

MINUTES

BROWARD COUNTY PLANNING COUNCIL

April 26, 2012

MEMBERS PRESENT: Mayor Lamar Fisher, Chair
Commissioner Anne Castro, Vice Chair
Tim Bascombe
Frederick Burton
Commissioner Bobby DuBose
Kenneth Fink
School Board Member Patricia Good
Mary D. Graham
Commissioner Sue Gunzburger
Dan Hobby
Commissioner Michael S. Long
Commissioner Rita Mack
Commissioner Lisa Mallozzi
Louis Reinstein

MEMBERS ABSENT: Commissioner Claudette Bruck
Sara Case
Commissioner Keith London
Sharon P. Ragoonan
Mayor Michael Udine

ALSO PRESENT: Henry Sniezek, Planning Council Executive Director
Andrew Maurodis, Legal Counsel
Barbara Blake Boy, Planning Council Deputy Executive Director
Nancy Gassman, Ph.D., Broward County Natural Resources Planning and Management Division
Kirk Dourvetakis
Mylan Parrish
Jimmy Castro
Bryce Von Stetina
Nancy Cavender, The Laws Group

(A sign-in sheet reflecting those present is filed with the supplemental papers to the minutes of this meeting.)

A meeting of the Broward County Planning Council was held at 10:00 a.m. on Thursday, April 26, 2012, in Room 422 of the Broward County Governmental Center, Fort Lauderdale, Florida

CALL TO ORDER:

Chair Lamar Fisher called the meeting to order.

CHAIR FISHER: Good morning, ladies and gentlemen. I'd like to call to order the Broward County Planning Council meeting for April the 26th, 2012.

ROLL CALL:

CHAIR FISHER: Would you please call the roll?

THE REPORTER: Mr. Tim Bascombe.

MR. BASCOMBE: Present.

THE REPORTER: Commissioner Claudette Bruck.

Mr. Frederick Burton.

MR. BURTON: Present.

THE REPORTER: Ms. Sara Case.

THE REPORTER: Commissioner Anne Castro.

COMMISSIONER CASTRO: Here.

THE REPORTER: Commissioner Bobby DuBose.

COMMISSIONER DUBOSE: Here.

THE REPORTER: Mr. Kenneth Fink.

MR. FINK: Here.

THE REPORTER: School Board Member Patricia Good.

MS. GOOD: Here.

THE REPORTER: Ms. Mary D. Graham.

MS. GRAHAM: Here.

THE REPORTER: Commissioner Sue Gunzburger.

THE REPORTER: Mr. Dan Hobby.

MR. HOBBY: Here.

THE REPORTER: Commissioner Keith London.

THE REPORTER: Commissioner Michael S. Long.

COMMISSIONER LONG: Here.

THE REPORTER: Commissioner Rita Mack.

COMMISSIONER MACK: Here.

THE REPORTER: Commissioner Lisa Mallozzi.

COMMISSIONER MALLOZZI: Yes.

THE REPORTER: Ms. Sharon Ragoonan.

THE REPORTER: Mr. Louis Reinstein.

MR. REINSTEIN: Present.

THE REPORTER: Mayor Michael Udine.

THE REPORTER: Mayor Lamar Fisher.

CHAIR FISHER: Here.

Commissioner Sue Gunzburger entered the room while the Chair was introducing the kids present at the meeting.

Before we stand for the Pledge, I would like to recognize that today is Take Your Daughters and Sons to Work Day.

And to my left, we have Kirk Dourvetakis.

COMMISSIONER MALLOZZI: Close.

CHAIR FISHER: Close enough? Kirk's with us today. He was with us last year. Welcome, Kirk.

And then to my right here, we have Jimmy Castro Jimmy, welcome. Thank you for coming today.

CHAIR FISHER: Mylan.

COMMISSIONER MACK: Parrish.

CHAIR FISHER: Parrish. Mylan, thank you so much for being here.

And last but not least, we have Bryce here.

This is the son of one of our staff members.

So welcome, and thank you for being part of our Board meeting today.

We'll now stand and have the Pledge. And Jimmy will lead us in the Pledge.

THE PLEDGE OF ALLEGIANCE WAS LED BY JIMMY CASTRO

CHAIR FISHER: Thank you, Jimmy.

PRESENTATION OF PLAQUE:

CHAIR FISHER: It is now my honor to move from the podium down to the front, and to honor Henry Sniezek. So please give Henry your applause.

(Applause.)

CHAIR FISHER: I -- I can tell you that I never dreamed that I, as Chair, would be able to have the opportunity to do this, or want to do this, to be honest with you, Henry.

But on behalf of this wonderful Council, and for your years of service, words cannot describe how thankful we are for what you have done for this Council, the level you have brought it to, and to be able to work with you as the Chair, and past Chairs, and as members is just outstanding.

And we just thank you from the bottom of our heart.

A plaque is a plaque and it -- and we understand that it doesn't even show the appreciation that we want to give you.

We also are excited about your new venture. And we understand you're not too far away --

MR. SNIEZEK: No.

CHAIR FISHER: -- from the office. And so if Barbara or anyone else needs you, you would be there for us.

MR. SNIEZEK: I will.

CHAIR FISHER: We ask and bless you that you'll have a great career in your next step.

And on behalf of the Broward County Planning Council presented to Henry A. Sniezek with appreciation for your exemplary work and dedication, from 1984 to 2012, as Executive Director from 2004 to 2012.

Henry, love you, man, and we just thank you so much.

(Applause.)

CHAIR FISHER: Barbara has asked for the privilege to be able to say a few words, as well.

MS. BLAKE BOY: I just wanted to say on behalf of the Planning Council staff, obviously, Mayor Fisher is a tough act to follow, but he's exactly right. And it's been a privilege to work with Henry throughout these years. And he's a great mentor and boss.

And we're really going to miss him a lot. And besides being a great boss, he's a great human being and person, and it's an honor to have worked with him, from all of us.

Thank you.

(Applause.)

CHAIR FISHER: And I think Henry's going to say a few words.

But at the conclusion of our meeting, we have a beautiful cake in the back where we can celebrate together with a piece of cake and join the celebration.

Henry, it's all yours.

MR. SNIEZEK: Well, thank you so much.

I'm not going to get long-winded on you now. You know I'm not like that. But -- and I -- I couldn't do it justice. I couldn't thank everybody properly for just saying a few sentences.

I owe everybody here so much thanks, and so many great people in the past have been great.

And -- and I've worked for the Planning Council over 28 years, so I've been at the Planning Council over 20 years, and then I've had less than 25 years for the rest of my life. So if the Councils have some, like, colors or something, they are definitely in my blood, and it's going to stay there forever.

I am looking forward to my new challenge. I would like to -- you know, I'll always be a Planning Council person, too. And just can't thank you enough. So, thank you.

(Applause.)

CHAIR FISHER: We have a photographer, which we're going to be able to take some photographs, obviously, of Henry's last meeting as well as the children.

Commissioner?

COMMISSIONER GUNZBURGER: I just want to say, the Council's loss is the County's gain.

(Laughter.)

CHAIR FISHER: Well, I'm going to allow you to direct us --

PHOTOGRAPHER: Okay.

CHAIR FISHER: -- for photographs with the children.

(Pictures taken.)

(Applause.)

CONSENT AGENDA

CHAIR FISHER: We can move forward with our agenda.

AGENDA ITEMS C-1 THROUGH C-4:

CHAIR FISHER: And our Consent Agenda's Items C-1 through C-4.

Is there a motion to approve?

COMMISSIONER GUNZBURGER: **So moved.**

MR. BASCOMBE: Second.

CHAIR FISHER: Moved and second.

Any discussion?

All in favor, say aye.

Opposed?

Motion does carry.

VOTE PASSES UNANIMOUSLY.

REGULAR AGENDA

AGENDA ITEM R-1:

CHAIR FISHER: And on our Regular Agenda, R-1, we'll talk about our Fiscal Year 2013 Planning Council Budget Proposal.

Henry.

MR. SNIEZEK: Thank you, Mr. Chair.

R-1 is the Fiscal Year 2013 budget proposal. This -- this item was discussed by the Executive Committee immediately prior to this meeting, and they voted unanimously to recommend that the -- the County Commission approve the core allocation of \$991,180. That's basically a do no harm budget. It would just allow us to have exactly the same staff and resources that we have now.

In addition, they recommended that the County Commission approve a cost recovery fee for display ads for County Commission meetings.

Now, that's different than what we have now, because last year the State legislation changed. They will no longer approve amendments in the two cycles, so amendments just kind of flow as the year goes on, so it did increase the cost of advertising. So we'd like to have a cost recovery fee for that.

So if you'd like more information, our Deputy Executive Director, Barbara

Boy, can give you more information about those recommendations of the Executive Committee.

CHAIR FISHER: We're going to take those in two separate motions.

So who wants to talk about the budget? Commissioner?

COMMISSIONER GUNZBURGER: I want to congratulate you. It's a very lean budget. It's one that takes into account the problems that the County is going to face, thanks to Tallahassee, in sending us a bill for Medicaid that -- that we are now going into litigation over, and that we have to cut everything.

So I really appreciate the work that you did.

MR. SNIEZEK: Thank you, Commissioner.

CHAIR FISHER: Any further discussion?

MR. FINK: So moved.

COMMISSIONER CASTRO: Second. The budget (Inaudible.)

CHAIR FISHER: Been moved and second.

Discussion?

All in favor, say aye.

Opposed?

Motion does carry.

VOTE PASSES UNANIMOUSLY.

CHAIR FISHER: Now we're going to ask for another motion to approve the revision of the Broward County Land Use Plan Amendment fees to include the cost recovery for the public hearings.

COMMISSIONER MALLOZZI: So moved.

COMMISSIONER GUNZBURGER: Second.

COMMISSIONER CASTRO: Second.

CHAIR FISHER: Been moved and second.

Discussion?

All in favor, say aye.

Opposed?

Motion does carry.

Thank you. That takes care of R-1.

VOTE PASSES UNANIMOUSLY.

AGENDA ITEM R-2:

CHAIR FISHER: R-2 now is discussion as far as the Executive Committee recommendation of March 22, 2012.

And the recommendation is to appoint Barbara Blake Boy as the Executive Director, effective upon the approval of an agreement by the full Council which will be presented to our Council at its May 24th, 2012 meeting and authorize the Chair, myself, and Council Attorney to negotiate a said agreement for presentation at that time.

Further, it is recommended that Ms. Boy be appointed as the Interim Executive Director beginning May 14th, 2012, filling that gap, which Henry moves on to his new position.

MR. FINK: Are those two separate motions?

CHAIR FISHER: We can do one.

MR. FINK: Moved.

COMMISSIONER MALLOZZI: Second.

CHAIR FISHER: It's been moved and second.

Discussion on the motion?

All in favor, say aye.

Opposed.

Motion carries.

(Applause.)

VOTE PASSES UNANIMOUSLY.

AGENDA ITEM R-3:

CHAIR FISHER: And next on R-3 we have a special presentation. Henry I'll turn it over to you on that.

MR. SNIEZEK: Yes. Thank you.

We have Dr. Nancy Gassman here of the County staff to give you a 10, 15 minute presentation on the County's effort regarding climate change. This is a timely presentation, because recently the County issued its draft climate change element, and it also includes proposed changes to the Broward County Land Use Plan.

So we thought this would be a good time for Dr. Gassman to give you an overview of just the effort.

And -- and you'll be seeing this issue before the Council again, probably within the next several months.

CHAIR FISHER: Again, welcome.

DR. GASSMAN: Thank you.

I just got to have this conversation with you, with the Planning Council, in September of 2009, and a lot has happened since that time, and that's why I'm here to share some of the things that have been going on.

What I'd like to do is just give you a short primer on why climate change is such an important issue for Broward County. And I talked to you a little bit about some of our challenges, especially related to sea level rise.

Greenhouse gasses are at the core of the climate change. And the way that our atmosphere works, the atmosphere acts a lot like the glass in a greenhouse. It lets a certain amount of the sun's radiation through. The Earth absorbs some of that heat, but some of it bounces back.

And in the past, under what we would describe as natural warming conditions, we've had about 275 parts per million of carbon dioxide in the atmosphere.

And carbon dioxide is one of many greenhouse gas -- greenhouse gasses that we have a concern with.

Under global warming conditions, as the amount of carbon dioxide increases in the atmosphere, you can kind of think of it as the glass in the greenhouse getting thicker, and less of that heat that the sun delivers to the Earth is able to escape to the atmosphere, and so we get this gradual warming. And our current level of carbon dioxide is at 394 parts per million.

For the last roughly 400,000 years, the level in our atmosphere has not gone over 300 parts per million.

So we are at an unprecedented situation on our planet, where we have no way to know exactly what's going to happen in order for us -- there's -- there's no looking back into history and saying, well, what happens when the atmosphere is at 400 parts per million. It's never happened before.

So we're -- we're at an unprecedented part of our natural history with our greenhouse gasses being so very high concentration in our atmosphere. Locally, greenhouse gasses come from a variety of different sources, particularly 45 percent of our greenhouse gas emissions for Broward County comes from transportation.

Another 27 percent comes from residential electrical use, and another 24 percent comes from commercial use. So you can see that cars and electricity are the two big greenhouse gas emitters for our community.

One of the by-products of, again, this -- this increase in carbon dioxide is warmer temperatures. We're expecting to see between a 2 and a 10 degree Fahrenheit change in our -- in our local temperature in the next 90 years.

We're also expecting that this climate change is going to result in what's called climate instability, where we have much hotter summers; when we have droughts, they last longer, they're more extreme; when we have rainfall, like the extreme rainfall we experienced in the Hallandale/Hollywood area in December of 2009, we had eight inches -- 8 to 16 inches of rain in a 48 hour period. That's not a rainfall that -- that any of us has seen in our lifetime until that moment.

So, again, wetter rainy seasons, as well. And cold snaps. Many of you will remember January of 2010, where we had a week of weather that barely got above 50 degrees. We literally had iguanas falling from trees.

So this kind of extreme weather event is something that we're going to be expecting to see at a much higher frequency in the future.

And the other thing we're going to expect to see is sea level rise. Up to two to five feet by the end of the century. So let's talk a little bit about how these things happen.

Carbon dioxide goes up. It's a leading indicator. And then sometime after that carbon dioxide concentration goes up, the air temperature rises. There you have your global warming.

As the air temperature rises, you start to get ice melts. There's unprecedented level of glacier melt and melt of the Greenland ice cap at this time. And in addition to ice melt, the sea surface temperature also goes up. So the oceans are also warming as we go forward. And as those things happen, sea level rises. So the implications for sea level rise in southeast Florida are rather significant.

We may -- we will be having increasing saltwater intrusion into our drinking water aquifer, the Biscayne Aquifer. We're going to see increasing challenges with both drainage and flood control. There will be impacts to both public and private infrastructure.

Our beaches will be at the front line of what's going to happen related to sea level rise. And there will certainly be impacts to coral reefs and to the Everglades, two national treasures here in the south Florida area.

The picture you're looking at right now is essentially a topographic map of Broward County.

The areas that are in the light colors, the light yellows and the light greens, are very low-lying areas, and the areas that are in the browns and the bright whites are relatively high areas, not as you would compare us to maybe Colorado, but compared to ourselves.

The areas in the north part of the County are at the -- between 14 and 20 feet of elevation, whereas the areas in the south part of the County, both coastal and in the southwest, are more in the range of something less than 5 feet of elevation in -- in most locations.

When you overlay sea level rise onto this elevation map, what is revealed is that at a one-foot sea level rise, which is projected to occur sometime between 2040 and 2070 from the 2010 baseline, you'll see areas that are in orange and in -- in purple that show those low-lying areas as potentially inundated when sea level rises.

And this vulnerability analysis is a great tool for us to start looking for specific areas of concern within our county. Two areas that you can see very easily

there is Westlake Park, which is a coastal wetland, and the area more toward the lower center is Pond Apple Slough, another natural area that's low-lying and is a -- is a wetland.

When you look at a two-foot sea level rise scenario, which could happen in less than 50 years or as late as the end of the century, what you see is, again, increasing areas that are impacted by sea level rise.

The coastal -- coastal areas will be increasingly inundated because of our tidal water bodies.

But you'll also notice that there are some impacts in, for example, southwest Broward. And those impacts are possible because our groundwater and our surface water are very closely tied together, and that as sea level rises, we will have increasing challenges to move that water from rainstorms, for example, into the canal systems and then push that out to the ocean, which is how our drainage system works.

But sea level rise is not only a concern for the future, it's a concern right now. Every fall, we have seasonal high tides that occur in, for the most part, September, October, and November. And they -- they occur about three days during that month.

This is a picture from 2009 when there was one of these extreme high tides, and it completely flooded out an area that's -- that's right next to the Performing Arts Center. And there happened to be a wedding going on, and they thought it would be a lot of fun to go and play in the water.

And -- and while sea level rise might be a recreational opportunity to some, it also demonstrates that our existing infrastructure is already challenged by the sea level rise that has occurred over the last hundred years. And that's about 8 to 10 inches. And these extreme high tides start to give us start to give us a picture of what our future conditions will be.

And another example is this is a home in the Fort Lauderdale area, and you'll notice that there's a storm drain right at the end of this driveway. Under these extreme high tide conditions, rather than the water draining out that storm drain, the water comes up.

And the water that we usually see go down the storm drain is fresh water, but during these extreme high tides, in certain locations, it's salt water that's coming up and completely flooding those neighborhoods.

And this is also true in areas where there's brand new construction going on, where, during nine months of the year, where the tides are not particularly

challenging, it's high and dry, but during that three month time period, again, about three days each month, you're seeing situations where, in fact, the streets are completely inundated with saltwater.

Again, a highly corrosive situation to drive your cars through. And even that new construction now is already, before anyone has taken occupancy of that home, they already have challenges to -- to get access to their homes.

And for someone who's buying a home in the spring, which is a beautiful home, sitting right on the water on a beautiful canal, you're going to buy that home in the spring, you're not going to know that in the fall you're going to be experiencing days where you're going to have extreme high tides.

And for anyone who is concerned about flooding and flood insurance, how many days a year are you willing to have your home flooded? And I think most people would tell you that the number zero comes to mind very quickly. And so it is because of these reasons that the Climate Change Task Force had made a series of recommendations that we need as a community to start looking at these issues and the vulnerability of both our public and private infrastructure to these issues of sea level rise, and to develop some changes for our Comprehensive Plan, to start looking out both immediately to protect our existing infrastructure, but also, in the long term, to start thinking about land uses that are associated with areas that are particularly low lying and vulnerable to sea level rise.

And so there were two action items that were highlighted in the Climate Change Action Plan. Again, one for the Comprehensive Plan, and the other one for making some Land Use Plan amendments.

In addition, the State of Florida last year passed some legislation to create the definition of adaptation action areas.

And the idea is that it's an optional component of your local Comprehensive Plan, and it allows you to identify some of these areas of particular concern that are low lying, and to consider policies, and prioritize funding to allow for an adaption in those areas to protect the existing infrastructure.

In addition, there's a group called the Southeast Florida Regional Climate Compact. They're made up of Palm Beach, Broward, Monroe, and Miami-Dade Counties, and they've also embraced this idea of the adaptation action area, and have incorporated it into the draft Regional Climate Change Action Plan to look at again at our Comprehensive Plan and our Land Use Plan to try to begin to plan and protect the future of some of these locations from the inevitable impacts of sea level rise.

So, in conclusion, I'd like to say that climate change is already impacting our community, both in the rainfall and our temperature, and in sea level rise, that greenhouse gas emission mitigation needs to be an important part of our future, as well as adapting to the impacts of sea level rise and other climate impacts that we already know will be coming.

And so, in August, we -- we will be bringing forward to you some proposed updates to both the climate plan -- I'm sorry, the compact -- there's too many C words -- the Comprehensive Plan, as well as Land Use Plan, for your consideration and approval.

Thank you.

CHAIR FISHER: Very good, Doctor. Thank you.

Anyone have any questions or comments?

COMMISSIONER MALLOZZI: I have a question.

CHAIR FISHER: Yes, please, Commissioner.

COMMISSIONER MALLOZZI: In one of your first slides -- and, again, I believe in climate change. I'm probably one of the greenest people you'll meet.

But -- and here's the question. In one of the first slides, you said that now we're at 394 parts per million, and in the past thousand years it has not gone over 300?

DR. GASSMAN: 400,000 years.

COMMISSIONER MALLOZZI: How do we know that? No offense meant, but --

DR. GASSMAN: From a scientific standpoint, we're able to use a variety of other measurements to determine what the atmospheric composition was. Some of -- some of the ways that they do that is using ice cores. Ice cores trap micro bubbles, and they're able to tap into those micro bubbles and determine how much carbon dioxide was in the atmosphere at that time.

And so --

COMMISSIONER MALLOZZI: But --

DR. GASSMAN: -- we've got some very long-term records, collaborated

from many, many sources, that allow for us to date that time frame back a long way.

COMMISSIONER MALLOZZI: Okay. May I?

CHAIR FISHER: Uh-huh. Please.

COMMISSIONER MALLOZZI: I remember when you were here in September, and, actually, I want to say prior to that we had a few different people discussing this.

And, again, I'm all for anything we can do.

I recall at one of our previous presentations how we needed to raise roads in order to prepare for when the water level rises and -- and have larger pads on -- on homes and whatnot.

Has that been done, or do you see it? And is that going to solve it? Or are we changing, and the change will not be enough?

DR. GASSMAN: It's really a -- a multi-fold question.

I think that there are many opportunities during normal operation and maintenance of our roadways and other infrastructure to make incremental changes that will help us to make sure that that infrastructure is able to live out its useful life -- lifespan.

But in our long-term planning, we need to make decisions about whether that infrastructure is going to continue to be there for the very long term.

There are certainly roads in a number of areas, Key West would be one great example, downtown Miami-Dade, has raised their roads in a couple of locations in order to reduce this flooding situation.

Hollywood has put in a number of storm water pumps along the intercoastal waterway near the North Lake and South Lake areas, to help move water off the land, both during storm events and during these high tide events.

But a pump that has to run three days in three months in order to deal with tide is going to be not the right solution once sea level has risen -- risen to the point where it's an everyday inundation.

So those kinds of adaptations are great for the short term, and they do provide an opportunity to, again, maintain the existing infrastructure, maintain the existing properties.

But, over time, other decisions are going to have to be made in order to recognize that we can't hold back the ocean in every location.

COMMISSIONER MALLOZZI: Thank you.

CHAIR FISHER: Commissioner Castro.

COMMISSIONER CASTRO: First, Dr. Gassman, I want to thank you for your work and people like Dr. Jurado and others, because I know sometimes there are non-believers, and it's a challenge every day.

And -- again, to, you know, Commissioner Mallozzi's point, whether you believe in global warming or not, things are happening that we have to deal with.

DR. GASSMAN: Yes.

COMMISSIONER CASTRO: For instance, in -- in some areas now, because of the flood control planes, some of the local planning groups are being asked to raise the height of new construction --

DR. GASSMAN: Uh-huh.

COMMISSIONER CASTRO: -- and when you have an existing neighborhood with an urban infill lot, the new house all of a sudden is eight feet higher than all the houses around it, it presents some unique challenges.

So I think there's a lot more tentacles here than what you've even alluded to that the planning people need to really kind of get into and figure.

The one thing I want to ask you about, though, is -- and you've touched on it, is the impact of climate change specifically to the water table and potable drinking water.

I -- I always find it ironic that we go through these serious droughts in Florida and have no water, but that we have saltwater intrusion coming into from the raising ocean. For whatever reason it's raising, it seems to be coming inland, which means the amount of potable water decreases.

And then, ironically, when we get the flooding inland, we trying to throw it in the canal and put it back out in the ocean.

So what is the plan to tie in this with the whole drinkable water and maybe horizontal wells or whatever you want to call them, tanks, you know,

saltwater type desalinization plants? How -- how does that fit and where do you see the County?

And -- and I'm glad you made it regional with the whole south Florida area, the tri-county, and I know we're reaching out to the west coast, as well. How do you see that playing out?

DR. GASSMAN: Well, what -- the water resource aspect of it is one of the most challenging.

The -- the vulnerability maps that I showed you are what are called bathtub maps. They are the simplest versions of how we can figure out where are the critical areas that we need to start contemplating.

But we need much better modeling to really understand how sea level rise will impact this lens of fresh water that sits under -- under the County.

So some of that modeling is underway right now, and we expect to have results in the next couple of years to better understand the interplay between sea level rise and groundwater levels.

In areas of the County that are more west, those areas have sophisticated drainage systems, which allow them to hold more water. It allows them to mound water higher or lower, depending on what the needs are.

And so those areas are -- they have -- they have better tools to start dealing with small changes in both rainfall and sea level rise.

It's the areas that are to the east that do not have those same kinds of mechanisms to be able to hold back the water that are more challenging.

COMMISSIONER CASTRO: And just to interrupt you real quick, even the areas out west, though, it's going through a natural drain system, and I assume it's percolating down then back into the aquifer at some point.

And then we have the problem where the aquifer sometimes has a saltwater intrusion that sort of kind of backs up a little bit.

Is there any consideration or planning to -- literally going to what I call lakes or horizontal wells -- I don't care what name you call it -- and doing a storage without having it seep through, and treat it in a different way so that -- and I don't mean to capture -- I guess I do mean capture it before it even seeps into the ground, so that we can maybe effect a positive water supply?

DR. GASSMAN: One of the major portions of the Everglades Restoration

Plan, which -- 20 year planning activity, was to try to find more storage. It is one of the real challenges of our area, is that we can't really store what we have. We have a finite amount of ability to -- to put the water somewhere and wait for it.

There's something called aquifer storage and recovery, or ASR, and that's putting excess fresh water down into a very deep hole and hold it there for a period of time.

And that technology is being used in some of our --in some areas, but it's still very exploratory in Broward County. There -- there's at least one ASR well, I believe, that -- that's currently in use in Broward County.

But, again, it's limited in the amount of capacity.

Our -- our big challenge over the next 20 years is to try to use -- simply use less water per person.

And conservation's going to be one of the major horizons that we need to consider by using low flow fixtures, low flow toilets, and just using water more wisely, planting our yards so that they don't need so much irrigation water.

These are all some of the challenges. And the other opportunity that is out there is reuse water.

COMMISSIONER CASTRO: Right. Thank you.

CHAIR FISHER: Ms. Graham, and then Mr. Burton.

MS. GRAHAM: Thank you, Mr. Chair.

Just real quick, you know, the less we use, the higher the rates go up, because it's a revenue stream for the municipalities, unfortunately.

COMMISSIONER GUNZBURGER: (Inaudible) – bonds.

MS. GRAHAM: I'm sorry?

COMMISSIONER MALLOZZI: Bonds.

COMMISSIONER GUNZBURGER: They are backed by the utility costs, so that we have to raise a certain amount to pay off the bonds.

MS. GRAHAM: Right. Well, we see it in Fort Lauderdale.

But you -- you didn't go into it in detail, but as they put these pumps on these finger canals or on these finger islands, like they have in East Las Olas side streets, where are they pumping the storm water that they're capturing, if the water table is high and the tides are high and water's finding its level?

DR. GASSMAN: In -- in the areas that are tidal, the areas that are influenced by the tide, where you actually see the water go up and down, that's saltwater or brackish water.

And so there is no storage of groundwater there, because there is no -- for the most part, there's no fresh water there. The -- the underlying geology is completely infiltrated by saltwater.

It's the areas that are further inland that they have an opportunity to deal with groundwater in -- in a different way.

MS. GRAHAM: So it's accepted that it's all mixing when it's on those finger streets and finger canals on the east side of town?

DR. GASSMAN: It's -- yes.

MS. GRAHAM: Okay. Thank you.

DR. GASSMAN: Yes.

CHAIR FISHER: Mr. Burton?

MR. BURTON: Thank you.

I see this as kind of two issues. The first is the slowing of the global warming and then the sea level rise on the global level, but also, for our purposes here, the effects in dealing with it in, south Florida in particular.

A couple things. Commissioner Castro, you alluded to something that is very important today. When you just fill in on certain areas, oftentimes it not only looks somewhat awkward to have a new home sitting eight feet higher than a -- than an existing home, but also you have to deal with the water runoff when it rains.

And a lot of times -- I hope everyone keeps this in mind -- that even if we raise the level of the streets, a lot of times it keeps the streets clear, but then it ends up causing water runoff into the adjoining property owners, and it creates a lot of problems.

So just filling in in certain spots and not filling it in other spots is really just

redistributing the problems more so than -- than solving them.

The other thing is with regards to pumps, you know, they're good when they work, but in the event of a hurricane or some sort of power loss, like we've experienced, you know, there was a pretty big outage back in 2005 in Wilma, and if you have a scenario where you're relying upon pumps, if they go down, you're really up the creek without a paddle in more ways than one. But with regards to holding water, I don't know if there's been any studies with regards to -- because it's more -- seems like it's more of an eastern Broward County problem, for example, using some of the lands that are public lands for parks and things like that.

And I know like in Weston, when they built the community, they build a lot of lakes. And, you know, they're beautiful, but they're also, you know, used for the water runoff.

And I was wondering if there was any, you know, studies or anything that if some of these park lands or other lands east that could be used in order to accommodate some of the -- the water runoff.

And also just kind of consider the other impacts of just changing one aspect versus many --

Thank you.

DR. GASSMAN: On the development side, if you go to areas like Key Biscayne and certain areas in Southwest Ranches, you -- you see this differential redevelopment, where all the houses were one story and they were on half an acre, and then they start putting -- they break -- they demolish those homes and they put in the new home, and they build to the new building code, and those houses are much higher.

And, yeah, they do create -- but, unfortunately, that's the evolution of our community, that new homes are built to new -- new standards, and they deal with the new regulations that are in place.

And every community goes through it, and, again, it's -- it's a -- it's a natural evolution of the development and redevelopment of a community.

And so a community that was built in the 1940's, over a period of 10 or 15 years, the majority of those homes get redeveloped, either renovated or demolished and -- and redeveloped over a certain period of time.

And so one of the challenges and -- and one of the opportunities for us in this community is to say in the next 50 years, when we're expecting this one foot

of sea level rise to occur, we have an opportunity to change our redevelopment standards so that we -- we use climate change as one of the criteria that we consider when we redevelop, to make sure we redevelop in the right places and redevelop with the right kinds of buildings to deal with these -- these changes that we're having in our community.

Relative to the pumps, you're absolutely right. The pumps are a challenge. If they don't work, then you're going to be dealing with the situation if you didn't have that opportunity.

The other thing is the more pumps we use, the more electricity we use, the more greenhouse gasses we start to admit -- emit, and now we're back to the situation that got us here in the first place.

I don't think I've answered your question. Could you just repeat it?

MR. BURTON: No, you did. I mean, I just wanted to make sure that everyone was kind of thinking, you know, before you just kind of raise a road, you understand what happens around it.

DR. GASSMAN: Yeah.

MR. BURTON: But the only other question I had was if there was any studies for retaining water --

DR. GASSMAN: Retaining water on natural lands.

MR. BURTON: -- on parks or other places.

DR. GASSMAN: When you look at the first foot of sea level rise, the majority of -- in terms of percentage, of the lands that are impacted are conservation lands and natural lands that have been set aside for the enjoyment of the public of these natural habitats.

To actually store water on those public facilities would essentially remove their recreational function and their open space function, which, as you know, when you redevelop land, you have to have a certain amount of open space, there's a ratio of open space that you need for the development that's coming in.

And so if you start removing those lands for a storm water management function, you start to change the ratio of available land that would allow for redevelopment.

Most of our parks have both a natural function as well as a recreational

function. And by flooding those areas, you would be completely removing the potential for the natural function and, potentially, the recreational function, as well.

So have there been discussions along those lines? Yes. Every -- everything's on the table when we're having these longer-term discussions. There hasn't been a definitive decision about whether that's a viable option at this time.

MR. BURTON: Thank you.

CHAIR FISHER: Mr. Burton, just to -- just to elaborate on that, and maybe, Henry, you can provide the -- the contact information to Mr. Burton concerning the Broward County Water Resource Task Force. They've been meeting for over, I guess, two years now.

DR. GASSMAN: Yeah.

CHAIR FISHER: And one of those items have come up, the C-51 Reservoir, which is in Palm Beach County, to be able to -- just to do exactly what you're doing, storing the water.

So you can actually get some of those recommendations that Henry can forward to you. It's interesting reading. It's an interesting concept that could become a reality, exactly what you're talking about.

CHAIR FISHER: Commissioner Mallozzi.

COMMISSIONER MALLOZZI: I just wanted to state, you know, earlier you said how conservation is -- is key, water conservation is key to this.

Several years ago, my city was faced with either spending approximately 12 to \$14,000,000 to dig into another aquifer or get our residents to conserve water.

We opted to get our residents to conserve water. And the you -- You Save, We Save, We All Win Water Conservation Program, we've been recognized at the County level, State level. We've won awards like you would not believe.

It's a great program. We have -- and we were going to wait for -- it was supposed to take place over 10 years, and in three years, we've saved over 5 percent of our -- of our water consumption already.

And it's -- it's projected to go well into more than we could ever dream of.

I'm saying that, A, to give my city a pat on the back, because I think it was phenomenal.

But, B, there are many elected officials here. Mike Bailey is our Utilities Director, and he has no problem sharing information if you're interested in seeing how certain aspects of it might be applicable to all of your cities, because it really is a phenomenal program.

Thank you.

DR. GASSMAN: Right now, the -- the County is working with, I believe it's 15 municipal partners and local utilities under the Conservation Pays Program, where they are providing rebates for low flow fixtures.

And so, as -- as much as I wish that was 31 municipalities, at this point we've got about half of them on board, and we're -- we're working toward that -- that goal together.

So the County has certainly been very inclusive in trying to include all the municipalities in the efforts that we are moving forward.

We've had conversations with other groups like the Transportation Planning Council, as well as the Metropolitan Planning Organization to talk about these issues in -- in a broader context, and, of course, at the regional level, having the discussions with the other counties about what we need to do as a community.

CHAIR FISHER: And reuse is where it's at. I mean, our reuse program in the City of Pompano has been implemented for many, many years. But we even had an opportunity to --

DR. GASSMAN: Yeah.

CHAIR FISHER: -- help serve Lighthouse Point and the FDOT highway sector.

So it's been a tremendous program.

DR. GASSMAN: The --

CHAIR FISHER: I think that's where we're going to have to go.

DR. GASSMAN: -- the Oasis Program is --

CHAIR FISHER: I think Pompano's been fortunate to have that program in

place.

DR. GASSMAN: Yeah. The -- the Pompano Beach Oasis Program is -- is a great model for others in the County to -- to contemplate and consider in -- in reducing water use.

Any further questions or comments?

MR. BASCOMBE: I do.

CHAIR FISHER: Yes, Mr. Bascombe.

MR. BASCOMBE: First of all, I'd like to say first of all, thank you very much for making that a very clear and concise presentation, because having the children here is kind of wonderful, because it's -- that subject will impact them many years from -- from what we're doing now, and what we do now will impact them.

So, Dr. Gassman, I have two questions.

One -- one is there is a lot of information out there that's available -- and thank you, Henry, and staff, for providing me, because I've done a lot of studying, or I've read up on this to understand the subject. And it's a very complex -- lot of different variables that come into this.

But one thing I haven't seen is what happens at four and five feet of sea -- sea level rise.

There's a lot of graphics. There's a lot of things that do one, two, and three, but what -- what is the impact when we get to those kind of stages, if we get to those stages?

And another question, just so I don't have to ask again, on a bigger picture, how do we stack up as far as producing greenhouse gasses versus, say, China and India?

Just -- I'd love to know that, because that's another -- that's another -- you know, we -- we talk about what we can do, but what can we do, also, to impact versus what they do?

DR. GASSMAN: Okay. Your first question is why haven't you seen maps that are at four and five feet. I think there's -- they're -- they're out there. You can -- you can find them up to 20 to 30 meters if you're really interested in the doomsday scenario.

But at this point, on the -- on the time scale of community planning and

community change, a 50 year time frame is -- is, I think, what most people can potentially wrap their -- their head around. And -- and a 20 year time frame is even better to be able to say what are the things that we can put in place now that will still be there in 20 years.

And so from a decision-making process, it's -- it's easier to talk about some of these long but -- but shorter term time frames.

I think the other aspect that -- that the reason why we at Broward County are not advocating showing these long, long term vulnerability maps is that in that time frame, which is more than a hundred years, so much can change, both in terms of the science and in the development of the community, that you're looking at something that has -- has no real connection to reality, because, from a scientific standpoint, we're going to have -- have a much -- we're going to have better sea level rise projections in the next few years. We're going to have better modeling. We're going to have a better understanding of what the potential is for us to both reduce the amount of greenhouse gasses but also, as the technology changes, better ways to address climate change.

MR. BASCOMBE: I -- I --

DR. GASSMAN: And so a -- a five foot map is saying, if nothing changed from now over the next hundred or a hundred and fifty or 200 years, what would it look like?

Well, when you get that far out, it's -- it's not very realistic.

MR. BASCOMBE: -- I -- I understand what you're saying. And I understand from a cost perspective we have to think in the short term. We have to think medium term. Because we're really -- we don't want to put money out there that doesn't.

But I'll give you an example. If Governor Broward wouldn't have put the canals in, we wouldn't have had this issue with the Everglades. Maybe they didn't go long term on their studies.

Obviously, that was a long time ago, but what can we do now to study this, to kind of counteract those kind of situations when they -- when they happen?

DR. GASSMAN: What can we do to study it?

MR. BASCOMBE: We could study it --

DR. GASSMAN: That's happening -- that's happening from -- from a global

perspective.

MR. BASCOMBE: But that -- those studies or that information, I think we, as Council people who can actually make different policy changes, we need to know that as well.

And I -- and I've -- I have not seen that -- that information. I'd -- I'd love to get to that depth to be able to know that kind of information to be able to make the right decisions now.

DR. GASSMAN: I -- I think you're a very forward-thinking elected official, because a lot of elected officials are --

MR. BASCOMBE: I'm not elected. Thank you. Which --

DR. GASSMAN: Okay. A lot of -- a lot of parties don't want to think about things that are going to happen past their term of office, and so that's -- that's a very forward-thinking attitude.

I'll give you my card. I'll -- I can provide you with some additional information about some of these longer-term projections.

But, again, in general, I -- I would discourage from looking too far out, because it -- it becomes a situation that's just very difficult to think about in a coherent way in terms of community planning.

MR. BASCOMBE: But that's why we need -- I love to give -- give this analogy. We need chess players, people who think ten moves ahead, to be able to use the information correctly.

DR. GASSMAN: Right. And I -- I agree with that. But I think one of the challenges is that when I -- when you show pictures like someone floating in their front yard, there are people whose reaction -- their immediate reaction is I'm going to go home and pack up my suitcase and leave.

And when you look even at a three foot sea level rise scenario for our community, there are plenty of places that we can continue to have a vibrant and valuable community.

And so, to me, showing -- showing things that are significantly farther out gives people the sense that this is going to happen, but it's not going to happen in their lifetimes, necessarily, and it's not going to happen in their children's lifetimes, necessarily.

And I think it -- it prevents them from thinking about the fact that the human

population is very resilient, and that, along with changes in technology and changes in attitude, this community will continue to have a lot to offer for a very long time.

But I think that when you start talking about things that are two and three and 400 years out, that it changes the way they view it in a way that prevents them from doing things they need to do today to make a difference.

On your other question, U.S. versus China versus India --

MR. BASCOMBE: Well, I'd love to know this one, the answer to this.

DR. GASSMAN: -- ten years ago, the U.S. was using about 20 -- generating about 20 percent of the greenhouse gas emissions, and yet we only have 5 percent of the world's population. Whereas, China has something along the lines of 40 percent of the world's population.

Six years ago, they caught up with us per capita, so they are now -- I'm sorry, not per capita. They are now generating the same amount of greenhouse gasses that the United States is generating, but their population is significantly larger than ours.

So the United States has a long way to go in order to reduce their per capita generation of greenhouse gasses, but developing countries -- countries, especially China, are now at a point where they are starting to generate as -- as much greenhouse gas emissions as we are.

The one advantage is that because they are a developing country, they are using today's technologies to develop -- to develop their country, which means that they're using low emissions -- low emissions everything. Low emissions construction practices, low -- low energy fixtures.

So that's their advantage, because they're building today with today's technology, but they -- they've caught up with us.

And I -- I don't have the numbers for India, off-the-top-of-my head.

MR. BASCOMBE: Well, I just spent -- about two months ago, I spent two weeks in Quanzhou, and I saw the worst pollution I have ever seen in my life. I was there for two weeks, and I saw the sun --

DR. GASSMAN: Yeah.

MR. BASCOMBE: -- once, and it wasn't cloudy.

DR. GASSMAN: Yeah.

MR. BASCOMBE: And it was -- it was unbelievable, actually.

DR. GASSMAN: Yeah. They're -- as was seen in the Beijing Olympics, their -- their pollution prevention framework, regulatory framework, is not what it -- what it should be, based on the level of development that they have moved forward in.

And in the United States, we have very good pollution control. However, we still generate a lot of greenhouse gasses, especially related to single-occupancy vehicles.

MR. BASCOMBE: Are we generating more or are we at a steady neutral as far as --

DR. GASSMAN: The numbers that I've seen over the last few years is that we are in decline in terms of the total amount that -- that we are generating. But it's not declining at the rate that, for example, the U.S. Mayors' Agreement would recommend. We've -- we've got to go a long way to slow down this train that's moving forward that is climate changing.

MR. BASCOMBE: Thank you. Appreciate it.

CHAIR FISHER: Thank you.

Mr. Reinstein?

MR. REINSTEIN: Yeah. Thank you, Dr. Gassman. Thank you for your presentation.

And thank you for the fellow Council members' questions and comments, because those have been just as informative as -- as the presentation. Your conclusion finishes that proposed updates are on the way. When can we expect those proposed updates and -- and plans to help deal with these future vulnerabilities?

DR. GASSMAN: The -- the Comprehensive Plan, the climate -- we've developed a climate change element for the Broward County Comprehensive Plan. That's currently under review. We've had our first stakeholder meeting in March to get feedback on that element.

And the intent is that the climate change element will be able to be a template to be used by the other municipalities in Broward County as -- as a way to enhance their own Comprehensive Plans.

The Land Use Plan amendment also went through public comment during the March 21st public meeting, and we're expecting to be able to bring those to you in draft form for approval in the August -- the August Planning Council meeting.

CHAIR FISHER: I think that's the target.

MS. GASSMAN: Uh-huh.

MR. REINSTEIN: Thank you.

CHAIR FISHER: Any other questions or comments from anyone?

DR. GASSMAN: Okay.

CHAIR FISHER: Dr. Gassman, thank you so much.

DR. GASSMAN: Thank you so much for your time.

CHAIR FISHER: Really appreciate it.

COMMISSIONER CASTRO: Thank you.

CHAIR FISHER: That completes R-3.

AGENDA ITEM R-4:

CHAIR FISHER: R-4 is Counsel's report.

MR. MAURODIS: I have none other than to add my voice to all of yours. I've worked with Henry for 16 years. He's -- I've represented government officials for 32 years.

Henry's one of the -- the finest public servants I've ever had the honor to work with. And I'll miss -- I'll miss working with him.

And he's been an absolute pleasure.

CHAIR FISHER: Very good.

MR. SNIEZEK: Thank you.

AGENDA ITEM R-5:

CHAIR FISHER: Executive Director's Report, Henry?

MR. SNIEZEK: Yes, just ditto about working with Andy. You've got a great attorney, one of the best.

(Laughter.)

MR. SNIEZEK: That's right.

And -- and furthermore, I want to congratulate Barbara. I mean, she was nice enough to say that I'm a good person, well, I think Barbara's a really good person.

But, even more importantly, she's really skilled and talented professionally, and you're going to be in really good hands.

And just want to congratulate her.

Couple other things.

There's a cake. I could try a man versus food type thing and try to take -- take care of it myself, but I think I'd rather share it. So, please, if you have a chance and you want some cake, there's a big cake.

And third, just -- just the absences. Commissioner Bruck is -- had surgery on her knee --

MR. SNIEZEK: -- and so she wasn't able to make it today.

And Commissioner London is out-of-town, so that's why he's -- he's not here.

I think Mayor Udine sent an email that you all got.

CHAIR FISHER: He did.

MR. SNIEZEK: And Sara Case contacted me just before the meeting. She wasn't feeling well today, and she couldn't make it. But she did want the Board to know she would have voted for Barbara.

CHAIR FISHER: Great. Very good. Thank you.

And I believe Mr. Reinstein provided that correspondence. We appreciate you doing that.

That concludes our Regular Agenda.

PUBLIC HEARING

AGENDA ITEMS PH-1 THROUGH PH-4:

CHAIR FISHER: And on our Public Hearing Agenda, Items 1 through 3 are Quasi-judicial.

Andy, are those waived?

MR. MAURODIS: They have all been waived.

And if no one from the public wishes to speak, and there's no objection to the staff recommendation, we can approve them all in a single motion.

CHAIR FISHER: Okay. PH-1 through 4. Does anybody wish to pull an item?

Is there a motion?

COMMISSIONER CASTRO: Motion to approve PH-1 through 4.

MR. HOBBY: Second.

UNIDENTIFIED SPEAKER: Second.

CHAIR FISHER: It's been moved and second.

All in favor, say aye.

Opposed?

Motion does carry.

Thank you.

VOTE PASSES UNANIMOUSLY.

OTHER BUSINESS

NEXT REGULAR SCHEDULED PLANNING COUNCIL MEETING

CHAIR FISHER: Our next meeting, of course, will be on May 24th, 2012. And, again, Henry has stated, let's enjoy some cake together.

ADJOURNMENT

CHAIR FISHER: This meeting is adjourned.

(The meeting concluded at 10:58 a.m.)