



**Town of Lake Park, Florida
Stormwater Policy Committee
Meeting Minutes
Tuesday, October 29, 2019 6:00 PM
535 Park Avenue, Lake Park, Florida 33403**

CALL TO ORDER:

The meeting was called to order at 6:04 p.m.

PLEDGE OF ALLEGIANCE:

Public Works Director Richard Scherle led the Pledge of Allegiance.

ROLL CALL:

John D’Agostino, Town Manager	Present
Richard Scherle, Public Works Director	Present
Raul Mercado, Certified Floodplain Manager	Present
Ronnie Lee Cohen, Committee Member	Present
Dena Davis, Committee Member	Present

Deputy Town Clerk Shaquita Edwards was in attendance.

SPECIAL PRESENTATIONS/REPORTS:

None

CONSENT AGENDA:

Stormwater Policy Committee Meeting Minutes of September 30, 2019.

Motion: Committee Member Scherle moved to approve the consent agenda; Committee Member Mercado seconded the motion.

Vote on Motion:

Committee Member	Aye	Nay	Other
Cohen	X		
D’Agostino	X		
Davis	X		
Mercado	X		
Scherle	X		

Motion passed 5-0.

Committee Member Scherle reviewed the agenda and explained that the topic of the discussion related to steps 4 and 5 of the Floodplain Management Program

NEW BUSINESS:

STEP 4: REVIEW POSSIBLE ACTIVITIES

Committee Member Mercado briefly reviewed steps 1 through 3, and explained the importance of the Floodplain Management Program. He explained that all Stormwater Policy Committee Members would receive an outreach plan report over the following days. He informed that the report was specific to the responsibilities of the Committee. He explained that there are three Public Outreach Components as follows: Website, Flood Preparedness Public Survey, and Public Outreach Meetings/Open Houses. He asked Committee Member Scherle if the Town of Lake Park had the capability of incorporating a website as a form of outreach. Committee Member Scherle explained he believed that a webpage could be added to the Town of Lake Park Website (Public Works Page).

Committee Member Mercado explained the basics of survey outreach as related to identifying the target audiences (Elected Officials, Residents, and Commercial Property Agents). He explained that the typical form of outreach is conducted via workshop to facilitate discussion and solicit feedback from Property Owners Associations. Committee Member D'Agostino agreed and suggested that educational materials be provided to Town of Lake Park Residents to encourage participation. He suggested the provision of educational materials regarding swales and bioswales.

Committee Member Mercado reviewed the supplemental documents within the agenda packet (see Exhibit "A"). Committee Member D'Agostino suggested that the surveys be provided in Creole, English, and Spanish. Discussion ensued regarding the provision of paper or electronic surveys. Per consensus, the Committee agreed that both were necessary to encourage participation. Committee Member Mercado asked Committee Member Scherle for clarification regarding the use of Survey Monkey. Committee Member Scherle explained that to his knowledge the Town of Lake Park had a Survey Monkey account established via Lake Park Public Library. Committee Member Mercado reiterated that the Committee would receive the outreach report, and the report would include survey guidelines. He recommended that each Committee Member create a list of five survey questions. Committee Member Scherle informed the Committee Members to forward their questions to the Town Clerk's Office. Committee Member D'Agostino suggested that the Town not attempt to reinvent the wheel. Committee Member Scherle explained that he liked the first survey (climate change example), and that it should be framed to address flooding and neighborhood issues. Committee Member Davis asked Committee Member Mercado how many questions would be included in the survey. Committee Member Mercado explained that the survey should consist of 25-30 questions. Discussion ensued regarding the types of questions that would be included in the survey.

Committee Member Scherle questioned the deployment date for the first survey. Committee Member Mercado explained that by the end of the next scheduled meeting, the Committee should have at least two sets of survey questions that can be distributed via survey monkey. Committee Member D'Agostino suggested to use the survey method to educate and encourage water retention efforts (example: use of rain barrels). Committee Member Mercado agreed and explained that educating the community about rain gardens was also important.

Committee Member Mercado explained that he would provide more survey examples to the Clerk's Office for distribution to the Committee. He explained that at the next scheduled meeting the Committee would begin to create surveys.

Committee Member Mercado explained that the workshops should be inclusive of the Elected Officials. Committee Member D'Agostino suggested that all stakeholders should be included in the workshop. Committee Member Scherle suggested a special presentation at a Regular Commission Meeting. Committee Member Mercado explained that he preferred to meet with the Elected Officials one on one. He asked Committee Member D'Agostino to provide a listing of the Property Owners Associations in the Town of Lake Park. Committee Member D'Agostino agreed to provide a list. Committee Member Mercado suggested to invite the Board of Directors for each Property Owners Associations, and Commercial Property Agents to future Workshops.

Committee Member Mercado repeated that each Committee Member would prepare five questions and provide them to the Town Clerk's Office prior to the next scheduled Stormwater Policy Committee Meeting.

Discussion ensued regarding green infrastructure, rain gardens, the use of rain barrels, and the provision of information via the use of billing inserts. Committee Member Mercado reviewed the educational materials and events within the agenda packet (see Exhibit "B").

Committee Member Scherle announced that the next two Stormwater Policy Committee Meetings were scheduled for Tuesday, November 19, 2019 and Tuesday, December 17, 2019 at 6:00 p.m.

PUBLIC COMMENT:

Karen Sjolholm, Town Resident, explained that the majority of Lake Park Residents live on single family lots and not Property Owners Associations. She suggested that the proposed Workshops be inclusive of all Town of Lake Park Residents. Committee Member Scherle explained that notices would be provided per defined geographic areas. Committee Member D'Agostino suggested to schedule multiple workshops to provide information to all Town of Lake Park Residents. Ms. Sjolholm agreed and commented that community buy-in and participation was necessary from the single- family property owners.

Jeff Young, Town Resident, explained that he agreed with the proposed methods of outreach and suggested community action/representation (example: Rain Barrels, and Planting Trees).

COMMITTEE MEMBER COMMENTS:

Committee Member Cohen had no comments.

Committee Member D'Agostino had no comments.

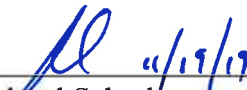
Committee Member Davis thanked Committee Member Mercado for guiding the Town of Lake Park throughout the Floodplain Management process. She expressed that she was very happy to serve of the Stormwater Policy Committee.

Committee Member Mercado had no comments.

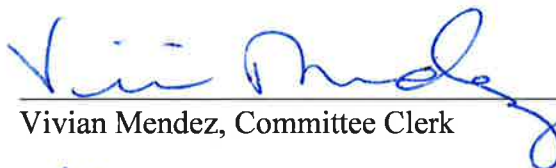
Committee Member Scherle had no comments.

ADJOURNMENT

There being no further business to come before the Stormwater Policy Committee and by unanimous vote, the meeting adjourned at 7:40 p.m.



Chair, Richard Scherle



Vivian Mendez, Committee Clerk



Shaquita Edwards, Assistant Committee Clerk

Approved on this 19 of November, 2019



TOWN OF LAKE PARK
PUBLIC COMMENT CARD

MEETING DATE: 10/29/19

Cards must be submitted before the item is discussed!!
*****Three (3) minute limitation on all comments**

Name: Karen Sjöholm

Address: 815 Magnolia Dr

If you are interested in receiving Town information through Email, please provide your E-mail address: klsearth@aol.com

I would like to make comments on the following Agenda Item:
workshop scope. Lake Park is a majority of single family parcels, why are you currently party of Lake Park & west of lot 10th?

I would like to make comments on the following Non-Agenda Item(s):
where it is mainly POA & not reaching majority of citizens

Instructions: Please complete this card, including your name and address; once the card has been completed, give it to the Town Clerk. The Mayor will call your name when it is time for you to speak. Comments are limited to three (3) minutes per individual.

Exhibit "A"

STEP 4
SUPPLEMENTAL
DOCUMENTS

CLIMATE CHANGE SURVEY

Questions To Ask to Determine Your Risk of Coastal Storm Surge Damage

In Southwest Florida, the risk of a hurricane hitting our area is an ever-present threat from June to November every year. It may be tempting to think that if a large-scale hurricane doesn't directly pass over your city that you don't have anything to worry about. Unfortunately, that isn't true. Storm surge, an abnormal rise in water above the normal tide, is one the leading causes of coastal flooding. Storm surges are extremely dangerous because they are capable of flooding large coastal areas, causing severe devastation, and can occur outside of a direct hit from a hurricane. To assess the potential damage to your property a storm surge can bring and what you can do about it, ask yourself the following questions:



“How High Above Sea Level is my Home?”

All low-lying coastal regions, which can cover many miles inland, are vulnerable to flooding from storms. Since a large majority of Southwest Florida coastlines lie less than 10 feet above sea level, within the reach of strong storm surge event, the impact can be substantial. Find out from a reliable source where your home stands, but chances are high that it is at or just above sea level and therefore within a coastal flooding zone.

“What Kind of Damage Could be Expected in my Area?”

Storm surges have damaged roads and bridges, destroyed homes and businesses, and, in severe cases, wiped out entire coastal communities. In order to know what could be destroyed, survey your home and property to see what valuable items are within a few feet of the ground. A famous example of this is Hurricane Katrina, which caused well over \$100 billion in damage from its surge's floods.

“Can Storm Surge be Predicted?”

The good news is yes- while a storm surge is generally very damaging, it can be predicted with enough time for residents to leave the area. NOAA has several models, such as an extratropical storm surge model, that predicts surge and its impact from extratropical storms. These advanced computer models are used to simulate the weather conditions in a

severe storm to learn how it can cause coastal inundation conditions. Even if you live in an area prone to flooding, you will not be taken by surprise by it.

“How Will I know if Coastal Inundation is Going to Happen?”

Once you have established that you are indeed at risk for damage from a storm surge, it can be nerve-wracking wondering when or if it will happen. NOAA's National Weather Service monitors coastal inundation conditions 24 hours a day, 7 days a week. These experts will warn you in advance if a threat should appear. The Weather Service issues forecasts, watches, and warnings, with details on a storm's potential impact. Local emergency management officials use this information to decide when evacuations are necessary, and if they are, report them to media outlets like the local news stations.

“What Can I Do to Protect my Family and Property?”

The best way to protect your family is to be prepared. Know the hazards that may affect you, your family, and your home and make plans for where you'll go if told to evacuate. Stay tuned to local media outlets, listen for advisories or specific instructions from your local officials, and leave immediately if told to do so. Fully-equip your home with protective items like hurricane shutters and durable hurricane glass in the windows, so you know you and your family can flee the area and feel secure that your home will be protected while you are gone. Staying after the evacuation notice is released to try and cover your windows may mean you don't leave in time, so don't run this risk.

If you haven't already installed impact windows, hurricane shutters, and other hurricane protection in your home, do so now. Waiting to hear when there is another storm in the Atlantic means it is already too late. Contact Storm Solutions today for a free estimate, and give yourself the peace of mind that your family and belongings will be safe if a catastrophic storm surge should occur.

What you can do about climate change

You can take actions to reduce your greenhouse gas emissions and adapt to the impacts of climate change. Here are some examples of free or low-cost actions you can take every day. Share them with your friends and community — together we can make a big difference.

Be aware of your emissions

If you know where your greenhouse gas emissions are coming from you can take actions that have the biggest impacts.

Drive and fly less

The transport sector contributes 19 per cent of New Zealand's total greenhouse gas emissions.

Actions you can take

- Walk or cycle – it is free, has the least impact on the environment and is good for your health.
- Use public transport.
- Carpool with friends.
- Work remotely and use video conferencing instead of traveling to a meeting.
- Reduce the number of flights you take. This has shown to be one of the most effective climate change actions you can take.
- If you fly, pay to offset your emissions.

Reduce your electricity use

Greenhouse gas emissions are produced when we use electricity and gas. New Zealand has a high level of renewable electricity production, but this is still supplemented by burning fossil fuels.

Actions you can take

- Switch off lights when not in use.
- Use LED lightbulbs.
- Unplug electronics from the wall socket when they're not in use.
- Run the dishwasher and the washing machine only when full.
- Wash clothes in cold water and dry them outdoors when possible.
- Try having shorter showers or shower before going to bed (there is less fossil fuelled electricity generation after 9 pm).

For more ideas see the [Energywise website](#).

Eat less meat

Red meat production produces significantly more greenhouse gas emissions than the production of chicken meat, fruit, vegetables and cereals. It also requires substantially more water.

Around 30 per cent of the world's land area is used for livestock production. It is one of the key reasons for cutting down forests.

Actions you can take

- Cut down on meat. Eat more fruit and vegetables instead - this has many health benefits, such as reducing the risk of heart disease.
- Try having a meatless day each week. The [Meatless Monday website](#) has great recipes to get you started.

Plant trees

In New Zealand, forests offset nearly 30 per cent of our greenhouse gas emissions. A regenerating native forest can remove more than 8 tonnes of carbon dioxide per hectare per year from the atmosphere over its first 50 years.

Studies have shown that coastal vegetation can reduce erosion. It can also reduce the impact of waves and floods.

Trees provide shade which has a cooling effect in towns and cities. When placed around buildings they can cut electricity used for cooling in summer.

Actions you can take

- Plant native trees on your property.
- Get involved in a community forest restoration, dune care or coastal revegetation programme in your area

Know your area and be prepared

Become informed about what is happening in your region now and what could happen in the future.

If you live or are planning to move to a coastal area, it is important to consider the impacts future sea level rise will have on coastal hazards such as erosion and flooding.

Climate Change Attitude Assessment

1. Climate Change Survey

Please complete this short survey about climate change. Your responses are anonymous.

2. Attitudes toward climate change

Question Title

1. Choose one answer:

	Strongly Agree	Agree	Disagree	Strongly Disagree
There is sufficient scientific evidence that climate change is taking place.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More research is needed before climate change can be accepted as scientifically proven.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Human actions are causing climate change.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The seriousness of climate change has been exaggerated.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe climate change can be minimized.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We should adapt to climate change not try to stop it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Climate change is an unstoppable process and we cannot do anything about it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe people should change their lifestyles to help minimize climate change.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Government should have a greater role in minimizing climate change.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Binding laws should be passed to cap carbon emissions, even if this causes some economic disruption.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Businesses (not governments) should play a leading role in minimizing climate change.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The United States should enter into international treaties to minimize climate change.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Climate change is due to natural variation and not to human actions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is too late to do anything about climate change.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. Knowledge of climate change

Question Title

1. How informed are you about:

	Very well informed	Informed	Not informed
The different causes of climate change. <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The consequences of climate change <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to minimize climate change. <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lifestyle changes I can make to help minimize climate change. <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The present role of government in minimizing climate change. <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. Information about yourself

Question Title

1. How many previous science courses have you taken at the university level?

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7 or more

Question Title

2. I have (select all that apply):

- Taken a course related to climate change
- Read about climate change in newspapers, magazines or online
- Discussed climate change with family or friends.
- Participated in a public meeting or political rally related to climate change
- Volunteered for an organization related to climate change.
- Changed personal behaviors to lesson impact on climate change

Question Title

3. To anonymously match later surveys with your responses from this survey, please tell us your favorite color:

|

Question Title

4. and your birthday (MM/DD/YYYY):

Survey on Climate Change

1. Climate Change (or Global Warming) is the idea that the Earth's average temperature has been on the rise for the past 150 years and the world's climate may change as a result: Do you think that Climate Change is happening?

- Yes
- No
- Don't know

2. Do you think the severity of recent hurricanes like Harvey and Irma is most likely the result of global climate change, or is it just the kind of severe weather events that happen from time to time?

- Result of climate change
- Just happens from time to time

3. Assuming climate change is happening, what do you think it is caused from?

4. How much do you trust scientists as a source of information about climate change?

- Strongly trust
- Somewhat trust
- Somewhat distrust
- Strongly distrust

5. How worried are you about climate change?

- Very worried
- Somewhat worried
- Not very worried
- Not at all worried

6. When do you think climate change will start to harm people in the United States?

- Being harmed now
- 10 years
- 25 years
- 50 years
- 100 years
- Never

7. How much do you think climate change will harm future generations?

- Not at all
- Only a little
- Moderate amount
- A great deal

8. Do you think we should fund more research into renewable energy sources, such as solar and wind power?

- Strongly support
- Somewhat support
- Somewhat oppose
- Strongly oppose

9. Regulate CO₂ (carbon dioxide, primary greenhouse gas) as a pollutant?

- Strongly support
- Somewhat support
- Somewhat oppose
- Strongly oppose

10. How often do you hear about climate change in the media?

[« All Events](#)

Green Infrastructure Workshop

October 23 @ 6:00 pm - 8:00 pm

Workshop on Green Infrastructure Stormwater Opportunities for Community Groups and Houses of Worship

Join us to learn how you can make a difference in our community by helping to manage stormwater where it falls! Green infrastructure stormwater practices beautify neighborhoods, improve water quality in our rivers and Lake Michigan, and help reduce flooding and basement backups, along with other important benefits.

Sweet Water and Clean Wisconsin are helping expand the reach of MMSD's Fresh Coast Resource Center through a series of green infrastructure stormwater workshops. This workshop is especially relevant to those who work with community / neighborhood organizations and/or with their houses of worship.

Time & location: The workshop will take place from 6:00 pm – 8:00 pm on Wednesday, October 23rd, in Room 3080 at 600 E. Greenfield Ave. Milwaukee, WI 53204.

RSVP: Please register by sending an RSVP email to Ethan at etaxman@cleanwisconsin.org



Details

Date:
October 23

Time:
6:00 pm - 8:00 pm

Venue

GLRF 3080

Introducing

GREEN INFRASTRUCTURE FOR COASTAL RESILIENCE

Co-hosted by NOAA Office of Coastal Management,
Michigan Coastal Zone Management Program, and
Michigan Sea Grant



May 15, 2019 - Bay City - [DoubleTree by Hilton](#)

May 17, 2019 - Dearborn - [U of M Dearborn - Fairlane Center South](#)

Sessions are limited to 50.

The Michigan Coastal Management Program, Michigan Sea Grant, and Michigan State University Extension are excited to invite you to a one-day training workshop, **Introducing Green Infrastructure for Coastal Resilience**. Green infrastructure practices play a critical role in making coastal communities more resilient to natural hazards and threats to water quality that are characteristic of living on the coast. NOAA's Office for Coastal Management will lead participants through the fundamentals of green infrastructure, including concepts, various practices, and the wide variety of benefits it provides. Through presentations featuring local speakers, group discussions, and activities, participants will learn what they can do to support green infrastructure in their local communities.

Course participants from land use planning, conservation planning, hazard mitigation, stormwater management, floodplain management, and local government departments will learn how to:

- Differentiate green infrastructure terms and concepts
- Identify the ecological, economic, and societal benefits of green infrastructure
- Recognize the wide variety of scales of approaches referred to as "green infrastructure"
- Identify new or existing planning processes suitable for integrating green infrastructure techniques
- Connect with local green infrastructure activities and experts

PRELIMINARY AGENDA

8:30 a.m. – Registration and Continental Breakfast

9:00 a.m. – Welcome and Workshop Goals and Objectives

9:20 a.m. – Section 1: Green Infrastructure Concepts and Principles

9:55 a.m. – Section 2: The Practice of Green Infrastructure
10:25 a.m. – **Break**
10:35 a.m. – Local Landscape Conservation
11:05 a.m. – Local Community/Site Scale Green Infrastructure
11:35 a.m. – Section 2: The Practice of Green Infrastructure - *continued (activity)*
12:00 p.m. – **Lunch**
12:45 p.m. – Section 2: The Practice of Green Infrastructure - *continued (activity debrief)*
1:00 p.m. – Local Shoreline Protection
1:30 p.m. – Section 3: Implementing Green Infrastructure
2:05 p.m. – **Break**
2:15 p.m. – Local Plans, Regulations, or Policies Supporting Green Infrastructure
2:45 p.m. – Group Discussion on Challenges and Solutions
4:00 p.m. – **Wrap-up and Adjourn**

Exhibit "B"

**Educational
Materials and
Events**

Climate Change/Hurricanes/Stormwater and Rain Gardens

The hurricanes and tropical storms events of 2017-2018 were historic. Images from impacted communities can invoke strong feelings. As we look around our homes and communities—both those impacted and those that were unscathed—we may ask ourselves, *what can I do?*



It is likely that some storms will continue to bring heavy winds and precipitation that may threaten infrastructure no matter what we do. Absorbing all the rain water from a mega storm like Harvey may not be possible, but in urban areas landscaping features like rain gardens can absorb rain from smaller events and decrease the frequency of floods in high risk neighborhoods.

In densely urban areas, the high percentage of impervious landscaping—where stormwater cannot absorb into the ground and instead runs off and pools at the lowest point—is a serious contributor to urban flooding. For instance, a study in coastal Texas found that for each square meter of impervious surface added to the landscape, flooding water damaged property costing thousands of U.S. dollars.

Storm water management systems such as rain barrels, bioswales and rain gardens—all of these are excellent options.



A well-designed rain garden seems to provide the greatest impact for reducing stormwater runoff for individual homeowners. Here we will attempt to provide a detailed step-by-step guide for adding a rain garden to your landscape.



No matter your location, rain gardens can have a positive impact. One place they may be especially helpful are in communities that are upstream from low-lying areas that are susceptible to large, damaging storms. Sometimes the landscaping choices made by homeowners miles away can help to mitigate flooding damage downstream.

Planning a rain garden is an exercise in balance. Specifically, you are trying to balance the amount of rain that falls on a property with the amount of rain that stays on the property long enough to be absorbed.



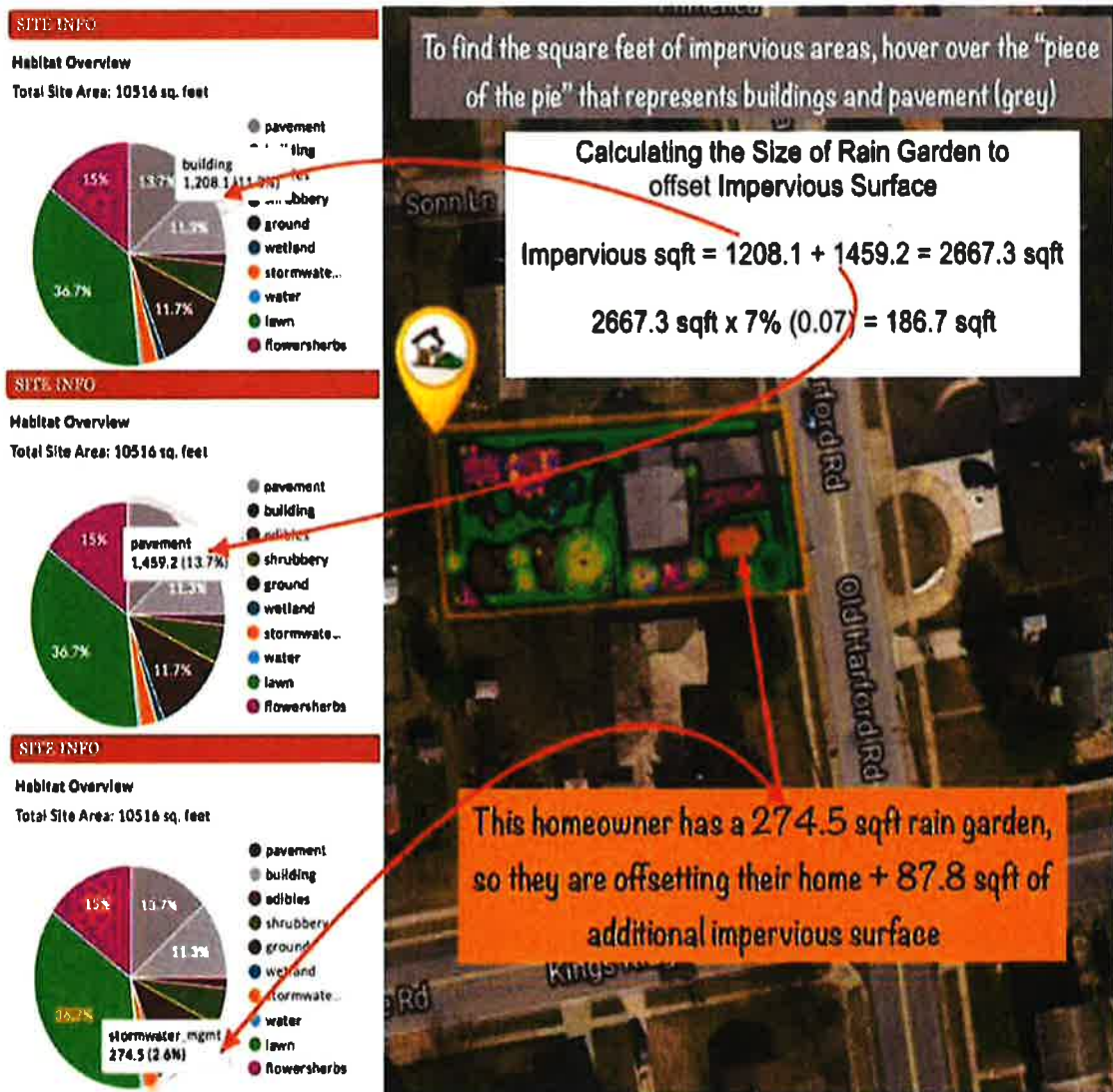
The ground can only absorb so much water at once, and depending on your square footage of impervious surface area (roof, cement driveway, etc), you may need to build a large rain garden, or more than one rain garden, to balance all the water running off the impervious areas. A habitat map is a great way to help you figure out how to strike a balance by helping you measure the total area of your impervious surfaces.



Using a map from a Habitat Network user, we'll walk you through how to use our metrics to roughly calculate how many square feet of rain garden(s) you may need. The general *rule of thumb* is that rain gardens should be five to ten percent the size of the impervious landscape that is generating runoff. We recommend, then, a rain garden should be 7% (0.07%) of your total impervious surface. The Habitat Overview in the mapping tool calculates the square feet of your impervious surface if you hover over

the buildings and pavement. Then you can add these together for your total impervious square footage and multiply by 0.07 (or 7%). Use the image as a guide for your own calculations.

Now that you know how much square footage is required to offset your impervious surface in rain gardens, take a walk around your property and decide whether the layout of your downspouts, pavement, and other features means one large rain garden or multiple rain gardens. Keep in mind you may not be able to provide a 100% offset. Or, like the example above of this Habitat Network user, the Shady Maple House is offsetting their entire impervious surface, plus an additional 87.8 square feet.



Rain Gardens



Rain gardens, also called bioretention facilities, are one of a variety of practices designed to treat polluted stormwater runoff. Rain gardens are a designed depressed area in the landscape that store runoff from impervious urban areas, like roofs, driveways, walkways, parking lots, and compacted lawn areas. Rain gardens typically rely on plants and an engineered soil media to soak up stormwater while absorbing and filtering pollutants carried in urban runoff.

How to Create a Rain Garden - Part 1 Choosing a Site

- Position your garden at least 10 feet (3.0 meters) from your home.
- If your garden is too close to the house, water may erode at the home's foundation. This can cause basement flooding or structural problems.[1] Keep your rain garden away from driveways and sidewalks as well to avoid pathway erosion.[2] Watch your yard's rainfall draining pattern during a storm. Try positioning your garden ...
- Measure your area's slope.
- Test the soil in your location.
- Plot your garden's size using stakes and string.
- Plan your garden's depth based on its slope.

How to build a rain garden in your backyard?

- Locate and select your downspout. Your rain garden will be directly connected to one...
- Determine the size of your rooftop that drains to the downspout.
- Calculate the size of your rain garden.
- Designing the rain garden. Create the garden at the lowest point of your yard,...

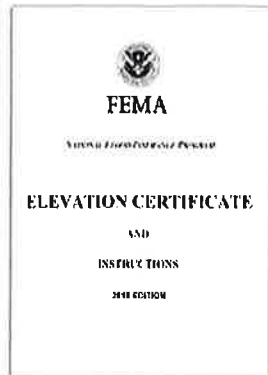
1. What are the best plants for rain gardens?

- **Plants for Your Rain Garden. Good flowering plants for rain gardens are blue flag iris, goldenrod,**

[Rain Gardens - Gardening Solutions - University of Florida ...](http://gardeningsolutions.ifas.ufl.edu/design/types-of-gardens/r...)
gardeningsolutions.ifas.ufl.edu/design/types-of-gardens/r...

Flood Information...

PROVIDED BY THE TOWN OF LAKE PARK, FL



HAVE YOU REQUESTED AN ELEVATION CERTIFICATE?

An elevation certificate is a document prepared by a qualified engineer/surveyor which is used to measure the difference in elevation between your home and the base flood elevation of your area, to ensure compliance with community floodplain management ordinances and to determine the proper insurance premium rates.

An elevation certificate costs from \$600 to 1200, depending on location. Visit <http://discover.pbcgov.org/pzb/building> for the new FEMA elevation certificate and instructions.



Flood Information...

PROVIDED BY THE TOWN OF LAKE PARK, FL

WHAT CAN A RAIN GARDEN DO FOR YOU?

A rain garden is a garden of native shrubs, perennials, and flowers planted in a small depression, which is generally formed on a natural slope. It is designed to temporarily hold and soak in rainwater runoff that flows from roofs, driveways, patios or lawns. Rain gardens are effective in removing up to 90% of nutrients and chemicals and up to 80% of sediments from the rainwater runoff. Compared to conventional lawn, rain gardens allow for 30% more water to soak into the ground.

A strategically placed rain garden can reduce the volume of stormwater that enters the larger stormwater management system while creating visual interest to property.



DRAINAGE SYSTEM DEBRIS

Flood prevention comes in many designs. When rain falls on paved surfaces, a much greater amount of runoff is generated compared to runoff from the same storm falling over a forested area. These large volumes of water are swiftly carried to our local streams, lakes, wetlands and rivers and cause flooding and erosion, and wash away important habitat for critters that live in the stream. Here's what you can do to help! For more information check out the Center for Watershed Protection at www.cwp.org.

- ✓ Keep the banks of swales and ditches clear of debris
- ✓ Keep grass clippings and fallen leaves clear from storm drain grates as they can quickly slow drainage in your neighborhood.

Flood Information...

PROVIDED BY THE TOWN OF LAKE PARK, FL





TOWN OF LAKE PARK FLOOD HAZARDS

Is your property in a flood zone? Visit the FEMA Flood Map Service Center to see your property's flood risk?
<https://msc.fema.gov/portal/home>

You can also go to the Palm Beach County *Flood Zone Determination System* website and type in your address to find your flood zone. Even if you are not located in the Special Flood Hazard Area, your property may be subject to flooding.
<https://discover.pbcgov.org>



Is your property in a flood zone?
Visit the FEMA Flood Map Service Center to see
your property's flood risk!
<https://msc.fema.gov/portal/home>



FEMA

Sign up for ALERTPBC. The Palm Beach County wide emergency notification system allows you to opt in via phone, text and email!
For more information visit:
<http://discover.pbcgov.org/publicsafety>



Follow www.lakeparkflorida.gov and Ch. 18 (for comcast customers) for the latest updates in case of emergency.



The Town of Lake Park

FLOOD INFORMATION

WARNINGS
HAZARDS
PROTECTION

START AT THE FOUNDATION...

Protect your family by starting at the foundation first. Since the devastation of Hurricane Andrew in 1992, Florida has adopted and maintained statewide building codes. Floridians everywhere should follow these codes and build responsibly. Protecting your investment takes planning and should be completed long before a flood could happen.

The following list is just a few of the building categories considered when thinking of stronger building codes: Structural Loads, Wind Resistant Glass, Roof Assembly, Building Elevation, and Drainage.

Do your research! Before you hire a contractor, ask to see their state-issued license. **Verify!** Visit the Florida Department of Business and Professional Regulation (DBPR) to verify the license number and check for any complaints. An occupational license does not qualify an individual to act as a contractor.

Retrofit! Check out FEMA's *Homeowners Guide to Retrofitting*: 3rd Edition. This guide gives you clear information on your options for protecting your home and is designed for readers who have little or no experience with flood protection methods or building construction techniques.

The guide also provides homeowners with information on government and non-governmental financial assistance. By knowing the basic questions to ask your local officials, you are guided to the retrofitting technique that is appropriate for you!



How Much INSURANCE Do I Need?

Floods are the most common natural disaster in the United States. Flood insurance can be the difference between recovering and being financially devastated. The damage from just one inch of water can cost more than \$20,000. Federal law states that mortgages backed by the government must have flood insurance if the homes are located in Special Flood Hazard Areas (SFHAs).

Flood damage is not typically covered by homeowner's insurance. Homeowners are recommended to purchase flood insurance in an amount equal to the value of your home and belongings. While you are only required to adhere to minimum coverage, you may want to consider getting more to protect your home and possessions. The maximum limit of coverage depends on whether you choose to buy a federal or private flood insurance policy.

The Average cost of flood insurance in the state of Florida has a yearly premium cost of \$550. Have you determined the value of your home and possessions?

For details on how to purchase flood insurance and to find an insurance provider, visit www.floodsmart.gov. An official website of the United States government.

BEFORE & AFTER

Follow FEMA's three rules when facing the potential for flooding.

- ✓ **PREPARE:** Know your areas type of flood risk, gather supplies, keep important documents in waterproof container, know your evacuation routes, sign up for community flood alerts!
- ✓ **SURVIVE:** Identify your safe location, adhere to evacuation warnings, stay out of flood waters, stay away from bridges, seek high ground.
- ✓ **BE SAFE:** Listen to authorities, avoid driving, be aware of debris and contaminated water, watch for downed powerlines, use generators with caution.

WHAT DO I DO IF MY PROPERTY FLOODED?

Read over the ABC's of Returning to Flooded Buildings published by FEMA @ www.fema.gov.

Did you know there's a federal program that can help reduce your flood insurance premiums? Check out the Town of Lake Park's Community Initiatives at www.lakeparkflorida.gov.

The NFIP's Community Rating System (CRS) credits community efforts beyond those minimum standards by reducing flood insurance premiums for the community's property owners.

