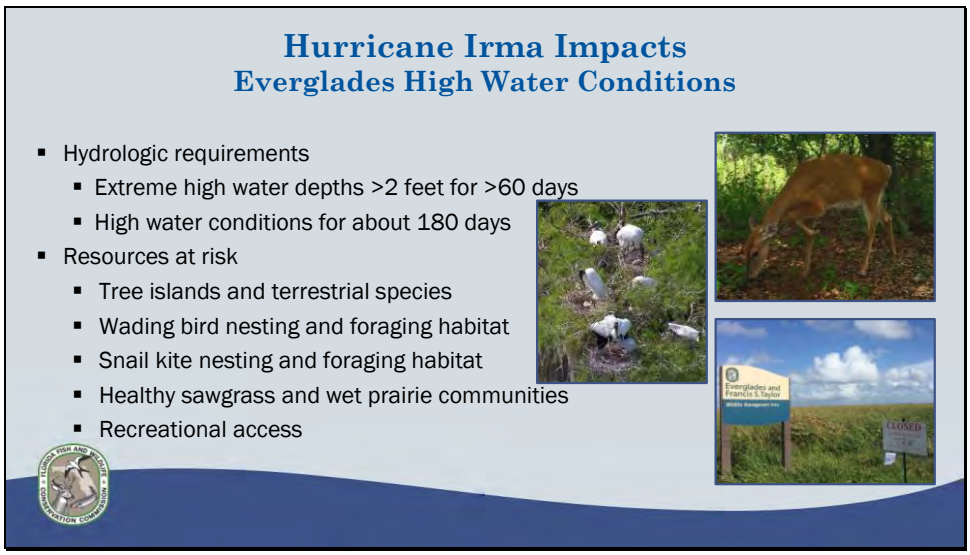
In the Francis S. Taylor Wildlife Management Area, stage gauges show the impacts of Irma's rainfall, and the other significant rain events of the season.

The chart shows the average stage the 62+63 gages in red and the 1980-2016 historical level in green, which is a desirable condition. The horizontal lines at 9.38 and 11.6 are used as the trigger point to implement public access restrictions as conservation measures.

These data clearly show the effects of the three most significant rainfall events and immediately following each event starting in June when the stages rose dramatically.

When Hurricane Irma hit on September 9th the Everglades Complex of WMA's had already been under high water conditions for about 90 days, since early June. Hurricane Irma pushed stages up to nearly record levels, that we have not seen since the devastating 1994-95 high water events.

After Hurricane Irma, water levels were dropping then TS Phillipe added an additional 2 -3" of rainfall across the WMA driving stages back up, and erasing much of the progress that had been made by water managers. Following TS Phillipe, a meaningful recession has been underway and stages are beginning to approach the closure criteria but still remain above the long term average.

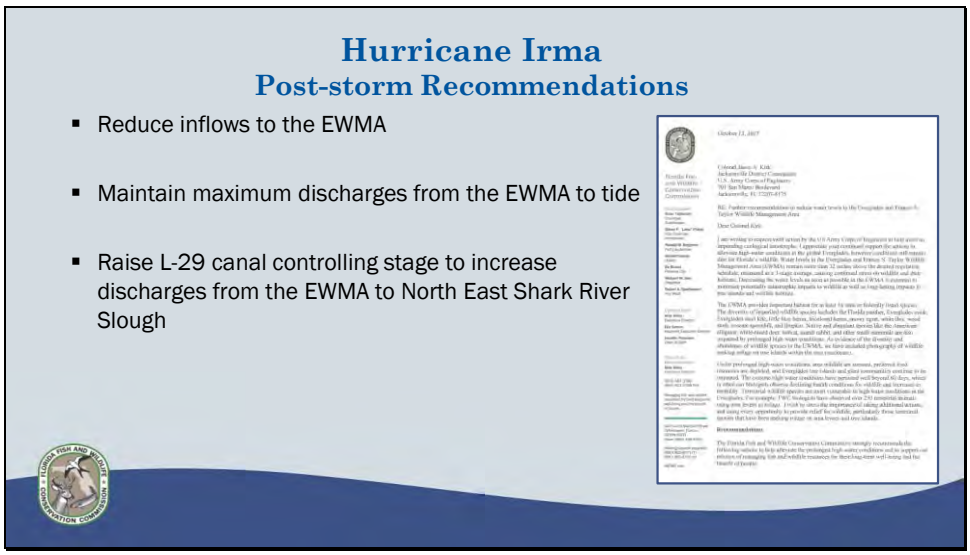


Our biologists understand the effects of high water in the Everglades ecosystem and have documented that high water persisting greater than 2.0 feet for longer than 60 days is detrimental to the areas ecology and wildlife resources. This current high water event started in early June and has lasted for about 180 days.

Prolonged high water conditions put many natural resources and imperiled wildlife species at risk. In particular, our terrestrial wildlife species are more vulnerable to disease, starvation and predation during high water events.

Additionally, habitats like the elevated tree islands, colonial bird nesting and foraging habitats, and wet prairies remain at risk during prolonged high water conditions.

Wet prairies in the Everglades WMA, particularly in more southern portions, have historically been important habitat for the federally endangered Everglade snail kite and its prey, the apple snail. The wet prairies and the ridge and slough communities also provide critical foraging habitat for a wide variety of birds and a high-quality browse for deer as long as the water depths remain compatible and do not significantly alter behaviors or movements.

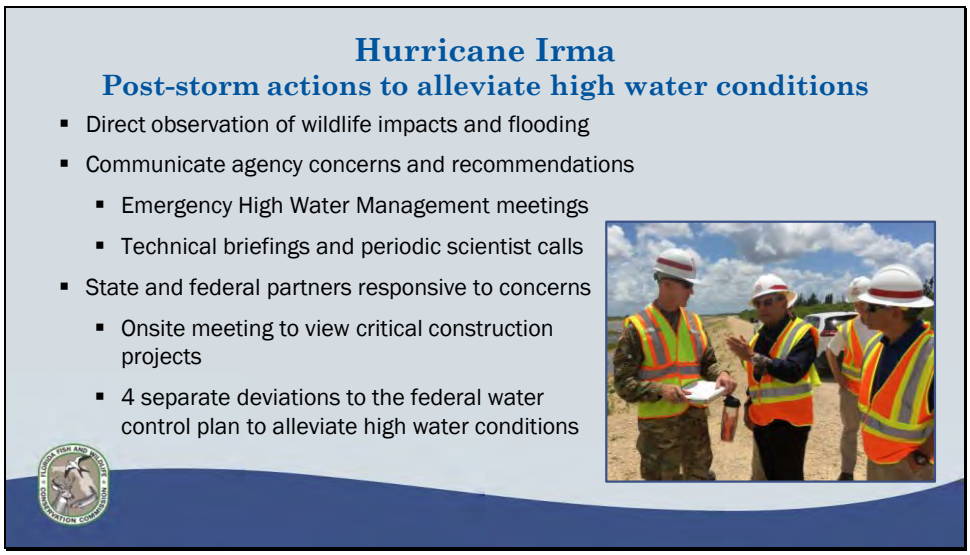


The agency developed three primary recommendations aimed at lowering the water levels and reducing the duration of high water to protect our wildlife and the areas ecology. These recommendations were transmitted to the U.S. Army Corps of Engineers and all of the state and federal partners in restoration.

The recommendations included:
Reducing inflows to the Everglades WMA in a manner that holds water in historically deeper areas.

Maintain maximum discharges from the WMA to the Atlantic Ocean through existing water control structures and conveyance canals.

Increase discharges from the Everglades WMA to North East Shark River Slough in Everglades National Park by utilizing the full capacity of the L-29 canal up to 8.5 feet NGVD, and maximizing discharges through the S-333 water control structure. This discharge structure is the main discharge point from the Everglades WMA to Everglades Nation Park.

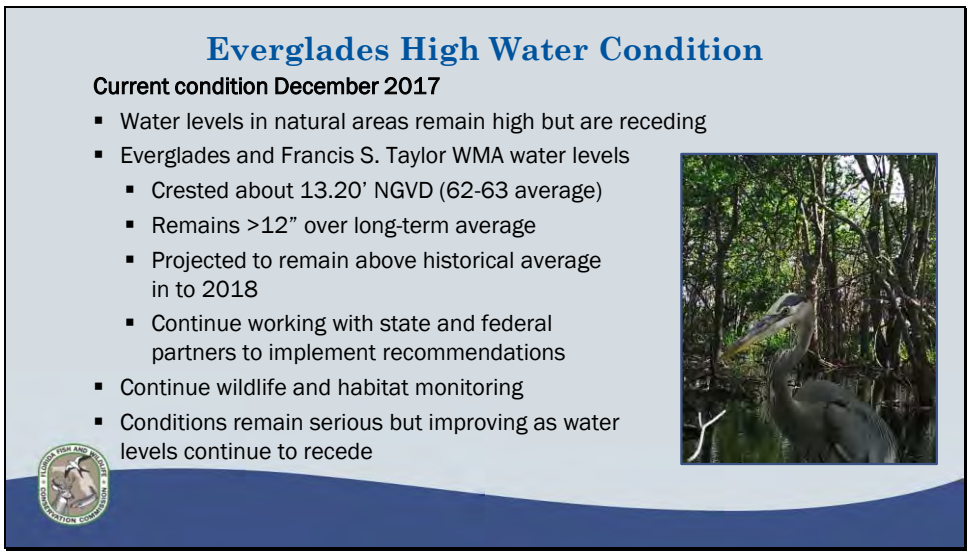


Since stages rose in June, and we were already under a closed condition when Irma hit, we had an existing process for agency-to-agency communication established with our state and Federal partners. This photo was taken by our Executive Director during an onsite meeting and observational tour of critical restoration projects (Contract 8 and 8A) in the southern end of the system, with FDEP, SFWMD, FWC and USACE

Additionally, the regularly scheduled Periodic Scientists Calls provide an opportunity for our staff to communicate the wildlife status and agency recommendations.

The state and federal agencies have been responsive to our concerns and have tried to work with us to improve the conditions. In doing so, the U.S Army Corps of Engineers has conducted four separate deviations to the water control plan, and each deviation requires full NEPA documentation and coordination across all agencies, tribal nations, and stakeholders.

Under these extreme conditions, each deviation has played a specific role in water management, and cumulatively they have approximately doubled the volume of water that can be moved out of the Everglades WMA help to alleviate the high water conditions.



Under the current conditions, water managers are using the flexibility provided by the deviations to reduce the inflows to the Everglades natural areas and increase outflows. The combination of the seasonal transition to a drier rainfall pattern and the added flexibility of water management operations has contributed to significant reductions in the water levels across the Everglades Complex of WMA's and all areas continue to recede.

However, water levels in the Everglades and Francis S Taylor WMA remain more than 12" above the historical level for this time of year and our Biologists will continue to monitor the wildlife and habitat conditions until water levels recede to a seasonably compatible level.
We anticipate the conditions will continue to improve but may remain serious for wildlife until the stages recede below the criteria and wildlife resume more normal behaviors.

As a management strategy, we collectively increased stakeholder communication on the high water situation. Internally, staff worked closely with Commissioner Bergeron and our Executive Office to develop recommendations and communicate them with photography highlighting the abundance and diversity of wildlife stranded on tree islands in the Everglades.

We worked with Community Relations Office to coordinate a press release of the recommendations, and display the recommendations letter, and photography on the MyFWC homepage for our stakeholders. Staff and leadership continually communicated our concerns and recommendations to stakeholders, and partnering agencies.

Our Commissioner appeared before the South Florida Water Management Districts Governing Board to thank them for their cooperation and support throughout this season, and help all of our stakeholders understand the importance of maintaining water levels that are compatible with the areas wildlife and ecology.

On November 3rd the South Region hosted a media event and provided invited press members the opportunity to observed the high water conditions directly. The event was very successful, thanks to the assistance of our staff and leadership, and resulted in a number of media postings, videos and news release that reached a wide audience.

In closing, it has been a long and eventful season, and we would like to share with our fellow Commissioner's and audience some of the media coverage form the November event highlighting the high water conditions we have been experiencing in South Florida.

Impacts to Marine Fisheries

- Sunken charter and commercial vessels
- Lost dockage and infrastructure
- Numerous displaced vessels
- Impacts to fish houses from storm damage and loss of power
- Losses to fishermen's houses and property
- Loss of commercial lobster trap gear
- Loss of fishing days
- Fuel and ice shortages

Hurricane Irma made significant impacts to Florida's saltwater fishing industries, including sunken charter and commercial fishing vessels, lost dockage and infrastructure, a large number of displaced recreational and commercial vessels, impacts to fish houses from storm damage and extended loss of power, losses to fishermen's houses and property, loss of commercial lobster trap gear, loss of fishing days, as well as fuel and ice shortages.

Photo courtesy of Jeff Cramer.

After Hurricane Irma had moved through Florida, FWC staff immediately began to assess needs and provide assistance to the fishing industry. Staff from the Division of Marine Fisheries Management (DMFM) conducted wellness checks by placing telephone calls to commercial fishermen, wholesale and retail seafood dealers, and charter fishing operations. DMFM staff also held daily conference calls with leaders from Florida's commercial fishing industry to identify and facilitate meeting immediate industry needs. Staff also coordinated with small businesses to help them apply for immediate short-term loans up to $25,000 to bridge the gap between the time damage is incurred and when a business secures other financial resources, including insurance claims. The Florida Small Business Emergency Bridge Loan Program is administered by the Florida Department of Economic Opportunity in partnership with the Florida Small Business Development Center Network. At the direction of Governor Scott, FWC also issued Executive Orders implementing several regulatory changes to help Florida's commercial fishermen recover from the effects of Hurricane Irma and get back to work.

Governor Scott sent a letter to the U.S. Secretary of Commerce requesting a broad-based federal fishery resources disaster declaration to provide streamlined and expedited relief for businesses that rely on Florida's commercial and recreational fishing industry. FWC staff worked with Florida's Congressional delegation to determine economic impacts to Florida's fisheries and funding needs.

FWC photo by Andy Grayson

Assistance Provided to Fishermen

Commercial

- Extension of renewal deadlines for a variety of 2017/2018 endorsements to June 30, 2018 (statewide)
- Spiny lobster trap fishery (Collier, Dade, and Monroe counties)
  - Cooperative trap recovery efforts authorized
  - Waived fees for replacement trap tags
  - Waived trap tag requirement until Jan. 1, 2018
- UF/Sea Grant fly-overs to locate lost traps
- DMFM received $132,892 grant to facilitate additional trap recovery efforts

Recreational

- Governor Scott waived recreational license requirements for Florida law enforcement officers, first responders, and utility workers until June 30, 2018
- Added days to Gulf gray triggerfish season

Several commercial endorsements must be renewed by Sept. 30 of each year. To provide financial and regulatory relief for commercial harvesters impacted by Hurricane Irma, the 2017/2018 renewal deadlines for the following endorsements were extended to June 30, 2018 via Executive Order: spiny lobster commercial dive, marine life, blue crab, and lampara net.

Additional measures were implemented by Executive Order to assist the commercial spiny lobster trap fishery. Cooperative lobster trap recovery efforts were authorized to allow fishermen to locate and recover each other's lost traps. Fees for replacement spiny lobster trap tags were waived for the 2017/2018 season to replace trap tags purchased and received prior to Hurricane Irma. The requirement that all lobster traps must have a current Commission-issued trap tag permanently affixed was waived through Jan. 1, 2018. Replacement trap tags have been mailed to fishermen. Following the storm, the University of Florida and Florida Sea Grant worked with commercial fishermen to conduct fly-overs to locate lost traps. The Division of Marine Fisheries Management received a $132,892 grant from the National Fish and Wildlife Foundation to facilitate additional trap recovery efforts.

To show appreciation for hurricane response efforts, Governor Scott announced in September that Florida law enforcement officers, first responders, and electric utility workers will be able to enjoy license-free saltwater and freshwater fishing though June 30, 2018.

To provide recreational anglers with fishing opportunities that were missed due to impacts from Hurricane Irma, FWC issued an Executive Order to add an additional weekend to the recreational gray triggerfish season in state waters of the Gulf of Mexico. This action added Oct. 21 and 22 to the previously scheduled dates of Sept. 1-4, Sept. 9 and 10, Oct. 7 and 8, and Oct. 14 and 15.

Commercial Spiny Lobster Trap Fishery: Ideas for Future Seasons

- Waive spiny lobster trap tag fees for the 2018-2019 season
  - Current fee of $1.00 for each lobster trap certificate owned to renew trap tags each year
  - Average of 473,251 trap tags issued in each of the past 5 license years
- Begin trap soak period earlier so that it immediately follows the two-day sport season, long-term
  - Boats would leave dock starting at 12:01 a.m. on the Friday following the sport season to deploy traps
  - In 2018, this would lengthen the soak period from 5 days to 10 days

Direction requested

Because the commercial spiny lobster fishery sustained significant impacts from Hurricane Irma, fishery leaders have requested that the Commission consider additional measures to extend relief for future seasons.

Representatives from the commercial spiny lobster trap fishery have requested that the Commission consider waiving lobster trap tag fees for the 2018-2019 season. These trap tags must be purchased each year and placed on traps prior to each open season. Currently, commercial lobster trap fishermen pay $1.00 per lobster trap certificate owned to renew lobster trap tags each year. Over the past five license years, an average of 473,251 spiny lobster trap tags have been issued annually, with each endorsement holder owning anywhere between 1 and 8,657 spiny lobster trap certificates. Although the spiny lobster season begins in August each year, commercial lobster trap fishermen typically spend the months when the fishery is closed (April – July) preparing their trap gear for the following season, which includes placing new commission-issued trap tags on each trap. As a result, many fishermen renew their licenses and purchase their lobster trap tags for the following season well in advance. Waiving trap tag fees for the 2018-2019 season would assist those still recovering from losses due to Hurricane Irma.

Commercial spiny lobster trap fishery representatives have also requested that the Commission consider a regulatory change to begin the trap soak period earlier so that it immediately follows the two-day recreational sport season for future seasons, long-term. This change would allow commercial lobster trap fishermen to leave the dock starting at 12:01 a.m. on the Friday following the sport season to begin deploying traps prior to the regular season. Currently, baited spiny lobster traps may be placed in the water on Aug. 1 each year, five days prior to the opening of the regular lobster season.

Additional considerations are provided on the following slide.

Extending the trap soak period would allow additional time and flexibility for harvesters to place traps in the water before the start of the regular spiny lobster season. This may potentially result in a more robust harvest in traps at the beginning of the season. The two-day recreational spiny lobster sport season occurs on the last consecutive Wednesday and Thursday of July each year. Currently, traps may be placed in the water on Aug. 1 each year, which provides a 5-day soak period before the regular spiny lobster season opens on Aug. 6. If the soak period were extended to begin on the Friday following the two-day recreational sport season, the soak period would begin on a different date each year and the length of the soak period would vary annually.

Beginning the trap soak period earlier long-term could also result in higher mortality of bycatch while traps soak untended. This could include higher mortality of undersized lobsters and egg-bearing females, and may also result in user conflicts.

Landings in the commercial spiny lobster fishery are highest at the beginning of the season, decreasing throughout the season. Approximately 50% of all lobster landed in a given season are harvested in the first two months of the season (August and September). Of all commercial harvest methods, the spiny lobster trap fishery accounts for more than 90% of all commercial lobster landings each year.

Staff requests Commission direction on modifying the FWC's spiny lobster regulations to extend the trap soak period long-term to immediately follow the two-day recreational spiny lobster sport season.

FWC photo by Kyle Miller

Federal Fisheries Disaster Declaration

- Governor Scott requested federal disaster declaration
- Fishery disaster could be declared by U.S. Secretary of Commerce
- Congress may provide funding to assist commercial fishermen, charter operations, and associated infrastructure for losses
- Worked with NOAA in October and November to do a rapid damage assessment to quantify loss associated with disaster
  - Commercial Industry
    - Fishermen
    - Fish houses and wholesale dealers
  - Charter captains
  - Fishing infrastructure-related businesses

Recreational and commercial fishing is vital to Florida's economy. Recreational saltwater fishing in Florida had an economic impact of $7.6 billion in 2016. The dockside value of Florida's commercial saltwater fisheries is estimated to be more than $244 million.

On Oct. 2, Governor Scott requested a federal fishery resources disaster declaration to provide streamlined and expedited relief for businesses that rely on Florida's commercial and recreational fishing industry. NOAA Fisheries will evaluate Governor Scott's request. Based on this evaluation, the U.S. Secretary of Commerce may declare a fishery disaster. Congress may appropriate funding for fishery disaster relief to assist commercial fishermen, charter operations, and associated infrastructure for losses. If Congress appropriates funds, NOAA Fisheries will work with affected entities to distribute the funds consistent with the statutory requirements and conditions of the appropriation.

In October and November, FWC worked with NOAA to complete a rapid damage assessment to quantify hurricane associated losses for commercial fishermen, fish houses and wholesale seafood dealers, charter fishing operations, and fishing infrastructure-related businesses. This data should be summarized in the coming weeks.

U.S. Coast Guard photo by Petty Officer 2nd Class Michael Himes.

Moving Forward

- Agency will continue to work on Irma items
  - Displaced vessels
  - Federal Fisheries Disaster declaration
  - Assessing and refining FWC's internal hurricane response activities
- Direction requested on:
  - Waiving 2018-2019 spiny lobster trap tag fees of $1.00 per trap
  - Extending the commercial spiny lobster trap soak period long-term to immediately follow the two-day sport season