



AGENDA
TAVARES CITY COUNCIL
April 7, 2021
4:00 PM
TAVARES CITY HALL COUNCIL CHAMBERS
201 E MAIN STREET, TAVARES

(Members of the public wishing to speak on an item that is on the agenda must fill out a Request to Speak form available from the City Clerk or at the Council Meeting prior to the meeting being called to order. In addition, the Mayor will ask for comment under the agenda item titled "Audience to be Heard" for matters not on the Agenda. For further information contact the City Clerk at (352) 742-6209 or snovack@tavares.org)

I. CALL TO ORDER

II. INVOCATION/PLEDGE OF ALLEGIANCE

Tab 1 Pastor Eric Filkin, Bridges Covenant Church

III. APPROVAL OF AGENDA

IV. PROCLAMATIONS/PRESENTATIONS

Tab 2 Proclamation - Water Conservation Month (Mayor)

Tab 3 Proclamation - Retirement of Dr. Diane Culpepper, Executive
Director of Lake Technical College (Mayor)

V. SWEARING IN BY CITY ATTORNEY AND DISCLOSURE OF EXPARTE COMMUNICATIONS

VI. READING OF ALL ORDINANCES/RESOLUTIONS INTO RECORD

VII. CONSENT AGENDA

Tab 4 Approval of the March 17, 2021 City Council Regular Meeting
Minutes (City Clerk)

Tab 5 Resolution #2021-06 - Adoption of 2021-2026 Lake County Local
Hazard Mitigation Strategy Plan (LMS)

Tab 6 Request Council Approval to Amend Purchasing Policy for Federal
Award Compliance (Finance)

VIII. RESOLUTIONS

Tab 7 **Resolution 2021-05 - Preemption of Municipal Home Rule Powers (Mayor)**

IX. ORDINANCES - PUBLIC HEARING

First Reading

Tab 8 **Ordinance 2021-02 - Koenke Property - Annexation and Rezoning of approximately 05.74 acres located east of CR-561, south of Lake Industrial Blvd. (Community Development)**

Tab 9 **Ordinance 2021-03 - Koenke Property - Small Scale FLUM Amendment of approximately 05.74 acres located east of CR-561, south of Lake Industrial Blvd. (Community Development)**

Second Reading

X. GENERAL GOVERNMENT

Tab 10 **Board Appointment - Planning and Zoning Board (Mayor)**

Tab 11 **Request Council's approval to issue Request for Proposal (RFP) for Debt Financing to Extend Water, Sewer, Reclaim Capital Lines on Woodlea Rd. (Finance)**

Tab 12 **Discuss the FY 2021 Current Year Budget Deferred Items (City Administrator)**

XI. NEW BUSINESS

XII. OLD BUSINESS

XIII. AUDIENCE TO BE HEARD

XIV. REPORTS

Tab 13 **City Administrator Report**

Tab 14 **City Council Member Reports**

XV. ADJOURNMENT

F.S. 286.0105 If a person decides to appeal any decision or recommendation made by Council with respect to any matter considered at this meeting, he will need record of the proceedings, and that for such purposes he may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.

Individuals with disabilities needing assistance to participate in any of these proceedings should contact the City Clerk at least two (2) working days in advance of the meeting date and time at (352) 742-6209.

**AGENDA SUMMARY
TAVARES CITY COUNCIL
4/7/2021**

AGENDA TAB NO.: 1

SUBJECT TITLE: Pastor Eric Filkin, Bridges Covenant Church

OBJECTIVE:

Pastor Eric Filkin, Bridges Covenant Church, will provide the invocation and lead those present in the Pledge of Allegiance.

SUMMARY:

Pastor Eric Filkin, Bridges Covenant Church, will provide the invocation and lead those present in the Pledge of Allegiance.

OPTIONS:

N/A

STAFF RECOMMENDATION:

N/A

FISCAL IMPACT:

N/A

LEGAL SUFFICIENCY:

N/A

ATTACHMENTS AVAILABLE TO THE PUBLIC UPON REQUEST:

Attachments not provided are available to the public upon request to the City Clerk.

**AGENDA SUMMARY
TAVARES CITY COUNCIL
4/7/2021**

AGENDA TAB NO.: 2

SUBJECT TITLE: Proclamation - Water Conservation Month (Mayor)

OBJECTIVE:

For the Mayor to read a proclamation declaring April 2021 as Water Conservation Month with adoption by the Tavares City Council.

SUMMARY:

Susan Davis, Intergovernmental Coordinator for the Governmental Affairs Program, St. Johns River Water Management District, has requested the City issue a proclamation declaring April 2020 as Water Conservation Month.

2021 marks the 23-year anniversary since April was first established as Water Conservation Month.

The Florida Section American Water Works Association,(FSAWWA), Florida's Water Management Districts, and City of Tavares are working together to increase awareness about the importance of water conservation and encouraging businesses, industries, schools, and citizens to save water and thus promote a healthy economy and community. April has been designated as Water Conservation Month as it is typically a dry month and water demands are most acute.

OPTIONS:

1. The Mayor to read a proclamation declaring April 2021 as Water Conservation Month with adoption by the Tavares City Council.
2. Do not adopt the proclamation.

STAFF RECOMMENDATION:

Option 1, the Mayor to read a proclamation declaring April 2021 as Water Conservation Month with adoption by the Tavares City Council.

FISCAL IMPACT:

N/A

LEGAL SUFFICIENCY:

N/A

ATTACHMENTS AVAILABLE TO THE PUBLIC UPON REQUEST:

1. Water Conservation Month 2021

Attachments not provided are available to the public upon request to the City Clerk.



PROCLAMATION
WATER CONSERVATION MONTH
APRIL 2021

WHEREAS, water is a basic and essential need of every living creature; and

WHEREAS, the State of Florida, Water Management Districts and the City of Tavares are working together to increase awareness about the importance of water conservation; and

WHEREAS, the City of Tavares and the State of Florida has designated April, typically a dry month when water demands are most acute, Florida's Water Conservation Month, to educate citizens about how they can help save Florida's precious water resources; and

WHEREAS, the City of Tavares has always encouraged and supported water conservation, through various educational programs and special events; and

WHEREAS, every business, industry, school and citizen can help by saving water and thus promote a healthy economy and community; and

NOW, THEREFORE, as Mayor of the City of Tavares, I do hereby proclaim the month of April as

Water Conservation Month

PASSED AND DULY ADOPTED by the Tavares City Council on this 7th day of April, 2021

Amanda Boggus, Mayor

**AGENDA SUMMARY
TAVARES CITY COUNCIL
4/7/2021**

AGENDA TAB NO.: 3

SUBJECT TITLE: Proclamation - Retirement of Dr. Diane Culpepper, Executive Director of Lake Technical College (Mayor)

OBJECTIVE:

For the Mayor to read a Proclamation declaring April 7, 2021 as Dr. Diane Culpepper Day with adoption by the Tavares City Council.

SUMMARY:

Dr. Diane Culpepper, Executive Director, Lake Technical College, will be retiring in August 2021. She has served the students and community in her capacity as Executive Director since July 2010. During her tenure she has strengthened private/public partnerships through joint initiatives that have significantly improved education opportunities throughout Lake County. Some of those initiatives include the following:

- Securing millions of dollars in funding to Lake Technical School with direct benefits to the residents of Tavares, neighboring communities, and Lake County.
- Secured over \$4.5 million dollars in funding from local and state funding sources to create the Center for Advanced Manufacturing Program.
- Developed a medical simulation lab for practical nursing, medical assistance, and nursing assistant students.

Before the Mayor and Council is a proclamation in honor of the retirement of Dr. Culpepper and her dedication to Lake Technical College students, the City of Tavares and its citizens, and the citizens of Lake County, by declaring April 7, 2021 as Dr. Diane Culpepper Day.

OPTIONS:

1. The Mayor to read a proclamation declaring April 7 2021 as Dr. Diane Culpepper Day with adoption by the Tavares City Council.
2. Do not adopt the proclamation.

STAFF RECOMMENDATION:

Option 1, for the Mayor to read a proclamation declaring April 7, 2021 as Dr. Diane Culpepper Day with adoption by the Tavares City Council.

FISCAL IMPACT:

N/A

LEGAL SUFFICIENCY:

Yes.

ATTACHMENTS AVAILABLE TO THE PUBLIC UPON REQUEST:

1. Proclamation - Dr. Diane Culpepper

Attachments not provided are available to the public upon request to the City Clerk.



Proclamation

WHEREAS, Dr. Diane Culpepper has served as the Executive Director of Lake Technical College since July 2010; and,

WHEREAS, Dr. Diane Culpepper has strengthened partnerships with Lake County Schools and Lake-Sumter State College by collaborating on joint initiatives that have significantly improved the education opportunities in Tavares and Lake County; and,

WHEREAS, Dr. Diane Culpepper developed the vision and secured over \$4.5 million in local and state funding sources to create the Center for Advanced Manufacturing, a program that is a direct business incubator for manufacturing businesses in Tavares; and,

WHEREAS, Dr. Diane Culpepper developed a medical simulation lab for practical nursing, medical assistant, and nursing assistant students, which has been a direct benefit to the professional medical community in Tavares; and,

WHEREAS, Lake Technical College, Institute of Public Safety, has been located in Tavares since its creation, and is a business generator for Tavares and our neighboring communities; and,

WHEREAS, the City of Tavares commends Dr. Dianne Culpepper on her dedication to the students, community, and citizens, and the City of Tavares extends best wishes in her August 2021 retirement.

NOW THEREFORE, as Mayor of the City of Tavares, I do hereby proclaim April 7, 2021 as

Dr. Diane Culpepper Day

PASSED AND DULY ADOPTED, by the Tavares City Council on this 7th day of April 2021.

Amanda Boggus, Mayor

**AGENDA SUMMARY
TAVARES CITY COUNCIL
4/7/2021**

AGENDA TAB NO.: 4

SUBJECT TITLE: Approval of the March 17, 2021 City Council Regular Meeting Minutes (City Clerk)

OBJECTIVE:

To consider approval of the March 17, 2021 City Council Regular Meeting minutes.

SUMMARY:

Attached are March 17, 2021 City Council Regular Meeting minutes as submitted by the City Clerk.

OPTIONS:

1. Move to approve the City Council meeting minutes as submitted under the Consent Agenda.
2. Move to approve the City Council meeting minutes with corrections.

STAFF RECOMMENDATION:

For Council approval.

FISCAL IMPACT:

N/A

LEGAL SUFFICIENCY:

Yes.

ATTACHMENTS AVAILABLE TO THE PUBLIC UPON REQUEST:

1. 03-17-2021 CC Minutes

Attachments not provided are available to the public upon request to the City Clerk.



**TAVARES CITY COUNCIL
MEETING MINUTES
MARCH 17, 2021 – 4:00 PM
TAVARES CITY HALL COUNCIL CHAMBERS
201 EAST MAIN STREET, TAVARES**

COUNCIL MEMBERS PRESENT

**Amanda Boggus, Mayor
Lou Buigas, Vice Mayor
Lori Pfister, Council Member - *Absent*
Walter Price, Council Member
Troy Singer, Council Member**

STAFF PRESENT

**John Drury, City Administrator
Bob Williams, City Attorney
Susie Novack, City Clerk
Mike Fitzgerald, Community Development Director
Bob Tweedie, Economic Development Director
Lori Houghton, Finance Director
Richard Keith, Fire Chief
Stoney Lubins, Police Chief
James Dillon, Public Works Director
Phil Clark, Utilities Director
Crissy Bublitz, Human Resources Director
Mark O'Keefe, Public Communications Director
Scott Aldrich, Community Services Director**

TAVARES CHAMBER OF COMMERCE

J. Scott Berry, Executive Director

I. CALL TO ORDER

Mayor Boggus called the meeting to order at 4:00 p.m.

II. INVOCATION/PLEDGE OF ALLEGIANCE

Tab 1. Pastor Tom Cavanaugh, First Baptist Church of Mount Dora

Pastor Tom Cavanaugh, First Baptist Church of Mount Dora, provided the invocation and led those present in the Pledge of Allegiance.

III. APPROVAL OF AGENDA

Mayor Boggus asked if there were any changes to the Agenda. Mr. Drury said Staff had no changes.

MOTION

Troy Singer moved to approve the Agenda, seconded by Lou Buigas. The motion carried unanimously 4-0.

IV. PROCLAMATIONS/PRESENTATIONS

V. SWEARING IN BY CITY ATTORNEY AND DISCLOSURE OF EXPARTE COMMUNICATIONS

Attorney Williams said there were no quasi-judicial matters before Council.

VI. READING OF ALL ORDINANCES/RESOLUTIONS INTO THE RECORD

Ms. Novack read the following Resolution and Ordinance into the record:

RESOLUTION NO. 2021-04

A RESOLUTION OF THE CITY OF TAVARES, FLORIDA; AUTHORIZING APPLICATION FOR FUNDING THROUGH THE STATE OF FLORIDA FOR FUNDING ALLOCATED FROM THE 1.9 TRILLION DOLLAR AMERICAN RESCUE PLAN (HR1319); AUTHORIZING FUNDING FROM ANY DESIGNATED FEDERAL AGENCY FOR FUNDING ALLOCATED FROM THE 1.9 TRILLION DOLLAR AMERICAN RESCUE PLAN; AUTHORIZING ACCEPTANCE OF FUNDING FROM THE 1.9 TRILLION DOLLAR AMERICAN RESCUE PLAN THROUGH THE STATE OF FLORIDA OR ANY DESIGNATED STATE AGENCY; RELATED TO THE COVID-19 PANDEMIC EMERGENCY; AND AUTHORIZING THE CITY ADMINISTRATOR TO EXECUTE DOCUMENTS RELATED TO 1.9 TRILLION DOLLAR AMERICAN RESCUE PLAN THROUGH THE STATE OF FLORIDA OR ANY DESIGNATED FEDERAL AGENCY FOR FUNDING FROM THE 1.9 TRILLION DOLLAR AMERICAN RESCUE PLAN: PROVIDING FOR CONFLICTS, SEVERABILITY, AND EFFECTIVE DATE.

ORDINANCE 2021-01

AN ORDINANCE OF THE CITY OF TAVARES, FLORIDA AMENDING THE LAND DEVELOPMENT REGULATIONS BY AMENDING CHAPTER 21, SECTION 21-15 SINGLE OR TWO FAMILY RESIDENTIAL USES, REMOVING THE PROVISION FOR TEMPORARY CONSTRUCTION SIGNS; SECTION 21-16 TEMPORARY SIGNS, REQUIRING THAT TEMPORARY SIGNS BE DISPLAYED FOR A MAXIMUM OF 120 DAYS IN A CALENDAR YEAR AND DELETING THE RESTRICTION ON VACANT PROPERTY AND LIMITING TWO (2) TEMPORARY SIGNS PER PARCEL OF PROPERTY; SECTION 21-17 MISCELLANEOUS SIGNS, DELETING THE PROVISIONS FOR FLAG CONTENT; SUBJECT TO THE RULES, REGULATIONS AND OBLIGATIONS ORDAINED BY THE CITY OF TAVARES COUNCIL; PROVIDING AN EFFECTIVE DATE.

VII. CONSENT AGENDA

Mayor Boggus asked if any Council Members would like to pull an item on the Consent Agenda for discussion.

MOTION

Lou Buigas moved to approve the Consent Agenda [Tab 2, Approval of the March 3, 2021 City Council Regular Meeting Minutes], seconded by Walter Price. The motion carried unanimously 4-0.

Tab 2. Approval of the March 3, 2021 City Council Regular Meeting Minutes

Approved on the Consent Agenda.

VIII. RESOLUTIONS

Tab 3. Approval of Resolution 2021-04 Authorizing Funding from 1.9 Trillion Dollar American Rescue Plan (HR)1319)

Ms. Houghton provided the following presentation:

On March 13, 2020, Donald Trump, as President of the United States, declared the ongoing Coronavirus (COVID-19) Pandemic of sufficient severity and magnitude to warrant a nationwide emergency declaration covering all states, tribes, territories, and the District of Columbia. The Presidential Declaration provided for the availability of Federal Assistance (FEMA) due to the COVID-19 Pandemic. The incident period for Public Assistance under the Declaration ban on January 20, 2020 and is currently on going.

On March 27, 2020, Donald Trump as President of the United States signed into law the two (2) Trillion Dollar Coronavirus Economic Stimulus Bill (The Cares Act) which

provided economic relief from the negative impacts of the Coronavirus Pandemic. Cares Act Funding to Cities was accomplished through sub-recipient allocations from respective Counties.

On March 11, 2021, Joseph Biden, President of the United States signed into law the 1.9 Trillion Dollar American Rescue Plan (HR1319) which provides additional relief to address negative economic impacts from the Coronavirus Pandemic. The American Rescue Plan (HR 1319) allocates 19.53 billion dollars to non-CDBG direct eligible cities. A preliminary funding estimate for Tavares is approximately 7 million dollars subject to eligibility of cost covered by the American Rescue Plan. .

The City Council has responded to the Coronavirus Pandemic through the following actions:

- The City Council Adopted Resolution 2020-05 on March 18, 2020 declaring a Local State of Emergency.*
- The City Council Adopted Resolution 2020-06 on April 1, 2020 authorizing application and execution of agreements for Federal Assistance to the State of Florida (FEMA).*
- The City Council Adopted Resolution 2020-21 on September 2, 2020 authorizing application and execution of agreements as a sub-recipient to Lake County, Florida for Cares Act Funding.*

Resolution 2021-04 authorizes the City Administrator to make application and execute needed agreements and contracts with the State of Florida or any designated Federal Agency to receive funding from the Federal 1.9 Trillion Dollar American Rescue Plan (HR1319).

Once funding from the Rescue Plan has been secured, the City Administrator will bring a "Spend Plan" back to the City Council for discussion and approval that meets the eligibility and criteria of the 1.9 Trillion Dollar American Rescue Plan (HR1319).

Staff recommends approval of Option 1, Move to approve Resolution 2021-04 authorizing the City Administrator to apply for funding from the State of Florida or any designated Federal Agency for funding from the Federal 1.9 Trillion American Rescue Plan (HR1319), and to execute all documents related to and required by the application for \$1.9 Trillion Dollar American Rescue Plan Funding.

Mayor Boggus asked for comments from the audience. There were none.

Mayor Boggus asked for comments from the Council.

Council Member Price inquired about eligible items. Mr. Drury said broad parameters have been provided to date. He said water and sewer is eligible through the CDBG grant process, and dollars associated with lost revenues such as gas tax revenues due to remote working during the pandemic. Funding for items related to City staff assisting

with vaccination programs is also eligible. Tavares paramedics supported the vaccine program in Leesburg and Mount Dora. The plan will be sent to the Governor who is working on various ways the funds will be allocated. He said prior relief funding went through the state, county, and then to the city. The city will match any deficiencies with available funding and then a spend plan will come to Council for consideration on what items to spend the monies.

Council Member Singer asked for clarification that there is no direct cost to Tavares to approve the Resolution. Mr. Drury confirmed.

Vice Mayor Buigas asked if the Resolution is a formality to put a plan together. Mr. Drury confirmed. He said the resolution is a formality to allow the City Administrator to put together a spend plan and match up dollars, and set the City up for the opportunity to receive funding.

MOTION

Troy Singer moved to approve Resolution 2021-04, seconded by Walter Price. The motion carried unanimously 4-0.

IX. ORDINANCES – PUBLIC HEARING

First Reading

Second Reading

Tab 4. Ordinance 2021-01 – Land Development Regulation Amendment – Chapter 21 Temporary Signs and Miscellaneous Sign Content

Mr. Fitzgerald made the following presentation:

Previously the City Council instructed staff to expand the city sign regulations by adding vacant property as a permissible temporary sign location with no permit nor fee required along with other changes necessary to be in conformity with a relatively new Supreme Court decisions on sign regulations by bringing back to City Council an amendment to the City's Land Development Regulations Chapter 21.

By way of background, 1) the current City sign regulations prohibit temporary signs on vacant property, 2) the City Council would like to expand the sign regulation to include vacant property and 3) a U.S. Supreme Court decision in Reed v Town of Gilbert ruled that regulating signs based on the message on the sign would be a restriction to free speech or conversely show favoritism to some category of speech. The court further determined that regulating signs based on the message would be unconstitutional and would invalidate the regulation or governing code.

The court did recognize that governmental type signs such as traffic signs in the street right-of-way's fall into a separate category and are necessary for public safety and protection. The court also stated that sign design such as size, height, location, number allowed, etc. could be regulated provided no reference is made to the sign message.

At the December 16, 2020 meeting City Council directed staff to expand the city sign regulations by adding vacant property as a permissible temporary sign location with no permit nor fee required along with other changes necessary to be in conformity with the new Supreme Court ruling.

Ordinance 2021-01 proposes changes to temporary sign regulations that temporary signs may be displayed for a period of up to 120 days in a calendar year, may be displayed on vacant and developed land without a permit, and shall be permitted up to two (2) temporary signs per parcel of property in addition to any non-temporary permitted signs they may have on the property. Ordinance 2021-01 also proposes to remove a provision pertaining to flag content in conformity with Supreme Court decisions. Ordinance 2021-01 maintains that feather signs are prohibited in Tavares.

At their February 18th meeting the Planning & Zoning Board voted unanimously (7-0) to recommend denial of Ordinance 2021-01. Staff recommends that City Council moves to approve Ordinance 2021-01 amending Temporary Sign Regulations and Miscellaneous Sign content in conformity with Supreme Court decisions.

Gary Santoro, Royal Harbor, said the Planning and Zoning Board comments did not violate the Supreme Court ruling regarding signs. He said the Board tried to be business friendly and noted signs are not being maintained. The Planning and Zoning Board felt that while people do not want permitting for signs, there should be a mechanism to allow city Staff to do their job. He noted his support for the Council to approve flag signs.

Jesse Smith, 32600 Lakeshore Drive, Lake County, expressed his frustration at being code enforced for having too many signs on his property. He said limiting the number of flags is unconstitutional.

Mayor Boggus asked for any additional comments from the audience.

Joseph Droin, Flag Business Owner, said he sells flags in Eustis, Lake County, Mount Dora, Tavares, and Leesburg. He said the flags are called sweeper flags and noted the difference in various regulations in each city. Mr. Droin noted Leesburg recently rescinded their ban on sweeper flags to help businesses affected during the pandemic.

Deb Murphy, 1723 Sunrise Court, Tavares, noted a concern for oversight and said there should be permitting procedures in place for successful enforcement of temporary signs.

Mr. Drury said Council instructed staff to expand the city sign ordinance by adding more properties that can have temporary signs with no permit or fee. He said Council would be expanding the sign ordinance to add more property with no cost and no permit if the ordinance is approved. The current ordinance does not permit flag signs. Adding flag signs would be a Council decision. Mayor Boggus asked for confirmation that the referred flags are feathered flags. Mr. Drury confirmed and said they are feathered wind blown signs that have to have a certain wind threshold in order to see both sides.

Mayor Boggus asked for confirmation the ordinance does not affect regular flags like the American flag or the State of Florida flag. Mr. Drury confirmed. Mayor Boggus said the original ordinance was written in 2005 and is being addressed due to the Supreme Court case. Mr. Drury confirmed, and said the Supreme Court case has driven all cities to look at their ordinance to ensure compliancy. Mayor Boggus said she believes the ordinance should remain as-is with no expansion. She said signs on improved property should not be regulated.

Vice Mayor Buigas asked Officer McCormick if the reports Council receives from the Police Department reflecting approximately 150 cases per month include cases regarding signs, and if so, how many. Officer McCormick confirmed and said currently there are approximately 10 out of 150 open cases regarding temporary flags. He said he has placed a hold on any cases until a determination has been made by Council, and noted the number of flag violations would increase once an ordinance has passed.

Vice Mayor Buigas asked Officer McCormick if he has a mechanism in place to handle violations, or if it is only complaint driven. Officer McCormick said a case is initiated if he sees a violation or receives a complaint. He reviewed the process of noticing and bringing a case to hearing. Vice Mayor Buigas asked Officer McCormick if he has a mechanism to track sign violations. Officer McCormick confirmed, and said he uses an Outlook calendar program to manage sign violations by calendaring the date the violation was witnessed and inspected.

Council Member Singer asked for confirmation there is a separate ordinance prohibiting snipe signs in the right-of-way. Officer McCormick confirmed, and said snipe signs are prohibited and do not apply to the ordinance before Council. He said snipe signs located in the right of way are taken down and discarded.

Council Member Price said feather flag signs should not be prohibited as the City is attempting to attract real estate development. He said realtors have come before Council and stated it takes on average 8 to 9 months to sell vacant property, and if a sign has to be removed in 90-120 days it would impede on their ability to sell property. He said it is an undue burden on vacant land owners and realtors who service those owners. Council Member Price said if a property owner wished to support a federal

candidate, a state candidate, a county candidate, and a municipal candidate with campaign signs, they would not be able to with a two sign limit. He said two 4x8 signs are allowed with a total of 64 square feet and recommended using a square footage requirement rather than number of signs.

Council Member Singer noted his support for an ordinance that allows vacant property owners the same rights as developed property owners. He said he is not in support of permitting because it places an undue burden on the residents that have to go through the permitting process.

Vice Mayor Buigas said she agrees with both Council Members Singer and Price. She said vacant property owners are being discriminated. She said she personally is not in support of signs as they are not maintained, and noted the Supreme Court case does not allow the control of language or content.

Council Member Price noted his objection to the permitting process, and said every time a roofer or fertilizer company provides service to a home they would be required to obtain a permit for each sign which would be an undue burden. Council Member Price said he is in support of feather signs.

Discussion was held regarding feather flag signs.

There was a consensus from the Council to allow feather flag signs.

Discussion was held regarding the ordinance, and workshopping those items where a consensus could not be reached when a full Council is present.

MOTION

Council Member Price moved to allow signs on vacant property and feather signs

Council Member Price said the Council can come back to address the size, number, and duration of signs at a later date.

Attorney Williams asked for confirmation the motion is to approve the ordinance with an amendment to add feathered flag signs.

Lou Buigas seconded the motion.

Further discussion was held regarding the ordinance before the Council, the motion, and items that would be workshopped in the future.

MOTION

Walter Price moved to approve Ordinance 2021-01, seconded by Lou Buigas. The motion carried unanimously 4-0.

Mayor Boggus asked if the Council could workshop the remaining issues such as duration and square footage of temporary signs. Mr. Drury confirmed and said staff would bring back the current ordinance and regulations for review. Once Council consensus has been reached an amending ordinance would be created and moved through the process of adoption. Mayor Boggus asked if the Council could also workshop the permitting process including how it would work if passed. She noted an example of going online to register a sign. Mr. Drury confirmed and said all options would be provided including no permit, online registration, and in-person registration.

X. GENERAL GOVERNMENT

Tab 5. Board Appointment – Lake Community Action Agency

Mayor Boggus made the following presentation:

Council Member Roy Stevenson previously served as the City representative to the Lake Community Action Agency Board. During the December 2, 2020 City Council Meeting, the Council directed staff to advertise for a citizen representative to serve as a City representative. The position was then advertised in the Daily Commercial and on the City website. As no applications were received, discussion was agendaed for the March 3, 2021 City Council Regular Meeting. The afternoon of March 3rd just prior to the meeting an application was received from Brooke S. Matthews. During the meeting an audience member, Vance Jochim, said he would like an opportunity to submit an application as well. Council tabled discussion to the March 17, 2021 City Council meeting to allow all interested persons an opportunity to submit applications for review.

The City has received the following applications (attached) for appointment as the City Representative to the Lake Community Action Agency:

- *Brooke S. Matthews*
- *Vance Jochim*

Lake Community Action Agency is one of Lake County's leading organizations in the delivery of human services. For more than 44 years Lake Community Action Agency has advocated for the poor, elderly and disadvantaged, and administers anti-poverty programs throughout Lake County utilizing U.S Department of Health and Human Services and Community Services Block Grant funds allocated by the Florida Department of Community Affairs.

Mayor Boggus noted an application was received from Donna Klinger the previous day.

Attorney Williams said under the City Charter the position is a Mayor appointment with consent of Council.

Mayor Boggus noted Ms. Matthews applied for another position that recently opened.

Mayor Boggus appointed Donna Klinger as the City Representative to the Lake Community Action Agency Board.

Attorney Williams said with the appointment of Donna Klinger a motion would need to be made and ratified by the Council. He said the Mayor's recommendation comes to Council as an appointment and does not need a second.

Vice Mayor Buigas said it is great to see so many people wanting to participate.

There was a unanimous consensus for approval in a vote of 4-0 for Mayor Boggus' appointment of Donna Klinger as the City Representative to the Lake Community Action Agency Board.

Tab 6. Florida Fish and Wildlife Conservation Commission Agreement Renewal to Maintain Two City Boat Ramps Located at Tavares Recreational Park and Sumerall Park

Mr. Dillon made the following presentation:

The Florida Fish and Wildlife Conservation Commission (FWC) would like to renew their existing 20-Year Agreement with the City to maintain two (2) City boat ramps in exchange for the city providing public access to the boat ramps and not charging a launch fee among other provisions as outlined in the attached agreement. The two boat ramps are located at Tavares Recreational Park (TRP) and Summerall Park.

Under the agreement, FWC will provide labor, equipment, and materials funded in part from 1) the Sport Fish Restoration Act - Boat Access program and in part from 2) the state to maintain the boat ramps.

Subject to availability of programed funds, the City of Tavares will provide ancillary facilities such as, but not limited to, lighting, public restrooms, picnic, and recreational facilities as may be deemed by the city to be necessary or desirable. If the city chooses not to move forward with the acceptance of the Agreement, the obligations of the parties will cease and total responsibility will revert back to the City of Tavares for the boat ramp maintenance.

The Memorandum of Agreement has passed through the review process by city staff and legal counsel for the city and approved to be presented to City Council for acceptance.

Staff recommends Council Approve and authorize the Mayor to execute the attached Memorandum of Agreement with The Florida Fish and Wildlife Conservation Commission for a renewed period of 20 years

Mayor Boggus asked for comments from the audience. There were none.

Mayor Boggus asked for comments from the Council.

Council Member Singer asked if the contract could be terminated at any time and then the City would be responsible for full maintenance. Mr. Dillon confirmed.

MOTION

Troy Singer moved to approve, seconded by Lou Buigas.

Council Member Price asked if the agreement is already in place, and for the cost if not approved. Mr. Dillon confirmed there is a current agreement. Mr. Drury said the FWC provides annual inspections. He said the City would incur a cost of approximately \$5,000 to \$6,000 to hire professional structural engineers, as well as any costs for needed or programmed repairs. He confirmed the City is required to ensure everyone has access. Attorney Williams noted the City cannot charge a municipal fee for access.

Vice Mayor Buigas said it is great to have a partnership with FWC. She noted the City also partners with FWC for an annual water clean-up program.

The motion carried unanimously 4-0.

Tab 7. Lake Frances Utilities Improvement Project Update

Mr. Clark made the following presentation:

Lake Frances, which was constructed in the 1970's, is one of the oldest subdivisions of its type in Tavares. It consists of 442 lots with approximately 600 residents .

Previously the City secured SRF funding to rehabilitate the Water and Sewer utility lines and hired a contractor to do the work. Construction began in mid-2020. Approximately 40% of the project is complete to date. The project is within the budget and currently on schedule. The City's proactive efforts to have open and frequent communications with the HOA and community leaders has proven effective to address issues and concerns with the project. City staff are on site daily inspecting and making sure the city has good quality control and all construction specifications are adhered to. This also allows daily interaction with the residents. At this point, staff does not foresee any major issues or delays. The project should be completed by December 2021.

Mr. Clark thanked Mr. Drury for mentoring him through the process, the City Council for their support, and the Staff, Residents, HOA Representatives, and community leaders who helped in the success of the project.

Mayor Boggus asked for comments from the audience. There were none.

Mayor Boggus asked for comments from the Council. There were none.

Mayor Boggus commended Mr. Clark.

Tab 8. Planes, Tunes & Barbecue 2021 Event Update

Mr. Tweedie provided a high level overview of the 2021 Planes, Tunes & Barbeque event scheduled April 9 through 11, 2021 with the following highlights:

- Music centric element event
- Friday, April 9, 2021 – 4:00 p.m. to 10:00 p.m.
- Saturday, April 10, 2021 – 10:00 a.m. to 10:00 p.m., including the incorporation of Seaplane-A-Palooza and contests
- Sunday, April 11, 2021 – 11:00 a.m. – Jones Brothers Bingo

Mayor Boggus asked for comments from the audience. There were none.

Mayor Boggus asked for comments from the Council.

Vice Mayor Buigas inquired about advertising. Mr. Tweedie said contracts are being finalized which would be completed within two weeks. Advertising would include the City website, social media platforms, Daily Commercial, Daily Sun, Triangle News Leader, banners, and posters. The aviation portion will be advertised through outlets such as Aviation Digest, Seaplane Fly In magazine, and Social Flight. Vice Mayor Buigas inquired about event insurance. Mr. Tweedie confirmed event insurance has been secured for inclement weather.

Council Member Singer thanked Mr. Tweedie and Staff, and said everyone is looking forward to the event. He noted the hard work behind the scenes to produce the event, and said the event is a great economic driver for the community.

XII. NEW BUSINESS

XIII. OLD BUSINESS

Council Member Singer inquired about the status of placing military signs as discussed in a recent Council meeting. Mr. Drury said Staff will identify the cost in the upcoming budget to place five flags and poles near the Freedom Flag monument.

Mayor Boggus inquired about cemetery upgrades for military veterans. Mr. Dillon said the concept plan has been completed and will reflect in the upcoming budget.

XIV. AUDIENCE TO BE HEARD

Gary Santoro, Royal Harbor, said Lake County surpassed 58,000 Covid-19 vaccinations at Lake Sumter State College (LSSC) and Sears vaccination sites since the program began.

XV. REPORTS

Tab 9. City Administrator Report

Mr. Drury congratulated Mayor Boggus on her appointment to the Florida League of Mayors Board of Directors. He said she will be representing District 6. He noted Council Member Pfister was in Tallahassee attending committee meetings and representing Tavares and City initiatives.

Tab 10. City Council Member Reports

Council Member Price wished those present a Happy St. Patrick's Day.

Council Member Singer encouraged those present to support local businesses.

Vice Mayor Buigas provided the following positive quote; "May the sun shine, all day long, everything go right, and nothing wrong. May those you love bring love back to you, and may all the wishes you wish come true!" ~Irish Blessing

XVI. ADJOURNMENT

There was no further business and Mayor Boggus adjourned the meeting at 5:24 p.m.

Respectfully,

Susie Novack, MMC, FCRM
City Clerk

**AGENDA SUMMARY
TAVARES CITY COUNCIL
4/7/2021**

AGENDA TAB NO.: 5

SUBJECT TITLE: Resolution #2021-06 - Adoption of 2021-2026 Lake County Local Hazard Mitigation Strategy Plan (LMS)

OBJECTIVE:

To approve resolution 2021-06 authorizing the adoption of the updated 2021-2026 Lake County Local Mitigation Strategy and authorization for the City of Tavares to execute a supporting resolution.

SUMMARY:

On April 6, 2016, The City Council approved the previous version of the Lake County Local Mitigation Strategy (LMS). The objective of this agenda item is to inform Tavares City Council about the Lake County hazard mitigation strategy plan revision, as required by law (every five years), and request Council adoption, through Resolution, of the 2021-2026 LMS plan update.

By law, the local county mitigation plan of each County must be updated and reauthorized every five (5) years. That time is here and the Lake County is seeking current adoption of the updated plan by each municipality, including Tavares.

Florida Administrative Code 27P-22 provides the authorization for the Hazard Mitigation Grant Program. Section .005 of that code defines the required components of the Local Mitigation Strategy.

The 2016-2021 update of the Lake County Local Mitigation Strategy was adopted by the Lake County Board of County Commissioners on February 9, 2021, and is attached below.

OPTIONS:

1. To approve
2. Not approve

STAFF RECOMMENDATION:

Staff recommends approval.

FISCAL IMPACT:

No fiscal impact

LEGAL SUFFICIENCY:

Legally sufficient

ATTACHMENTS AVAILABLE TO THE PUBLIC UPON REQUEST:

1. Resolution 2021-06- Adoption of Lake County local Mitigation Strategy Plan 2021-2026
2. Local Mitigation Strategy 2020_Final

Attachments not provided are available to the public upon request to the City Clerk.

RESOLUTION NO. 2021-06

A RESOLUTION OF THE CITY OF TAVARES, FLORIDA, ADOPTING THE LAKE COUNTY LOCAL MITIGATION STRATEGY: MULTI-JURISDICTIONAL PLAN 2021-2026 AND PROVIDING AN EFFECTIVE DATE.

WHEREAS the Florida Division of Emergency Management and the Federal Emergency Management Agency recommends that all local governments, in cooperation with their local county department of emergency management, develop and maintain a hazard mitigation plan; and

WHEREAS the City of Tavares desires to have and participate in this plan to protect the life and property of its citizens; and

WHEREAS the City of Tavares, in cooperation with Lake County, has developed the plan, policies and procedures necessary to plan and develop projects to protect the citizens of Tavares and Lake County from hazards.

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF TAVARES, FLORIDA:

The City of Tavares adopts the proposed Lake County Local Mitigation Strategy: Multi-Jurisdictional Plan 2021-2026, dated February 9, 2021, identifying the hazards and strategies to mitigate those hazards.

THIS RESOLUTION shall become effective upon its passage and adoption according to law.

PASSED AND RESOLVED this 7th day of April, 2021, by the City Council of the City of Tavares, Florida.

Amanda Boggus, Mayor

Tavares City Council



Local Mitigation Strategy: Multi-Jurisdictional Plan

2020

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SUMMARY OF CHANGES

The Summary of Changes will list the routine updates that will be made to the LMS Plan once it has been accepted. Changes made to the 2020 plan will be archived by Lake County Emergency Management. This plan is a living document and can be changed at any time by the LMS Working Group. Continual citizen participation and input by all interest parties is encouraged.

Change	Comments/Purpose	Date	Pages
Plan Update	Plan was updated and revised in entirety.	2020	All

EXECUTIVE SUMMARY

Lake County is vulnerable to a variety of natural, technological, and human-caused hazards which threaten the health and wellbeing of the community, affect economic health, and pose harm to the environment. Lake County Emergency Management has convened a group of individuals representing the county, the municipalities, and other interested parties to comprise the members of the Lake County Local Mitigation Strategy Working Group (LMS Working Group) to monitor and update this continual planning process.

This document is the result of a multi-jurisdictional approach to mitigation planning. Lake County along with its municipalities formally adopted the existing Lake County Local Mitigation Strategy (2015) and once this revision is approved, this updated document will be presented for adoption via a new resolution.

The LMS Working Group conducted research to identify the hazards threatening Lake County in order to estimate risk, impacts, and potential consequences relating to public, responder safety, continuity of operations, continuity of government, property, facilities, infrastructure, environment, economic issues, and public confidence in the county. The natural hazards in the LMS are mirrored in the Comprehensive Emergency Management Plan (CEMP) for continuity and to facilitate an all-hazards approach to planning.

Proposed projects and programs intended to reduce impacts of future natural disasters are called mitigation projects. Mitigation projects are included in the project list and continue to be developed and added to the list by the LMS Working Group as new hazard research is available, risk increases, and as resources and opportunities become available. Implementing the LMS will help make Lake County more resistant to the effects of major disasters.

The LMS will continue to be updated and expanded in the future to address changing hazards, reflect the experiences of future disasters, and changes in the participating jurisdictions. The update process and future versions of the LMS will be used to inform the public and encourage other interested parties to participate more in making Lake County resilient.

I. INTRODUCTION

Mitigation is any action taken to permanently reduce or eliminate the risk to people and their property from the effects of hazards. The Lake County Local Mitigation Strategy attempts to reduce some of the risk associated with hazards by implementing mitigation projects within Lake County and its municipalities. The LMS process is intended to be a framework for documenting the activities of the LMS Working Group and the future mitigation activities within the County. This plan includes updated bylaws of the LMS Working Group; and, the overall planning process is intended to make the LMS Working Group more active in the coming years as well as find ways to further promote public participation. The LMS Working Group has been established to prepare the community to be more resistant and resilient to the effects of future disasters.

A. Purpose

The purpose of the LMS is to provide an on-going process that will encourage hazard mitigation efforts as part of the ongoing planning efforts of Lake County. The LMS encourages evaluation of all hazards to evaluate vulnerabilities and develop goals, objectives, plans, programs, and projects to lessen the effects of those hazards and prioritize implementation of projects to further these goals.

B. Planning Process

The LMS Working Group is made up of representatives from Lake County governmental agencies, incorporated municipalities, organizations and associations representing key business industry, community interest groups, other governmental entities, and non-profit or faith-based groups. Interested citizens are always welcome and encouraged to become involved in the process. The Lake County LMS Working Group by-laws are located in Appendix II of this document and were updated in this planning process.

The LMS Working Group encourages involvement in the mitigation planning process by each jurisdiction in Lake County. Jurisdictions are encouraged to identify others that should be participating on the LMS Working Group. In the past, annual meetings have been held in December of each year for the purpose of preparing the annual update to be submitted. In January of 2020, the Committee voted to move to a quarterly meeting schedule. The 5-year planning update kick-off meeting was held on March 10, 2020 with Lake County Emergency Management representatives followed by a meeting on May 8, 2020 with the LMS Working Group. The LMS Working Group was noticed through email distribution with follow-up phone calls from the LMS Coordinator. A formal public meeting was held on August 8, 2020 with the LMS Working Group noticed via email distribution, website notice, and public notification. Further efforts by the Chair and Vice-Chair to encourage participation and attention at meetings continued in preparation for submission to the Florida Division of Emergency Management.

a) Review of Community Capabilities and Incorporation of Existing Plans

Lake County communities currently have several existing programs and plans related to hazard mitigation and post-disaster redevelopment as listed in Appendix I-E of this Plan which includes but is not limited to:

- Lake County Comprehensive Emergency Management Plan (CEMP) - The CEMP was used to help identify the pertinent hazards for the LMS risk assessment.

- Lake County Comprehensive Plan and Jurisdictional Comprehensive Plan(s) – The Comprehensive Plan(s) were used to determine the direction of future growth, goals, and objectives of the County and each jurisdiction.
- Jurisdictional Master Plans (City of Leesburg and City of Tavares) – Helped identify future growth opportunities and plans, identified environmental impacts, and mitigation opportunities.
- Lake County Code of Ordinances Chapter VI – Resource Protection Standards, 6.01.02: Wetlands Impact and Mitigation, and the Lake-Sumter Metropolitan Planning Organization (MPO) Transportation Plan – Codes were used to determine potential mitigation measures.
- Lake County Community Wildfire Protection Plan (CWPP) – Identified wildfire vulnerabilities within the County.

C. Participating Organizations

Lake County encourages participation from all of its jurisdictions and enables any entity within the jurisdictions or unincorporated county to be involved in the planning effort. Those involved in the process include: Astatula, Clermont, Eustis, Fruitland Park, Groveland, Howey-in-the-Hills, Lady Lake, Lake County, Leesburg, Mascotte, Minneola, Montverde, Mount Dora, Tavares, Umatilla, and The Villages.

This is the inclusive list of all jurisdictions that must approve the LMS as a multi-jurisdictional plan. Each jurisdiction is responsible for actual implementation of the plan within their boundaries and ensuring that their projects meets the needs of the communities. Participation will be identified by attendance at meetings, both in person and virtual, and active involvement in the process. These are the same jurisdictions that were involved in the 2015 plan. The desire of this plan is to foster further participation from all municipalities and to meet on a more consistent basis in the future.

Participation in the planning process included the following entities:

Advanced Planning Consultants, LLC

City of Clermont

City of Eustis

City of Leesburg

City of Mount Dora

City of Tavares

City of Umatilla

Florida Department of Health in Lake County

Lake County Emergency Management

Lake County Public Works Department

Lake County Schools

Lake County Stormwater Section

Lake County Office of EMS

Town of Montverde

Villages Community Development District

Withlacoochee Forest Center

The LMS Working Group has had participation from all remaining jurisdictions due to contact with each entity by members of the Office of Emergency Management to obtain updated information

for the LMS Update. Email meeting notices are sent to any and all interested parties both within and outside of Lake County to encourage participation.

D. Public Participation

The LMS Working Group has benefited from the assistance and support of its many members and support staff and intends to continue its efforts to engage more members of the community in the planning process, including more representatives of the private sector. The public will have additional opportunities to provide input on this updated LMS Plan, such as through the Lake County website and municipal meetings where the plan will be formally adopted by resolution within each Lake County community. A copy of the Local Mitigation Strategy for Lake County is available on the county website at: https://lakecountyfl.gov/offices/emergency_management/. This webpage also provides other mitigation information to the public along with a contact link back to the Office of Emergency Management.

The LMS Working Group welcomes public input and encourages participation through legal notices of upcoming public meetings. Future meetings which may be conducted utilized web conferencing will also include a gathering at the Emergency Operations Center for interested parties to attend, listen, and participate in the planning process. Once the updated plan is posted on the website, opportunity for public comment and input will be available prior to adoption.

Public input during held meetings is captured within the meeting minutes (Appendix I-C). Comments are addressed by the Committee for incorporation into the document. As noted, public input options are available via the County website, however, no comments were received for the 2020 submission.

Once the plan is adopted, it will remain on the website, available for public comment and input in an ongoing process. In addition to this planning process, many of the jurisdictions maintain their own efforts to inform the public about potential hazards, hazard mitigation, and this planning process. Lake County and the LMS Working Group will continue efforts to develop a more robust planning process and encourage more participation and involvement from the jurisdictions, interested parties, and the public.

E. Update Process

During the 2020 Lake County LMS Update, the LMS Working Group took the following actions:

- In 2016, 2017, 2018, 2019 and 2020 annual meetings of the LMS Working Groups were noticed to the public and held with attendance and meeting minutes provided to document the process.
- In March 2020, Lake County Emergency Management hired a consultant to assist in the update process.
- The plan was reviewed and rewritten to be compliant with the 2020 Florida Local Mitigation Strategy Crosswalk
- The General Section include the Introduction, purpose, and planning process and was revised to reflect the current approach.

-
- The Risk Assessment Section was reviewed for applicable hazards and to be consistent with the Lake County Comprehensive Emergency Management Plan (CEMP).
 - Mitigation Goals Section includes the goals, projects list, National Flood Insurance (NFIP) and Community Rating System (CRS) and was updated to reflect the current list, current NFIP and CRS information.
 - Plan Maintenance Section include monitoring and evaluation; the update process; and process for project implementation and was updated to reflect the current approach.
 - LMS Working Group By-Laws Appendix contains the policies of the LMS Working Group and was updated to include the current practices.

The Draft Plan was provided to the LMS Working Group for their review and comment. Another meeting will be conducted to review the Final Draft and approve all changes. The LMS Working Group will continue to solicit input from anyone who may have an interest in the process and include any additional parties as needed as required by Florida Administrative Code 27P-22.

As with the 2015 LMS update, the 2020 LMS goals, objectives, and priorities remain unchanged and continue to guide this document as is consistent with the County goals and priorities.

II. HAZARD IDENTIFICATION AND VULNERABILITY ASSESSMENT

A. Introduction

The purpose of the hazard identification and vulnerability assessment is to use best available information and technology to identify and evaluate potential hazard risks facing Lake County, as well as provide the factual basis for mitigation activities proposed in Lake County's LMS that aim to reduce those risks. The vulnerability assessment provides for the identification and analysis of known hazards that may threaten life and property across the entire planning area. It also includes the results of a multi-jurisdictional vulnerability assessment conducted for each of Lake County's municipal jurisdictions to determine where locally specific risks vary from those facing the rest of the county.

Lake County is vulnerable to a wide range of hazards that threaten life and property. FEMA's current regulations and guidance under the Disaster Mitigation Act of 2000 (DMA 2000) require, at a minimum, an evaluation of a full range of natural hazards. The Hazards within the Lake County LMS are broken up into two main hazard types:

- Natural Hazards - Are threats of a naturally occurring event will have a negative effect on life, property and the environment.
- Societal Hazards - are hazards that are created by humans or hazards that directly impact humans by means other than a natural or technological incident.
- Technological Hazards - Include those that are caused by man-made technological advancements, although some can be a result of natural hazards in specific circumstances.

B. Initial Hazard Identification

The potential hazards that may affect the residents and visitors to Lake County are reviewed on a regular basis. Each jurisdiction will be addressed individually however we begin with a general overview at the county level of each of the hazards. This plan is in line with FEMA's guidance by focusing on hazards that directly affect Lake County.

Each of the initially identified hazards were studied for their potential impact on Lake County as well as in terms of the availability of hazard mitigation strategies to reduce that impact. Best available data on historical occurrences, the geographic location, and extent, as well as the probability of future occurrences, were collected and reviewed as part of the hazard identification process in the following sections.

The table below lists the range of hazards identified in this risk assessment:

Table 1: Hazard Identification by Type

Type	Hazard	Hazard-Specific Effects
Natural	Drought	Extreme Temperatures
Natural	Flooding	
Natural	Hail	
Natural	Extreme Heat	Drought
Natural	Tropical Cyclone Events	High Winds; Flood; Tornadoes
Natural	Thunderstorms/Wind/Lightning	Wildfire
Natural	Sinkholes/Subsidence	
Natural	Tornadoes	High Winds
Natural	Wildland Fire/Wildfire	
Natural	Erosion	
Natural	Winter Storm/Freeze	
Natural/Societal	Epidemic/Pandemic	Mass Casualty/Fatality
Technological	Dam/Levee Failure	Flooding
Technological	Hazardous Materials	Fixed Facilities; Transportation; Radiological Release; Biological
Technological	Cyberterrorism	Critical Infrastructure Disruption
Technological	Terrorism	Mass Casualty/Fatality
Technological	Prolonged Utility/Communications Failure	Critical Infrastructure Disruption
Societal	Civil Disorder/Disturbance	
Societal	Mass Casualty	

Some hazards are not listed due to the geographic location and characteristics of the planning area, and are not relevant to Lake County and the participating jurisdictions, i.e. volcanoes and earthquakes. There are no volcanoes in the Southeast United States that would impact Lake County. Additionally, past impacts and potential future impacts due to earthquakes are considered negligible and, therefore, not included in this plan.

C. Probability Summary

Each hazard is described and ranked based on relative risk using probability and severity as the identified measures.

Probability is based on historical information and considers the likelihood that Lake County will see an impact by the hazard within a given period of time.

- **N = None:** No previous occurrence and considered no threat
- **L = Low:** Some potential every 16 years or more
- **M = Moderate:** Potential occurrence every 3 to 15 years
- **H = High:** Potential to exist every 1 to 2 years

Based on the history of the hazards occurring and all available information, a summary of probabilities table has been created to determine then likelihood of a hazard occurring within a certain number of years. **Table 2** indicates summary probabilities for the hazards identified in this plan.

Additionally, impacts are addressed by how the populations and structures could potentially be affected. It is important to note that a hazard with a low probability of occurring can be just as severe as one with a high probability of occurring. **Table 3** indicates the potential impact a hazard may have based on the following criteria.

- **N = None:** No impact expected
- **L = Low:** Special portions of the population affected; day to day operations not affected; minor cosmetic damage to structures possible
- **M = Moderate:** Approximately 50% of population affected; mobile homes and poorly built or maintained structures impacted
- **H = High:** Significant portions of the population impacted; major damage to old, poorly maintained mobile home structures; some damage to structures built to recently approved building code

Table 2: Summary Probabilities for Hazards to Locality

	Drought	Flooding	Hail	Excessive Heat	Tropical Cyclone Events	Thunderstorm Lightning/Wind	Sinkholes	Tornadoes	Wildfire	Erosion	Winter Storm Freeze	Dam/Levee Failure	Hazardous Materials	Epidemic/Pandemic	Civil Disorder/Disturbance	Terrorism	Cyberattack/Cyberterrorism	Mass Casualty	Prolonged Utility/Comms. Failure
Lake County	M	H	H	M	M	H	M	M	M	L	M	L	M	M	L	L	H	L	M
Astatula	M	M	M	M	M	H	M	M	M	L	M	L	L	M	L	L	H	L	M
Clermont	M	M	M	M	M	H	M	M	M	M	M	L	L	M	L	L	H	L	M
Eustis	M	M	M	M	M	H	M	M	M	L	M	L	L	M	L	L	H	L	M
Fruitland Park	M	M	M	M	M	H	M	M	M	L	M	L	L	M	L	L	H	L	M
Groveland	M	M	M	M	M	H	M	M	M	L	M	L	L	M	L	L	H	L	M
Howey-in-the-Hills	M	M	M	M	M	H	M	M	M	L	M	L	L	M	L	L	H	L	M
Lady Lake	M	M	M	M	M	H	M	M	M	L	M	L	L	M	L	L	H	L	M
Leesburg	M	M	M	M	M	H	M	M	M	L	M	L	L	M	L	L	H	L	M
Mascotte	M	M	M	M	M	H	M	M	M	L	M	L	L	M	L	L	H	L	M
Minneola	M	M	M	M	M	H	M	M	M	L	M	L	L	M	L	L	H	L	M
Montverde	M	M	M	M	M	H	M	M	M	L	M	L	L	M	L	L	H	L	M
Mount Dora	M	M	M	M	M	H	M	M	M	L	M	L	L	M	L	L	H	L	M
Tavares	M	M	M	M	M	H	M	M	M	L	M	L	L	M	L	L	H	L	M
Umatilla	M	M	M	M	M	H	M	M	M	L	M	L	L	M	L	L	H	L	M
Villages, The	M	M	M	M	M	H	M	M	M	L	M	L	L	M	L	L	H	L	M

Table 3: Summary Potential Hazard Impact to Locality

	Drought	Flooding	Hail	Excessive Heat	Tropical Cyclone Events	Thunderstorm Lightning/Wind	Sinkholes	Tornadoes	Wildfire	Erosion	Winter Storm Freeze	Dam/Levee Failure	Hazardous Materials	Epidemic/Pandemic	Civil Disorder/Disturbance	Terrorism	Cyberattack/Cyberterrorism	Mass Casualty	Prolonged Utility/Comms. Failure
Lake County	M	H	L	M	H	H	L	M	M	L	L	L	H	H	L	M	H	M	H
Astatula	M	H	L	M	H	H	L	M	M	L	L	L	H	H	L	M	H	M	H
Clermont	M	H	L	M	H	H	L	M	M	M	L	L	H	H	L	M	H	M	H
Eustis	M	H	L	M	H	H	L	M	M	L	L	L	H	H	L	M	H	M	H
Fruitland Park	M	H	L	M	H	H	L	M	M	L	L	L	H	H	L	M	H	M	H
Groveland	M	H	L	M	H	H	L	M	M	L	L	L	H	H	L	M	H	M	H
Howey-in-the-Hills	M	H	L	M	H	H	L	M	M	L	L	L	H	H	L	M	H	M	H
Lady Lake	M	H	L	M	H	H	L	M	M	L	L	L	H	H	L	M	H	M	H
Leesburg	M	H	L	M	H	H	L	M	M	L	L	L	H	H	L	M	H	M	H
Mascotte	M	H	L	M	H	H	L	M	M	L	L	L	H	H	L	M	H	M	H
Minneola	M	H	L	M	H	H	L	M	M	L	L	L	H	H	L	M	H	M	H
Montverde	M	H	L	M	H	H	L	M	M	L	L	L	H	H	L	M	H	M	H
Mount Dora	M	H	L	M	H	H	L	M	M	L	L	L	H	H	L	M	H	M	H
Tavares	M	H	L	M	H	H	L	M	M	L	L	L	H	H	L	M	H	M	H
Umatilla	M	H	L	M	H	H	L	M	M	L	L	L	H	H	L	M	H	M	H
Villages, The	M	H	L	M	H	H	L	M	M	L	L	L	H	H	L	M	H	M	H

D. Hazard Profiles

b) Drought

1. *Description*

A drought is a period of time when an area or region experiences below-normal precipitation. The lack of adequate precipitation, can cause reduced soil moisture or groundwater, diminished stream flow, crop damage, and a general water shortage.

2. *Location and Extent*

All areas of Lake County are subject to the effects of drought conditions. Since Lake County has a large number of lakes, drought effects of lowered water levels may impact tourism for those that participate in activities on the water. Resident populations would not be unduly affected other than an inconvenience. Agricultural concerns such as the horticulture, animal services, citrus, and vegetable crops could be affected by a long-term drought which could have a negative economic effect. Critical facilities and infrastructure would likely be unaffected. Considering these factors, a drought would have a low impact to residents and critical infrastructure but have more moderate impact to agriculture.

The extent of drought in Florida is generally measured through one of two indices, the Keetch-Byram Drought Index (KBDI) or the U.S. Drought Monitor Index. While Lake County historically has not been immune to regional or statewide droughts, recent population growth has accelerated the depletion of water supplies. The KBDI has a range from 0 for no drought to 800 being the most severe drought. Table 3 summarizes the mean KBDI for Lake County since 2011.

Table 4: Keetch-Byram Drought Index (KBDI) for Lake County, Florida (2011 – 2020)¹

Date	KBDI
June 5, 2011	559
December 5, 2011	437
June 5, 2012	367
December 5, 2012	499
June 5, 2013	99
December 5, 2013	454
June 5, 2014	344
December 5, 2014	81
June 5, 2015	449
December 5, 2015	N/A²
June 5, 2016	N/A
January 1, 2017	457
June 5, 2017	431
December 5, 2017	359
June 5, 2018	55
December 5, 2018	405
June 5, 2019	447
December 5, 2019	274

¹ <http://currentweather.freshfromflorida.com/current-report.html>

² Data only available for prior 3 years from current date

3. Previous Occurrences

During 1977, a two-month dry emergency caused an estimated \$30,000,000 in damages to Florida, and the Governor declared a three-month drought during 1979, the worst since 1971.

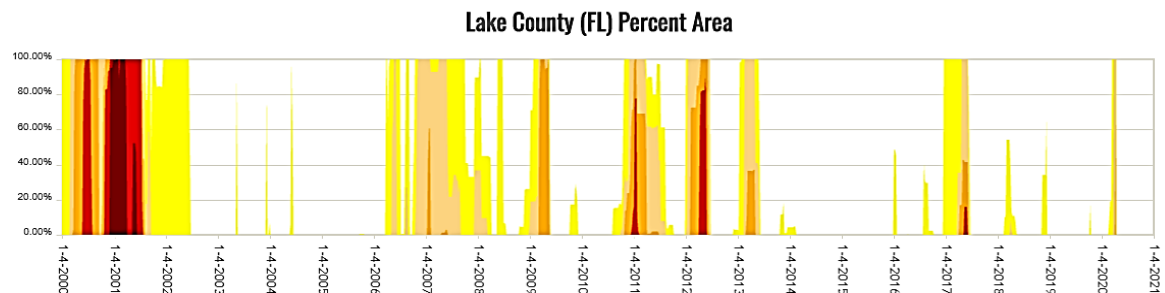
The drought from 1997-2002 was considered to be a “very serious” drought according to the St. John’s Water Management District. Lake County instituted water restrictions for itself at the same time that many other counties were doing the same. This drought also played a role in the extensive wildfires and sinkholes that occurred during the summers of this time period.

Since 2000, the longest duration of drought (D1-D4) in Florida lasted 124 weeks beginning on April 11, 2006 and ending on August 19, 2008. The most intense period of drought occurred the week of February 27, 2001 where D4 (Exceptional Drought) affected 39.08% of Florida land.³

No major drought events have taken place since the last LMS update.

The figure below shows a 20-year comparison of drought by condition for Lake County. D4 drought conditions are defined as conditions where exceptional and widespread crop/pasture losses occur as well as shortages of water which create water emergencies.

Figure 1: 20-Year Drought Comparison for Lake County, FL (2000 – 2020)



4. Probability of Future Events

As of January 2020, the Palmer Drought Severity Index (PDSI) categorized the region in a “moderate (D1) to severe (D2) drought.” Using historical records, it can be estimated that Lake County will experience at least one drought every two to three years.

There is no way to predict when a drought will occur or how long it may last. Drought conditions existed in Florida from 1965 through 1982, from 1997 to 2002, 2006 to present with some relief the rainy months in 2013 and 2014. The conditions of various areas of the state have are affected to different degrees.

5. Vulnerability and Risk Assessment

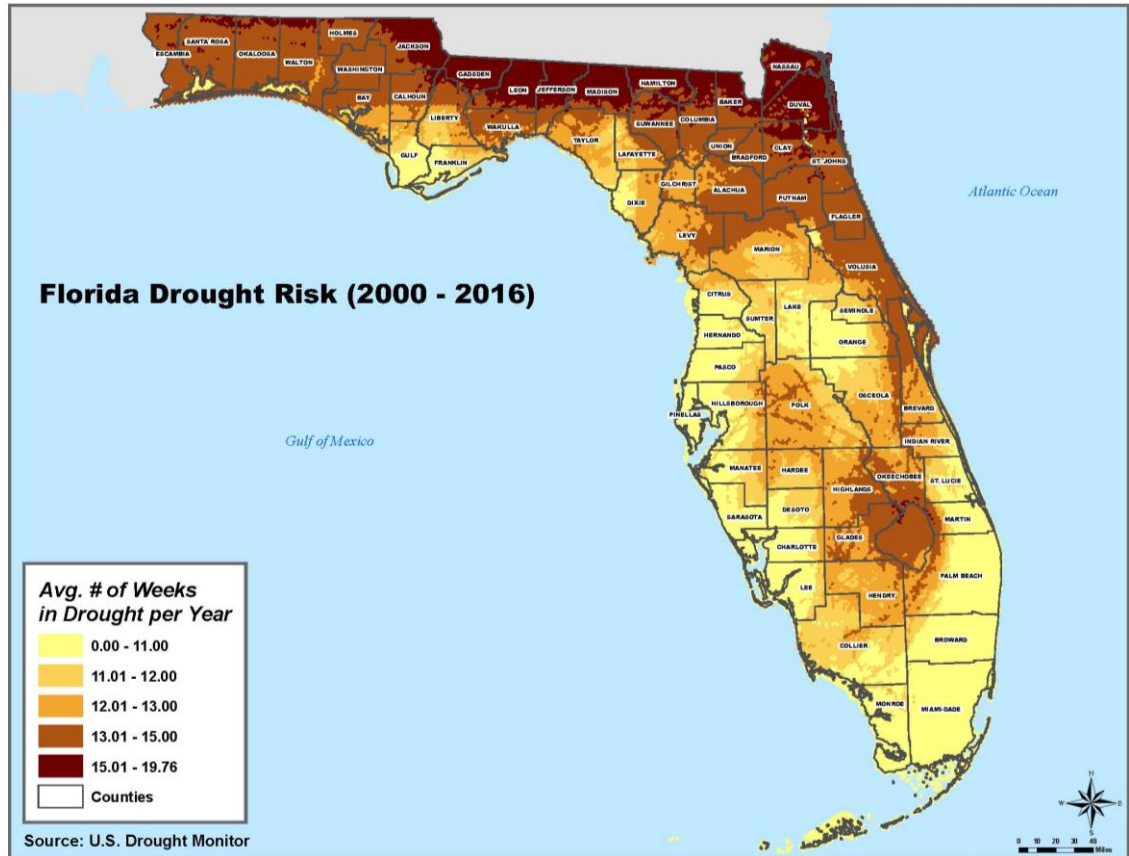
It is increasingly likely that Lake County could have another drought or extreme heat event. Extreme heat events can occur simultaneously with drought, but either can occur without

³ <https://www.drought.gov/drought/states/florida>

the other. While extreme heat events can cause death to any person of any age, the elderly, very young, and mobility restricted are considered the most at risk.

It is expected that the county could see an average of up to 12 weeks or more of drought each year (Figure 1) based on the average number of weeks of drought that occurred from the year 2000 through 2016 according to the data acquired from U.S. Drought Monitor (<https://droughtmonitor.unl.edu/>).

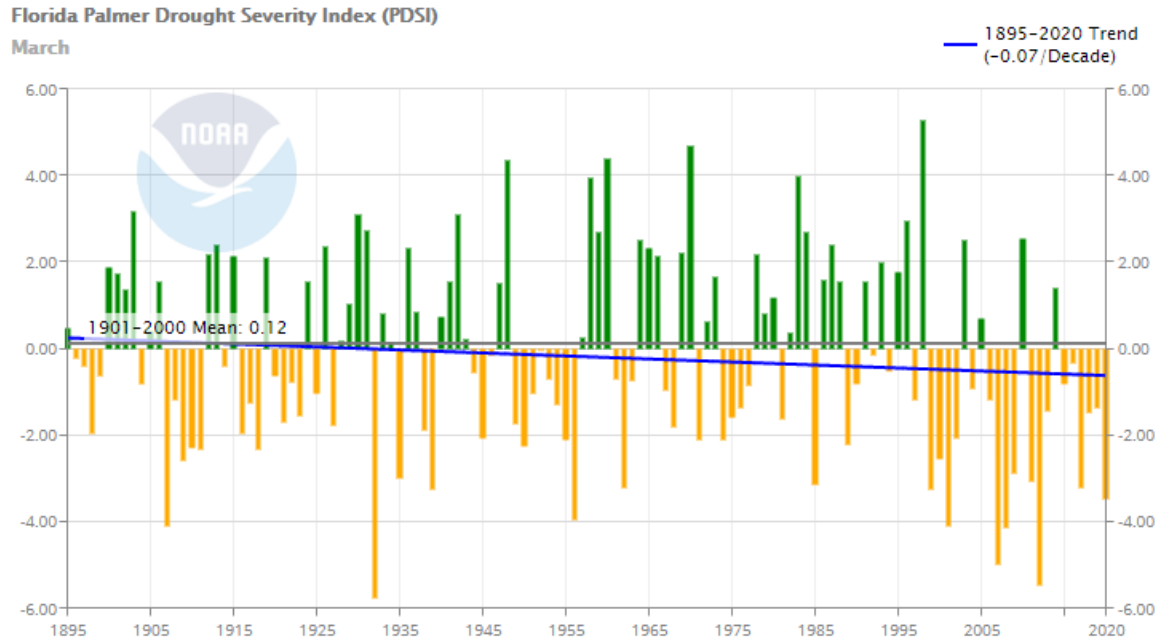
Figure 2: Florida Drought Risk (2000 - 2016)



Lake County is uniformly vulnerable to drought. Drought is typically associated with crop damage, and not necessarily the built environment (i.e., improved property). In a worst-case scenario, drought within Lake County could reach moderate to severe levels (400 to 800) out of a potential score of 800 on the KBDI Index.

The Palmer Drought Severity Index data for the State of Florida from 1895 to 2020 has shown a trend of more frequent severe drought conditions as seen in the figure below.

Figure 3: Florida PDSI Trend (1885 - 2020)



Lake County has experienced mostly moderate drought conditions over the last five years. Heavy rains during the rainy season can reduce the drought index substantially, however dry spells can increase the number in a relatively short time period. It is important to note that during prolonged cold spells when conditions are often windy, it will make conditions dry very quickly. Fires can be triggered from careless activities during extremely dry periods and water consumption may have to be curtailed if consumptions exceed rainfall and replenishment of the water table.

During a drought water levels in rivers and lakes would become lower, as would the water table. Local governments and water management districts within the County would find it necessary to impose water usage restrictions. Farmers would be particularly affected by the drought conditions, as the water table fell and deeper wells had to be drilled for irrigation purposes.

c) Flooding

1. *Description*

Flooding is a general and temporary condition of partial or complete inundation of normally dry land areas from:

- The overflow of inland or tidal waters;
- The unusual and rapid accumulation or runoff of surface waters from any source

For the state as a whole, flooding is a problem due to much of the state being at sea level. Lake County is very fortunate to have more elevation than other counties due to its interior

location. While flooding can result from either storm surge associated with hurricanes, by riverbank overflow, or by pooling of water, it is the latter two that represent a potential hazard to Lake County. Heavy rains within a drainage area and the inability of a river to accommodate the added runoff can cause flooding resulting in overflow. Storm water runoff is also a problem that occurs because of poor urban development in areas subject to flash flooding. Hurricane-induced flooding can also present problems for low-lying areas of Lake County. These areas may experience flooding from either a "direct hit" or a storm that passes close by. Rainfall varies with each hurricane; however, on the average, the normal hurricane delivers between ten and twelve inches of rain. Non-tropical storm systems can also linger and be significant rainmakers as well.

2. *Location and Extent*

Topography in Lake County is varied. Ground elevations range from less than 5 feet above National Geodetic Vertical Datum of 1929 (NGVD) along the St. Johns River to a high of 312 feet NGVD (USGS; 7.5 min. Quads). Landforms in Lake County are of three basic types: ridges, valleys, and uplands. Lake County has 1,345 lakes whose surface areas are 2.5 acres or more. About 32 percent of the county is taken up by lakes, swamps, and marshes; 33 percent by open undeveloped land; 21 percent by agriculture; 12 percent by Ocala National Forest; and 2 percent by urban use.

Lake County has more than 1,300 lakes comprising a total of 202 square miles. 45.5 percent of the county's acreage is in the 100-year floodplain. According to Federal Emergency Management Agency Flood Insurance Rate Maps (FIRM), most of the county's 100-year floodplain area lies in A, ANI, AO, or AH flood zones, with about 21% in the AE Zone. Certain areas of Lake County are low-lying and subject to flooding from rising water. Specific areas include those along the western shores of Lake Apopka, the complete shoreline of Lake Louisa, the western shorelines of Lake Minnehaha and Lake Minneola, the complete shoreline of Lake Dora, Lake Yale, Lake Akron, and along the entire western shoreline of the St. John's River. Many of the lakes could be impacted as well, although drainage wells and improved drainage systems have mitigated problems in these areas.

There are three primary areas within Lake County that would typically be affected by rain events: the St. Johns River area in extreme Northeast Lake County, the Green Swamp area in Southern Lake County and the Wekiva River area that straddles Seminole County to the east. These areas could have issues if heavy rains fell simultaneously in the counties surrounding Lake County, adding to the volume of runoff. Aside from these primary areas, ponding could occur anywhere in Lake County in low areas that are characterized by either poorly drained or supersaturated soils (high water table). There are no specific drainage patterns that aggravate flood conditions in the County, according to the St. John's River Water Management District.

Lake County has a vested interest in participating in the federal floodplain mapping project and the Community Rating System (CRS), where appropriate, in order to assist homeowners and businesses with decisions about property vulnerability and flood insurance. The National Flood Insurance Program (NFIP) allows property owners in the 100-year flood zone to acquire federal flood insurance policies on land subject to flood hazards. Only the county participates in the CRS a Federal Emergency Management Agency (FEMA) program, which qualifies residents for reduced rates on flood insurance.

These vary depending on the level of activities the jurisdiction performs to reduce its flood potential.

With regard to determining the extent of magnitude and severity of flooding that has taken place, there is not a scale like hurricanes and tornadoes. Even what has been considered as “minor” flooding could impact roadways, structures and the quality of life of residents. However, one tool that can measure severity along waterways is available from the National Weather Service. A river gauge had been installed at the St. Johns River in Astor to monitor the flood stage of the river to generate forecasts to better warn residents of potential flooding conditions.

In summary, Lake County has an abundance of lakes and fresh water bodies within its boundaries. The County itself lies above the aquifer that hydrates much of the Central Florida region. Southwest Lake County is an Area of State Environmental Concern, as it is an environmentally sensitive recharge area. The various maps provided that identify areas within the 100-year flood plain are merely tools to assist in planning. This is not to say that areas outside of the 100-year flood plain will not flood, because that simply is not the case. In recent years in the United States, it has been said that people have been caught off guard because the maps and plans said that they would not flood. However, the reality is that the State of Florida is extremely flat and subject to flooding a great deal more than other states. Lake County and municipal partners need to continue to monitor drainage patterns and reoccurring flood areas to pursue future mitigation activities.

3. *Previous Occurrences*

One of the aspects of living in Florida is the frequent downpours from thunderstorms in the summer months and the moisture sources that can feed storm systems, much of which can cause pooling of water along roadways and low-lying areas. Listing every heavy rain event that has taken place within Florida would be virtually impossible. There have been two significant flooding events in Lake County in the last ten years.

- Hurricane Matthew Flooding, 2016: Rain bands associated with Hurricane Matthew produced a swath of heavy rain of between 3.5 and 4.5 inches from Clermont to Mount Plymouth, resulting in areas of minor urban, roadway and lowland flooding. The St. Johns River near Astor peaked just below moderate flood stage. A total of 10 residents evacuated to shelters within the county due to the potential for river flooding.⁴
- Hurricane Irma Flooding, 2017: Rain bands associated with Hurricane Irma produced rainfall totals between 8 and 12 inches, resulting in areas of urban and poor drainage flooding. Numerous roadways were impacted by significant levels of standing water and many retention ponds reached capacity or overflowed.⁵

4. *Probability of Future Events*

The probability of future occurrence is medium-high as heavy rains associated with low lying areas, poor drainage areas and riverine overflow can result in flooding. Intense rainfall in a short period of time can cause flash flooding. The location and distribution of

⁴ <https://www.ncdc.noaa.gov/stormevents/eventdetails.jsp?id=661662>

⁵ <https://www.ncdc.noaa.gov/stormevents/eventdetails.jsp?id=720120>

the rainfall, the land use and topography, vegetation types and growth/density, soil type, and soil water-content are all contributing factors.

5. *Vulnerability and Risk Assessment*

With the exception of the highly elevated areas of Lake County that are out of the reach of areas that could collect water, all areas are subject to the effects of flooding, including those areas identified as being less likely to flood. For this reason, Lake County and municipal partners need to be vigilant about monitoring flood conditions with future events to enhance their planning efforts. Flooding can impact residential areas with their local roadways and lift stations that may be impacted if they become surrounded with water.

The Astor area has been particularly susceptible and damage is limited to individual homes. Areas along the St. Johns River can be impacted however are limited to individual homes that may become isolated. Emerald Lakes in Clermont has an ongoing flooding issue that is currently mitigated by the efforts of the subdivision. However, if their efforts were to fail there is a wastewater facility that would be inundated and would result in the need to evacuate the subdivision. Most of the county's businesses and critical facilities (including fire facilities and hospitals) are not located in hazardous areas and would likely not suffer impacts that would affect the general population. Given the possible effects to the entire population of Lake County, flooding has been designated to have a high impact potential.

Specific impacts that could occur include:

- Injury/death due to: drowning, vehicle accidents, becoming trapped, exposure to hazardous materials/wastewater.
- Damage to property: mold, repair or replacement of damaged property, issues due to uninsured property damage.

The Flood Risk Map generated from 2013 FEMA Flood Risk Report for Lake County is shown in Appendix III: Maps and Figures - General Flood Zones for Lake County, FL. Additional information regarding flood risks within the county can be found in the FEMA Lake County Flood Risk Report.⁶

d) Hail

1. *Description*

Hail is frozen precipitation that can occur during a thunderstorm. Hail forms when raindrops freeze into balls of ice. Up until January 2010, severe hail in Lake County was defined as three-fourths of an inch (penny size) or larger. However, in January 2010, the National Weather Service raised the hail size criteria for Severe Thunderstorm Warnings from 0.75-inch (penny size) to 1.00 inch (quarter size).

According to the National Weather Service, within Florida, many storms which have the potential for 0.75-inch hail also have the potential to produce 50-knot + (58 mph +) winds. Many storms capable of producing 0.75-inch to just below 1-inch size hail will still require Severe Thunderstorm Warnings for 50-knot + (58 mph +) damaging winds. Special

⁶ Lake County Flood Risk Report accessible from: <https://msc.fema.gov/portal/advanceSearch>

Weather Statements will continue to be issued for "strong storms," generally those with 45-57 mph winds and small hail, below 1.00-inch.

2. *Location and Extent*

Severe thunderstorms can happen anytime of the year in Central Florida and produce hail at any time. Although, hail storm events occur most often during the late winter and early spring severe weather season and as previously mentioned, often accompany thunderstorms or tornadoes. A hail event has no geographic limitations to the area it affects. Therefore, it is presumed that all of Lake County is uniformly at risk to a hail event.

On average, Lake County has seen hail from .75 to 1.75 inches in diameter. Lake County would expect to receive the same size diameter hail and possibly even greater sizes, which may occur from extremely high cloud tops that develop.

Damage from hail increases with the size of the hail and can cause damage to vehicles, aircraft, and homes, and can be fatal to people and livestock. However, Florida thunderstorms do not often include hail because the hailstones usually melt before they reach the ground because of the generally warm temperatures in Lake County.

3. *Previous Occurrences*

Mapping between the years of 1955-2002 indicates fewer than 35 severe hailstorms (using the former criteria) have struck Lake County during that timeframe. A couple of previous occurrences that produced substantial damage include:

- Winter Storm in 1986: A storm that hit Lake County produced hail the size of golf balls in and around the Leesburg area of Lake County.
- Hail Storm of 1992: The most destructive hailstorm in east central Florida history occurred on March 25, 1992 across Lake, Orange, and Seminole counties. An estimated \$60 million dollars in damage occurred, with losses concentrated among nursery greenhouses and car dealerships.

Since 2010 there have been 24 documented hail storm events in Lake County (Table 4) with hail ranging in size from .75 to 1.75 inches in diameter. None of these hail storms resulted in property damage or crop damage or any significance. Locations and dates of hail storms are listed in the table that follows. Should hail occur, it could cause damage to car dealerships and the agricultural enterprises which include greenhouses, horticulture, foliage, and citrus crops. Damage to car dealerships has occurred in the past and could happen again in the future. This could result in an economic effect to the County. Tourism, critical facilities, and infrastructure would likely not be impacted. Other than injuries to individuals that may get caught out in the hail storm, populations would not be affected.

Table 5: Hail Storm Damage in Lake County Florida (2010 – Present)⁷

Location	Date	Size	Damages
Lake Minnehaha	6/15/2011	1.00	-0-
Lake Louisa	4/20/2012	1.50	-0-
Astor Park	4/20/2012	1.75	-0-
Howey-in-the-Hills	7/09/2012	0.75	-0-
South Clermont	3/24/2013	1.00	-0-
Sylvan Shores	4/30/2013	1.00	-0-
Lake Dora	4/30/2013	0.88	-0-
South Clermont	5/19/2013	0.88	-0-
Mount Dora	2/12/2014	1.00	-0-
Groveland	6/10/2014	1.00	-0-
Eustis	6/20/2015	1.00	-0-
Lake Louisa	7/3/2015	1.00	-0-
Lake Dora	3/26/2016	1.00	-0-
Fruitland Park	5/4/2016	0.88	-0-
Sorrento	5/29/2016	1.00	-0-
Leesburg	1/22/2017	1.00	-0-
Tavares	1/22/2017	1.00	-0-
Grand Island	1/22/2017	1.00	-0-
Okahumpka	7/4/2017	0.88	-0-
Mount Plymouth	7/17/2017	1.00	-0-
Paisley	6/28/2018	0.75	-0-
Okahumpka	3/27/2019	1.00	-0-

4. *Probability of Future Events*

Based on the frequency of hail events in the past, the probability of future hail occurrences in Lake County is high. Over the past 10 years, Lake County has been impacted by one or more hail events per year. It can be expected that future hail events will continue to cause minor to severe damage to property throughout Lake County.

5. *Vulnerability and Risk Assessment*

As it cannot be predicted where hail may fall, all existing and future buildings, facilities, and populations in Lake County are considered to be equally exposed to this hazard and could potentially be impacted. Hail can become as big as baseballs or golf balls; however, Florida typically experiences hail the size of pennies (0.75-inches) or quarters (1.00-inches). An average hail storm can last for a few minutes to hours. While all of Lake County's assets are equally exposed to hail, anticipated future damages or losses are expected to be minimal. When looking at the damage amounts associated with historical occurrences, hail generally would have a low impact to Lake County and its jurisdictions.

⁷ <http://www.ncdc.noaa.gov/stormevents>

e) Extreme Heat1. *Description*

Extreme heat is defined as extended period where the temperature and relative humidity combine for a dangerous heat index. During the summer months heat can be very dangerous, as it can induce hyperthermia (heat stroke), heat exhaustion, or dehydration.

2. *Location and Extent*

All of Lake County is equally at-risk from extreme heat. It is also especially hazardous to certain segments of the population such as the elderly and young children. Additionally, heat increases the demand for electricity to operate air conditioners, increasing the likelihood of brownouts and blackouts within the electrical grid.

While there are various definitions for extreme heat (or heat waves), the National Weather Service issues a heat advisory when the daytime temperatures will exceed a certain temperature depending on the time of the year. It is during these times that those vulnerable populations will be especially prone to extreme heat-related illnesses and conditions. Florida is quite accustomed to daytime temperatures in the 90's in the summertime. Also, with Florida being a peninsula, the breezes from both coastlines assists in keeping the temperatures generally below 100° F. The table below shows the heat threat levels from the National Weather Service.

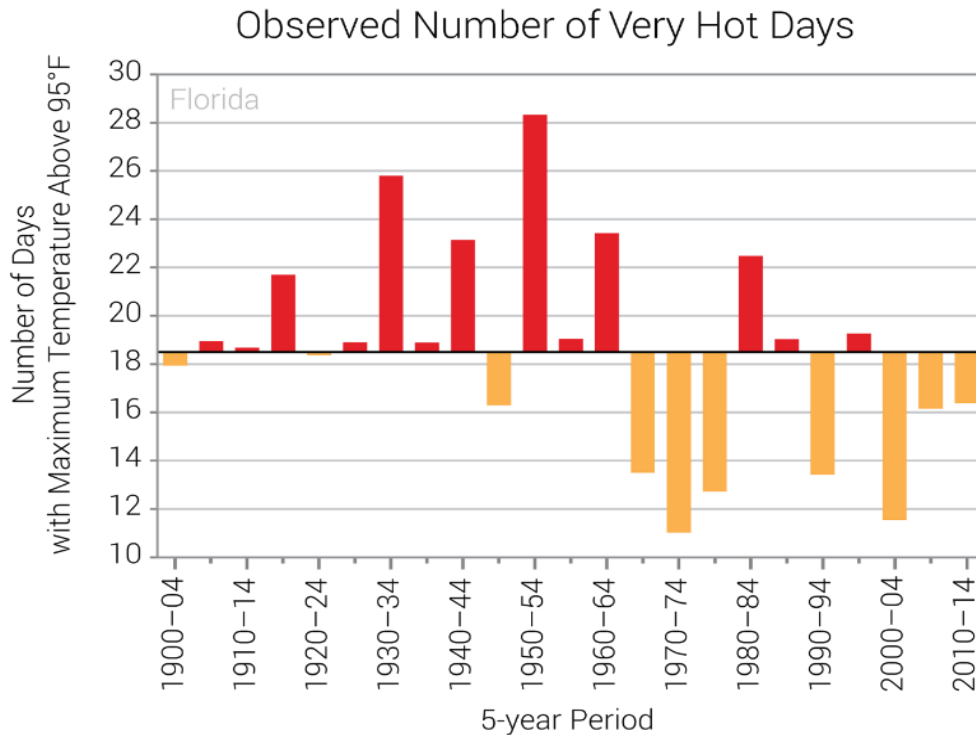
Table 6: Excessive Heat Threat Chart⁸

Excessive Heat Threat Level	Threat Level Descriptions
Extreme	<i>"An Extreme Threat to Life and Property from Excessive Heat"</i> Highest heat index 118 degrees (F) or greater
High	<i>"A High Threat to Life and Property from Excessive Heat"</i> Highest heat index 113-117 degrees (F) or greater
Moderate	<i>"A Moderate Threat to Life and Property from Excessive Heat"</i> Highest heat index 108-112 degrees (F) or greater
Low	<i>"A Low Threat to Life and Property from Excessive Heat"</i> Highest heat index 105-107 degrees (F) or greater.
Very Low	<i>"A Very Low Threat to Life and Property from Excessive Heat"</i> Highest heat index around 105 degrees (F) for July and August or...between 102-104 degrees (F) for June through September or...between 99-103 degrees (F) for May through October
Non-Threatening	<i>"No Discernable Threat to Life and Property from Excessive Heat"</i> Warm season weather conditions are non-threatening

⁸ https://www.weather.gov/mlb/heat_threat

Florida typically experiences far fewer days with temperatures exceeding 100°F than most other southern states, it is the most humid state in the nation leading to uncomfortable summers for visitors and local residents. As mentioned, extended periods of extreme heat, especially when combined with high humidity, can result in heat-related illness among vulnerable populations, as well as place excess stress on agricultural production, water supplies, and energy generation.⁹

Figure 4: Observed Number with Maximum Temperature Above 95 Degrees, State of Florida



3. Previous Occurrences

Research from past years did not produce data that revealed extraordinary hot spells within Florida. However, a noteworthy period in Central Florida, including all of Lake County, was the heat wave of June – July 1998, when coastal breezes were impeded – allowing temperatures across the region to range between the upper 90's and 101 degrees. Wildfires became extreme in certain parts of Central Florida (National Weather Service, Melbourne). This time was known as the '98 Florida Firestorm.

4. Probability of Future Events

Extreme heat has a moderate probability of having a significant impact to Lake County. As noted, each year Florida typically has several days over 95 degrees in which increases the likelihood of an extreme heat event.

⁹ <https://statesummaries.ncics.org/chapter/fl/>

5. *Vulnerability and Risk Assessment*

All areas of Lake County are susceptible to extreme heat. A significant heat wave coinciding with a drought could damage crops creating an economic effect. Additionally, the homeless and elderly populations would have an increased risk of potential hyperthermia (heat stroke), heat exhaustion, or dehydration. Lake County would have to consider opening shelters to accommodate these populations. Tourism would not necessarily be impacted as hot weather is expected in Florida. Critical facilities and infrastructure would not likely be impacted.

According to the U.S. Census Bureau, in 2018 it was estimated that the median age in Lake County was 47.3 and increase from 45.6 in 2010. Additionally, as of 2018, 26.63% of the population in Lake County was aged 65 years or older (an increase from 25.7% in 2010), representing a rather sizable portion of the county that is more vulnerable to extended periods of extreme heat (or heat waves). The county continues to be a destination for retirees and has seen, and will continue to see, its elderly population increase. Also, urbanization will lead to an increase in the “heat island” effect from an increase in impervious surfaces, which only exacerbates extreme heat as a hazard in the future. Considering all of these factors, extreme heat would generally have a moderate impact to Lake County and its jurisdictions.

f) Tropical Cyclone Events

1. *Description*

A hurricane is a tropical cyclone. A tropical cyclone is a rapidly rotating storm system characterized by a low-pressure center, a closed low-level atmospheric circulation, strong winds, and a spiral arrangement of thunderstorms that produce heavy rain or squalls.

Hurricanes and tropical storms have long affected Florida because of its location. As a narrow peninsula between two warm bodies of water, Florida is regularly affected by hurricanes. The greatest threats to Lake County posed by a hurricane are wind damage and inland flooding. Wind damage from the storm itself is related to wind speed and the accompanying “pressure” that is exerted on structures. When the wind speed doubles, four times more force is exerted on structures. Wind damage can also be caused by hurricane-spawned tornadoes, which can be more destructive than the hurricane itself. Damage can also be caused by wind-borne debris and flood conditions.

2. *Location and Extent*

The entire County is susceptible to tropical cyclone events. Over the course of the past century, a very large number of storms have crossed the Central Florida region from various directions. Lake County is no stranger to tropical systems, which can have severe impacts on health, safety, and the economy. Many of the hurricanes identified as crossing through Lake County were during periods when record keeping did not document a storm name or specific information. Sources of historical hurricane information often provide a large amount of information for coastal locations, but less for interior locations.

The intensity of hurricanes is measured by the Saffir-Simpson scale, with sustained wind speeds (measured in miles per hour) to measure the extent of a tropical storm or depression. Once a tropical storm reaches wind speeds of 74 miles per hour or greater, it

is then classified as a Category 1 hurricane. It is important to note that in 2010, the National Weather Service and National Hurricane Center have changed its criteria by no longer correlating wind speed with storm surge height. No two storms are the same and less intense storms could in fact created storm surge that is comparable to stronger storms.

Typical damage by hurricane category can be seen in the following table.

Table 7: Saffir-Simpson Scale and Typical Damage¹⁰

Scale	Wind Speed	Typical Damage
Category 1	74-95 mph	Well-constructed frame homes could have damage to roof, shingles, vinyl siding, and gutters. Large branches of trees will snap and shallowly rooted trees may be toppled. Extensive damage to power lines and poles likely will result in power outages that could last a few to several days.
Category 2	96-110 mph	Well-constructed frame homes could sustain major roof and siding damage. Many shallowly rooted trees will be snapped or uprooted and block numerous roads. Near-total power loss is expected with outages that could last from several days to weeks.
Category 3	111-129 mph	Well-built framed homes may incur major damage or removal of roof decking and gable ends. Many trees will be snapped or uprooted, blocking numerous roads. Electricity and water will be unavailable for several days to weeks after the storm passes.
Category 4	130-156 mph	Well-built framed homes can sustain severe damage with loss of most of the roof structure and/or some exterior walls. Most trees will be snapped or uprooted and power poles downed. Fallen trees and power poles will isolate residential areas. Power outages will last weeks to possibly months. Most of the area will be uninhabitable for weeks or months.
Category 5	≥157 mph	A high percentage of framed homes will be destroyed, with total roof failure and wall collapse. Fallen trees and power poles will isolate residential areas. Power outages will last for weeks to possibly months. Most of the area will be uninhabitable for weeks or months.

3. Previous Occurrences

Between 1851 and 2018, in Florida, 112 hurricanes have directly impacted the state of Florida. The total number of major hurricanes, Category 3 or above, between 1851 and 2018, reached 55, resulting in incalculable damages and loss of life. Flooding that occurred from Tropical Storm Fay is discussed in the flooding hazard section and no other significant tropical cyclone hazards have occurred since. The following storms are a few of the more notable events that have impacted Lake County, based on available information:

- Hurricane Donna, 1960: This storm impacted Florida as a Category 4 hurricane and traveled northward through the state, heavily impacting the citrus industry up to the Central Florida region.

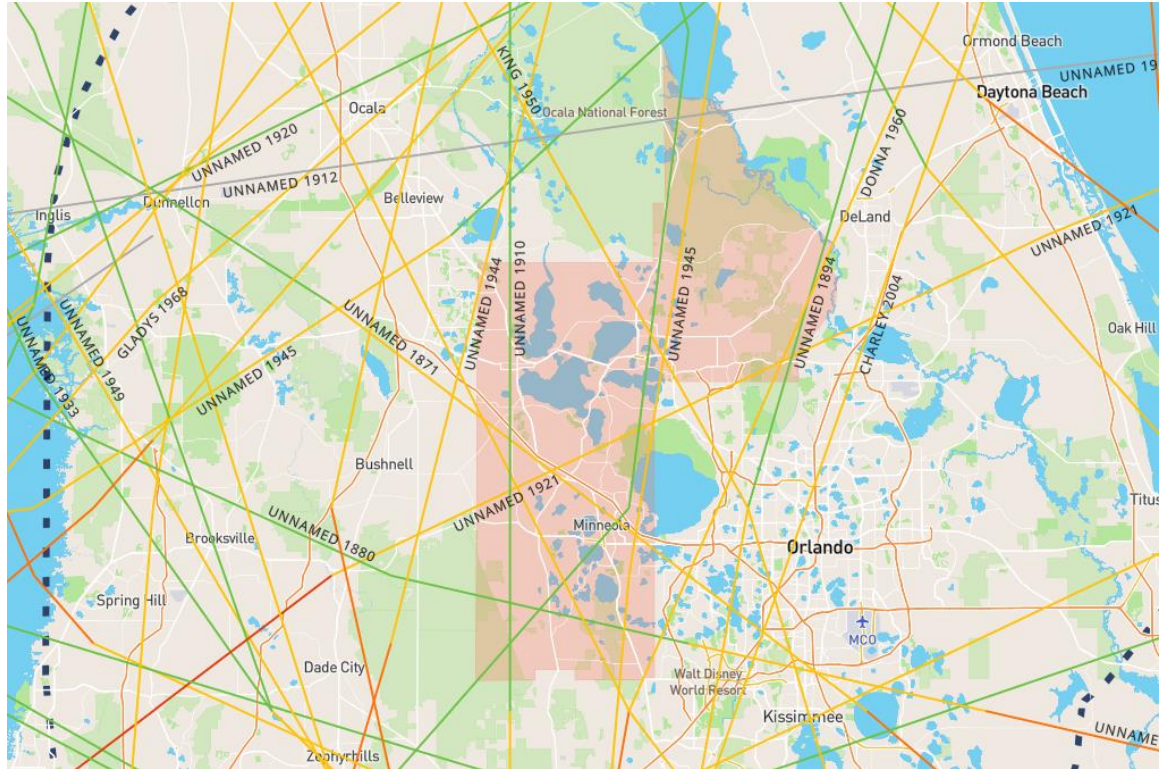
¹⁰ <http://www.nhc.noaa.gov/aboutsshws.php>

- Hurricane Charley, 2004: There were some downed trees and power lines in southern Lake County. Three houses were damaged by falling trees. There was no major infrastructure damage (National Weather Service, Melbourne). Orange County and areas to the east of Lake County received substantial damage. This storm is an excellent example of a hurricane that did not lose much potency, despite traveling over land for an extended period of time. The storm exited the state in the Daytona Beach area. If the storm track had been slightly to the west, Lake County could have received substantial damage. The previous LMS notes that Lake County sheltered about 2,000 people during Hurricane Charley.
- Hurricane Frances, 2004: This storm resulted in 417 residences being damaged in Lake County, with 69 destroyed (most mobile homes), 77 business damaged and two (2) destroyed. Damage estimates were near six (6) million dollars (National Weather Service, Melbourne). The previous LMS notes that the damages were higher at approximately \$8.5 million and that Lake County sheltered about 4,000 people during Hurricane Frances.
- Hurricane Jeanne, 2004: The impacts in Lake County were that approximately 2,800 residences were damaged, 111 residences destroyed and 60 businesses damaged (National Weather Service, Melbourne).
- Hurricane Matthew, 2016: As major Hurricane Matthew passed east of the Space Coast during the morning of October 7, winds gusted to tropical storm force for over 12 hours across Lake County. Major damage occurred to three homes with minor damage to four homes, caused mainly by falling trees and branches. Initial property damage assessment was a cost of approximately \$389 thousand.¹¹
- Hurricane Irma, 2017: Category 3 Hurricane Irma made landfall near Naples during the late afternoon of September 10. Irma then moved northward across west-central Florida during the overnight period while weakening to a Category 1 hurricane approximately 45 miles west of Leesburg. A long duration of damaging winds occurred across Lake County, with a period of gusts to minimal hurricane force. The highest measured sustained wind was recorded at the Leesburg Airport ASOS (KLEE; 48 mph from the southeast at 0235LST on September 11) and the highest measured peak gust was 69 mph from the southeast at 0246LST. A preliminary damage assessment from the county listed 1,987 affected residential and business structures, with an additional 648 with minor damage, 82 with major damage and 7 destroyed. The total residential/business estimated damage cost was \$36.5 million.¹²

¹¹ <https://www.ncdc.noaa.gov/stormevents/eventdetails.jsp?id=719429>

¹² <https://www.ncdc.noaa.gov/stormevents/eventdetails.jsp?id=719501>

Figure 5: Hurricane Paths in Lake County and Central Florida, (1851 – 2017)¹³



Since tropical cyclones are random in distribution, it is impossible to forecast whether Florida will experience a tropical cyclone. However, the probability of a future tropical cyclone/hurricane event making a direct impact to Lake County is moderate as noted in referencing the previous occurrences section. Past history shows the county is vulnerable but impacts have been sporadic over the years.

As mentioned previously, all areas of Lake County are susceptible to tropical cyclone events. With Lake County being located inland approximately 50 miles from either coast, it is more protected than other parts of the state from the most devastating winds from hurricanes. The County's interior location is not threatened by storm surge from the ocean waters, with the exception of areas along the St. Johns River located in northeast unincorporated Lake County. These areas may be susceptible to flooding if the outflow of the river into the Atlantic is adversely impacted due to the storm surge pushing the water inland for a period of time.

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impacted the residents and businesses of Lake County. With the population of Lake County continuing to grow, the effects of even minor hurricanes and tropical systems will be felt even more than in the past. Storms from the past, like Hurricane Donna, while costly, were not in today's dollars and did not impact nearly as many people than if the storm hit today. Storms like Hurricane Charley, which hit the Orlando metro area with sustained winds of 85 mph, remind public safety officials that predictions are not always accurate. Despite being an interior county, substantial damage can be done away from the coastline. Furthermore, a slight change in path can make all of the difference in the areas that are ultimately impacted by an event. Through the efforts of mitigation activities, areas can be further protected against known hazards.

The entire population of Lake County, tourism, agriculture, critical facilities, and infrastructure could be affected by a tropical cyclone depending on the severity of the storm and the path it takes. Mobile homes, poorly constructed and/or substandard housing, apartment complexes, and low-rent housing projects are especially susceptible because of their lack of resistance to high winds, and apartment complexes and low-rent projects because of their size and densities. High wind speeds can cause damage to structures with the most significant threat to mobile homes and other older substandard or unreinforced properties that are located throughout the County.

The total mobile home population in Lake County is estimated at 40,935¹⁴ accounting for nearly 12% of the total county population. This population has to have a safe place to go during possible tornadic activity.

While everyone can be impacted, the elderly, those with lower income, and the homeless would be most affected. Tornadoes can cause other cascading events like utility outages, economic loss, and transportation issues along with the hardships that result from the disruption of normal life. Thus, when considering the possibility of these wide-ranging effects, the impact to Lake County and its jurisdictions is high.

While improbable, it is not impossible for a Category 5 hurricane, with winds of 155 MPH, to impact Lake County, however, due to inland location the predominant number of storms would be Category 4 or less.

g) Thunderstorms/Wind/Lightning

1. *Description*

Thunderstorms consist of rain-bearing clouds that also produces lightning, a rapid discharge of electricity in the atmosphere. Any person who has been a resident of Central Florida during the summer is well aware of the typical weather patterns during this season. Warm mornings give way to afternoon thunderstorms that are typically localized and can be very intense. Compared to many other places in the nation, Central and South Florida receive an exorbitant amount of lightning strikes that are responsible for numerous deaths and property damage every year. The Central Florida region between Tampa and Orlando

¹⁴ data.census.gov; 2018 ACS 1-Year Estimates: Total Pop. in Occupied Housing by Tenure by Units in Structure

has been dubbed the “Lightning Capital” of the United States. Here, warm, rising air pulls in sea breezes from the Atlantic Ocean and the Gulf of Mexico.

2. *Location and Extent*

All areas of Lake County are susceptible to the effects of thunderstorms. These events are common throughout Florida, occur throughout the year and typically are widespread events. Although thunderstorms generally affect a small area, they are very dangerous given their ability to produce accompanying hazards including high winds, hail, and lightning which all may cause serious injury or death, in addition to property damage. They are most common in Florida because atmospheric conditions are favorable for generating powerful storms.

All areas of Lake County are susceptible to the effects of high winds related to a thunderstorm. A severe thunderstorm includes damaging winds greater than 58 mph (50 knots) or greater and hail 1 inch or larger in diameter. High winds have been further broken down into three categories by the NWS Storm Events database:

- High Wind: Sustained non-convective winds of 35 knots (40 mph) or greater lasting for 1 hour or longer or winds (sustained or gusts) of 50 knots (58 mph) for any duration (or otherwise locally/regionally defined), on a widespread or localized basis. In some mountainous areas, the above numerical values are 43 knots (50 mph) and 65 knots (75 mph), respectively.
- Strong Wind: Non-convective winds gusting less than 50 knots (58 mph), or sustained winds less than 35 knots (40 mph) resulting in a fatality, injury, or damage.
- Thunderstorm Wind: Winds, arising from convection (occurring within 30 minutes of lightning being observed or detected), with speeds of at least 50 knots (58 mph), or winds of any speed (non-severe thunderstorm winds below 50 knots) producing a fatality, injury, or damage. Events with maximum sustained winds or wind gusts less than 50 knots (58 mph) should be entered as a Storm Data event only if they result in fatalities, injuries, or serious property damage.

All areas of Lake County are susceptible to lightning strikes and their potential effects. Any lightning bolt can kill. Lightning plays a crucial role in the fire-based ecologies of the forests; unfortunately, it also plays a role in fires that might threaten human life and property. Many of the fires in 1998¹⁵ that impacted the State of Florida were ignited by lightning strikes. Due to Lake County’s location in Central Florida, there are a large number of lightning strikes and loss of life can primarily be prevented by proper public education. Damage to buildings can also be prevented by lightning rod systems and surge protectors to reduce the risk of fires. With regard to a scale for lightning, there is no scale for strength (such as weak vs. strong).

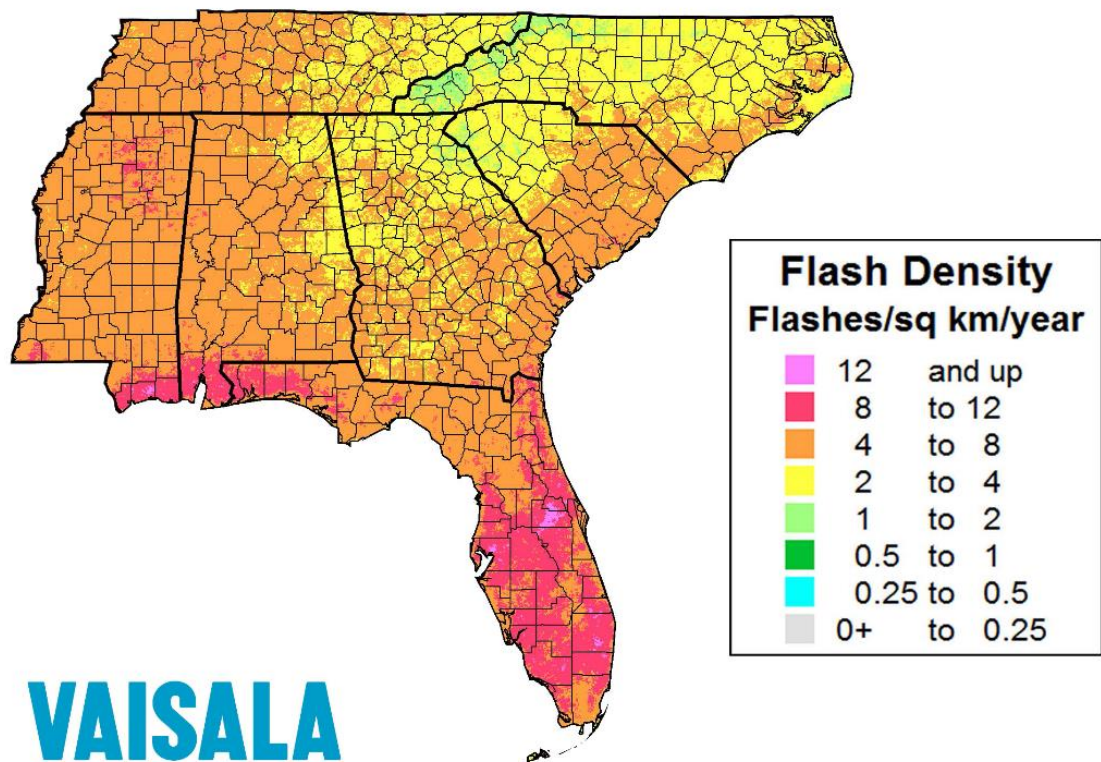
3. *Previous Occurrences*

Within Lake County, 13 deaths and 39 injuries occurred between 1959 and 2010, with a total of 449 deaths statewide in the same period. This included a man who was struck and

¹⁵ U.S. Fire Administration, 2004

killed in June 1990 while on a golf course in Lake County, and a fourth-grade teacher at Eustis Heights Elementary School who was struck and injured in 1988 while standing in an exterior doorway. Since 2010, forty-three¹⁶ (43) people have died in Florida from lightning strikes, an average of 3+ people per year, while some 25+ people are injured on average in the United States. Lake County could expect 4-12 lightning flashes per square kilometer per year. In 2018, lightning struck and killed a 44-year old man in Umatilla, this has been the only death recorded in the county due to lightning since 2010. The Figure below indicates lightning flash density from 2007 through 2016.

National Lightning Detection Network 2007 - 2016



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Figure 6: Vaisala National Lightning Detection Network (2007 - 2016)¹⁷

Since 2010, there have been 29 thunderstorm/wind events in the county, 13 of which caused damage in Lake County. Details of these impacts, including the magnitude and amount of property damage cost are listed in the following table.

¹⁶ <http://www.lightningsafety.noaa.gov/victims.html>

¹⁷ Lightning data from Vaisala.com provided in a media release dated 2017

Table 8: Thunderstorm/Wind Events in Lake County (2010 – 2019)¹⁸

Location	Date	Magnitude	Property Damage
<i>Mascotte</i>	1/25/2011	61 kts EG	500.00K
<i>Ferndale</i>	1/25/2011	56 kts EG	20.00K
<i>Mascotte</i>	3/30/2011	50 kts EG	0.00K
<i>Grand Island</i>	3/30/2011	50 kts EG	0.00K
<i>Leesburg Airport</i>	3/30/2011	54 kts EG	0.00K
<i>Tavares</i>	3/30/2011	50 kts EG	0.00K
<i>Astor Park</i>	4/20/2012	52 kts EG	0.50K
<i>Groveland</i>	5/15/2012	50 kts EG	0.40K
<i>Lady Lake</i>	8/10/2012	50 kts EG	0.00K
<i>South Clermont</i>	3/24/2013	56 kts EG	0.00K
<i>Lake Louisa</i>	3/24/2013	70 kts EG	250.00K
<i>Lake Louisa</i>	3/24/2013	65 kts EG	0.00K
<i>Mt. Dora</i>	6/11/2013	Heavy Rain	10.00K
<i>Lake Griffin</i>	7/4/2013	50 kts EG	0.00K
<i>Minneola</i>	4/30/2014	43 kts EG	2.00K
<i>Tavares</i>	6/10/2014	48 kts EG	1.00K
<i>Mt. Dora</i>	5/20/2015	52 kts. EG	0.00K
<i>Montverde</i>	6/1/2015	52 kts. EG	0.00K
<i>Ferndale</i>	6/18/2015	52 kts. EG	0.00K
<i>Lane Park</i>	6/25/2015	52 kts. EG	0.00K
<i>Tavares</i>	7/29/2015	48 kts. EG	50.00K
<i>Montclair</i>	7/29/2015	43 kts. EG	1.00K
<i>Lake Dora</i>	3/26/2016	50 kts. EG	0.00K
<i>Sylvan Shores</i>	7/13/2016	52 kts. EG	10.00K
<i>Lake Minnehaha</i>	7/15/2016	56 kts. EG	15.00K
<i>Tropical Shores Manor</i>	8/14/2016	50 kts. EG	0.00K
<i>Lisbon</i>	8/14/2016	50 kts. EG	0.00K
<i>Mascotte</i>	9/1/2016	50 kts. EG	14.00K
<i>Eustis</i>	9/1/2016	50 kts. EG	5.00K
<i>Lady Lake</i>	4/6/2017	60 kts. EG	0.00K
<i>Lake Yale</i>	5/30/2017	50 kts. EG	0.00K
<i>Howey in the Hills</i>	7/21/2017	61 kts. EG	25.00K
<i>Lake Harris</i>	4/15/2018	48 kts. EG	1.00K
<i>Howey in the Hills</i>	11/2/2018	50 kts. EG	0.00K

¹⁸ <http://ncdc.noaa.gov/stormevents>

Location	Date	Magnitude	Property Damage
Lake Harris	12/20/2018	50 kts. EG	0.00K
Mascotte	1/24/2019	83 kts. EG	250.00K
Okahumpka	5/5/2019	52 kts. EG	0.00K
Eustis	5/5/2019	52 kts. EG	0.00K

4. *Probability of Future Events*

The probability of future occurrences of thunderstorms/winds/lightning within Lake County is high as these events occur frequently especially during summer months. Generally speaking, all of Lake County is subject to the effects of Thunderstorms, Wind, or Lightning. It is anticipated since Lake County has experienced lightning storms before, it will likely occur again. Wind events in recent history have averaged from 40 to 70 knots and it is likely that those will occur again as well. The county has certainly experienced high winds and gusts that have impacted the residents and businesses of Lake County.

5. *Vulnerability and Risk Assessment*

Lake County is very susceptible to thunderstorms, high winds, and lightning. With the population of Lake County continuing to grow, the effects of thunderstorms and wind events will be felt even more than in the past and substantial damage can be experienced by residents. With severe thunderstorms and lightning, segments of the population could be negatively affected. Agricultural lands throughout the County and its jurisdictions could suffer damage and economic losses. Individuals in open areas such as golf courses and parks are at risk, as well as those that may be participating in boating or other water activities on the numerous lakes and streams in Lake County. Critical facilities and infrastructure would be possibly impacted in a devastating storm. Lightning can cause fires in the future during dry periods, more so within unincorporated Lake County within forested areas. Lake County is part of lightning capital of the US and on average receives 6.0 to 7.5 lightning flashes per square km, a relatively high flash density during storms. Given all of the factors, thunderstorms, high winds, and lightning generally would have a high impact to Lake County and its jurisdictions.

h) Sinkholes/Subsidence

1. *Description*

According to United States Geological Survey (USGS), a sinkhole is a depression in the ground that has no natural external surface drainage. Basically, this means that when it rains, all of the water stays inside the sinkhole and typically drains into the subsurface. Sinkholes are dramatic because the land usually stays intact for a period of time until the underground spaces just get too big. If there is not enough support for the land above the spaces, then a sudden collapse of the land surface can occur.

Topographically, Florida is part of a large Karst formation that comprises a section of the southeastern portion of the United States. Karst refers to the rock “foundation” that is slowly eaten through by chemical weathering eventually leading to subsidence or sinkholes. In Florida, the rock is generally limestone or gypsum, but it can be other types as well. The Karst terrain is also marked by the numerous caves and underground drainages.

2. *Location and Extent*

According to CDS Business Mapping utilizing the sinkhole database, Lake County is ranked as number 10 on a list of the top sinkhole prone counties in Florida¹⁹ and experiences several sinkholes a year, usually on private property. In cases where sinkholes occur in the public right-of-way, the Lake County Department of Public Works and/or the Florida Department of Transportation are notified to assess the sinkhole activity. Sinkholes impact the community generally by physical destruction. Their extent is generally measured in terms of the diameter of the opening and/or their depth (both usually measured in feet). Any size sinkhole is a threat because they can cause harm to people, vehicles or entire structures, as they succumb to the unstable ground.

Although it might be true that some areas of Central Florida are more prone to sinkholes than others, it must be realized that all areas of Lake County are susceptible to sinkholes and their potential effects. The county as a whole has more sinkhole activity in the central portion of the county, with areas outside of the county to the north and east having much more activity, based on sinkhole reports by the U.S. and Florida Geological Surveys. However, this does not mean that extreme damage cannot occur anywhere; all it takes is one sinkhole to severely impact life and property. Sinkholes can be caused by water ponding; canting of fence posts; collapse of bulkheads; and other hydro-geological factors.

3. *Previous Occurrences*

According to the Florida Department of Environmental Protection there were approximately 100 sinkholes reported to that agency since 1964 (FDEP Sinkhole Database), not including reports from other agencies. This number is probably lower than the actual amount considering that there are numerous sinkholes that are never reported to the authorities. Subsidence occurs because of settling of soil underneath the foundation of structures and typically results in minor, repairable damage. It can, however, in some cases result in the structure being condemned. Below are some of the more notable sinkhole occurrences that have happened in Lake County:

- June 2000: An extended drought was blamed for a sinkhole 20 feet wide that opened in Lake County.
- February 2004: A sinkhole approximately 30 feet in diameter opened up in Clermont, forcing a family to relocate until it could be filled.
- November 2005: A large sinkhole forced a Mascotte family out of their home while it was determined if there was a threat to the structural integrity of the house.
- August 2006: A sinkhole opened in Clermont that was approximately 20 feet in diameter and closed Maridru's Lane.
- September 2007: A large, growing sinkhole forced several families in Clermont to relocate after a neighbor's house was condemned.
- June 2011: A sinkhole swallowed part of a Leesburg store building on East Main Street caused by wet weather after a dry spell causing the ground to become too heavy and collapse.

¹⁹ <http://www.riskmeter.com/RiskMeter/RiskMeter-Announces-Top-Ten-Sinkhole-Prone-Counties.htm>

- August 2013: A sinkhole opened up in Clermont at the Summer Bay Resort causing a building to slowly sink and prompting the evacuation of three buildings.
- August 2015: A sinkhole opened up in Groveland which resulted in a boil water notice for some and no water for those closest to the location of the sinkhole including one school.

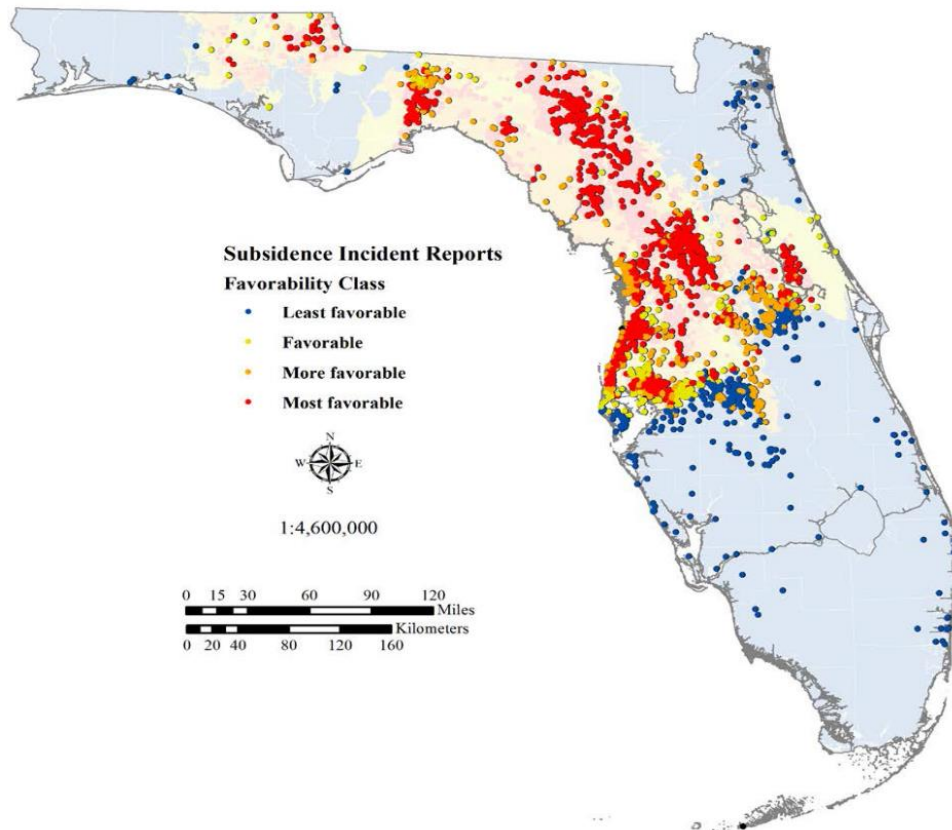
No major sinkhole events have taken place since the last LMS update.

4. *Probability of Future Events*

There is a moderate probability of future sinkhole occurrences in Lake County, according to historic data as sinkhole events occur every few years. Activities that increase the risk of sinkhole are groundwater pumping, construction and development practices, and breakages in water lines, though they can also occur due to natural or geological factors.

5. *Vulnerability and Risk Assessment*

As noted, from 2010 to 2019, Lake County has had a reported 36 sink holes of various sizes, ranging from under 3 feet wide to over 40 feet wide. While most of the sinkholes are relatively minor and pose little threat, there is always the possibility of a much larger sinkhole causing significant damage within the county. A majority of the county is listed as an area that is favorable to sinkhole formation (see the following figure).

Figure 7: 2018 Subsidence Incidents²⁰

Sinkholes can have a diameter of greater than 200 feet. Sinkholes can be shallow or develop depths that are greater than 100 feet, creating extremely dangerous situations, swallowing entire structures. Depending on the location of the sinkhole, residents' homes, tourists in transient housing, critical facilities, infrastructure, and agricultural concerns could suffer negative effects. Economic effects could vary again depending on the size and location of the sinkhole. Considering all of these factors, sinkholes generally have a low impact to Lake County and its jurisdictions.

i) **Tornadoes**

1. *Description*

A tornado is a violent windstorm characterized by a twisting, funnel-shaped cloud extending to the ground. Tornadoes are most often generated by thunderstorm activity (but sometimes result from hurricanes and other tropical storms) when cool, dry air intersects and overrides a layer of warm, moist air forcing the warm air to rise rapidly.

2. *Location and Extent*

Similar to hurricane data, there is only reliable recorded data for tornadoes since 1950. Although the Midwest has the reputation for the worst tornadoes, Florida experiences the

²⁰ 2018 Subsidence Incident Reports - Florida Division of Emergency Management (FDEM) State Hazard Mitigation Plan

greatest number of tornadoes per square mile of all the states. Florida has averaged 52 tornadoes reported per year since 1961, with an average of two fatalities per year. Florida's tornadoes are generally of shorter duration (3 miles) and have narrower paths (125 yards wide). Mapping indicates that about 95 percent of the county is in the 1 in 250-year risk area, and the remainder in the 1 in 500-year risk area. All areas of Lake County are susceptible to tornadoes and their potential effects.

The Fujita Scale (now the Enhanced Fujita Scale) is used to determine the intensity of tornadoes. Most of the tornadoes that have hit Lake County have been on the lower spectrum, in the F0 or F1 range. On February 1, 2007, the National Weather Service switched from the Fujita Scale to the Enhanced Fujita Scale to better reflect examinations of tornado damage surveys, aligning wind speeds more closely with associated storm damage. The Enhanced Fujita Scale levels are listed in the table below.

Table 9: Measuring the Intensity of Tornadoes (Extent)²¹

Scale	Wind Speed (mph)
EF0	65-85
EF1	86-110
EF2	111-135
EF3	136-165
EF4	166-200
EF5	>200

Because of the unpredictable patterns of tornadoes, and because the entire state of Florida has a relatively high risk, the entire County is vulnerable to tornado-induced damage. The damage potential for a tornado increases as a function of population density. As the number of structures and people increase, the potential damage/injury rate increases. Mobile homes, poorly constructed and/or substandard housing, apartment complexes and low-rent housing projects are especially susceptible because of their lack of resistance to high winds, and apartment complexes and low-rent projects because of their size and densities.

3. *Previous Occurrences*

There have been 51 recorded tornadoes in Lake County since 1950 that have caused somewhere between \$226,470,050 and \$241,320,500 in total damage. These same tornadoes have also been responsible for 231 injuries and 26 deaths.

Historically significant events are noted in the 2010 plan. There have been few significant tornado events in Lake County in the last five years. However, worth noting is a storm that happened in 2007 for the purpose of this plan.

- The Groundhog Day Tornado Outbreak, February 2, 2007: On the morning of February 2, 2007, a powerful storm system moved across Lake County from the

²¹ <http://www.srh.noaa.gov/oun/?n=efscale>

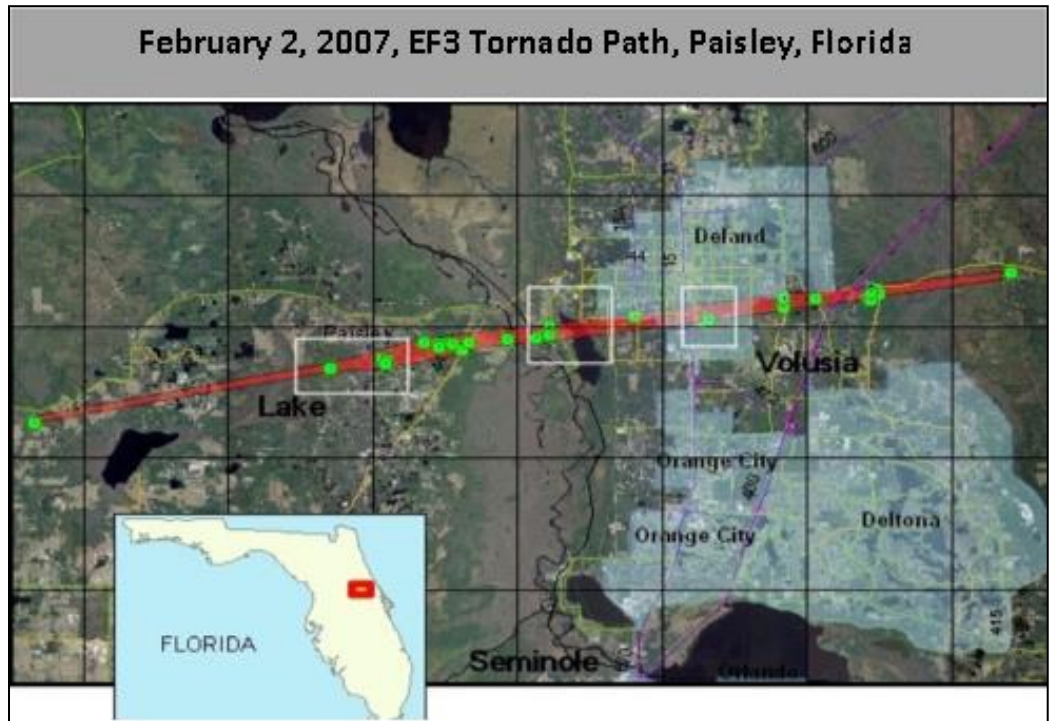
The EF scale still is a set of wind estimates (not measurements) based on damage.

west producing three tornadoes, two of which had large impacts on the County and resulted in a Presidential Disaster Declaration. The first tornado touched down in Sumter County, near Wildwood, and moved toward the Villages and Lady Lake. This tornado registered as an EF3 on the Enhanced Fujita Scale and created a swath of destruction along its 17-mile path, killing eight.

- The second tornado touched down near County Road 42 in northern Lake County in between Altoona and Paisley. This tornado was responsible for 13 deaths as it traveled its 26-mile path. In addition to killing 21 people in Lake County, these tornadoes caused approximately \$98 million in damages. These storms struck in the early morning hours when many people were sleeping and unable to receive emergency messages. The path of these storms is displayed in the following figures.

Figure 8: February 2, 2007, EF3 Tornado Path, Lady Lake, Florida



Figure 9: February 2, 2007, EF3 Tornado Path, Paisley, Florida

The table below lists the incidences of tornadoes in Lake County since 2010.

Table 10: Tornado/Funnel Cloud Events in Lake County (2010 – 2020) ²²

Location	Date	Magnitude	Property Damage
<i>Dona Vista</i>	9/12/2010	Funnel Cloud	-0-
<i>Grand Island</i>	8/5/2011	EF0	\$25K
<i>Lady Lake</i>	9/24/2011	Funnel Cloud	-0-
<i>Lake Louisa</i>	6/24/2012	EF0	-0-
<i>Eustis Airport</i>	6/25/2012	Funnel Cloud	-0-
<i>Tropical Shores</i>	4/30/2013	Funnel Cloud	-0-
<i>Mount Plymouth</i>	2/23/2014	Funnel Cloud	-0-
<i>Clermont</i>	6/1/2015	EF0	-0-
<i>Fruitland park</i>	9/1/2016	EF0	\$22K
<i>Emerald</i>	9/13/2016	Funnel Cloud	-0-
<i>Dona vista</i>	1/22/2017	Funnel Cloud	-0-
<i>Umatilla</i>	9/10/2017	EF1	-0-
<i>Tavares</i>	7/4/2018	EF0	-0-
<i>Okahumpka</i>	1/4/2020	EF0	-0-

4. Probability of Future Events

According to previous occurrences the probability of a future tornado affecting Lake County is moderate. While the majority of these events are small in terms of size, intensity and duration, a greater number of stronger storms (i.e., F2 and F3 tornadoes) have been reported in the past. Further, even a minor tornado can cause substantial damage.

5. Vulnerability and Risk Assessment

Due to the unpredictable nature of tornadoes, all of Lake County is vulnerable to their impacts. High wind speeds can cause damage to structures with the most significant threat to mobile homes and other older substandard or unreinforced properties. The total mobile home population in Lake County is estimated at 40,935²³ accounting for nearly 12% of the total county population. The mobile home population is distributed throughout the County and all jurisdictions. This population has to have a safe place to go during possible tornadic activity. While everyone can be impacted, the elderly, those with lower income, and the homeless would be most affected. Tornadoes can cause other cascading events like utility outages, economic loss, and transportation issues along with the hardships that result from the disruption of normal life.

A tornado with the greatest intensity of EF5, with winds of greater than 200 MPH, although rare, could occur in Lake County. The maximum that has occurred has been a recorded

²² <http://ncdc.noaa.gov/stormevents>

²³ data.census.gov; 2018 ACS 1-Year Estimates: Total Pop. in Occupied Housing by Tenure by Units in Structure

EF3 in February, 2007 during the Groundhog Day Outbreak. This incident is considered the worst natural disaster in the county's history and officials were determined not to let it happen again. In February of 2011, Lake County launched a new warning system that calls residents directly when there is a public safety emergency. Alert Lake was the new emergency notification system and for tornado warnings (or other significant incidents, such as natural disasters, warning from law enforcement, chemical spill, flooding, or other emergencies), the system automatically calls people on a registered phone number. For those who have landlines in their homes, the 911 database is utilized. For those that do not have a house phone but want to know about severe weather when on the go, the Alert Lake system can also send messages straight to a cell phone. Considering all of these factors, tornadoes would generally have a moderate impact to Lake County and its jurisdictions.

j) Brush Fires, Wildfires and Forest Fires

1. *Description*

According to the Federal Emergency Management Agency (FEMA), a wildland fire or wildfire is an unplanned, unwanted fire burning in a natural area, such as a forest, grassland, or prairie. As building development expands into these areas, homes and business may be situated in or near areas susceptible to wildfires. This is called the wildland urban interface. Wildfires can damage natural resources, destroy homes, and threaten the safety of the public and the firefighters who protect forests and communities.

2. *Location and Extent*

Lake County is uniformly exposed to wildfire risk. Forest fires pose a serious threat while playing an important role in Florida's ecology. Much of the northeast portion of Lake County lies within the Ocala National Forest, which contains many longleaf pines that are a fire dependent species of tree. It is important to understand that much of the Ocala National Forest is a fire-based ecology, and as such, special precautions should be made by those who reside within it. The "La Nina" weather effect occasionally causes an extended drought period. Controlled burns reduce the amount of fuel that might build up over years of not having a fire. The Florida and US Divisions of Forestry have incorporated controlled, naturally occurring, and prescribed burns into their forest management plans. Uncontrolled wildfires will continue to threaten Lake County and it is important to understand the actions that can take place to reduce the threats posed by wildfires.

Wildland fires can adversely impact homes, businesses, and vegetation, specifically those that are in higher risk areas. And, wildland fires affect visibility as well as air quality, which, can severely affect populations with compromised respiratory systems (such as the elderly). Impacts of wildfires are measured by acres burned each year.

While all areas of Lake County are vulnerable to wildfires, the northeast and southern portions of the county are more likely to experience direct incidents of wildland fires. A wildland fire incident can be felt throughout the county due to resources being redirected to contain the fires.

3. Previous Occurrences

All of Lake County may be impacted by wildfires during the especially months with minimal rainfall. Carelessness can lead to wildfires during dry or windy conditions and when burning restrictions are not followed. Even with prescribed burns, Lake County remains at risk for brush fires in unincorporated areas and at the wildland/urban interface areas. Since 2010, the only published account of a burn ban was ordered in Lake County from February to June 2012. Below is a look at how many acres have burned due to wildfires in Lake County from 2012 to 2019.²⁴

**Table 11: Acres Burned due to Wildfires,
Lake County, FL (2012 – 2019)**

Year	Total Acres Burned
2012	2,008.6
2013	374.5
2014	337.5
2015	674
2016	804
2017	2,941.3
2018	244
2019	64.7

The following highlight a few of the more notable forest fires in Lake County, which are briefly summarized.

- Fires of 1998: Unusually extended periods of hot weather coupled with little rainfall created the ideal situation for an outbreak of forest fires in Central Florida in the summer of 1998 (NOAA). Some 2,200 fires occurred that summer, with most of the damage being caused by a few of the very large ones. All jurisdictions within Lake County were affected to some degree by the prolonged heat and wildfire threat.
- Fire of 1999: The smoke from a large brush fire near Groveland was responsible for 5 accidents on March 3, 1999. Seven people were hospitalized. The jurisdictions affected were unincorporated Lake County and the City of Groveland.
- Fires of 2000: High temperatures and an extended dry period allowed for 13 fires to flare up during the summer of 2000 – burning some 4,000 acres of central and southern Lake County. All jurisdictions within Lake County were affected to some degree by this large-scale fire.
- Green Swamp Fire of 2001: An illegal trash fire started a 10,000-acre blaze that blanketed much of central and south Lake County in smoke. This smoke was responsible for several accidents due to low visibility on U.S. 27, and respiratory problems for at-risk citizens. The primary jurisdictions affected were Groveland, Clermont, Mascotte, Montverde, and unincorporated Lake County.

²⁴ Source: Lake County Fire Rescue – Historical Fire Data, Accessed May 6, 2020

- Wekiva River Fire of 2007: Some 36 residences were evacuated near the Wekiva River after a 1,000-acre fire burned within a quarter mile of the homes in May of 2007. The primary jurisdiction affected was unincorporated Lake County.
- Deerhaven Fire of 2008: Approximately 140 homes near Deerhaven (northeast Lake County) were evacuated after a 1,000-acre blaze threatened to close off a main road to these houses. The Deerhaven Wildfire became out of control after 25 mph wind gusts made it difficult to contain. The primary jurisdiction affected was unincorporated Lake County.
- 2012 Groveland Fires: In January a 300-acre fire on County Road 33 was difficult to contain due to swamp conditions before rain helped firefighters contain the blaze. In February a fire in Clermont shut down Thompson Place near CR 561 as the fire continued to burn in swampy area. In April a fire north of State Road 50 near Timber Lake Village had to be contained before reaching a nearby swamp which could have resulted in a muck fire that lasted for weeks.
- April 2012, Sorrento: An illegal burn in a yard spread quickly and threatened homes.
- April 2016, Eustis Radio Tower Fire: an unattended yard debris fire spread consuming 141 acres threatened homes in the Royal Trails Subdivision.
- April 2017, Sod Farm II. A fire started in Eustis and quickly spread to 400 acres overnight prompting the evacuation of more than 20 homes. By the following day the fire had been contained at 782 acres.

4. *Probability of Future Events*

There is a moderate probability of future wildfire events in Lake County, especially during drought cycles and abnormally dry conditions, particularly during the months with minimal rainfall amounts (December through April). An estimated acreage cannot be determined as the amount of acres burned can vary wildly from year to year.

5. *Vulnerability and Risk Assessment*

The major causes of brush and forest fires are due to lightning, human negligence, or cases of criminal mischief, and occurs during the months with higher thunderstorm activities. Late winter and spring also are prime periods for wildfires, fueled by strong winds and a lack of rainfall during that same time frame. Lake County has a considerable amount of undeveloped area with prime fuel source for fires and experienced major fire events in the past.

In 2019, an assessment identified the following communities in the County to be at the highest risk:

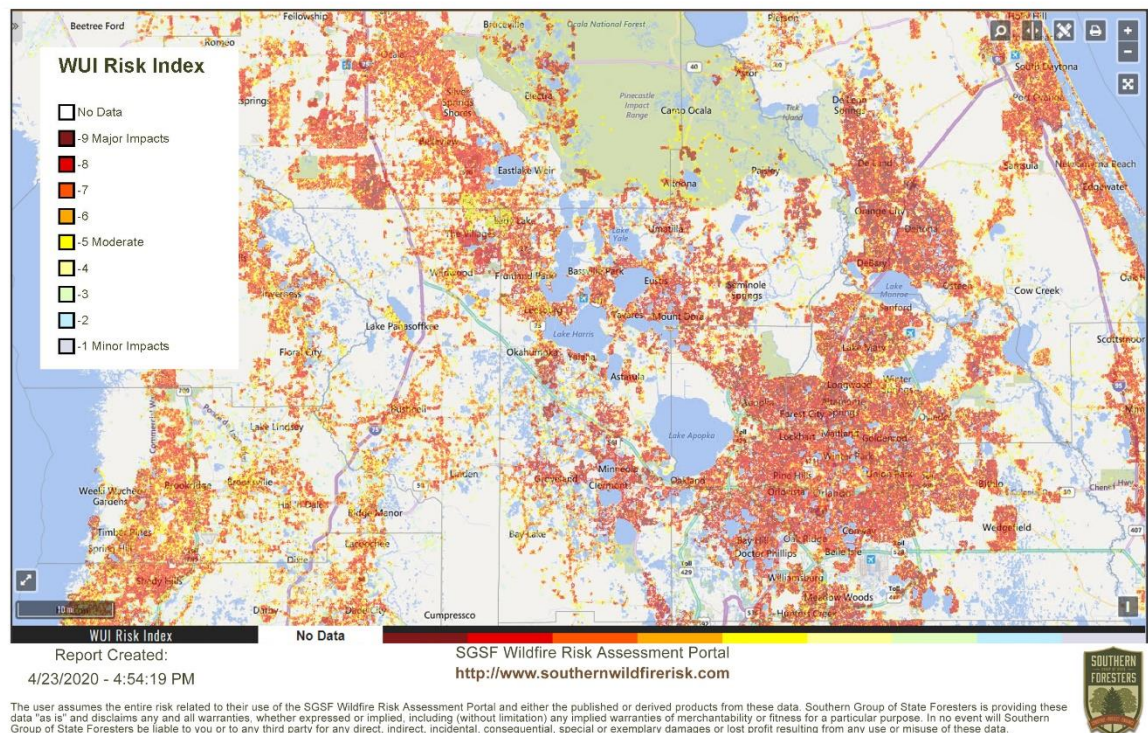
- Cassia
- Green Swamp
- North Lake
- Pine Lakes

- The Royal Trails Subdivision

The Florida Forest Service Wildland Urban Interface (WUI) Risk Index, illustrated in the following figure, identifies areas where the potential impact of wildfire on people and their homes and assess a risk based on housing density and fire intensity (Flame Length) to determine areas that may be majorly impacted by a wildfire incident.²⁵ A map of critical facilities within the WUI risk areas is available in Appendix III: Maps and Figures – Wildland Urban Interface (WUI) Risk Index for Lake County, Florida.

Figure 10: Wildland Urban Interface (WUI) Risk Index

Wildland Urban Interface Risk Index
Lake County, FL



Wildfires in Lake County primarily affect wooded areas with low population density and do not typically pose a danger to highly populated areas. However, wildfires can still impact all jurisdictions in Lake County. Structures, critical facilities, infrastructure, and housing for vulnerable populations have some exposure to impact by wildfires. An exact dollar loss cannot be determined due to the fact impact is undefined. There have been no significant wildfires other than those reflected in this section. Considering all of these factors, wildfires/forest fires would generally have a moderate impact to Lake County and its jurisdictions.

²⁵ <https://www.southernwildfirerisk.com/>

k) Erosion

1. *Description*

Erosion occurs when land is worn away by the action of natural forces in waves, currents and wind. Even though erosion is a natural process, it can be either mitigated or enhanced by human activity. Erosion is generally measured as the loss of material in cubic yards.

2. *Location and Extent*

Erosion is most likely to take place within Lake County along the Wekiva and St. Johns Rivers to the northeast, as well as along streams, creek beds, lakes and other bodies of water that are scattered throughout the County. All residents need to be vigilant about erosion in areas that are adjacent to bodies of water as erosion can result in damage to property, roads, and other infrastructure.

According to the St. Johns River Water Management District, the Florida Legislature passed the Wekiva River Protection Act in 1988 which requires the river's surrounding counties to amend their comprehensive plans and land development rules to deter wetlands losses and protect wildlife habitats. The act authorizes local governments to create rules to treat stormwater runoff. Special rules are also in place for development in the basin that require additional stormwater treatment and established protection zones along the waterways to preserve wetlands, uplands and water quality and reduce erosion and groundwater drawdown.

3. *Previous Occurrences*

Since 2010, there has been one incident of erosion in Clermont. In April 2013, rainfall of 3 to 4 inches in a short period of time, associated with a strong thunderstorm, caused a steep 30-foot section of ground adjacent to State Road 50 in Clermont to slide into a home. The mudslide destroyed a home on Sunnyside Drive. Mud several feet high entered the home. The drainage system in the area was designed several decades ago and could not handle the excessive rain rate. Property damage was estimated at \$75,000.

4. *Probability of Future Events*

Besides the 2010 occurrence, there have been no other documented incidents in Lake County. The probability that an event happens in the county continues to be low.

5. *Vulnerability and Risk Assessment*

Lake County has not seen any large erosion events that have caused widespread damage to property. However, erosion is being addressed along the Wekiva and St. Johns Rivers. Erosion can result in structures adjacent to water bodies becoming damaged or destroyed because they are not able to be supported by the ground. There is no scale to measure the magnitude or severity of erosion, as even small amounts of erosion can lead to substantial damage to homes and businesses. Erosion impacts would be fairly limited in scope as impacts to populations, tourism, agriculture, economic interest, critical facilities and infrastructure have not be realized in the past. Considering all of these factors, erosion would generally have low impact to Lake County and its jurisdictions.

I) Winter Storm/Freeze:

1. *Description*

The National Weather Service (NWS) defines a Winter Storm/Freeze as a weather event with accumulating frozen precipitation such as snow, sleet, and/or freezing rain. This event affects every state in the continental United States, although such weather is typically uncommon in Florida, especially southern parts.

A freeze occurs when overnight temperatures reach at least 32 degrees Fahrenheit. A hard freeze occurs when overnight temperatures fall below 28 degrees Fahrenheit for at least 4 hours.

2. *Location and Extent*

Extremely freezing temperatures are not typical for the Florida climate although each winter, Florida faces the threat of at least a moderate freeze. For Lake County this hazard is a potential problem centered on the vegetable, foliage, and citrus industries. Episodes of extreme freezing temperatures would be widespread to all locations and not just specific locales. If temperatures reach freezing levels for extended periods of time, combined with other climatic factors, crop or landscape damage may occur, having a significant impact on the county's economy and employment base.

The freeze line runs through the northern part of Lake County just north of Altoona although the entire county could be impacted. Personal injury or death due to freezes is not considered a hazard except for the homeless and indirectly through fire caused by incorrect or careless use of space heaters, etc. However, the elderly may be impacted as well as young children and since it is anticipated that the elderly population will continue to increase, there is a chance that this population could see some impact from winter storms and freezes. Additionally, consumer demand of electricity during periods of very extreme cold weather may overload the electrical grid, which may cause outages and have a significant impact on electrically-dependent critical facilities and persons. Critical facilities, infrastructure, and tourism would likely not be affected by winter storms and freezes.

3. *Previous Occurrences*

One of the most significant freezes took place within Florida in February, 2001, when the president declared a major disaster declaration for Florida to allow funds to reach those individuals impacted by the event. The agricultural industry was severely impacted and resulted in many individuals being out of work. Since 2010, two freeze and one wind chill events occurred in Lake County and none have occurred since. These are outlined in the table below.

Table 12: Freeze and Wind Chill Events Lake County (2010 – 2020)

Location	Date	Type	Crop Damage
Lake	12/14/2010	Frost/Freeze	-0-
Lake	12/14/2010	Cold/Wind Chill	-0-
Lake	12/27/2010	Frost/Freeze	\$1.830M

4. *Probability of Future Events*

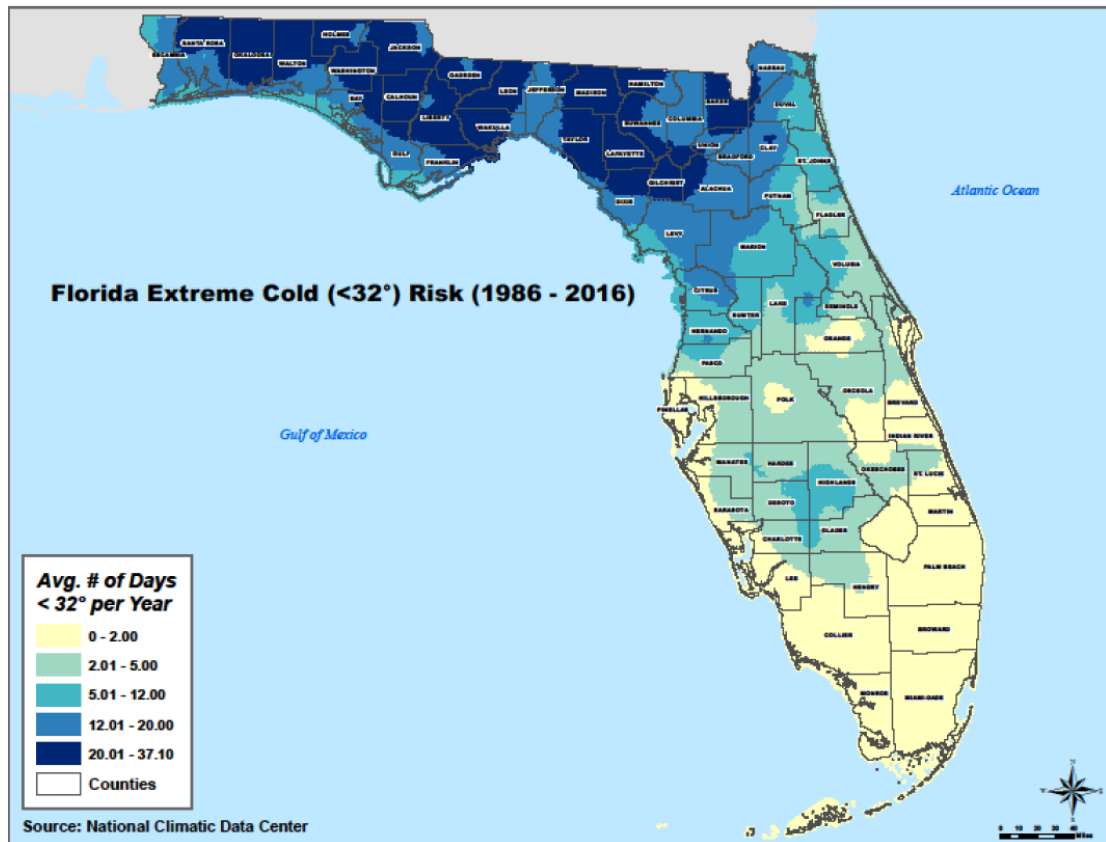
All portions of Lake County have been impacted by episodes of freezing temperatures in the past, therefore confirming that the entire county is susceptible and according to previous occurrences the future probability is moderate.

5. *Vulnerability and Risk Assessment*

Temperatures in Lake County can be as low as single digits, but rarely below zero. Additionally, light, freezing rain has been reported on occasion. Frozen precipitation in small amounts, although not commonplace, is possible within Lake County. The probability of another significant freeze event continues to be moderate.

With regard to a scale to measure the magnitude or severity, the National Weather Service issues a threat awareness chart regarding one's vulnerability to the hazard of excessive cold temperatures, especially wind chill. Of the cold weather hazards that can be expected, the most likely for Lake County are the crop-killing freezes. Lake County is not normally subject to the types of winter storms experienced in the panhandle that can include snow precipitation and accumulation; typical effects are from wind, wind chill, and freezes. Considering all of these factors, winter storm/freezes would generally have a low impact to Lake County and its jurisdictions.

According to the National Climactic Data Center, it is expected that the county could see an average of 2 to 12 extreme cold (<32 degrees) days each year (Figure below) is based on the average number of extreme cold days that occurred from the year 1986 through 2016.

Figure 11: Florida Extreme Cold Risk (2000 – 2016)

m) Dam or Levee Failure

1. *Description*

A dam/levee failure is a collapse or breach in a dam or levee. While most dams have storage volumes small enough that failures have little or no repercussions, dams with large storage amounts can cause significant downstream flooding.

According to FEMA, more than a third of the country's dams are 50 or more years old. Approximately 14,000 of those dams pose a significant hazard to life and property if failure occurs. There are also about 2,000 unsafe dams in the United States, located in almost every state. Dam failures can result from one or a combination of the following reasons²⁶:

- Overtopping caused by floods that exceed the capacity of the dam
- Deliberate acts of sabotage
- Structural failure of materials used in dam construction
- Movement and/or failure of the foundation supporting the dam
- Settlement and cracking of concrete or embankment dams

²⁶ FEMA (2019b). Why Dams Fail, <https://fema.gov/why-dams-fail>

- Piping and internal erosion of soil in embankment dams
- Inadequate maintenance and upkeep

2. *Location and Extent*

According to the Florida Department of Environmental Protection, there are nine (9) dams within Lake County. These dams are located in unincorporated Lake County, but could affect not only jurisdictions within Lake County, but also in other locations in Central Florida.

3. *Previous Occurrences*

To date, there have been no reports of damages as a result of dam failures, however, any issues in the future would likely be as a result of the Burrell Lock and Dam, as well as the Cherry Lake Dam. The Burrell Lock and Dam is located in northwest Lake County north of the City of Leesburg in the vicinity of Lake Griffin. The Cherry Lake Dam is located in southern Lake County, between the Cities of Minneola at Cherry Lake.

Table 13: Dams in Lake County, Florida²⁷

NID ID	Name	Hazard Rating
FL20500	Lake Apopka Lock and Dam	Low
FL00708	Burrell Lock and Dam	High
FL00704	M-1	Low
FL00707	M-6A	Low
FL00437	Cherry Lake Outlet	Significant
FL20503	M-4	Significant
FL20502	M-5	Significant
FL20501	Villa City	Significant
FL20505	Harris Bayou	High

4. *Probability of Future Events*

According to Mr. Ron Hart of the Lake County Water Authority²⁸:

- “The Burrell Dam has the capacity to cause damages to the low-lying property both downstream of the structure as well as around Lake Griffin, especially if discharges out Moss Bluff are not adjusted to accommodate the increases in flow. However, if discharges are managed properly at the Moss Bluff Dam, damages should be limited to low lying areas around Haynes Creek.
- The Cherry Lake Dam can cause damage downstream due to prolonged and excessive discharges that result in the capacity being exceeded at any of the five dams downstream. The dam has a very long levee system that increases the exposure to catastrophic damage and uncontrolled discharges.”

²⁷ National Inventory of Dams (<https://nid.sec.usace.army.mil/>)

²⁸ Lake County LMS 2010

5. *Vulnerability and Risk Assessment*

No evaluations or studies have been conducted to determine the extent of damage that might be caused in the event of a failure. It has been determined, however, that the total amount of damages might exceed the cost to repair or replace these dams. Most of the areas impacted would be residential homes with local roadways and lift stations may be impacted causing issues. Specific areas of concern include the following however the impact is limited and isolated in focus:

- Timber Village/Groveland – Residential mobile home community of approximately 50 homes that may become flooded or have limited access.
- Isolated homes along levees that number less than five homes.
- Pasture flooding in an isolated area with no structures involved.
- Homes at the end of Indigo Road which will have limited access and number approximately 15.
- Plantation Golf Course has 3 to 4 holes that would be underway. This was known when the property was developed and golfers can bypass the area to finish playing. The golf course is responsible for repairing any damages.
- Emerald Lake Subdivision – Extremely low elevation of roads and home sites within the subdivision.

Considering all of these factors, a dam or levee failure would generally have a low impact to Lake County and its jurisdictions.

n) Epidemic/Pandemic

1. *Description*

An epidemic is a disease that affects a greater number of people than is usual within a region. A pandemic is the same as an epidemic except it has spread to more than one region of the world. Infectious diseases are caused by pathogenic microorganisms, such as bacteria, viruses, parasites or fungi; the diseases can be spread, directly or indirectly, from one person to another. Zoonotic diseases are infectious diseases of animals that can cause disease when transmitted to humans.

For the purpose of this Plan, infectious disease has been categorized as (1) pandemic and (2) localized infectious disease outbreaks.

A pandemic is an epidemic that occurs over a wide geographic area, often global. Pandemics results when a microorganism (or disease condition) emerges that is pathogenic for humans but to which humans have no immunity or prior protection. Thus, an epidemic occurs and the number of cases substantially exceeds the number of expected cases over a given period of time. Pandemics generally refer to infectious diseases that spread efficiently from person to person across the globe, although the term may be used to describe medical conditions with other risk factors, such as chronic illnesses like cardiovascular diseases.

2. *Location and Extent*

Populated areas throughout Lake County its jurisdictions are the most at risk from human disease. Disease is not a risk, in itself, to the physical or operational integrity of any type of structure. However, high absenteeism could threaten the operating capabilities of businesses, industries, institutions and government agencies.

In the event of a pandemic, medical and health care facilities may be overwhelmed, with local care not readily accessible to those in need. Fatalities would significantly increase. Public safety would be compromised due to illness among public safety and security agencies. Quarantine and isolation techniques would be imposed, requiring a significant enforcement challenge. Temporary health care facilities and field hospitals would have to be activated and staffed by professionals from outside the county.

Overall, the human and economic consequences of the event would be very substantial.

3. *Previous Occurrences*

- Below are the epidemics/pandemics that may have had notable impacts:
- The “Spanish Flu,” 1918/1919: The Spanish Flu began in August 1918, in three disparate locations: Brest, Boston and Freetown. An unusually severe and deadly strain of influenza spread worldwide. The disease spread across the world, killing 25 million in the course of six months; some estimates put the total of those killed worldwide at well over twice that number. An estimated 17 million died in India, 500,000 in the USA and 200,000 in the UK. It vanished within 18 months and the actual strain was never determined, though some recent attempts at reconstructing genes from the virus have been successful.
- H5N1 “Bird Flu,” 1997/2003: Asian highly pathogenic avian influenza (HPAI) A(H5N1) virus occurs mainly in birds and is highly contagious among them. HPAI Asian H5N1 is especially deadly for poultry. The virus was first detected in 1996 in geese in China. Asian H5N1 was first detected in humans in 1997 during a poultry outbreak in Hong Kong and has since been detected in poultry and wild birds in more than 50 countries in Africa, Asia, Europe, and the Middle East. Six countries are considered to be endemic for Asian HPAI H5N1 virus in poultry (Bangladesh, China, Egypt, India, Indonesia, and Vietnam).²⁹

Since its widespread re-emergence in 2003, rare, sporadic human infections with this virus have been reported in Asia, and later in Africa, Europe, and the Middle East. Human infections with Asian H5N1 viruses have been associated with severe disease and death. Most human infections with avian influenza viruses, including HPAI Asian H5N1 viruses, have occurred after prolonged and close contact with infected birds. Rare human-to-human spread with this virus has occurred, but it has not been sustained and no community spread of this virus has ever been identified.

- SARS, 2002/2003: Severe acute respiratory syndrome (SARS) is a viral respiratory illness caused by a coronavirus called SARS-associated coronavirus

²⁹ <https://www.cdc.gov/flu/avianflu/h5n1-virus.htm>

(SARS-CoV). SARS was first reported in Asia in February 2003. The illness spread to more than two dozen countries in North America, South America, Europe, and Asia before the SARS global outbreak of 2003 was contained.

Since 2004, there have not been any known cases of SARS reported anywhere in the world. The content in this website was developed for the 2003 SARS epidemic. But some guidelines are still being used.³⁰

- H1N1, 2009: In the spring of 2009, a novel influenza A (H1N1) virus emerged. It was detected first in the United States and spread quickly across the United States and the world. This new H1N1 virus contained a unique combination of influenza genes not previously identified in animals or people. This virus was designated as influenza A (H1N1)pdm09 virus. From April 12, 2009 to April 10, 2010, CDC estimated there were 60.8 million cases (range: 43.3-89.3 million), 274,304 hospitalizations (range: 195,086-402,719), and 12,469 deaths (range: 8868-18,306) in the United States due to the (H1N1)pdm09 virus.³¹
- Ebola, 2014-2016: On March 23, 2014, the World Health Organization (WHO) reported cases of Ebola Virus Disease (EVD) in the forested rural region of southeastern Guinea. The identification of these early cases marked the beginning of the West Africa Ebola epidemic, the largest in history. On March 23, 2014, with 49 confirmed cases and 29 deaths, the WHO officially declared an outbreak of EVD.

Overall, eleven people were treated for Ebola in the United States during the 2014-2016 epidemic. On September 30, 2014, CDC confirmed the first travel-associated case of EVD diagnosed in the United States in a man who traveled from West Africa to Dallas, Texas. The patient (the index case) died on October 8, 2014. Two healthcare workers who cared for him in Dallas tested positive for EVD. Both recovered.

On October 23, 2014, a medical aid worker who had volunteered in Guinea was hospitalized in New York City with suspected EVD. The diagnosis was confirmed by the CDC the next day. The patient recovered. Seven other people were cared for in the United States after they were exposed to the virus and became ill while in West Africa, the majority of whom were medical workers. They were transported by chartered aircraft from West Africa to hospitals in the United States. Six of these patients recovered, one died.

- MERS, 2014: In May 2014, CDC confirmed two unlinked imported cases of MERS in the United States—one to Indiana, the other to Florida. Both cases were among healthcare providers who lived and worked in Saudi Arabia. Both traveled to the U.S. from Saudi Arabia, where scientists believe they were infected. Both were hospitalized in the U.S. and later discharged after fully recovering.³²

³⁰ <https://www.cdc.gov/sars/index.html>

³¹ <https://www.cdc.gov/flu/pandemic-resources/2009-h1n1-pandemic.html>

³² <https://www.cdc.gov/coronavirus/mers/us.html>

- Zika Virus, 2015 and 2016: In early 2015, a widespread epidemic of Zika fever, caused by the Zika virus in Brazil, spread to other parts of South and North America. It also affected several islands in the Pacific, and Southeast Asia. In 2016, a reported 5,168 cases of Zika virus were reported in the U.S. In the State of Florida, this included 1,107 cases of the virus.³³
- COVID-19, 2020: On January 11, 2020, Chinese health authorities preliminarily identified more than 40 human infections with novel coronavirus in an outbreak of pneumonia under investigation in Wuhan City, Hubei Province, China. Chinese health authorities subsequently posted the full genome of the so-called “novel coronavirus 2019”, or “2019-nCoV”, in GenBank®, the National Institutes of Health genetic sequence database.

On February 11, 2020 the World Health Organization announced an official name for the disease that is causing the 2019 novel coronavirus outbreak, COVID-19 and declared it a pandemic outbreak on March 11, 2020.³⁴

4. *Probability of Future Events*

According to previous history and the CDC, pandemic type events rarely happen (4 times in the 20th century), therefore indicating a low/moderate probability.

5. *Vulnerability and Risk Assessment*

Certain people are at high-risk for serious complications (infants, elderly, pregnant women, extreme obesity and persons with certain chronic medical conditions). Further impacting risk, most people have little or no immunity because they have no previous exposure to the virus or similar viruses.

Seasonal flu rates of medical visits, complications, hospitalizations and death can vary from low to high. The CDC estimates that flu-related hospitalizations since 2010 ranged from 140,000 to 710,000, while flu-related deaths are estimated to have ranged from 12,000 to 56,000. Now in comparison, pandemic flu rates of medical visits, complications, hospitalizations and death can range from moderate to high. The number of deaths could be much higher than the seasonal flu (e.g. The estimated U.S. death toll during the 1918 pandemic was approximately 675,000). With the recent spread of COVID19, additional pandemic numbers will continually change until a time in which the virus is contained.

Considering the spread and infection rate, a pandemic event may cause major impacts on the general public, such as travel restrictions and school or business closings. Additionally, there is the potential for severe impact on domestic and world economies.³⁵ Thus, a pandemic/epidemic would generally have a high impact to Lake County and its jurisdictions.

Most efforts in analyzing the impacts and effects of disease and pandemic have been done at the national level. Because of the dynamics involved with the spread of disease and pandemic, a local level assessment has not been conducted specifically, but the local

³³ <https://www.cdc.gov/zika/index.html>

³⁴ Florida Department of Health – [Novel Coronavirus \(2019nCoV\)](#)

³⁵ (<https://www.cdc.gov/flu/pandemic-resources/basics/about.html>)

understanding that if a pandemic does impact our community, it will quickly overwhelm our local healthcare system.

o) Hazardous Materials

1. *Description*

A hazardous material is any item or agent which has the potential to cause harm to humans, animals, or the environment, either by itself or through interaction with other factors. Emergencies can happen during production, storage, transportation, use or disposal. populations are at risk when chemicals are used unsafely or released in harmful amounts where you live, work or play.

Hazardous materials include:

- Explosives;
- Flammable, non-flammable, and poison gas;
- Flammable liquids;
- Flammable, spontaneously combustible, and dangerous when wet solids;
- Oxidizers and organic peroxides;
- Poisons and infectious substances;
- Radioactive materials; and
- Corrosive materials.³⁶

2. *Location and Extent*

The release of a hazardous materials to the environment could cause a multitude of problems. Although these incidents can happen almost anywhere, certain areas of the County are at higher risk, such as near roadways that are frequently used for transporting hazardous materials and locations with industrial facilities that use, store, or dispose of such materials. Areas crossed by railways, waterways, airways, and pipelines also have increased potential for mishaps. Incidences can occur during production, storage, transportation, use, or disposal of hazardous materials. Communities can be at risk if a chemical is used unsafely or released in harmful amounts into the environment. Hazardous materials can cause death, serious injury, long-lasting health effects, and damage to buildings, the environment, homes, and other property.

The term “release” includes spilling, leaking, pumping, pouring, emitting, emptying, discharging, escaping, leaching, dumping, or disposing into the environment of any hazardous material. Hazardous materials releases (HMRs) may be intentional or accidental, and may occur at fixed facilities or on vehicles.

HMRs are harmful in three ways:

- 1) Life safety concerns. Chemical, biological, and radiological agents can cause significant health risks to those exposed to them; biological agents can be additionally dangerous if they are infectious. Flammable and explosive materials also present life safety concerns if they are exposed to heat.

³⁶ National Archives and Records Administration, “[Code of Federal Regulations Title 49: Transportation](#)”

2) Costly and delicate nature of cleanup. Any release of a hazardous material requires a thorough and careful clean-up of the site and decontamination of those exposed.

3) Operational delays. Delays caused by any HMR and the ensuing evacuation and cleanup processes could lead to significant economic losses due to traffic delays (mobile releases) or operational shut-down (fixed facilities).

Most incidents occur with little or no warning, and can be difficult to detect until symptoms present themselves in those affected. Although major chemical incidents seem most threatening, it is the smaller, more routine accidents and spills that have a greater impact on humans, wildlife, economy, and environment. Some of the most common spills involve tanker trucks and railroad tankers containing gasoline, chlorine, or other industrial chemicals.

Accidental hazardous waste/materials spills can be reported immediately following the spill, thus reducing the amount of time the spill is left uncontained. Most hazardous waste/materials spills occur with little or no warning, and can be difficult, if not impossible, to detect until symptoms present themselves to those affected. External releases may create airborne plumes of chemical, biological, or radiological elements that can affect a wide area and last for hours or days. Internal releases would most likely require evacuation of a facility for hours to days. Both external and internal releases would require extensive clean-up efforts, which could last days to months depending on the type and magnitude of the spill.

3. *Previous Occurrences*

Small hazardous material releases such as gasoline or diesel spills can be a daily/weekly occurrence. The most recent large hazardous materials incident was in July of 2013. A massive explosion at the Blue Rhino Propane Plant resulted in the release of nearly 600,000 pounds of propane.³⁷

4. *Probability of Future Events*

The threat of future incidents involving hazardous materials is ever increasing, not only from our own County's growth and increasing demand for hazardous products, but also from homeland security threats. The County also is a major transportation route where by hazardous materials are constantly traveling through the community in the immediate proximity of citizens, homes, and local businesses. Transportation of hazardous materials via highways, airport, railways, waterways, or pipelines requires citizens to live within vulnerable areas of hazardous materials. Although, the probability and risk of a hazardous material event happening in the future certainly exists, the overall risk remains low due to stringent industry regulation and scrutiny of such facilities and transports.

To assist in planning for potential hazardous materials incidents, the County uses CAMEO FM, a system of software applications used widely to plan for and respond to chemical emergencies. The CAMEO program identifies each facility and creates a worst-case scenario vulnerable zone (VZ) around that facility to help in the planning process to understand all the areas that could potentially be impacted by a chemical release or

³⁷ <https://www.osha.gov/news/newsreleases/region4/12082015>

accident. In an effort to define the hazard areas for our extremely hazardous materials (classified as “302” hazards), we use the output of “worst-case scenarios” from the CAMEO FM Program. When identifying the worst-case vulnerability zones for all the “302” facilities in the County, all of the heavily populated areas are at risk from at least one of the “302” facilities.

5. *Vulnerability and Risk Assessment*

Areas with multiple chemical facilities experience a greater risk of a chemical incident than other locations. Nearly every community in Lake County has at least one facility in each that stores, produces, or utilizes a hazardous material. Propane installations are located across the state and their presence increases the risk of an incident. Hazardous material shipments move through the county annually; these shipments can occur at any time, day or night, and by means of road, rail, air and water, and often through areas with urbanized, high traffic volume routes. Considering all of these factors, a hazardous materials incident would generally have a high impact to Lake County and its jurisdictions.

Hazardous waste/materials spills may be accidental or intentional, and may occur at fixed facilities or during transportation.

Hazardous materials are widely used in public and private facilities and farms. Numerous facilities in Lake County store, use, dispose, or have the capacity and infrastructure to handle hazardous materials on a regular basis; under Title III of the Emergency Planning and Community Right to Know Act, facilities that meet certain requirements must report to federal, state, and local authorities. These facilities are commonly referred to as “Tier I” or “Tier II” facilities. There are 247 Tier II facilities with over 500 hazardous materials located in Lake County.

While smaller spills may be more frequent in Lake County, larger, more dangerous spills are infrequent.

p) Civil Disorder/Disturbance

1. *Description*

Civil disorder is typically the result of groups or individuals within the population feeling, rightly or wrongly, that their needs or rights are not being met, either by the society at large, a segment thereof, or the current overriding political system. When this results in community disruption where intervention is required to maintain public safety it becomes a civil disturbance. Civil disturbances can also occur in reaction to political movements or special events that attract large crowds, or as a result of an unemployment or economic crisis. When groups or individuals disrupt the community to the point where intervention is required to maintain public safety, the event has become a civil disturbance.

2. *Location and Extent*

Civil disturbance can occur anywhere and spans a wide variety of actions which includes, but is not limited to: labor unrest, strikes, civil disobedience, demonstrations, riots, prison riots, or rebellion leading to revolution. Triggers could include racial tension, religious conflict, unemployment, a decrease in normally accepted services or goods, such as extreme water, food, or gasoline rationing, or unpopular political actions. The most common type of civil disturbance is riots. Riots can cause extensive social disruption, loss

of jobs, death, and property damage. The loss and damages may result from those involved in the action or initiated by authorities in response to the perception of a potential threat.

3. *Previous Occurrences*

Lake County has a low occurrence of civil unrest. Lake County contains one State Correctional Institute in Clermont (1,093 population) and the Lake County Detention Center (capacity 960 beds, 747 average population in 2016). In the event of an institutional emergency within the correctional facilities located in Lake County, coordination with State and/or Federal authorities may be required.³⁸

There have been no recorded instances of large, unlawful civil disturbances in Lake County that have exceeded the ability of existing law enforcement resources and partnering agencies to suppress and control.

4. *Probability of Future Events*

The probability of civil disturbances occurring in Lake County is considered low.

5. *Vulnerability and Risk Assessment*

It is impossible to conduct a vulnerability analysis and loss estimation by jurisdiction for Civil Disturbances. While peaceful protests or demonstrations occur frequently, it is difficult to determine when a protest will become a civil disturbance or riot, by disrupting daily operations or by becoming violent. Based on the historical occurrences, the large, urban areas of the state are more likely to be affected by Civil Disturbances than the small rural areas. Considering all of these factors, civil disorder/disturbance would generally have a low impact to Lake County and its jurisdictions.

q) Cyberattack/Cyberterrorism

1. *Description*

For the purposes of this report, a cyberattack is defined as a malicious computer-to-computer attack through cyberspace that undermines the confidentiality, integrity, or availability of a computer (or network), data on that computer, or processes and systems controlled by that computer. National Security Presidential Directive 54/Homeland Security Presidential Directive 23 (NSPD-54/HSPD-23) defines cyberspace as the interdependent network of information technology infrastructures, and includes the Internet, telecommunications networks, computer systems, and embedded processors and controllers in critical industries.

Threats to cyber space are regarded as one of the most serious economic and national security challenges in this day in age for the United States. As the Director of National Intelligence (DNI) recently testified before Congress, “the growing connectivity between information systems, the Internet, and other infrastructures creates opportunities for attackers to disrupt telecommunications, electrical power, energy pipelines, refineries, financial networks, and other critical infrastructures.”³⁹

³⁸ Lake County Comprehensive Emergency Management Plan, 2018

³⁹ Director of National Intelligence, Annual Threat Assessment of the Intelligence Community for the Senate Armed Services Committee, Statement for the Record, March 10, 2009, at 39.

The duration of a cyberattack is dependent on the complexity of the attack, how widespread it is, how quickly the attack is detected, and the resources available to aid in restoring the system. One of the difficulties of malicious cyber activity is that it could come from virtually anyone, virtually anywhere. The following tables summarize the common types and sources of cyberthreats.⁴⁰

⁴⁰ United States Government Accountability Office, "Critical Infrastructure Protection: Department of Homeland Security Faces Challenges in Fulfilling Cybersecurity Responsibilities", Report #GAO-05-434 (May 2005), www.gao.gov/new.items/d05434.pdf

Table 14: Common Types of Cyber Attacks

Type of Attack	Description
<i>Botnet</i>	A collection of compromised machines (bots) under (unified) control of an attacker (botmaster).
<i>Denial of service</i>	A method of attack from a single source that denies system access to legitimate users by overwhelming the target computer with messages and blocking legitimate traffic. It can prevent a system from being able to exchange data with other systems or use the Internet.
<i>Distributed denial of service</i>	A variant of the denial of service attack that uses a coordinated attack from a distributed system of computers rather than from a single source. It often makes use of worms to spread to multiple computers that can then attack the target.
<i>Exploit tools</i>	Publicly available and sophisticated tools that intruders of various skill levels can use to determine vulnerabilities and gain entry into targeted systems.
<i>Logic bombs</i>	A form of sabotage in which a programmer inserts code that causes the program to perform a destructive action when some triggering event occurs, such as terminating the programmer's employment.
<i>Phishing</i>	The creation and use of emails and websites designed to look like those of well-known legitimate businesses, financial institutions, and government agencies in order to deceive Internet users into disclosing their personal data, such as bank and financial account information and passwords. Phishers use or sell this information for criminal purposes, such as identity theft and fraud.
<i>Sniffer</i>	Also known as packet sniffer. A program that intercepts routed data and examines each packet in search of specified information, such as passwords transmitted in clear text.
<i>Trojan horse</i>	A computer program that conceals harmful code. A Trojan horse usually masquerades as a useful program that a user would wish to execute.
<i>Virus</i>	A program that infects computer files, usually executable programs, by inserting a copy of itself into the file. These copies are usually executed when the infected file is loaded into memory, allowing the virus to infect other files. Unlike the computer worm, a virus requires human involvement (usually unwitting) to propagate.
<i>War dialing</i>	Simple programs that dial consecutive telephone numbers looking for modems.
<i>War driving</i>	A method of gaining entry into wireless computer networks using a laptop, antennas, and a wireless network adaptor that involves patrolling locations to gain unauthorized access.
<i>Worm</i>	An independent computer program that reproduces by copying itself from one system to another across a network. Unlike computer viruses, worms do not require human involvement to propagate.

Table 15: Common Sources of Cybersecurity Threats

Threat	Description
<i>Bot-network operators</i>	Bot-network operators are hackers; however, instead of breaking into systems for the challenge or bragging rights, they take over multiple systems in order to coordinate attacks and to distribute phishing schemes, spam, and malware attacks. The services of these networks are sometimes made available on underground markets (e.g., purchasing a denial-of-service attack, servers to relay spam or phishing attacks, etc.).
<i>Criminal groups</i>	Criminal groups seek to attack systems for monetary gain; specifically, organized crime groups use spam, phishing, and spyware/malware to commit identity theft and online fraud. International corporate spies and organized crime organizations also pose a threat to the United States through their ability to conduct industrial espionage and large-scale monetary theft, and to hire or develop hacker talent.
<i>Foreign intelligence services</i>	Foreign intelligence services use cyber tools as part of their information-gathering and espionage activities; in addition, several nations are aggressively working to develop information warfare doctrine, programs, and capabilities. Such capabilities enable a single entity to have a significant and serious impact by disrupting the supply, communications, and economic infrastructures that support military power—impacts that could affect the daily lives of U.S. citizens across the country.
<i>Hackers</i>	Hackers break into networks for the thrill of the challenge or for bragging rights in the hacker community. While remote hacking once required a fair amount of skill or computer knowledge, hackers can now download attack scripts and protocols from the Internet and launch them against victim sites. Thus, while attack tools have become more sophisticated, they have also become easier to use. According to the Central Intelligence Agency, the large majority of hackers do not have the requisite expertise to threaten difficult targets such as critical U.S. networks; nevertheless, the worldwide population of hackers poses a relatively high threat of an isolated or brief disruption causing serious damage.
<i>Insiders</i>	The disgruntled organization insider is a principal source of computer crime. Insiders may not need a great deal of knowledge about computer intrusions because their knowledge of a target system often allows them to gain unrestricted access to cause damage to the system or to steal system data. The insider threat also includes outsourcing vendors as well as employees who accidentally introduce malware into systems.
<i>Phishers</i>	Individuals or small groups that execute phishing schemes in an attempt to steal identities or information for monetary gain. Phishers may also use spam and spyware/malware to accomplish their objectives.
<i>Spammers</i>	Individuals or organizations that distribute unsolicited email with hidden or false information in order to sell products, conduct phishing schemes, distribute spyware/malware, or attack organizations (e.g., denial of service).
<i>Spyware/Malware authors</i>	Individuals or organizations with malicious intent carry out attacks against users by producing and distributing spyware and malware. Several destructive computer viruses and worms have harmed files and hard drives, including the Melissa Macro Virus, the Explore.Zip worm, the CIH (Chernobyl) Virus, Nimda, Code Red, Slammer, and Blaster.
<i>Cyberterrorists</i>	Cyberterrorists seek to destroy, incapacitate, or exploit critical infrastructures in order to threaten national security; cause mass casualties, weaken economies, or target businesses; and/or damage public morale and confidence. Cyberterrorists may use phishing schemes or spyware/malware in order to generate funds or gather sensitive information.

2. *Location and Extent*

As most day-to-day activities rely on the Internet in one aspect or another, any person or infrastructure is susceptible to cybersecurity threats. Energy pipelines, specifically U.S. natural gas pipelines, have been cited by DHS as targets of cyberattack. While information on these attacks is not publicly available knowledge, cyber security officials warn that, with sufficient access, a hacker could “manipulate pressure and other control system settings, potentially reaping explosions and other dangerous conditions.”⁴¹ While cyber risks and threats are mainly thought of as not having specific locations, there are physical sites that would be impacted. Locations at risk could include government agencies, institutions of higher education, medical facilities, and various private sector entities.

3. *Previous Occurrences*

Low-level cyber-attacks occur daily and sometimes hourly on governmental systems. Most of these attacks do not breach the County systems, however, there have been cases of minor breaches.

4. *Probability of Future Events*

Based on the growing sophistication and political climate, there is a high probability of future cyberattack events within Lake County.

5. *Vulnerability and Risk Assessment*

The public is heavily reliant on technology for daily life, including cell phones, handheld devices such as tablets, and computers. Any disruption to this technology caused by a cyberattack would impair the ability for the public to conduct basic activities, such as communications, mobile banking, and work. Property and facilities may become either uninhabitable or unusable as a result of a cyberattack, particularly if their infrastructure is reliant on technology for sustainability.

A significant majority of critical infrastructure systems are in some way tied to technology, oftentimes through virtual operations and supervisory control and data acquisition (SCADA) systems. Therefore, a cyberattack could disable the vast majority of systems which control these pieces of critical infrastructure, as well as traffic control, dispatch, utility, and response systems. Targeted cyberattacks can impact water or wastewater treatment facilities. The disruption of the virtual systems tied to this infrastructure could cause water pollution or contamination and subsequent environmental issues.

Cyberattacks can interfere with emergency response communication and activities. Given that many first responders rely on technology both at operations center and in the field, a cyberattack could impair the ability to communicate. For example, many agencies rely on technology to notify and route responders to the scene of the emergency. More specifically, 911 dispatch centers rely on technology which makes them vulnerable to cyber exploits. Considering all of these factors, cyberattack/cyberterrorism would generally have a high impact to Lake County and its jurisdictions.

⁴¹ Florida State Hazard Mitigation Plan, 2013

r) Terrorism

1. *Description*

A terrorist incident could involve a wide variety of materials or actions, or combinations of materials and actions. These could range from uncomplicated incidents impacting relatively small areas, to highly complex incidents with very widespread physical or economic consequence. The response to such an incident would require specialized personnel and resources beyond the capabilities of Lake County and its municipalities, and would require assistance from mutual aid organizations, adjacent counties, the State of Florida, and the Federal government.

2. *Location and Extent*

Lake County has many facilities and systems that are considered to be critical infrastructure; whose continued and uninterrupted operation is necessary for the health, safety and well-being of the community. These facilities could be considered potential targets for a terrorist attack which could have potentially widespread consequences for adjacent neighborhoods or the community as a whole. With Lake County's close vicinity to Orange County and the popular tourist destinations located within, Lake County could be considered a host-county in the event a major catastrophic terrorist event should occur.⁴²

3. *Previous Occurrences*

Historically, Lake County and its jurisdictions have been fortunate not to have experienced any terrorist related incidents in the past.

4. *Probability of Future Events*

The probability of a terrorist act within Lake County is considered low with a minimum to moderate impact. However, due to the close vicinity to Orange County and the popular tourist destinations located within, Lake County could be considered a host-county in the event a major catastrophic terrorist event should occur.

Historically, there had been few successful acts of terrorism committed in the State. However, with the heightened level of national terrorism events, and because of the number of facilities within the State associated with tourism, the military, government, cultural, academic, and transportation, the potential is considered to be high nationwide. In Lake County, terrorism assessments have identified facilities that have the potential for being targets for terrorist attacks with the intent of causing psychological effects of the appearance of terrorism, catastrophic levels of loss of life, injury, and property and environmental damage.

5. *Vulnerability and Risk Assessment*

Lake County's vulnerability to the consequences of a terrorist attack on its facilities or systems include, but are not limited to:

- Disruption to the ability to initiate and sustain emergency response operations
- Increased safety risks to the community from the release of hazardous materials or dangerous substances

⁴² Lake County Comprehensive Emergency Management Plan, 2018

- Disruption to the ability to maintain governmental functions, including: law enforcement, public health and safety, public utility systems, education, and other critical operations
- Threats to institutions serving large numbers of individuals with higher vulnerability to the health and safety consequences
- Threats to the economic vitality of the community and its businesses
- Damage or disruption to components of the transportation or utility infrastructure resulting in additional physical or economic consequences

Considering all of these factors, terrorism would generally have a moderate impact to Lake County and its jurisdictions.

s) Prolonged Utility/Communications Failure

1. *Description*

A utility failure can result from a variety of related causes, including sagging lines due to hot weather, flashovers from transmission lines to nearby trees and incorrect relay settings. According to the electric utility industry's trade association, the potential for such disturbances is expected to increase with the profound changes now sweeping the electric utility industry.

A communication failure is defined as the severe interruption or loss of private and or public communications systems, including but not limited to transmission lines, broadcast, relay, switching and repeater stations as well as communications satellites, electrical generation capabilities, and associated hardware and software applications necessary to operate communications equipment. These disruptions may result from equipment failure, human acts (deliberate or accidental), or the results of natural or human made disasters.

2. *Location and Extent*

A prolonged utility failure can have the following potential impacts on Lake County: electrical power outage, surface and air transportation disruption, potable water system loss of disruption, sewer system outage, telecommunication system outage, human and health safety, psychological hardship, economic disruption, and disruption of community services. All municipalities are at equal risk for prolonged power outages; however, some communities may be restored more quickly than others depending on other high priority locations with which they share a grid.

A prolonged communications failure would affect essential facilities and the day to day operations of local government as well as the business community. Sites of concern would range from dispatch agencies, satellite uplink and downlink sites, internet service provider sites, and the telecommunication industry switching sites. Interruptions in day to day communications would create problems for businesses, public agencies, citizens and emergency services.

3. *Previous Occurrences*

Utility failure/disruption occurs on a daily basis and is typically minor and services are restored quickly. Most of the prolonged utility failure/disruption is directly associated with

other contributing hazards such as hurricanes, tornadoes, floods, technological failures etc.

4. *Probability of Future Events*

While the probability of future power failure incidents in Lake County is difficult to predict, the historic record indicates that significant power failures have occurred. Data is not readily available on the frequency of smaller power outages across the county; however, it is reasonable to assume that power failure events of shorter duration will continue to occur in the future. The potential for another major power failure that disrupts power for Lake County residents is always possible, yet are expected to occur less frequently than smaller incidents. In addition, future changes in climate may also impact the frequency and probability of future power failure occurrences.

5. *Vulnerability and Risk Assessment*

Loss of electricity can lead to the inability to use electric-powered equipment, such as: lighting; heating, ventilation, and air conditioning (HVAC) and necessary equipment; communication equipment (telephones, computers, etc.); small appliances such as refrigerators and medical equipment. This all can lead to food/medical supply spoilage, loss of heating and cooling. Utility failure can also pose a threat to the general population of Lake County regarding the loss of communications, gas, and water supply that are critical to ensure the health, safety, and general welfare of the population. The special needs population can be especially vulnerable to loss of heat or air conditioning during extreme weather conditions.

Considering all of these factors, prolonged utility failure/disruption would generally have a moderate impact to Lake County and its jurisdictions.

t) Mass Casualty

1. *Description*

A Mass Casualty Incident (MCI) is any incident in which emergency medical services resources, such as personnel and equipment, are overwhelmed by the number and severity of casualties.

2. *Location and Extent*

A mass casualty incident can be caused by various incidents/factors. Largely these are associated with the following examples: terrorism; large gatherings/special events; biological; and transportation.

An MCI will be classified by different levels depending on the number of victims. These levels are as follows:

- MCI Level 1 (5-10 victims)
- MCI Level 2 (11-20 victims)
- MCI Level 3 (over 21 victims)
- MCI Level 4 (100 victims or greater, major MCI)
- MCI Level 5 (1000 victims or greater, major MCI)

Any location in Lake County is at risk of experiencing a mass casualty event. Areas or events that are densely populated within the of the county that could potentially be more likely targets for a mass casualty event, especially one caused by terrorism.

3. *Previous Occurrences*

Historically, Lake County and its jurisdictions have been fortunate not to have experienced large/major mass casualty incidents in the past.

4. *Probability of Future Events*

The probability of disasters involving mass casualties resulting from the factors listed is considered possible, although the probability is low within lake county.

5. *Vulnerability and Risk Assessment*

As previously mentioned, any location in Lake County is at risk of experiencing a mass casualty event, especially those that are more densely populated. Additionally, any areas surrounding a mass casualty event will be in danger of additional injuries and fatalities depending on the type of incident. A mass casualty event can be particularly chaotic for first responders who can become quickly overwhelmed by responding simultaneously to the crisis and consequences of an attack. In the event of a terrorist attack, response could become inhibited due to debris on the road, traffic, or airborne disease/chemicals. Access must be coordinated in order to perform effective rescue efforts. First responders may also be targeted in the event of secondary attacks. Considering all of these factors, a mass casualty incident would generally have a moderate impact to Lake County and its jurisdictions.

III. VULNERABILITY ASSESSMENT METHODOLOGY AND CONCLUSIONS

The Local Mitigation Strategy must include an assessment of vulnerability to all hazards.⁴³ For some hazards such as lightning, hail, high winds, excessive heat, and freezes, all jurisdictions are equally at risk and have similar hazard vulnerabilities. For other hazards, some areas are more vulnerable than others due to geographical or property characteristics. These hazards include: flooding, sinkholes, wildfires, and dam/levee failure.

A. Assessing Vulnerabilities

a) Repetitive Loss Properties

The Flood Mitigation Assistance (FMA) Grant Program was created as part of the National Flood Insurance Reform Act (NFIRA) of 1994 to reduce or eliminate claims under the National Flood Insurance Program (NFIP). The FMA Grant program was updated in FY 2013 by the Flood Insurance Reform Act of 2012 (Public Law 112-114). The primary objective of the Repetitive Loss Properties Strategy is to eliminate or reduce the damage to property and the disruption of life caused by repeated flooding of the same properties. A specific target group of repetitive loss properties is identified and serviced separately from other NFIP policies by the Special Direct Facility (SDF). The target group included every NFIP-insurance policy that since 1978 and regardless of an ownership change during that period has experienced:

- Insurance property with 2 flood claims where the repairs equaled or exceeded 25% of the market value of the structure at the time of the flood event.
- Insured property with flood history of 4 or more separate claims of \$5,000 each with cumulative total exceeding \$20,000 or at least 2 claim payments where the cumulative amount of 2 claims exceeds the market value of the structure.

Although the FMA Grant Program is federally funded, and administered through a partnership with the Florida Division of Emergency Management (FDEM), local and Native American Tribal governments, and the Federal Emergency Management Agency. Authority and responsibility for developing and maintaining a State Mitigation Plan, assisting local and Native American Tribal governments in developing and maintaining Flood Mitigation Plans, reviewing FMA Grant sub-applications, recommending cost effective sub-applications to FEMA and providing pass-through grant funds to awarded FMA Grant projects from eligible sub-applicants resides with FDEM. They also are responsible for ensuring the projects funded are completed and all reporting requirements are met.

As of 2020 LMS plan update, there are nine (9) repetitive loss properties in Lake County (Astor), and all are residential and are located in unincorporated Lake County. There are no documented repetitive loss properties in the municipalities participating in this plan. The Lake County Department of Public Works continues efforts to work with these property owner(s) to find possible solutions to the flooding problems. Total payments made for all repetitive flood loss properties in the past has been \$953,534. Lake County and the jurisdictions are continuing to work with property owners to resolve all issues related to repetitive flooding.

⁴³ United States Code of Federal Regulations 44 CFR 201.6(c)(2)(ii)

b) Local Match Requirement/Potential Funding Sources

A very important component of the application process for mitigation process is the identification of funding source(s) to meet the local match requirements for respective projects. While cash match provided by the applicant is an option, the identification of outside funding sources is often sought to create less financial hardship for the applicant. There are a variety of other programs that could potentially be viable sources for mitigation projects. While they all have their own programmatic rules and requirements, there is often the ability to use these programs as tools and resources to assist in the completion of mitigation projects.

The first source of funding may come from the various programs sponsored by the Florida Division of Emergency Management (FDEM). Various Federal programs under the direction of the FDEM Mitigation Unit are a potential resource as well, such as the National Flood Insurance Program, the Flood Mitigation Assistance Program, and the Pre-Disaster Mitigation Program. There is also the Residential Construction Mitigation Program (RCMP), which provides technical and financial resources to homeowners for hurricane retrofitting. If homeowners are recommended for the program, they are eligible for a forgivable loan to complete the retrofitting recommendations. Since, 2010, the Repetitive Flood Claims Program and the Severe Repetitive Loss Program were eliminated.

There are also other programs offered, such as the Community Development Block Grant (CDBG) Program and Florida Communities Trust; the Florida Department of Environmental Protection's Florida Coastal Management Program, and various programs under the US Army Corps of Engineers; US Department of Agriculture; US Department of Commerce; US Department of Homeland Security; and the US Department of Housing and Urban Development. This list is not exhaustive, as there are also various other agencies and organizations that provide funding opportunities. This list will continue to be improved upon and shared with mitigation partners in order to assist them in their planning and funding efforts.

B. Land Use Trends and Potential Loss

Land use especially within hazard-prone areas has an impact on vulnerability as some uses may be more prone to disaster related damages than others. Residential and industrial development are examples of this. Individual jurisdictions have the most significant and legal authority over land use policy and can make an analysis of potential land use projects to determine if a mitigation strategy is necessary. Local current land uses and potential for new development reports along with future land use and general development trends are indicative of how future development will impact the LMS for Lake County. Careful consideration of potential risk from various hazards can help guide thoughtful land use to minimize vulnerabilities in the future. When necessary to further local effort, modifications to plans, ordinances, codes and similar policies can be proposed as initiatives for consideration into the LMS.

The Lake County Comprehensive Plan 2030⁴⁴ guides future development through policies and procedures consistent with the County's growth objectives. This plan identifies current and future development trends.

⁴⁴ https://www.lakecountyfl.gov/offices/planning_and_zoning/comprehensive_planning/

C. Critical Facilities and Structures

Lake County maintains an inventory of critical facilities, infrastructure and structures that are located within hazard area. This list includes but is not limited to emergency services facilities, medical facilities, government facilities, schools, emergency/evacuation shelters, fire and police stations, emergency operation center, facilities used by special needs populations, and any other facilities identified by Emergency Management. This list is updated annually.

The LMS Working Group has identified goals and objectives to guide the development of this plan. These goals and objectives provide focus for the activities of the LMS Working Group toward mitigation efforts that will meet the needs of the jurisdictions.

The goals selected by the LMS Working Group are related to the broad mitigation needs and capabilities of the communities involved, rather than addressing a specific hazard type or category. Therefore, these mitigation goals and objectives are multi-hazard and are the mitigation related capabilities that are important to Lake County. These will be present in each participating jurisdiction in the future as the goals are achieved.

D. Mitigation Actions

Each goal is following by several objectives that provide more specific steps to be taken by the LMS Working Group and the jurisdictions to achieve the broad-based, long-range direction for planning. Objectives define the steps that are actionable for implementation by the LMS Working Group and associated community partners.

The objectives are intended to guide selection and implementation of mitigation projects that are included in the project list. The closer the goals and objectives are to reaching a more resilient, disaster community, completion of those projects will further improve the community and achieve the goals of the mitigation planning process.

Since the 2010 plan, Lake County has completed four projects and one was terminated. This list is included in Appendix I. Projects that remain open are generally open due to the fact that match funding is even more difficult to find within local government budgets and mitigation initiatives and generally do not take precedence over providing the basic services that are expected to be provided by local governments to citizens. Also, it is important to note that although a project may be listed as completed, that does not mean it was necessarily funded by FEMA. The initiative may have been completed by the local government on its own or was funded by alternative funding sources. This document is meant to be a planning tool that is not completely reliant on FEMA assistance to add, fund, or complete projects identified within the plan.

It is anticipated that the list of completed projects will grow as there is one mitigation project currently underway as of the plan update that is not yet completed. The intent is to identify a comprehensive range of hazards with involvement by all jurisdictions within Lake County. Every jurisdiction has an identifiable project/action item within the LMS project listing. Appendix I identifies all of the projects, listed by priority score.

IV. MITIGATION GOALS AND OBJECTIVES

Goal 1: Local government will have the capability to develop, implement, and maintain effective mitigation programs.

Objective 1.1: Data and information needed for defining hazards, risk areas, and vulnerabilities will be readily available.

Objective 1.2: Emergency services organizations will have the capability to detect emergency situations and promptly initiate emergency response operations.

Objective 1.3: The capability to effectively utilize available data and information related to mitigation planning and program development will be available.

Objective 1.4: The effectiveness of mitigation initiatives implemented in the community will be measured and documented.

Objective 1.5: There will be a program to derive mitigation “lessons learned” from each significant disaster event occurring in or near the community.

Objective 1.6: Up-to-date technical skills in mitigation planning and programming will be available for the community.

Goal 2: All sectors of the community will work together to create a disaster resistant community.

Objective 2.1: A business continuity and recovery program will be established and implemented in the community.

Objective 2.2: Local agencies and organizations will establish specific interagency agreements for the development and implementation of mitigation-related projects and programs.

Objective 2.3: Local elected governing bodies will promulgate the local mitigation plan and support community mitigation programming.

Objective 2.4: Outreach programs to gain participation in mitigation programs by business, industry, institutions, and community groups will be developed and implemented.

Objective 2.5: The community will be periodically updated regarding local efforts in mitigation planning and programming.

Objective 2.6: The community’s public and private sector organizations will partner to promote hazard mitigation programming throughout the community.

Goal 3: The community will have the capability to initiate and sustain emergency response operations during and after a disaster.

Objective 3.1: Designated evacuation routes will be maintained and improved wherever possible to remain open before, during, and after disaster event.

Objective 3.2: Designated evacuation shelters will be retrofitted or relocated to ensure their operability during and after disaster events.

Objective 3.3: Local emergency services facilities will be retrofitted or relocated to withstand the structural impacts of disasters.

Objective 3.4: Response capabilities will be available to protect visitors, special needs individuals, and the homeless from a disaster's health and safety impacts.

Objective 3.5: Shelters or structures for vehicles and equipment needed for emergency services operation will be retrofitted or relocated to withstand disaster impacts.

Objective 3.6: Utility and communications systems supporting emergency services operations will be retrofitted or relocated to withstand the impacts of disasters.

Objective 3.7: Vehicle access routes to key health care facilities will be protected from blockage as a result of a disaster.

Goal 4: The continuity of local government operations will not be significantly disrupted by disasters.

Objective 4.1: Buildings and facilities used for the routine operations of government will be retrofitted or relocated to withstand the impacts of disasters.

Objective 4.2: Community redevelopment plans will be prepared to guide decision-making and resource allocation by local government in the aftermath of a disaster.

Objective 4.3: Important local government records and documents will be protected from the impacts of disasters.

Objective 4.4: Plans and programs will be available to assist local government employees in retrofitting or relocating their homes to ensure their availability during a disaster.

Objective 4.5: Plans will be developed, and resources identified, to facilitate reestablishing local government operations after a disaster

Objective 4.6: Redundant equipment, facilities, and/or supplies will be obtained to facilitate reestablishing local government operations after a disaster

Goal 5: Mitigation efforts will be a continuing activity to protect the health, safety, and welfare of the community's residents.

Objective 5.1: Adequate systems for notifying the public at risk and providing emergency instruction during a disaster will be available in all identified hazard areas.

Objective 5.2: Effective structural measures will be developed to protect residential areas from the physical impacts of disasters.

Objective 5.3: Facilities in the community posing an extra health or safety risk when damaged or disrupted will be made less vulnerable to the impacts of a disaster.

Objective 5.4: Public and private medical and healthcare facilities in the community will be retrofitted or relocated to withstand the impacts of disasters.

Objective 5.5: Residential structures will be removed or relocated from defined hazard areas.

Objective 5.6: Residential structures will be retrofitted to withstand the physical impacts of disasters.

Objective 5.7: Safety devices on transportation networks will not fail because of a disaster.

Objective 5.8: Structures, facilities, and systems serving visitors to the community will be prepared to meet their immediate health and safety needs.

Objective 5.9: There will be adequate resources, equipment, and supplies to meet victims' health and safety needs after a disaster.

Goal 6: The policies and regulations of local government will support effective hazard mitigation programming throughout the community.

Objective 6.1: All reconstruction or rehabilitation of local government facilities will incorporate techniques to minimize the physical or operational vulnerability to disasters.

Objective 6.2: Land use policies, plans, and regulations will discourage or prohibit inappropriate location of structures or infrastructure components in areas of higher risk.

Objective 6.3: Local governments will ensure that hazard mitigation needs and programs are given appropriate emphasis in resource allocation and decision-making.

Objective 6.4: Local governments will establish and enforce building and land development codes that are effective in addressing the hazards threatening the community.

Objective 6.5: Local governments will protect high hazard natural areas from new or continuing development.

Objective 6.6: Local jurisdictions will participate fully in the National Flood Insurance Program and the associated Community Rating System.

Objective 6.7: New local government facilities will be located outside of hazard areas and/or will be designed to not be vulnerable to the impacts of such hazards.

Objective 6.8: Reconstruction and rehabilitation of structures and utilities in the community will incorporate appropriate hazard mitigation techniques.

Objective 6.9: Regulations will be established and enforced to ensure that public and private property maintenance is consistent with minimizing vulnerabilities to disaster.

Goal 7: Community residents will have homes, institutions, and places of employment that are less vulnerable to disasters.

Objective 7.1: Economic incentive programs for the general public, businesses, and industry to implement structural and non-structural mitigation measures will be established.

Objective 7.2: Local government will support key employers in the community in the implementation of mitigation measures for their facilities and systems.

Objective 7.3: Programs for removal, relocation, or retrofitting of vulnerable structures and utilities in hazard areas will be established and implemented.

Objective 7.4: The vulnerability to disasters of schools, libraries, museums, and other institutions important to the daily lives of the community will be minimized.

Goal 8: The community's economic vitality will be less threatened by a disaster.

Objective 8.1: Components of the infrastructure needed by the community's businesses and industries will be protected from the impacts of disaster.

Objective 8.2: Local government emergency response and disaster recovery plans will appropriately consider the needs of key employers in the community.

Objective 8.3: Local government will encourage community businesses and industries to make their facilities and operations disaster resistant.

Objective 8.4: Local government will establish programs, facilities, and resources to support business resumption activities by impacted local businesses and industry.

Objective 8.5: Local government will implement programs to address public perceptions of community condition and functioning in the aftermath of a disaster.

Objective 8.6: Local government will strive to diversify the employment base of the community.

Goal 9: The community's infrastructure will be better protected and less vulnerable to a disaster.

Objective 9.1: Local governments will encourage hazard mitigation programming by private sector organizations owning or operating key community utilities.

Objective 9.2: Routine maintenance of the community's infrastructure will be done to minimize the potential for system failure because of or during a disaster.

Objective 9.3: Sources of energy normally used by the community will not be unwarrantedly vulnerable to the impacts of a disaster.

Objective 9.4: The telecommunications systems and facilities serving the community will not be unwarrantedly vulnerable to the impacts of a disaster.

Objective 9.5: Transportation facilities and systems serving the community will be constructed and/or retrofitted to minimize the potential for disruption during a disaster.

Objective 9.6: Water and sewer services in the community will not fail because of a disaster.

Goal 10: Members of the community will have the opportunity to learn of the hazards threatening local areas and the techniques to minimize vulnerability to those hazards.

Objective 10.1: All interested individuals will be encouraged to participate in hazard mitigation planning and training activities.

Objective 10.2: Education programs in risk communication and hazard mitigation will be established and implemented.

Objective 10.3: Managers of public facilities will be knowledgeable in hazard mitigation techniques and the components of the community's mitigation plan.

Objective 10.4: Technical training in mitigation planning and programming will be given to appropriate local government employees.

Objective 10.5: The owners and operators of businesses and industries in the community will be knowledgeable in appropriate hazard mitigation techniques.

Objective 10.6: The public living or working in defined hazard areas will be aware of that fact, understand their vulnerability, and know appropriate mitigation techniques.

Objective 10.7: The public will have facilitated access to information needed to understand their vulnerability to disasters and effective mitigation techniques.

A. Addressing Known Risks and Vulnerabilities

Proposed mitigations projects, in addition to meeting the long-range intent of the goals and objectives, are used to address known problem areas in the community. These can include hardening and retrofitting or existing critical facilities as well as addressing stormwater issue in known problem areas. These may not projects can be used to address problems that do not necessarily affect an entire neighborhood but can cause unsafe conditions or damage properties.

V. NATIONAL FLOOD INSURANCE PROGRAM (NFIP) AND COMMUNITY RATING SYSTEM (CRS)

Flood insurance is designed to provide an alternative to disaster assistance to reduce the escalating costs of repairing damage to buildings and their contents caused by floods. In addition to providing flood insurance and reducing flood damages through floodplain management regulations, the NFIP identifies and maps the Nation's floodplains. Mapping flood hazards creates broad-based awareness of the flood hazards and provides the data needed for floodplain management programs and to actuarially rate new construction for flood insurance. Flood insurance policy information is listed in the table below.

All jurisdictions (Astatula, Clermont, Eustis, Fruitland Park, Groveland, Howey-in-the-Hills, Lady Lake, Lake County, Leesburg, Mascotte, Minneola, Montverde, Mount Dora, Tavares, Umatilla) participate in the NFIP. The Lake County Office of Emergency Management and the LMS Working Group will continue to promote and educate the community about the benefits of this program and its implications on reducing flood hazards throughout the community. Jurisdictions within Lake County are continuing to conduct a variety of activities associated with the NFIP. Activities include, but are not limited to:

- Collecting flood elevation certificates
- Eliminating repetitive flood loss properties
- Informing residents of map changes
- Adopting new maps

As the jurisdictions of Lake County adopt the Local Mitigation Strategy, the list of actions related to the NFIP within individual jurisdictions will continue to be refined and updated to reflect the most comprehensive list of possible activities within the LMS relating to the NFIP and CRS.

The Community Rating System (CRS) is a voluntary program for NFIP-participating communities. The goals of the CRS are to reduce flood losses, facilitate accurate insurance rating, and to promote the awareness of flood insurance. The CRS has been developed to provide incentives in the way of premium discounts for communities to go beyond the minimum floodplain management requirements to develop extra measures to provide protection from flooding. At this update, only Lake County is participating in the CRS and has a rating of 7 as of October 1, 2020.

Table 16: Flood Insurance Policy Information in Lake County⁴⁵

Community Name	Policies In-force	Total Coverage	Total Written Premium +FPF
<i>Astatula</i>	6	\$1,192,400	\$3,361
<i>Clermont</i>	228	\$69,403,900	\$97,053
<i>Eustis</i>	120	\$33,980,400	\$56,500
<i>Fruitland Park</i>	87	\$26,193,500	\$35,046
<i>Groveland</i>	173	\$51,115,500	\$83,683
<i>Howey-in-the-Hills</i>	14	\$3,778,000	\$4,521
<i>Lady Lake</i>	156	\$37,669,400	\$74,306
<i>Lake County</i>	2,371	\$602,696,100	\$1,230,779
<i>Leesburg</i>	260	\$69,364,500	\$136,321
<i>Mascotte</i>	15	\$3,669,400	\$6,025
<i>Minneola</i>	43	\$10,970,400	\$23,320
<i>Montverde</i>	15	\$4,581,900	\$5,921
<i>Mount Dora</i>	218	\$64,892,600	\$100,011
<i>Tavares</i>	119	\$30,641,000	\$63,506
<i>Umatilla</i>	15	\$3,573,500	\$5,862

⁴⁵ <https://www.fema.gov/policy-claim-statistics-flood-insurance>

VI. IMPLEMENTATION

A. Prioritization of Projects

Prior to the 2010 plan, a program called Mitigation 20/20 was used to rank Lake County's mitigation projects. In preparation for the 2010 update, it was decided to use a different method to rank future projects and the LMS Working Group agreed that it would be acceptable use the STAPLEE method to prioritize the mitigation projects. The STAPLEE model is still the accepted method for rating projects on the project list.

The STAPLEE acronym stands for Social, Technical, Administrative, Political, Legal, Economic, and Environmental factors and the dimensions along which each project is measured. The STAPLEE system assesses each project using a scale that allows for a raw score to be derived. There were 7 different dimensions that were further divided into 22 smaller criteria considerations. The projects were rated using a scale of 1 to 5 for each smaller unit with a 1 being very unfavorable and a 5 being very favorable. A 3 would be considered neither favorable nor unfavorable. The higher a project scored the higher it would be placed on the priority list since this meant it received more "favorable" scores on the criteria consideration.

All projects up until the 2010 plan update have used the old rating criteria. All new projects submitted for consideration to the LMS Working Group since the 2010 update were scored using the STAPLEE criteria. The project listing, as shown within Appendix I, shows the projects ranked using both the old and new criteria. The LMS Working Group wants to ensure that not only is the most user-friendly scoring used for this process, but that all municipalities feel the rating criteria results in their projects being fairly ranked for funding consideration. The LMS Working Group will continue to refine the scoring process as needed.

A table outlining the STAPLEE method is on the next page.

Table 17: Using the STAPLEE Method to Prioritize Projects

Dimension	Criteria	Description
<u><i>Social</i></u>	Community Acceptance	Will this project not be objectionable to a large majority of the population being impacted by the hazard?
<i>Social</i>	Effect on Segment of Population	Thinking of all immediate, direct, and indirect side effects of the implementation of this project, what will the effect be on the segment of the population (things to consider: property access, construction noise, inconvenience of actions)?
<u><i>Technical</i></u>	Technically Feasible	Most of the projects are at such a scale that they need to be technically feasible at the time they are submitted to the list.
<i>Technical</i>	Long-Term Solution	Does the project in, and of, itself or as a part of a large comprehensive program represent a long-term solution to the problem at hand?
<i>Technical</i>	Secondary Impacts	Secondary impacts include things like scalability of solutions and potential re-use of technologies used in the project.
<u><i>Administrative</i></u>	Staffing	Do you have enough staff to administer and manage the project?
<i>Administrative</i>	Funding Allocation	Are there funds currently budgeted for the project?
<i>Administrative</i>	Maintenance/Operations	Will you have enough personnel to maintain and operate the project, if applicable?
<u><i>Political</i></u>	Political Support	What do the elected officials think of the project? Are they aware of it? What might they think of it? The existence of a single person or group of persons that is very vocal in their support for a project might make it easier to realize the mitigation action. What does the community think about the project? Do they think it is a fair use of resources?
<i>Political</i>	Local Champion	The existence of a single person or group of persons that is very vocal in their support for a project might make it easier to realize the mitigation action.
<i>Political</i>	Public Support	What does the community think about the project? Do they think it is a fair use of resources?
<u><i>Legal</i></u>	State Authority	Does the state have jurisdiction with this kind of project?

Dimension	Criteria	Description
<i>Legal</i>	Existing Local Authority	Does the municipality have the legal authority to undertake the project?
<i>Legal</i>	Potential Legal Action	Will the project potentially cause legal action?
<u><i>Economic</i></u>	Cost of Action	How expensive is the project?
<i>Economic</i>	Benefit of Action	How many and how great are the benefits to the project?
<i>Economic</i>	Contributes to Economic Goals	Does the project align with your community's economic goals?
<i>Economic</i>	Outside Funding Required	Will you need outside funding to finance your share of the cost?
<u><i>Environmental</i></u>	Effect on Land and Water	What are the long-term effects on the land and water on and adjacent to the site?
<i>Environmental</i>	Effect on Endangered Species	Will any endangered species be impacted by the project?
<i>Environmental</i>	Consistent with Community Environmental Goals	Will the project be consistent with the community's environmental goals?
<i>Environmental</i>	Consistent with Federal Laws	Will the project be in any danger of breaking any federal rules or regulations?

Projects will be submitted to the LMS Working Group for consideration and must include a cost-benefit analysis and a scoring form. Projects can be submitted to the group at any time and action will be taken at the next LMS Working Group meeting. At any time, the LMS Working Group may choose to review the project list and update the prioritization ranking. Environmental factors may dictate that some projects need to be considered due to current conditions that require a project to be moved up on the list for available funding. Other factors may lead to this review include declared disasters, funding availability, new or revised policy development, plan revision cycles, legal or fiscal restraints, and life safety priorities.

VII. MITIGATION PROJECT PRIORITY LIST

The project priority list is located in Appendix I of this plan and also includes completed and deleted project lists.

A. Responsible for Mitigation Actions

The implementation and completion of approved mitigation projects will be administered by the jurisdiction, agency, or organization that proposed the project. On an annual basis, the Lake County Office of Emergency Management, in coordination with the LMS Working Group, will check the status of the mitigation initiatives to ensure that efforts have been made to complete any projects on the LMS project list. This approach is utilized as only the jurisdiction, agency, or

organization that proposed the project has the authority or responsibility for implementation. During the plan implementation process, the LMS Working Group monitors the status of projects, assigns priorities, and will take other action for support and coordination.

B. Cost-Benefit Analysis

When a project is submitted to the LMS Working Group, it must be accompanied by a cost-benefit analysis (CBA) for consideration. Projects not including a CBA will be returned to the proposer for completion of the appropriate information prior to resubmission. A copy of a form that has been accepted for documenting the CBA has been included in the appendix to this plan behind the project lists. This form can be utilized by the proposer to document what the costs are associated with a proposed project and estimate the value that will be received as a benefit resulting from completion of the project. The cost benefit analysis results will be factored into the prioritization process to determine the project ranking.

C. Actions Completed

Any project that has been funded and completed will be added to the Completed Project List regardless of the source of funding. Lake County Emergency Management maintains all project lists for Lake County. The project list can change as funding, requirements, etc. change and/or are updated. For deleted projects, an explanation is included to document the action. The LMS committee periodically reviews the project lists to determine ongoing eligibility and feasibility. Projects may be closed or withdrawn at the discretion of the committee.

VIII. PLAN MAINTENANCE**A. LMS Monitoring and Evaluation**

Lake County continues to maintain the Local Mitigation Strategy as a mechanism to guide mitigation actions that are being pursued in both the incorporated and unincorporated areas. The LMS Plan is housed in the Lake County Office of Emergency Management. One of the primary methods by which to maintain the plan is to track the status of the mitigation initiatives. The Lake County Office of Emergency Management has devised a database management system that tracks the projects as they are completed in the county to monitor progress. The Lake County LMS Working Group will make attempts to complete projects within five years (before the next plan update) as funding becomes available.

The LMS Working Group will meet at least annually to discuss any projects or changes that might have occurred that would be addressed by the update. Meetings can and will be scheduled following after times of natural disaster events and other times as deemed appropriate by the LMS Working Group Chair. Criteria used to evaluate the LMS Document and activities should include and are not limited the following situations:

- Change in requirements at any governmental level
- Changes in development trends and land use
- Completion of existing mitigation projects and introduction of new goals
- Changes in policy, procedure, or code

- Changes in building codes and practices
- Review of legislative actions that could affect funding of mitigation efforts
- Changes in Flood Insurance Rate Maps, National Flood Insurance Program, etc.

These meetings will be organized by the Lake County Office of Emergency Management. This meeting will result in the preparation of the Annual LMS Progress Report that will be submitted to the state and satisfy the annual CRS program requirement as well. The Lake County Office of Emergency Management will maintain an up-to-date list of all active working group members will be utilized as a distribution list for notification.

Since the last revision of the LMS there has not been any significant changes to development in Lake County that would impact the hazards identified within this plan. As of this writing, there are no anticipated development changes or trends that would impact these hazards in the future. This of course is subject to change in the future and will be a topic to be considered at future LMS meetings.

At each LMS meeting, representatives will report on the current status of projects, and if a project's scope or details have changed. It may also be reported that the project has been cancelled all together, in which case the project will be removed from the mitigation initiative prioritization list with an explanation. All changes and activities as a result of the LMS meeting will be considered part of the overall evaluation process, which will be administered and documented by the Office of Emergency Management and become an official component of the LMS.

The LMS Working Group will use the following criteria, among others, as a starting point for monitoring the overall LMS process:

- Goals and objectives address current and expected conditions
- The nature, magnitude and/or type of risks have changed
- The current resources are appropriate for implementing the plan
- There are implementation problems, such as technical, political or coordination issues with other agencies
- The outcomes have occurred as expected (demonstrating progress)
- The agencies and other partners participated as originally proposed

B. LMS Updates

An important key of the planning process is to begin thinking about the steps to update the plan prior to the next review date, which is in 2025. Revisions to the plan will start at least 12 months prior to the existing plans next required update, with Lake County providing drafts to state staff for preliminary comments ahead of time. This will ensure that the plan remains in active status and does not lapse for any period of time between plan review periods. Based on experience, it is easy to underestimate the time that it takes to complete the plan update.

In addition to the ongoing maintenance of the plan and LMS activities, the staff of the Office of Emergency Management assigned to handle mitigation activities will be responsible for the Five-

Year Update. The expectation is that continual review and refinements of the LMS Plan between plan updates will allow future updates to go smoothly. The update of the plan will take place by reading the document, identifying items to be fixed and utilizing a computer to make edits to the LMS document. This will occur as changes need to be made, instead of doing all of the changes at once for the five-year update. The Office of Emergency Management will continue to update the plan and be the responsible organization for this activity. This will be accomplished through continual review of the plan by LMS Working Group and support staff, as well as input from the general public.

Notice of upcoming meetings will be posted for at least ten days prior to the date of the meeting and available by the following means:

- Lake County LMS Website notice
- Email distribution list maintained by Lake County Emergency Management
- Notice published in local newsprint

Updates will be identified through the input of anyone with sound ideas to improve the plan from Lake County staff, LMS Working Group members and from the general public. Staff from the Office of Emergency Management assigned LMS responsibilities will update the electronic version of LMS document. The LMS Working Group will review the plan proposed to be submitted for the next update, guide changes as necessary and have final approval of the updated plan to be forwarded to state and federal counterparts for review and ultimate approval.

C. Implementation through Existing Plans and Programs

While some jurisdictions have taken steps towards integrating mitigation actions into their plans, some have not explicitly addressed these matters within their documents. It is important that some or all of the goals and actions of this local mitigation strategy be incorporated into other plans so that they will have a greater chance of being accomplished. Integrating plans is accomplished by having groups invite each other to each other's meetings. Information sharing ensures that the common elements are understood and documented within the various plans within Lake County. Through upcoming meetings that will be taking place with jurisdictions to adopt the Lake County LMS, integrating the LMS with their respective planning mechanisms is discussed and encouraged to promote further continuity. During individual plan review processes, suggested revisions and/or mitigation initiatives are identified for implementation into those plans.

Some of the County-wide plans and LMS integration efforts identified include:

- Lake County Comprehensive Emergency Management Plan (2018) – The CEMP incorporates elements of the LMS to identify hazard vulnerabilities and risks, as well as mitigation efforts to reduce potential risk throughout the County.
- Lake County Comprehensive Use Plan (2012) – The Comprehensive Plan supports LMS policies, including: capital improvements, land development regulations, conservation and wetland protection efforts, hazard mitigation, and post-disaster redevelopment.

- Lake County Code of Ordinances Chapter VI – Resource Protection Standards, 6.01.02: Wetlands Impact and Mitigation, and the Lake-Sumter Metropolitan Planning Organization (MPO) Transportation Plan.
- Lake County Community Wildfire Protection Plan (CWPP) – The CWPP was a stand-alone document. The 2020 LMS incorporates the requirements of the CWPP and acts as a replacement document to ensure the continued review and update of those requirements as they relate to the County.

Below is a listing of other plans, etc. that exist in the municipalities that further the goals and objectives of the LMS.

Table 18: Municipality Policies Supporting Lake County LMS

Jurisdiction	Policies
<i>Astatula</i>	• Policy 1-1.1.3: Firewise (Wildfire) • Policy 1-1.2.1: Wetlands development (Flooding) • Policies 1-1.2.2/5-1.8.2: Floodplain (Flooding) • Policies 1-1.2.4/5-1.2.13: Land development (Sinkholes) • Policies 401.11.1/4-2.1.1/4-2.3.2: Wells/City Connection (Sinkholes/Drought) • Policy 5-1.1.4: Construction (Erosion)
<i>Clermont</i>	• Policies 2-1/2-2: Land Use Density (Flooding) • Policies 2-16/3-5: Land Use Wetlands/Floodplain (Flooding) • Policy 2-2: Public Facilities Septic (Flooding)
<i>Eustis</i>	• Policies 1.4.1/2.1.1/2.1.2: Conservation (Flooding) • Policy 1.2.2: Land Use (Flooding)
<i>Fruitland Park</i>	• Policy 1-2.2: Floodplain (Flooding) • Policy 1-2.4: Setbacks (Sinkholes) • Policies 1-1.2/3-1.4: Open Space
<i>Groveland</i>	• Obj 7.8 Conservation (Flooding/Sinkholes) • Obj 7.2/7.10/7.13: Conservation Development (Flooding)
<i>Howey in the Hills</i>	• Policy 1-2.2.2: Floodplain (Flooding) • Policy 1-1.2.4: Sinkhole filling (Sinkholes) • Policies 4-2.3.1/5-1.7.1: Storm Water/Erosion (Flooding/Erosion) • Policies 5-1.8.1/8-1.2.1: Floodplains Development (Flooding)
<i>Lady Lake</i>	• FLU 1-9.3/2-4.4/3-2.2: Density/Development (Flooding/Erosion) • Goal Pub 6/Policy CIP 102.2/Policy Con 1-11.1: Floodplain (Flooding)
<i>Leesburg</i>	• Policies 1.1.1/1.3.2: Drainage/Elevation (Flooding) • Policy 1.3.3: Floodplain Conservation (Flooding) • Policies 1.2.1.9/1.3.3/Obj 1.4: Conservation (Flooding) • Policies 1.1.6/1.2.19/1.6.4/Obj. 1.7: Conservation (Erosion) • Policy 1.1.5: Land Use Conservation (Flooding/Drought)
<i>Mascotte</i>	• Policies 2.1.12/3.10.7/3.11.9/3.11.13/3.11.14: Land Use (Flooding) • Policies 1.2.9/Obj 1.6: Drainage (Flooding)

Jurisdiction	Policies
	Policy 1.2.9: Chemicals (Flooding)
<i>Minneola</i>	Section 98-12: Required easements and dedications. Drainage and Wetlands (Flooding)
<i>Montverde</i>	- Policies 101.24/5-1.2.13: Development (Sinkholes) - Policy 4-1.4.4: Septic (Flooding) - Policy 5-1.1.13: Development (Erosion)
<i>Mount Dora</i>	- Policies 2f/5f/7e: Floodplain Conservation (Flooding) - Policies 5e/2.2m: Land Use/Water (Sinkholes)
<i>Tavares</i>	- Policies 1-1.1.3/1-1.2.15/1-1.9.1: Floodplain Development (Flooding) - Policies 4-1.2.5/4-4.1/5-1.8.1: Floodplain/Sinkholes (Flooding) - Policies 5-1.2.10/5-1.8.6: Open Space (Sinkholes) - Policy 5-1.2.8: Shoreline (Erosion)
<i>Umatilla</i>	- Policies 5-1.83/5-1.81: Floodplain Preservation (Flooding/Sinkholes) - Policy 1-1.2.2: Development (Flooding)

The Villages although listed as a municipality is actually a special taxing district and does not have any plans, ordinances, etc. of their own as they follow the Lake County Building Codes and related policies, Fire Safety Codes, and Florida Building Codes as they may apply.

The municipalities utilize the approved LMS in connection with their own plans and procedures to further mitigation efforts working closely with the county to continue making all of Lake County resilient to the hazards identified.

While the majority of the planning efforts are aimed at flooding mitigation it is recognized that all hazards should be considered when revising plans and policies especially concerning land use, floodplain management, stormwater, development, etc. The LMS is adopted by all municipalities in Lake County and individual municipal and county-wide plans take mitigation efforts into consideration when making revisions.

Through upcoming meetings that will be taking place with jurisdictions to adopt the Lake County LMS, further integration of the LMS with their respective planning mechanisms will be discussed and encouraged to promote further continuity. Staff from the various organizations responsible for these individual plans will continue communicating with each other to further the process of better integrating these plans and improving overall dialogue about mitigation.

IX. AUTHORITIES AND REFERENCES

Code of Federal Regulations Title 44 201.6. *Local Mitigation Plans*. <http://www.ecfr.gov/cgi-bin/text-idx?rgn=div5&node=44:1.0.1.4.53>

FEMA (2011, Oct 1). *Local Mitigation Plan Review Guidance*, www.fema.gov:
http://www.fema.gov/media-library-data/20130726-1809-25045-7498/plan_review_guide_final_9_30_11.pdf

Florida Administrative Code 27P-22. *Hazard Mitigation Grant Program*,
<https://www.flrules.org/gateway/ChapterHome.asp?Chapter=27P-22>

Florida Statutes. *Chapter 252 Emergency Management*.
http://www.leg.state.fl.us/STATUTES/index.cfm?App_mode=Display_Index&Title_Request=XVII#TitleXVII

FEMA. *The Stafford Act*. http://www.fema.gov/media-library-data/1383153669955-21f970b19e8eaa67087b7da9f4af706e/stafford_act_booklet_042213_508e.pdf

APPENDIX I: ATTACHED SUBAPPENDICES

Maps, graphs, charts, tables, diagrams, and other additional data that provide support for the information presented in the LMS Plan are located in attachment Appendices A thru E.

Table 19: List of Appendices

SUBAPPENDIX	CONTENT
A	BYLAWS
B	LETTERS AND ADS
C	MEETING DOCUMENTATION
D	MEMBERSHIP
E	PROJECTS

APPENDIX II: LMS WORKING GROUP BY-LAWS AND MEMBERSHIP**ARTICLE I. PURPOSES OF THE WORKING GROUP**

The purpose of the Lake County Local Mitigation Strategy (LMS) Working Group is to decrease the vulnerability of the citizens, governments, businesses and institutions of Lake County to the future human, economic and environmental costs of natural, technological, and societal disasters. The Working Group will develop, monitor, implement, and maintain a comprehensive plan for hazard mitigation which will be intended to accomplish this purpose.

ARTICLE II. MEMBERSHIP

Participation in the Lake County LMS Working Group is voluntary by all entities. Membership in the Working Group is open to all jurisdictions, organizations and individuals supporting its purposes.

ARTICLE III. ORGANIZATIONAL STRUCTURE

The organizational structure of the Lake County LMS Working Group shall consist of the Working Group and other subcommittees which may from time to time be created as needed by the Lake County Working Group. The Working Group shall have a Chair, and a Vice-Chair. Any member is eligible for election to one of these positions. The Lake County Office of Emergency Management will perform administrative functions for the Working Group as required by State of Florida Emergency Management Scope of Work.

A. The Lake County LMS Working Group

The LMS Chair will preside at each meeting of the Working Group, as well as establish temporary subcommittees and assign personnel to them. The Vice-Chair will fulfill the duties and responsibilities of the chair in their absence.

The Lake County LMS Working Group will consist of the designated representatives from the following:

- One representative or designee from the government of Lake County and;
- One representative or designee of each participating incorporated municipality and;
- Representatives from organizations and associations representing key business industry, and community interest groups of Lake County and;
- Representatives from other governmental entities and;
- Representatives of non-profit organizations and/or faith-based institutions and;

Members of the Lake County LMS Working Group will be coordinated by the Chair or Vice-Chair to serve as the official representative and spokesperson for the jurisdiction or organization regarding the activities and decisions of the Lake County LMS Working Group. Each jurisdiction or organization shall also appoint an alternate to their primary representative. The alternate shall have full voting rights in the absence of the primary representative. Each municipality and Lake County will hold one vote in taking actions on behalf of their entities as long as they remain a member in good standing. To maintain good standing, members of the Lake County LMS Working Group must not have more than two (2) consecutive absences at scheduled meetings. At this

time, their vote will be withheld from the representative until they attend two (2) consecutive meetings. Their voting rights will be reinstated at the third (3) consecutive meeting. Mitigating or extenuating circumstances will be addressed by the Chair or Vice-Chair as appropriate on behalf of the Lake County LMS Working Group. Two consecutive absences can also occur in failure to vote by electronic (email or web-hosted service) voting procedures that may be utilized from time to time in place of formal meetings.

D. Committees

The Lake County LMS Working Group shall establish subcommittees at any time for any special purposes. The membership of the committees shall be appointed by the Chair or Vice-Chair of the Lake County LMS Working Group, who shall also designate the subcommittee Chair. Membership shall be unlimited and is open to all interested jurisdictions, organizations and individuals.

E. Program Staff

The Lake County Office of Emergency Management will serve as the program staff for the Lake County Working Group, and assist in the coordination and support of the Lake County LMS Working Group activities.

ARTICLE IV. OFFICERS

Any member in good standing of the Lake County LMS Working Group is eligible for election as an officer. The Lake County LMS Working Group will have a Chair and Vice-Chair elected by a majority vote of a quorum of the members present. Each shall serve a term of one year and be eligible for re-election for an unlimited number of terms. A quorum shall consist of designated representative or alternate from at least five (5) of the participating jurisdictions in good standing.

The Chair of the Lake County LMS Working Group will preside at each meeting of the Lake County Working Group. The Vice-Chair will fulfill the duties and responsibilities of the Chair in their absence. Administrative functions will be handled by the Lake County Office of Emergency Management in accordance with Federal and State regulations.

ARTICLE V. RESPONSIBILITIES

A. The Lake County LMS Working Group

All responsibilities of the LMS Working Group shall be specified by Chapter 27P-22.004 and 27P-22.005, Florida Administrative Code (FAC). These rules are authorized under Florida Statute 252. The Lake County LMS Working Group will be responsible for all actions and decisions made formally in the name of the Lake County LMS Working Group.

a) Subcommittees

The responsibilities of subcommittees will be defined at the time they are established by the Chair of the Lake County LMS Working Group, or the voting members in good standing.

ARTICLE VI. ACTIONS BY THE WORKING GROUP**A. Authority for Actions**

Only the Working Group has the authority to take final actions. Actions by subcommittees or program staff are not considered final until affirmed by action of the Lake County LMS Working Group.

B. Meetings, Voting and Quorum

Meetings of the Lake County LMS Working Group and its subcommittees will be conducted in accord with Robert's Rules of Order, when deemed necessary by Chair of the meeting. Regular meetings of the LMS Working Group will be scheduled at least annually with a minimum of 10 working days' notice. Committees will meet as deemed necessary by the Chair or Vice-Chair. Meetings can be held via a conferencing mechanism provided a means of recording attendance and voting can be done.

All final actions and decisions in the name of the Lake County LMS Working Group will be by affirmative vote of a quorum of the voting members present. A quorum shall consist of designated representative or alternate from at least five (5) of the participating jurisdictions. Each member of Working Group will have one (1) vote.

C. Emergency Actions by the Office of Emergency Management

The Lake County Office of Emergency Management is authorized to apply for grants, accept grants, create projects, approve projects, execute contracts and other actions consistent with the intent of public safety without the authorization of the LMS Working Group when, in the opinion of the Office of Emergency Management Manager, such expeditious action is necessary and consistent with the purpose stated in Article I. All applications, grant acceptances actions, project creations, project approvals under the section shall be authorized directly by the Office of Emergency Management Manager. The Chair or Vice-Chair of the LMS shall be informed of such action as soon as reasonably possible. All actions taken under this section shall be reported to the LMS Working Group at the next LMS Working Group meeting under new business.

a) Special Votes

Special votes may be taken under emergency situations or when there are other extenuating circumstances that are judged by both the Chair and Vice-Chair of the Lake County LMS Working Group or the Office of Emergency Management to prohibit scheduling of a regular meeting of the Lake County LMS Working Group. Special votes may be by telephone, electronic medium (email and/or web-hosted service with conference call capabilities), first class mail, and shall be in accord with all applicable statutes for such actions.

b) Public Hearings

When required by statute or the policies of Lake County, or when deemed necessary by the Lake County Working Group, a public hearing regarding actions under consideration for implementation by the Working Group will be held.

c) Documentation of Actions

All meetings and other forms of action by the Lake County LMS Working Group and subcommittees will be documented and made available for inspection by the public.

ARTICLE VII. ADOPTION OF AND AMENDMENTS TO THE BYLAWS

The Bylaws of the Lake County Working Group may be adopted and/or amended by a quorum of a designated representative or alternate from at least five (5) of the participating jurisdictions. Each member of Working Group will have one (1) vote. All proposed changes to the bylaws will be provided to each member of the Lake County LMS Working Group not less than ten (10) working days prior to such a vote.

ARTICLE VIII. DISSOLUTION OF THE WORKING GROUP

The Lake County LMS Working Group may be dissolved by affirmative vote of 100% of the attending quorum, by order of a court of competent jurisdiction, and/or by instruction of the Lake County governing body. At the time of dissolution, all remaining documents, records, equipment, and supplies belonging to the Lake County LMS Working Group will be transferred to the Lake County Office of Emergency Management for disposition.

Table 20: Lake County LMS Task Force Membership

Member Name	Position	Jurisdiction or Entity and Position
<i>Poniatowski, Michael</i>	Emergency Operations Manager	AdventHealth Waterman Hospital
<i>Wells, Graham</i>	Town Manager	Town of Astatula
<i>Echols, Dustin</i>	Member Relations Representative	Clay Electric
<i>Harrison, William</i>	Deputy Fire Chief	City of Clermont
<i>Pierce, Jennifer</i>	Fire Inspector	City of Clermont
<i>Butler, Paul</i>	Deputy Administrator	Florida Department of Health in Lake County
<i>Kissler, Aaron</i>	Administrator	Florida Department of Health in Lake County
<i>Milanese, Megan</i>	Government Operations Consultant II	Florida Department of Health in Lake County
<i>Calhoun, Gary</i>	Police Chief	City of Eustis
<i>Swanson, Michael</i>	Fire Chief - Chairman	City of Eustis
<i>Cribb, Roy</i>	Lake County Fire Service Area Supervisor	Florida Fire Service
<i>Tear, Judith</i>	Wildlife Mitigation Specialist & PIO	Florida Fire Service
<i>Dicus, Robb</i>	Public Works Director	City of Fruitland Park
<i>LaVenía, Gary</i>	City Manager	City of Fruitland Park
<i>Walsh, Josh</i>	Fire Captain	City of Groveland
<i>Chester, Larry</i>	Police Officer	Town of Howey-in-the-Hills
<i>Roman, Rich</i>	Police Officer	Town of Howey-in-the-Hills
<i>Thomas, Rick</i>	Police Chief	Town of Howey-in-the-Hills
<i>Tempsta, Robert</i>	Police Chief	Town of Lady Lake
<i>Carpenter, Thomas</i>	Director of Emergency Management	Lake County Board of County Commissioners
<i>Cates, Morgan</i>	Stormwater Team Leader	Lake County Board of County Commissioners
<i>Dickerson, Jim</i>	Fire Chief	Lake County Board of County Commissioners
<i>Earhart, Jeff</i>	Deputy Director, Public Works	Lake County Board of County Commissioners
<i>Gobel, Larry</i>	Traffic Operations Supervisor	Lake County Board of County Commissioners
<i>Hamilton, Mary</i>	Chief of Public Works Operations	Lake County Board of County Commissioners
<i>Johnson, Jeff</i>	Roads Superintendent	Lake County Board of County Commissioners

<i>Kostus, Spencer</i>	Deputy Director, Emergency Management	Lake County Board of County Commissioners
<i>Marchese, Deb</i>	Construction Program Specialist	Lake County Board of County Commissioners
<i>Mcray, Nick</i>	Operations Manager, Public Works	Lake County Board of County Commissioners
<i>Molenda, John</i>	Deputy County Manager	Lake County Board of County Commissioners
<i>Schneider, Fred</i>	Director of Public Works	Lake County Board of County Commissioners
<i>Sievert, Chris</i>	Deputy Fire Chief	Lake County Board of County Commissioners
<i>Smith, Jerry</i>	Director, Emergency Medical Services	Lake County Board of County Commissioners
<i>Van Alstine, Randy</i>	Transit Supervisor – LMS Coordinator	Lake County Board of County Commissioners
<i>Peebles, Peter</i>	Residential Appraisal	Lake County Property Appraiser's Office
<i>Carr, John</i>	Assistant Superintendent - Operations	Lake County Schools
<i>DeRidder, Lauren</i>	Supervisor of Risk Management	Lake County Schools
<i>Mabry, Joseph</i>	Safety & Security State Reporting Specialist	Lake County Schools
<i>McDuffie, Ralph</i>	Lieutenant	Lake County Sheriff's Office
<i>Hart, Ron</i>	Executive Director	Lake County Water Authority
<i>Craine, Darrell</i>	Deputy Director, Public Works	City of Leesburg
<i>Johnson, David</i>	Fire Chief	City of Leesburg
<i>Kelsey, Clifford</i>	Director, Public Works	City of Leesburg
<i>Jolliff, John</i>	Emergency Management Representative	LifePointe Church, Eustis
<i>Brasher, Randy</i>	Fire Chief	City of Mascotte
<i>Walker, Larry</i>	Public Works Director	City of Mascotte
<i>Donofrio, David</i>	CRA Manager / Accountant	City of Minneola
<i>Otero, Jan</i>	Fire Chief	City of Minneola
<i>Miller, Fred</i>	Public Works Superintendent	City of Minneola
<i>Nilson, Vaughn</i>	Director of Public Works	Town of Montverde
<i>Griner, Tim</i>	Fire Chief	City of Mount Dora
<i>Hand, Ethan</i>	Utilities Engineer	City of Mount Dora

<i>Lahr, Paul</i>	City Engineer	City of Mount Dora
<i>Langley, Steve</i>	Director of Electric Utilities	City of Mount Dora
<i>Marek, George</i>	Sr. Project Manager - Engineer	City of Mount Dora
<i>King, Stacy</i>	Corporate Emergency Preparedness Specialist	Orlando Health
<i>Hamstra, David</i>	Consultant	Pegasus Engineering
<i>Davis, Susan</i>	Intergovernmental Affairs Program	St. Johns River Water Management
<i>Clark, Phillip</i>	Director of Utilities	City of Tavares
<i>Dillon, James</i>	Director of Public Works	City of Tavares
<i>Keith, Richard</i>	Fire Chief – Vice Chair	City of Tavares
<i>Luckock, Buddy</i>	Fire Captain	City of Tavares
<i>Mercer, Aaron</i>	Director of Public Works	City of Umatilla
<i>Bean, Blair</i>	Director, District Property Management	The Villages Community Development District
<i>Baier, Richard</i>	District Manager	The Villages Community Development District
<i>Devlin, Jeanue</i>	District Manager	The Villages Community Development District
<i>Longacre, John</i>	Lieutenant, Emergency Management	The Villages Community Development District
<i>Tucker, Diane</i>	Administrative Operations Manager	The Villages Community Development District
<i>Wartinbee, Sam</i>	Direct, District Property Management	The Villages Community Development District
<i>Wilson, Brittany</i>	Director of Technology and Board Support	The Villages Community Development District

APPENDIX III: MAPS AND FIGURES

Figure 12: General Flood Zones for Lake County, FL

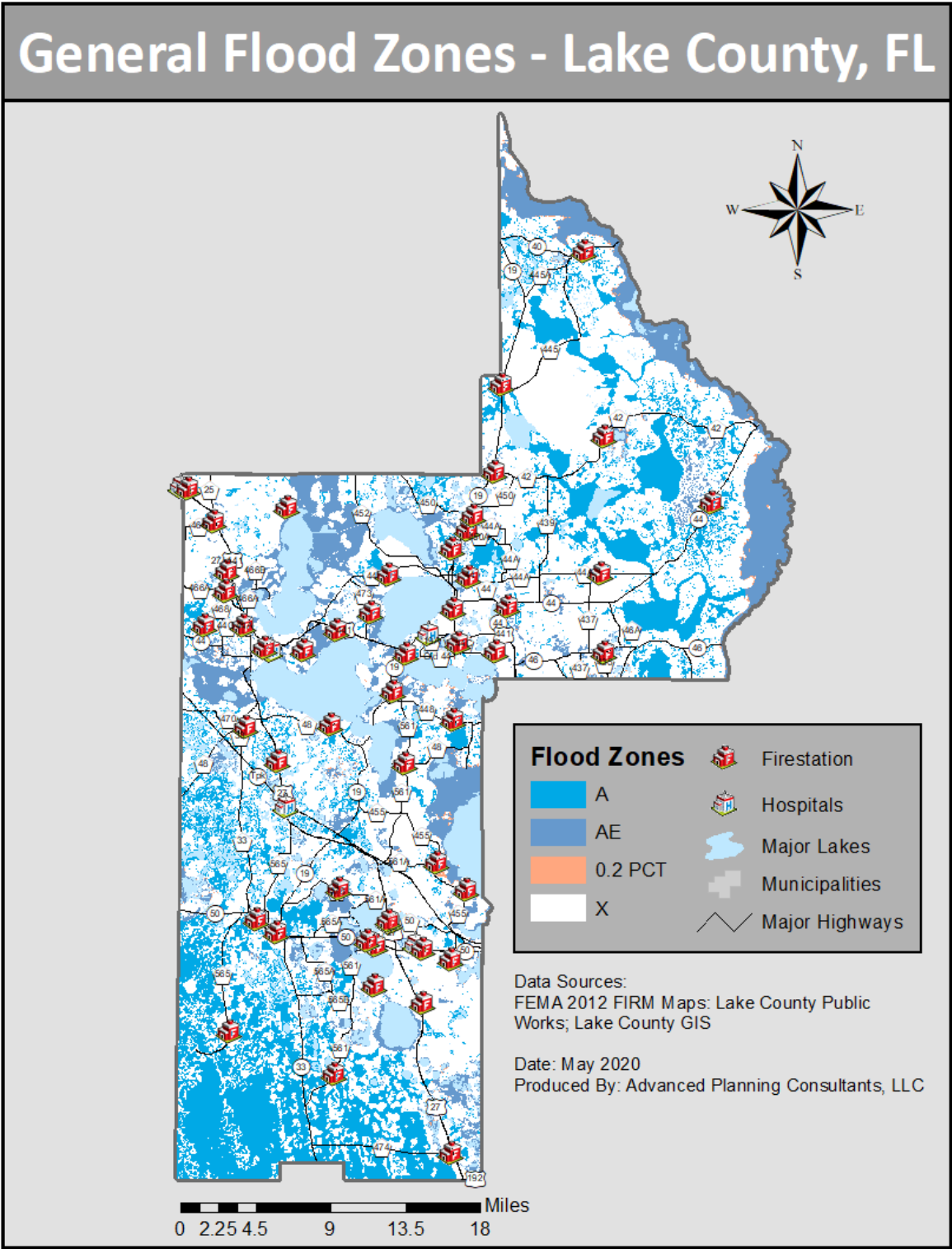
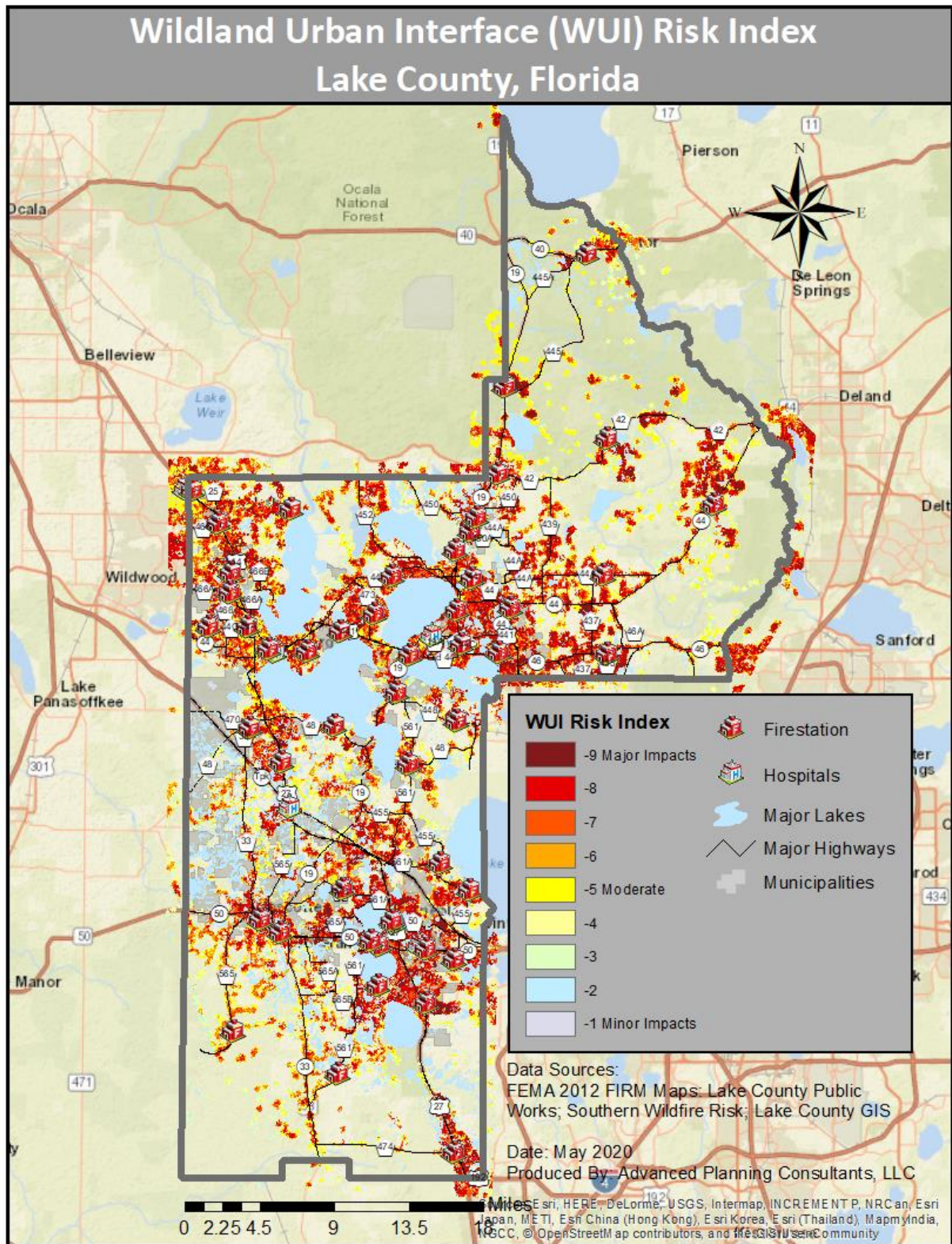


Figure 13: Wildland Urban Interface (WUI) Risk Index for Lake County, Florida.



**AGENDA SUMMARY
TAVARES CITY COUNCIL
4/7/2021**

AGENDA TAB NO.: 6

SUBJECT TITLE: Request Council Approval to Amend Purchasing Policy for Federal Award Compliance (Finance)

OBJECTIVE:

To request Council Approval to Amend Purchasing Policy for Federal Grant Compliance (Finance)

SUMMARY:

In anticipation of receiving funds through the American Recovery Plan as well as the anticipation of securing additional Federal Grants directly or indirectly as a sub-recipient, an update to the City Purchasing Policy is proposed.

Granting agencies have advised staff during administration of current federal pass-through grants for Hazzard Mitigation that a section referencing Federal Grant Post Award compliance should be included in the City's Purchasing Policy.

Staff proposes adding Section XVIII to the Purchasing Policy titled "Federal Awards" with two subsections:

A. Conflict of Interest

1. Employees
2. Vendors/Contractors/Contracted Entities

B. Procurement and Contracts

An Exhibit will also be added to the Policy to include a website link to Federal Post Award Requirements.

Staff recommends approval of the proposed amendment to the City of Tavares Purchasing Policy. A copy of the new section is attached for Council's review.

OPTIONS:

1. **Move to Amend** the City of Tavares Purchasing Policy to add Section XVIII for Federal Awards.
2. Do not amend the City of Tavares Purchasing Policy

STAFF RECOMMENDATION:

- **Move to Amend** the City of Tavares Purchasing Policy to add Section XVIII for Federal Awards.

FISCAL IMPACT:

There is no fiscal impact to Amend the Purchasing Policy

LEGAL SUFFICIENCY:

Legally Sufficient

ATTACHMENTS AVAILABLE TO THE PUBLIC UPON REQUEST:

1. Agenda Summary Purchasing Policy Amendment_Federal Awards_Sec XVIII_2

Attachments not provided are available to the public upon request to the City Clerk.

SECTION XVIII: FEDERAL AWARDS

A. Conflict of Interest – Employees

Code of Federal Regulations 2 CFR, Part 200 §200.318, imposes additional requirements on federally funded acquisitions concerning conflict of interest situations. It states: "No employee, officer, or agent shall participate in the selection, award, or administration of a contract sponsored by Federal award if a real or apparent conflict of interest would be involved. Such a conflict would arise when the employee, officer, or agent, any member of his or her immediate family, his or her partner, or an organization that employs or is about to employ any of the parties indicated herein, has a financial or other interest in or a tangible personal benefit from a firm selected for a contract. The officers, employees, and agents of the recipient shall neither solicit nor accept gratuities, favors, or anything of monetary value from contractors or parties to subcontracts."

B. Conflict of Interest – Vendors and Contractors

Conflict of Interest. Contractor will represent and warrant the following:

No Current or Prior Conflict of Interest. Contractor has no business, professional, personal, or other interest, including, but not limited to, the representation of other clients, that would conflict in any manner or degree with the performance of its obligations under an Agreement with the City as per Code of Federal Regulations 2 CFR, Part 200 § 200.318.

C. Excluded Parties / Debarment:

1. All contracts funded with federal funding whether directly or indirectly require:
 - a. Completion of a certification from the contracted entity that the entity has not been debarred from doing business under Federal awarded contracts.
 - b. The Purchasing Manager will confirm through the Federal Exclusions List available on Sam.gov that the entity is not excluded from receiving Federal contracts, certain subcontracts, and certain types of Federal financial and non-financial assistance and benefits.

<https://sam.gov/SAM/pages/public/extracts/samPublicAccessData.jsf>

- D. Procurement for City goods, services, or projects funded through Federal award as a direct recipient or as an indirect recipient will adhere to requirements for procurement and contracts as set forth by Sections 200.318 – 200.327 of the Electronic Code of Federal Regulations (e-CFR), Title 2 Grants and Agreements, Subtitle A – Office of Management and Budget Guidance for Grants and Agreements, Chapter II - Office of Management and Budget Guidance, Part 200 – Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, Subpart D – Post Federal Award Requirements.

<https://www.law.cornell.edu/cfr/text/2/part-200/subpart-D>

**AGENDA SUMMARY
TAVARES CITY COUNCIL
4/7/2021**

AGENDA TAB NO.: 7

SUBJECT TITLE: Resolution 2021-05 - Preemption of Municipal Home Rule Powers (Mayor)

OBJECTIVE:

To approve Resolution 2021-05 in support of Home Rule powers and opposition to unwarranted or overly broad preemption of municipal Home Rule powers by the Florida Legislature.

SUMMARY:

The Florida League of Mayors adopted a resolution on preemption of Home Rule during their March 4, 2021 Board meeting. Mayor Boggus represents District 6 on the Florida League of Mayors Board of Directors, and requested the City pass the attached companion resolution in support of Home Rule powers and opposition to preemptive legislation of those powers by the Florida Legislature. If approved, the City Administrator will forward the resolution to the Tavares legislative delegation.

OPTIONS:

1. Approve Resolution 2021-05 in support of Home Rule powers and opposition to preemption of those powers..
2. Do not approve Resolution 2021-05.

STAFF RECOMMENDATION:

Option 1, approve Resolution 2021-05 in support of Home Rule powers and opposition to preemption of those powers.

FISCAL IMPACT:

N/A

LEGAL SUFFICIENCY:

Yes.

ATTACHMENTS AVAILABLE TO THE PUBLIC UPON REQUEST:

1. Resolution 2021-05 - Home Rule

Attachments not provided are available to the public upon request to the City Clerk.

RESOLUTION 2021-05

A RESOLUTION OF THE CITY OF TAVARES, FLORIDA, SUPPORTING THE FLORIDA LEAGUE OF MAYORS TO PROTECT AND STRENGTHEN THE RIGHTS OF FLORIDA CITIZENS TO GOVERN THEMSELVES UNDER MUNICIPAL HOME RULE POWERS CONFERRED UPON THEM BY THE FLORIDA CONSTITUTION; PROVIDING FOR SEVERABILITY, CONFLICTS AND AN EFFECTIVE DATE.

WHEREAS, the Florida constitution to empowers its citizens with the right of local self-government through “Home Rule”; and,

WHEREAS, bills are being considered by the Florida Legislature that contradict Home Rule; and,

WHEREAS, Tavares ability to timely act on local problems and opportunities will be limited by these bills; and,

WHEREAS, intrusion upon “Home Rule” authority by the state undermines the fundamental constitutional right of citizens to govern themselves.

NOW THEREFORE, BE IT HEREBY RESOLVED, that the City Council of the city of Tavares, Florida supports all legislative efforts to protect “Home Rule” powers conferred upon them by the Florida Constitution, and oppose unwarranted broad preemptions of municipal Home Rule powers.

SECTION 1. The foregoing recitals are incorporated by reference and made a part thereof.

SECTION 2. Mayor to Execute. The Mayor is hereby authorized and directed to sign and execute this Resolution upon approval by the city council.

SECTION 3. Savings Clause: If any section, sentence, clause, phrase, or word of this Resolution is for any reason held, or declared to be unconstitutional, inoperative or void, such holding or invalidity shall not effect the remaining portions of this resolution without such constitutional, invalid, or inoperative part therein; and the remainder of this Resolution, after the exclusion of such part or parts shall be deemed and held to be valid as if such parts had not been included herein; or if this resolution or any provisions thereof shall be held inapplicable to any persons, property, kind of property, circumstances, or set of circumstances, such holding shall not effect the applicability thereof to any other person, property or circumstances.

SECTION 4. Conflicts. All Resolutions or parts of Resolutions in conflict with any of the provisions of this Resolution are hereby repealed.

SECTION 5. Severability. If any Section or portion of a Section of this Resolution proves to be invalid, unlawful, or unconstitutional, it shall not be held to invalidate or impair the validity, force, or effect of any other Section or part of this Resolution.

SECTION 6. Effective Date. This Resolution shall become effective immediately upon its passage and adoption.

IT IS HEREBY FURTHER RESOLVED that the City Council of Tavares directs the City Administrator to send a copy of this Resolution to the Governor of the state of Florida and to the Florida state legislative delegation representing Lake County, Florida

DULY PASSED AND ADOPTED this 7th day of April, 2021

Amanda Boggus, Mayor

ATTEST:

Susie Novack, City Clerk

APPROVED AS TO FORM:

Robert Q. Williams, City Attorney

**AGENDA SUMMARY
TAVARES CITY COUNCIL
4/7/2021**

AGENDA TAB NO.: 8

SUBJECT TITLE: Ordinance 2021-02 - Koenke Property - Annexation and Rezoning of approximately 05.74 acres located east of CR-561, south of Lake Industrial Blvd. (Community Development)

OBJECTIVE:

To consider the annexation and rezoning to Industrial (I) of approximately 05.74 acres of property located east of CR-561, south of Lake Industrial Blvd.

SUMMARY:

The subject property is approximately 05.74 acres located east of CR-561, south of Lake Industrial Blvd. The land is vacant and presently zoned as County Heavy Industrial District (HM). The applicant is proposing that the property be annexed and rezoned to City Industrial (I).

The proposed zoning of Industrial (I) is compatible with the surrounding zoning. The property is adjacent to parcels already annexed into the City of Tavares and designated as Industrial (I) zoning. The applicant at this time envisions the construction of approximately seven (7) buildings that are six thousand (6000) square feet in size.

The annexation of this property has been reviewed per the City's Annexation Policy. It has been determined by City staff that the property may be properly serviced by the City without undue hardship or significant negative fiscal impact to the City. City water service is available to the property and connection shall be required upon development.

The environmental assessment submitted by Stillwater Environmental, Inc. indicates no adverse conditions or environmental concerns with the property.

The preliminary traffic analysis submitted by Civil Engineering Solutions, Inc. does not indicate an adverse impact to the level of service for surrounding roadways.

The City is concurrently processing a future land use map amendment to re-designate the property from Lake County Industrial to City of Tavares Industrial (IND) on the Future Land Use Map 2040.

OPTIONS:

1. That City Council moves to approve Ordinance 2021-02 annexing and rezoning to Industrial (I) approximately 05.74 acres of property located east of CR-561, south of Lake Industrial Blvd.
2. That City Council moves to deny Ordinance 2021-02.

STAFF RECOMMENDATION:

At their March 18th meeting the Planning & Zoning Board voted unanimously to recommend approval of Ordinance 2021-02 annexing and rezoning to Industrial (I) approximately 05.74 acres of property located east of CR-561, south of Lake Industrial Blvd.

Staff recommends that City Council moves to approve Ordinance 2021-02 annexing and rezoning to Industrial (I) approximately 05.74 acres of property located east of CR-561, south of Lake Industrial Blvd.

FISCAL IMPACT:

N/A

LEGAL SUFFICIENCY:

This ordinance has been reviewed by the City Attorney and approved for legal sufficiency.

ATTACHMENTS AVAILABLE TO THE PUBLIC UPON REQUEST:

1. Ordinance 2021-02
2. Aerial Map
3. Concept Plan
4. Zoning Map
5. Environmental Assessment
6. Traffic Analysis
7. Traffic Analysis (Exemption Request approved by City Engineer)
8. 03-18-2021 PZ Board Minutes
9. Newspaper Ad 2-28-21
10. Newspaper Ad 3-7-21

Attachments not provided are available to the public upon request to the City Clerk.

ORDINANCE 2021-02

AN ORDINANCE OF THE CITY OF TAVARES AMENDING THE BOUNDARIES OF THE CITY BY ANNEXING APPROXIMATELY 05.74 ACRES OF LAND LOCATED EAST OF COUNTY ROAD 561, SOUTH OF LAKE INDUSTRIAL BOULEVARD, REZONING SAID PROPERTY FROM LAKE COUNTY HEAVY INDUSTRIAL DISTRICT (HM) TO CITY OF TAVARES INDUSTRIAL (I); SUBJECT TO THE RULES, REGULATIONS AND OBLIGATIONS ORDAINED BY THE CITY OF TAVARES COUNCIL; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the owner of the property described in **Exhibit “A”** has voluntarily petitioned to annex into the City of Tavares, and

WHEREAS, the property legally defined in **Exhibit “A”** is contiguous with the corporate limits of the City of Tavares and the annexation of said property will not result in the creation of any enclave; and

WHEREAS, the City of Tavares, Florida, is in a position to provide municipal services to the property described herein; and,

WHEREAS, the City Council of the City of Tavares, Florida, deems it in the best interest of the City to accept said petition and to annex said property; and,

WHEREAS, the property is currently zoned Lake County Heavy Industrial District (HM), and the applicant has requested that said property be rezoned to a City designation of Industrial (I); and,

WHEREAS, the City is concurrently processing an amendment to the City's Comprehensive Plan to re-designate the property from Lake County Industrial to City of Tavares Industrial (IND) on the Future Land Use Map 2040; and

WHEREAS, the City of Tavares held duly noticed public hearings before the Planning and Zoning Board and City of Tavares City Council, providing opportunity for individuals to hear and to be heard regarding the proposed amended zoning and annexation; and

WHEREAS, the City Council has reviewed and considered all relevant evidence and information and testimony presented by witnesses, the public, and City staff; and

WHEREAS, the City Council finds this amendment in compliance with the City of Tavares Land Development Regulations and the proposed amended Comprehensive Plan; now therefore

BE IT ORDAINED by the City Council of the City of Tavares, Florida, as follows:

Section 1. Annexation

The property legally defined as and depicted in **Exhibit “A”** attached hereto, situated in Lake County, Florida, is hereby incorporated into and made a part of the City of Tavares, Florida, pursuant to the voluntary annexation provisions of Section 171.044, Florida Statutes.

Section 2. Rezoning

The property described in **Exhibit “A”** shall hereby be rezoned from Lake County Heavy Industrial District (HM) to City of Tavares Industrial (I) and shall be subject to the provisions contained within the Land Development Regulations for this zoning designation.

Section 3. Severability.

Upon a determination by a court of competent jurisdiction that a portion of this ordinance is void, unconstitutional, or unenforceable, all remaining portions shall remain in full force and effect.

Section 4. Effective Date.

This Ordinance shall take effect immediately upon its final adoption by the Tavares City Council

PASSED AND ORDAINED this _____ day of _____, 2021 by the City Council of the City of Tavares, Florida.

Amanda Boggus, Mayor
Tavares City Council

First Reading: _____

Passed Second Reading: _____

ATTEST:

Susie Novack, City Clerk

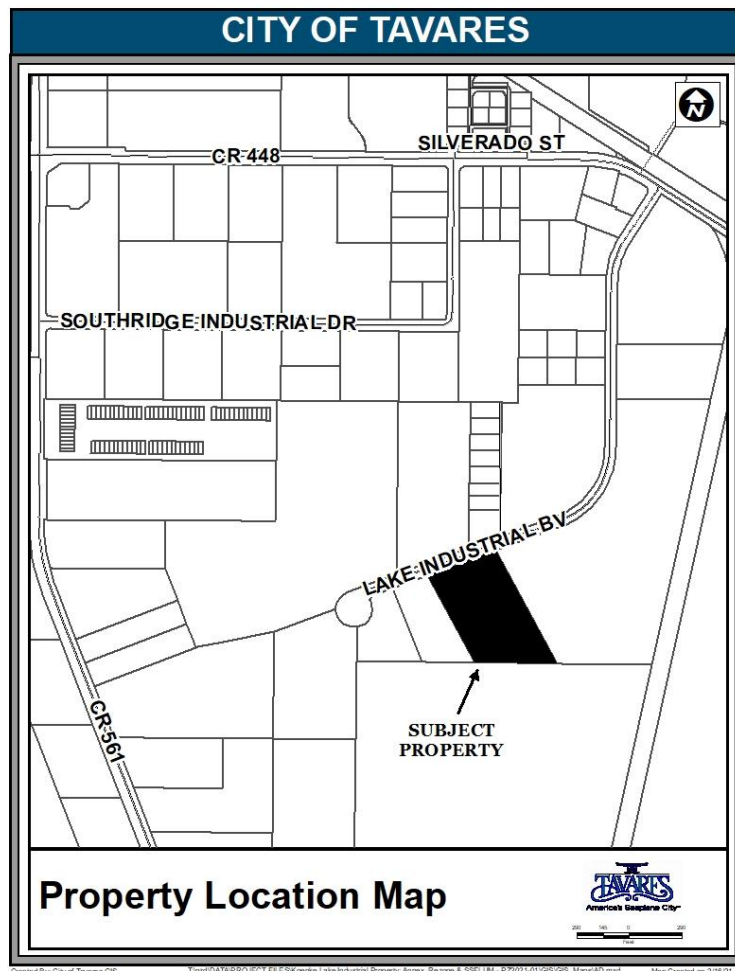
APPROVED AS TO FORM AND LEGALITY:

Robert Q. Williams, City Attorney

EXHIBIT "A"

LEGAL DESCRIPTION:

From the S.W. corner of the S.E. 1/4 (S 1/4 corner) of Section 8, Township 20, Range 26, Lake County, Florida, run East along the South line of said S.E. 1/4 455.0 feet to an iron pipe; thence turn to the left an angle of 90°00'00" and run North 1231.70 feet; thence East parallel with the South line of S.E. 1/4 a distance of 1106.46 feet to the P.O.B., from said P.O.B. run N. 29°27'33" W, 710.62 feet to the Southerly r/w of a 66 foot wide County Road; thence S. 69°17'00" W. along said r/w 400.00 feet; thence S. 29°04'45" E. 546.08 feet; thence East 458.22 feet to the P.O.B.



**CITY OF TAVARES
PLANNING AND ZONING BOARD MEETING
TAVARES COUNCIL CHAMBERS
201 E. MAIN STREET, TAVARES
MARCH 18, 2021**

BOARD MEMBERS PRESENT

Gary Santoro, Chairman
Dian Joy, Board Member
Bruce Peterman, Board Member
Deborah Murphy, Board Member
James Sweeza, Board Member
Dara Treadwell, Board Member

LAKE COUNTY SCHOOL BOARD

Helen LaValley - Absent

STAFF MEMBERS PRESENT

Robert Q. Williams, City Attorney - Absent
Mike Fitzgerald, Community Development Director
Jillian Roberts, Deputy City Clerk

CALL TO ORDER

Chairman Santoro called the meeting to order at 3:00 p.m. and asked those present to silence their cell phones. He led those present in the Pledge of Allegiance.

APPROVAL OF MINUTES

Chairman Santoro asked if there are any additions or corrections for February 18, 2021 Planning and Zoning Board Meeting minutes. There were none.

MOTION

Dara Treadwell moved to approve the minutes of the February 18, 2021 Planning and Zoning Board Meeting, seconded by Dian Joy. The motion carried unanimously 5-0.

SWEARING IN BY CITY ATTORNEY AND DISCLOSURE OF EX PARTE COMMUNICATIONS

Ms. Roberts swore those in that were present.

PUBLIC HEARING

1) Recommendation on Ordinance 2021-02 – Koenke Property – Annexation and Rezoning of approximately 05.74 acres located east of CR-561, south of Lake Industrial Blvd. from Lake County Heavy Industrial (HM) to City of Tavares Industrial (I).

Mr. Fitzgerald provided the following staff report;

The subject property is approximately 05.74 acres located east of CR-561, south of Lake Industrial Blvd. The land is vacant and presently zoned as County Heavy Industrial District (HM). The applicant is proposing that the property be annexed and rezoned to City Industrial (I). The proposed zoning of Industrial (I) is compatible with the surrounding zoning. The property is adjacent to parcels already annexed into the City of Tavares and designated as Industrial (I) zoning. The applicant at this time envisions the construction of approximately seven (7) buildings that are six thousand (6000) square feet in size. The annexation of this property has been reviewed per the City's Annexation Policy. It has been determined by City staff that the property may be properly serviced by the City without undue hardship or significant negative fiscal impact to the City. City water service is available to the property and connection shall be required upon development. The environmental assessment submitted by Stillwater Environmental, Inc. indicates no adverse conditions or environmental concerns with the property. The preliminary traffic analysis submitted by Civil Engineering Solutions, Inc. does not indicate an adverse impact to the level of service for surrounding roadways. The City is concurrently processing a future land use map amendment to re-designate the property from Lake County Industrial to City of Tavares Industrial (IND) on the Future Land Use Map 2040.

OPTIONS:

- 1. That the Planning & Zoning Board moves to recommend approval of Ordinance 2021-02 annexing and rezoning to Industrial (I) approximately 05.74 acres of property located east of CR-561, south of Lake Industrial Blvd.*
- 2. That the Planning & Zoning Board moves to recommend denial of Ordinance 2021-02.*

STAFF RECOMMENDATION:

Staff recommends that the Planning & Zoning Board moves to recommend approval of Ordinance 2021-02 annexing and rezoning to Industrial (I) approximately 05.74 acres of property located east of CR-561, south of Lake Industrial Blvd.

Chairman Santoro asked for comments from the Board. There were none.

Chairman Santoro asked for comments from the audience.

David Clutts, Civil Engineering Solutions, 322 N. Rockingham Ave. Tavares, Applicant, stated that he is available to answer questions.

Board Member Treadwell asked if there is a concept drawing. Mr. Fitzgerald confirmed there is one in the packet.

Chairman Santoro asked if the property is annexed and rezoned and the plans fall through, will the annexation and rezoning still occur. Mr. Fitzgerald confirmed that the annexation and rezoning would still proceed.

MOTION

Bruce Peterman moved to recommend approval of Ordinance 2021-02, seconded by Dian Joy. The motion carried unanimously 6-0.

2) Recommendation on Ordinance 2021-03 – Koenke Property – Small Scale FLUM Amendment of approximately 05.74 acres located east of CR-561, south of Lake Industrial Blvd. from Lake County Industrial to City of Tavares Industrial (IND). Recommendation on Ordinance 201-03

Mr. Fitzgerald provided the following staff report;

Ordinance 2021-03 proposes a small-scale amendment to the Future Land Use Map 2040 of the Comprehensive Plan. The subject property (Parcel Alternate Key Number 2719648) is 05.74 acres in size and generally located east of CR-561, south of Lake Industrial Blvd. The property is currently vacant. The applicant envisions industrial uses that are compatible with the industrial development that is adjacent to the subject property. This ordinance would amend the current Future Land Use Designation from Lake County Industrial to City Industrial (IND). Future Land Use Amendment The city is required to place a future land use designation on annexed property. The subject property is currently designated County Industrial. A City Industrial designation is compatible with surrounding property. Compatibility The surrounding property is industrial nature. Site Conditions The property is currently vacant. Prior to any development, an approved site plan will be required. All applicable surveying, environmental assessments, and permitting must be in place before the site plan is approved. Any proposed development project will be required to connect to available city utilities. Impact on City Services The subject property is located in the City's Utility Service Area. The City of Tavares has municipal water service available to the subject parcel and any new development on this property must connect to city utilities. The City's Concurrency Management System will ensure that Levels of Service (LOS) will not be degraded beyond the adopted levels of service for all regulated public facilities. Adverse impacts on Levels of Service are not implicated. Page 16 of 21 FINDINGS This amendment request is considered to be in compliance with the Comprehensive Plan Goals, Objectives and Policies with the following findings: 1. An Industrial Future Land Use designation would serve as the most appropriate land use for the

subject property in accordance with Future Land Use policy 1-1.1. 2. Impacts of the proposed development of the subject property shall be monitored through the City's Concurrency Management System. (Comp Plan, Chapter 8)

OPTIONS:

- 1. That the Planning & Zoning Board moves to recommend approval of Ordinance 2021-03 Future Land Use Map amendment from Lake County Industrial to City Industrial (IND) for 05.74 acres of property generally located east of CR-561, south of Lake Industrial Blvd.*
- 2. That the Planning & Zoning Board moves to recommend denial of Ordinance 2021-03.*

STAFF RECOMMENDATION:

Staff recommends that the Planning & Zoning Board moves to recommend approval of Ordinance 2021-03 Future Land Use Map amendment from Lake County Industrial to City Industrial (IND) for 05.74 acres of property generally located east of CR-561, south of Lake Industrial Blvd.

Chairman Santoro asked for public comment. There was none.

Chairman Santoro asked for comments from the Board. There were none.

MOTION

James Sweezea moved to recommend approval of Ordinance 2021-03, seconded by Dara Treadwell. The motion carried unanimously 6-0.

OTHER BUSINESS

Mr. Fitzgerald noted that Board Member Gary Korerner resigned from the Planning and Zoning Board.

PUBLIC COMMENT

None.

ADJOURNMENT

Dian Joy moved to approve to adjourn the meeting at 3:14 PM, seconded by James Sweezea. The motion carried unanimously 6-0.

Respectfully submitted,

March 18, 2021
Planning & Zoning Board Meeting

Jillian Roberts,
Deputy City Clerk

**AGENDA SUMMARY
TAVARES CITY COUNCIL
4/7/2021**

AGENDA TAB NO.: 9

SUBJECT TITLE: Ordinance 2021-03 - Koenke Property - Small Scale FLUM Amendment of approximately 05.74 acres located east of CR-561, south of Lake Industrial Blvd. (Community Development)

OBJECTIVE:

To consider an application for a Future Land Use Map amendment from Lake County Industrial to City Industrial (IND) for 05.74 acres of property generally located east of CR-561, south of Lake Industrial Blvd.

SUMMARY:

Ordinance 2021-03 proposes a small-scale amendment to the Future Land Use Map 2040 of the Comprehensive Plan.

The subject property (Parcel Alternate Key Number 2719648) is 05.74 acres in size and generally located east of CR-561, south of Lake Industrial Blvd. The property is currently vacant. The applicant envisions industrial uses that are compatible with the industrial development that is adjacent to the subject property. This ordinance would amend the current Future Land Use Designation from Lake County Industrial to City Industrial (IND).

Future Land Use Amendment

The city is required to place a future land use designation on annexed property. The subject property is currently designated County Industrial. A City Industrial designation is compatible with surrounding property.

Compatibility

The surrounding property is industrial nature.

Site Conditions

The property is currently vacant. Prior to any development, an approved site plan will be required. All applicable surveying, environmental assessments, and permitting must be in place before the site plan is approved. Any proposed development project will be required to connect to available city utilities.

Impact on City Services

The subject property is located in the City's Utility Service Area. The City of Tavares has municipal water service available to the subject parcel and any new development on this property must connect to city utilities. The City's Concurrency Management System will ensure that Levels of Service (LOS) will not be degraded beyond the adopted levels of service for all regulated public facilities. Adverse impacts on Levels of Service are not implicated.

FINDINGS

This amendment request is considered to be in compliance with the Comprehensive Plan Goals,

Objectives and Policies with the following findings:

1. An Industrial Future Land Use designation would serve as the most appropriate land use for the subject property in accordance with Future Land Use policy 1-1.1.
2. Impacts of the proposed development of the subject property shall be monitored through the City's Concurrency Management System. (Comp Plan, Chapter 8)

OPTIONS:

1. That City Council moves to approve Ordinance 2021-03 Future Land Use Map amendment from Lake County Industrial to City Industrial (IND) for 05.74 acres of property generally located east of CR-561, south of Lake Industrial Blvd.
2. That City Council moves to deny Ordinance 2021-03.

STAFF RECOMMENDATION:

At their March 18th meeting the Planning and Zoning Board voted unanimously to recommend approval of Ordinance 2021-03 Future Land Use Map amendment from Lake County Industrial to City Industrial (IND) for 05.74 acres of property generally located east of CR-561, south of Lake Industrial Blvd.

Staff recommends that City Council moves to approve Ordinance 2021-03 Future Land Use Map amendment from Lake County Industrial to City Industrial (IND) for 05.74 acres of property generally located east of CR-561, south of Lake Industrial Blvd.

FISCAL IMPACT:

N/A

LEGAL SUFFICIENCY:

This ordinance has been reviewed by the City Attorney and approved for legal sufficiency.

ATTACHMENTS AVAILABLE TO THE PUBLIC UPON REQUEST:

1. Ordinance 2021-03
2. FLU Map
3. 03-18-2021 PZ Board Minutes
4. Newspaper Ad 2-28-21
5. Newspaper Ad 3-7-21

Attachments not provided are available to the public upon request to the City Clerk.

ORDINANCE 2021-03

AN ORDINANCE OF THE CITY OF TAVARES, FLORIDA, AMENDING THE TAVARES COMPREHENSIVE PLAN FUTURE LAND USE MAP 2040, PROVIDING FOR A CHANGE OF FUTURE LAND USE DESIGNATION ON APPROXIMATELY 05.74 ACRES OF PROPERTY FROM COUNTY INDUSTRIAL TO CITY INDUSTRIAL (IND) FOR PROPERTY GENERALLY LOCATED EAST OF COUNTY ROAD 561, SOUTH OF LAKE INDUSTRIAL BOULEVARD; PROVIDING FOR SEVERABILITY AND CONFLICTS; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the owner of property described in **Exhibit “A”** attached hereto, is requesting an amendment to the Tavares Comprehensive Plan Future Land Use Map 2040 to change the designation of said property from Lake County Industrial to City Industrial (IND); and

WHEREAS, the City of Tavares is concurrently processing the annexation of this property; and

WHEREAS, the property consists of less than ten acres;

WHEREAS, the City of Tavares has advertised as required by law for two public hearings prior to adoption of this ordinance; and

WHEREAS, the City has held such public hearings and the records of the City provide that the owners of the land affected have been notified as required by law; and

WHEREAS, an Industrial Future Land Use designation is compatible with surrounding City of Tavares future land use designations; and

WHEREAS, the City of Tavares Planning and Zoning Board, Local Planning Agency, and City Council held duly noticed public hearings providing opportunity for individuals to hear and be heard regarding the adoption of the proposed map amendment; and,

WHEREAS, the City Council has reviewed and considered all relevant evidence and information and testimony presented by witnesses, the public, and City staff; and,

WHEREAS, the City Council finds this amendment in compliance with Chapter 163, Florida Statutes, and the City of Tavares Comprehensive Plan; and

WHEREAS, adoption of this amendment is in the best interest of the health, safety, and general welfare of the citizens of Tavares.

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Tavares, Florida as follows

Section 1. Future Land Use Amendment

The Comprehensive Plan and Future Land Use Map of the City of Tavares, Florida, is hereby amended to reflect a re-designation from Lake County Industrial to City of Tavares Industrial (IND) on certain real property as legally described in **Exhibit "A"**. All provisions of the Comprehensive Plan shall hereby apply to said property.

Section 2. Severability and Conflicts

The provisions of this ordinance are severable and it is the intention of the City Council of Tavares, Florida, to confer the whole or any part of the powers herein provided. If any court of competent jurisdiction shall hold any of the provisions of this ordinance unconstitutional, the decision of such court shall not impair any remaining provisions of this ordinance.

Section 3. Transmittal

The City Administrator is hereby authorized and directed to transmit the adopted Comprehensive Plan amendments to the Florida Department of Economic Opportunity, the East Central Florida Regional Planning Council, the St. Johns River Water Management District, the Department of Environmental Protection, the Florida Department of Transportation, and any other governmental agency in the State of Florida that has filed a written request with the City Council for a copy of the Comprehensive Plan within 10 working days of the adoption of this Ordinance as specified in the State Land Planning Agency's procedural rules.

Section 4. Effective Date

The effective date of this plan amendment, if the amendment is not timely challenged, shall be 31 days after the state land planning agency notifies the local government that the plan amendment package is complete. If timely challenged, this amendment shall become effective on the date the state land planning agency or the Administration Commission enters a final order

determining this adopted amendment to be in compliance. No development orders, development permits, or land uses dependent on this amendment may be issued or commence before it has become effective. If a final order of noncompliance is issued by the Administration Commission, this amendment may nevertheless be made effective by adoption of a resolution affirming its effective status, a copy of which resolution shall be sent to the state land planning agency.

PASSED AND ADOPTED this _____ day of _____, 2021 by the City Council of the City of Tavares, Florida.

Amanda Boggus, Mayor
Tavares City Council

First Reading: _____

Second Reading & Final Adoption: _____

ATTEST:

Susie Novack, City Clerk

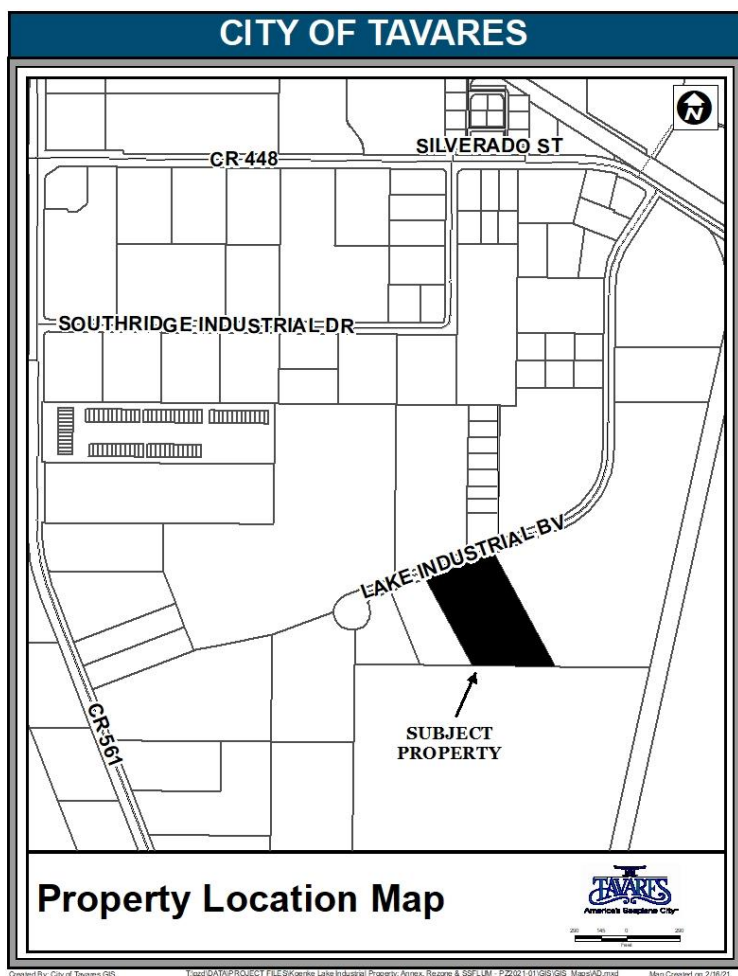
Approved as to form:

Robert Q. Williams, City Attorney

EXHIBIT "A"

LEGAL DESCRIPTION:

From the S.W. corner of the S.E. 1/4 (S 1/4 corner) of Section 8, Township 20, Range 26, Lake County, Florida, run East along the South line of said S.E. 1/4 455.0 feet to an iron pipe; thence turn to the left an angle of 90°00'00" and run North 1231.70 feet; thence East parallel with the South line of S.E. 1/4 a distance of 1106.46 feet to the P.O.B., from said P.O.B. run N. 29°27'33" W, 710.62 feet to the Southerly r/w of a 66 foot wide County Road; thence S. 69°17'00" W. along said r/w 400.00 feet; thence S. 29°04'45" E. 546.08 feet; thence East 458.22 feet to the P.O.B.



**CITY OF TAVARES
PLANNING AND ZONING BOARD MEETING
TAVARES COUNCIL CHAMBERS
201 E. MAIN STREET, TAVARES
MARCH 18, 2021**

BOARD MEMBERS PRESENT

Gary Santoro, Chairman
Dian Joy, Board Member
Bruce Peterman, Board Member
Deborah Murphy, Board Member
James Sweeza, Board Member
Dara Treadwell, Board Member

LAKE COUNTY SCHOOL BOARD

Helen LaValley - Absent

STAFF MEMBERS PRESENT

Robert Q. Williams, City Attorney - Absent
Mike Fitzgerald, Community Development Director
Jillian Roberts, Deputy City Clerk

CALL TO ORDER

Chairman Santoro called the meeting to order at 3:00 p.m. and asked those present to silence their cell phones. He led those present in the Pledge of Allegiance.

APPROVAL OF MINUTES

Chairman Santoro asked if there are any additions or corrections for February 18, 2021 Planning and Zoning Board Meeting minutes. There were none.

MOTION

Dara Treadwell moved to approve the minutes of the February 18, 2021 Planning and Zoning Board Meeting, seconded by Dian Joy. The motion carried unanimously 5-0.

SWEARING IN BY CITY ATTORNEY AND DISCLOSURE OF EX PARTE COMMUNICATIONS

Ms. Roberts swore those in that were present.

PUBLIC HEARING

1) Recommendation on Ordinance 2021-02 – Koenke Property – Annexation and Rezoning of approximately 05.74 acres located east of CR-561, south of Lake Industrial Blvd. from Lake County Heavy Industrial (HM) to City of Tavares Industrial (I).

Mr. Fitzgerald provided the following staff report;

The subject property is approximately 05.74 acres located east of CR-561, south of Lake Industrial Blvd. The land is vacant and presently zoned as County Heavy Industrial District (HM). The applicant is proposing that the property be annexed and rezoned to City Industrial (I). The proposed zoning of Industrial (I) is compatible with the surrounding zoning. The property is adjacent to parcels already annexed into the City of Tavares and designated as Industrial (I) zoning. The applicant at this time envisions the construction of approximately seven (7) buildings that are six thousand (6000) square feet in size. The annexation of this property has been reviewed per the City's Annexation Policy. It has been determined by City staff that the property may be properly serviced by the City without undue hardship or significant negative fiscal impact to the City. City water service is available to the property and connection shall be required upon development. The environmental assessment submitted by Stillwater Environmental, Inc. indicates no adverse conditions or environmental concerns with the property. The preliminary traffic analysis submitted by Civil Engineering Solutions, Inc. does not indicate an adverse impact to the level of service for surrounding roadways. The City is concurrently processing a future land use map amendment to re-designate the property from Lake County Industrial to City of Tavares Industrial (IND) on the Future Land Use Map 2040.

OPTIONS:

- 1. That the Planning & Zoning Board moves to recommend approval of Ordinance 2021-02 annexing and rezoning to Industrial (I) approximately 05.74 acres of property located east of CR-561, south of Lake Industrial Blvd.*
- 2. That the Planning & Zoning Board moves to recommend denial of Ordinance 2021-02.*

STAFF RECOMMENDATION:

Staff recommends that the Planning & Zoning Board moves to recommend approval of Ordinance 2021-02 annexing and rezoning to Industrial (I) approximately 05.74 acres of property located east of CR-561, south of Lake Industrial Blvd.

Chairman Santoro asked for comments from the Board. There were none.

Chairman Santoro asked for comments from the audience.

David Clutts, Civil Engineering Solutions, 322 N. Rockingham Ave. Tavares, Applicant, stated that he is available to answer questions.

Board Member Treadwell asked if there is a concept drawing. Mr. Fitzgerald confirmed there is one in the packet.

Chairman Santoro asked if the property is annexed and rezoned and the plans fall through, will the annexation and rezoning still occur. Mr. Fitzgerald confirmed that the annexation and rezoning would still proceed.

MOTION

Bruce Peterman moved to recommend approval of Ordinance 2021-02, seconded by Dian Joy. The motion carried unanimously 6-0.

2) Recommendation on Ordinance 2021-03 – Koenke Property – Small Scale FLUM Amendment of approximately 05.74 acres located east of CR-561, south of Lake Industrial Blvd. from Lake County Industrial to City of Tavares Industrial (IND). Recommendation on Ordinance 201-03

Mr. Fitzgerald provided the following staff report;

Ordinance 2021-03 proposes a small-scale amendment to the Future Land Use Map 2040 of the Comprehensive Plan. The subject property (Parcel Alternate Key Number 2719648) is 05.74 acres in size and generally located east of CR-561, south of Lake Industrial Blvd. The property is currently vacant. The applicant envisions industrial uses that are compatible with the industrial development that is adjacent to the subject property. This ordinance would amend the current Future Land Use Designation from Lake County Industrial to City Industrial (IND). Future Land Use Amendment The city is required to place a future land use designation on annexed property. The subject property is currently designated County Industrial. A City Industrial designation is compatible with surrounding property. Compatibility The surrounding property is industrial nature. Site Conditions The property is currently vacant. Prior to any development, an approved site plan will be required. All applicable surveying, environmental assessments, and permitting must be in place before the site plan is approved. Any proposed development project will be required to connect to available city utilities. Impact on City Services The subject property is located in the City's Utility Service Area. The City of Tavares has municipal water service available to the subject parcel and any new development on this property must connect to city utilities. The City's Concurrency Management System will ensure that Levels of Service (LOS) will not be degraded beyond the adopted levels of service for all regulated public facilities. Adverse impacts on Levels of Service are not implicated. Page 16 of 21 FINDINGS This amendment request is considered to be in compliance with the Comprehensive Plan Goals, Objectives and Policies with the following findings: 1. An Industrial Future Land Use designation would serve as the most appropriate land use for the

subject property in accordance with Future Land Use policy 1-1.1. 2. Impacts of the proposed development of the subject property shall be monitored through the City's Concurrency Management System. (Comp Plan, Chapter 8)

OPTIONS:

- 1. That the Planning & Zoning Board moves to recommend approval of Ordinance 2021-03 Future Land Use Map amendment from Lake County Industrial to City Industrial (IND) for 05.74 acres of property generally located east of CR-561, south of Lake Industrial Blvd.*
- 2. That the Planning & Zoning Board moves to recommend denial of Ordinance 2021-03.*

STAFF RECOMMENDATION:

Staff recommends that the Planning & Zoning Board moves to recommend approval of Ordinance 2021-03 Future Land Use Map amendment from Lake County Industrial to City Industrial (IND) for 05.74 acres of property generally located east of CR-561, south of Lake Industrial Blvd.

Chairman Santoro asked for public comment. There was none.

Chairman Santoro asked for comments from the Board. There were none.

MOTION

James Sweezea moved to recommend approval of Ordinance 2021-03, seconded by Dara Treadwell. The motion carried unanimously 6-0.

OTHER BUSINESS

Mr. Fitzgerald noted that Board Member Gary Korerner resigned from the Planning and Zoning Board.

PUBLIC COMMENT

None.

ADJOURNMENT

Dian Joy moved to approve to adjourn the meeting at 3:14 PM, seconded by James Sweezea. The motion carried unanimously 6-0.

Respectfully submitted,

March 18, 2021
Planning & Zoning Board Meeting

Jillian Roberts,
Deputy City Clerk

**AGENDA SUMMARY
TAVARES CITY COUNCIL
4/7/2021**

AGENDA TAB NO.: 10

SUBJECT TITLE: Board Appointment - Planning and Zoning Board (Mayor)

OBJECTIVE:

For the Mayor to make an appointment to the Planning and Zoning Board for the remainder of a seat that expires June 2022.

SUMMARY:

Recently Gary Koerner, Planning and Zoning Board Member, resigned from the Board. He was serving a term that expires June 2022. The City advertised the vacancy in the Daily Commercial, on the City website, and social media platforms. Two applications were received from the following:

- Brooke Matthews
- James Cheeseman

The Planning and Zoning Board is an advisory Board to the Tavares City Council, consisting of seven members who shall be residents of the City of Tavares. Terms are three years with the exception of those appointments made to fill the remainder of a vacated term.

OPTIONS:

1. Mayor to make an appointment to the Planning and Zoning Board with confirmation from Council.
2. Continue to advertise the Planning and Zoning Board vacancy.

STAFF RECOMMENDATION:

Option 1, for the Mayor to make an appointment to the Planning and Zoning Board with confirmation from Council.

FISCAL IMPACT:

None.

LEGAL SUFFICIENCY:

Yes.

ATTACHMENTS AVAILABLE TO THE PUBLIC UPON REQUEST:

1. PZ Application - Brooke Matthews

2. PZ Application - James Cheesman
3. Legal Ad - Affidavit of Publication

Attachments not provided are available to the public upon request to the City Clerk.

**AGENDA SUMMARY
TAVARES CITY COUNCIL
4/7/2021**

AGENDA TAB NO.: 11

SUBJECT TITLE: Request Council's approval to issue Request for Proposal (RFP) for Debt Financing to Extend Water, Sewer, Reclaim Capital Lines on Woodlea Rd. (Finance)

OBJECTIVE:

Request Council approval to issue Request for Proposals (RFP) for Bank Qualified Capital Improvement Note for debt financing to fund engineering, permitting, acquisition, installation, construction, and any other related costs identified for the project to extend and expand water, sewer and reclaim lines down Woodlea road to the area commonly known as the Peninsula area.

SUMMARY:

In order to provide utility services to the area known as the Peninsula which includes 16 developed homes and undeveloped vacant land within and abutting the Peninsula area, expansion of water and sewer capital lines are needed. These improvements will provide service availability to existing homes and also provide for economic development opportunities for the area. (The Public Works Director will provide a brief overview of the area and the Project).

The Project Costs are estimated at \$3,500,000 or less, and closing costs are estimated at \$60,000. Debt Service costs for the project will be offset by future Impact Fee payments from connections to the new capital lines.

The loan will be issued by pledge of water, wastewater, reclaim, and utility impact fees, and the debt will be subordinate to existing debt of the Water/Wastewater Utility. This project was identified in the list of projects in the September 2019 Rate Study. In addition this project was identified in the FY2021 Adopted Budget and Capital Improvement Plan.

Staff estimates that the timeline for the issuance, approval and closing for the loan to be as follows:

- Issue RFP on or before April 23, 2021
- RFP Proposals due on June 17, 2021
- Bring RFP award recommendations to City Council on June 23, 2021
- Bring Loan Resolution and Loan documents to the City Council for approval on July 21, 2021
- Loan closing 23, 2021 (pre-closing on July 21, 2021)

This item will come back to the City Council for approval of the award of RFP and the issuance of the debt obligation with accompanying Resolution.

OPTIONS:

1. **Move to Direct the Finance Director** to work with the City Financial Advisor to issue an RFP

- for debt issuance in the amount of \$3,250,000 to fund the "Peninsula Capital Line project".
2. Do not issue the RFP f

STAFF RECOMMENDATION:

1. **Move to Direct the Finance Director** to work with the City Financial Advisor to issue an RFP for debt issuance in the amount of \$3,250,000 to fund the "Peninsula Capital Line project".

FISCAL IMPACT:

There is no fiscal impact to issue an RFP.

LEGAL SUFFICIENCY:

Meets Legal Sufficiency.

ATTACHMENTS AVAILABLE TO THE PUBLIC UPON REQUEST:

1. Woodlea Road to Peninsula Utilities Line Extension

Attachments not provided are available to the public upon request to the City Clerk.

Woodlea Road to Peninsula Utilities Line Extension (Lane Park/Peninsula Area Project).

PROJECT OVERVIEW

The City of Tavares continues to grow.

In order to run water, sewer and reuse services to the City of Tavares subdivision named The Peninsula, it would require installation of new lines and a new capital lift Station.

Currently there are about sixteen homes at the Peninsula that are serviced with wells and septic systems.

This project also supports future growth in that area and would supply water and sewer service for approximately 1500 single family homes.

This project would consist of the quantities/task listed in the table below.

- 1,200 LF of 12-inch Watermain
- 1,200 LF of 8-inch Reclaim Watermain 5,900 LF of 16-inch Reclaim Watermain
- 1,700 LF of 8" Gravity Sewer 2,200 LF of 8-inch Gravity Sewer
- Existing Lift Station Modification
- 3,100 LF of 8-inch Sewer Force main
- New Duplex Lift Station

A survey has been ordered and design is under way.

Total estimated cost is 3.2 million.

**AGENDA SUMMARY
TAVARES CITY COUNCIL
4/7/2021**

AGENDA TAB NO.: 12

SUBJECT TITLE: Discuss the FY 2021 Current Year Budget Deferred Items (City Administrator)

OBJECTIVE:

To discuss the FY 2021 current year budget deferred items (City Administrator)

SUMMARY:

The City Council adopted the FY 2021 current year budget on September 16th, 2020 amongst a backdrop of a full nationwide pandemic that was negatively affecting the Florida economy including travel and tourism as well as closing down businesses in Florida both small and large. The Citywide budget was reduced as was the tax rate and as were revenue projections. Estimating City revenues from traditional sources like Florida sales tax and gas tax was challenging to say the least. The Finance Department estimated a reduction in revenues based on input from economic forecasters for the ensuing Fiscal Year 2021. The Adopted Budget included a list of deferred items not to be funded at the beginning of the fiscal year and re-evaluated 1/2 way into the Fiscal Year should the estimated revenues be better than forecasted. We are now 1/2 way into the fiscal year and the Finance Department has updated its revenue projections for the General Fund which is showing an estimated increase of \$225,513 than originally budgeted.

The Deferred Items List is attached with City Administrator recommendations on how to allocate the \$225,513. The City Administrator is recommending that \$100,000 go into reserves and a \$125,513 fund those items identified on the attached list. This recommendation maintains the lower tax rate and smaller City wide budget over the prior fiscal year while attending to some of the needed deferred items.

OPTIONS:

1. Approve the recommendation of \$100,000 for reserves and \$125,513 for funding some of the deferred items.
2. Fund a different set of items.
3. Place all the funds (\$225,513) into reserves.

STAFF RECOMMENDATION:

1. Approve the recommendation of \$100,000 for reserves and \$125,513 for funding some of the deferred items.

FISCAL IMPACT:

Sufficient funds are projected in the FY 21 budget to fund the recommendation. The FY 21 General Fund Revenue Budget would be increased by \$225,513. The FY 21 General Fund Reserves budget would be increased by \$100,000. The FY 21 General Fund Expenditures budget would be increased \$125,513.

LEGAL SUFFICIENCY:

yes

ATTACHMENTS AVAILABLE TO THE PUBLIC UPON REQUEST:

1. Deferred Items List for 4-7-21 Agenda

Attachments not provided are available to the public upon request to the City Clerk.

**AGENDA SUMMARY
TAVARES CITY COUNCIL
4/7/2021**

AGENDA TAB NO.: 13

SUBJECT TITLE: City Administrator Report

OBJECTIVE:

To inform Council on city related matters.

SUMMARY:

The City Administrator will provide a summary at the meeting.

UPCOMING MEETINGS:

City Council Meeting	April 21, 2021, 4:00 p.m., City Council Chambers
Planning & Zoning Board Meeting	April 15, 2021, 3:00 p.m., City Council Chambers
Code Enforcement Special Magistrate Hearing	April 27, 2021, 5:00 p.m., City Council Chambers
Library Board	April 21, 2021, 2:30 p.m., Library Conference Room

UPCOMING EVENTS:

Planes, Tunes & BBQ - featuring Seaplane-A-Palooza	April 9-10, 2021, Wooton Park - 4:00 p.m. to 9:00 p.m. Friday, 10:00 a.m. to 10:00 p.m. Saturday
Harris Chain of Lakes Steamboat Meet	April 12-16, 2021, Wooton Park - Details to be Announced
Hydro Drag Nationals	June 5-6, 2021, Wooton Park - Details to be Announced

OUTSIDE AGENCY MEETINGS:

Lake County League of Cities	April 9, 2021, 11:30 a.m., Mount Dora Golf Course
Lake Sumter MPO Executive Board Meeting	April 28, 2021, 2:00 p.m., 1300 Citizens Blvd., Leesburg
Tavares Chamber of Commerce	April 28, 2021, 11:30 a.m., Tavares Civic Center

OPTIONS:

N/A

STAFF RECOMMENDATION:

N/A

FISCAL IMPACT:

N/A

LEGAL SUFFICIENCY:

N/A

ATTACHMENTS AVAILABLE TO THE PUBLIC UPON REQUEST:

Attachments not provided are available to the public upon request to the City Clerk.

**AGENDA SUMMARY
TAVARES CITY COUNCIL
4/7/2021**

AGENDA TAB NO.: 14

SUBJECT TITLE: City Council Member Reports

OBJECTIVE:

To inform Council on city related matters.

SUMMARY:

Council will be offered an opportunity to provide a report at the meeting.

OPTIONS:

N/A

STAFF RECOMMENDATION:

N/A

FISCAL IMPACT:

N/A

LEGAL SUFFICIENCY:

N/A

ATTACHMENTS AVAILABLE TO THE PUBLIC UPON REQUEST:

Attachments not provided are available to the public upon request to the City Clerk.