

**Planning & Zoning Commission Meeting
Comprehensive Plan Review Update
Milton Fire Hall – 116 Front St
Monday, July 28, 2014 – 6:30 pm**

Minutes are not Verbatim
Transcriptionist: Helene Rodgvile

1. Call to order – Barry Goodinson

2. Roll call of members

Don Mazzeo	Present
Mark Quigley	Present
Linda Edelen	Present
Lynn Ekelund	Present
Barry Goodinson	Present

3. Corrections and Approval of agenda

Barry Goodinson: Do we have any corrections to this evening's agenda? Any corrections or changes. May I have a motion to approve the agenda?

Lynn Ekelund: Move to approve the agenda.

Mark Quigley: Second.

Barry Goodinson: All those in favor say aye. Opposed. Motion is carried.

4. Approval of minutes – none

5. Business – Discussion and possible vote on the following items:

a. Comprehensive Plan Review/Update

The main topic of the discussion will be “The River”.

Barry Goodinson: So I want to welcome you all here and I do want to acknowledge here that we have State Senator Ernie Lopez here and is Representative Smyk here? Not yet. We'll welcome him when he arrives. This meeting is going to be a little bit different from the past two that you all have been to. The last couple have been very interactive, so there won't be any little clickers to vote with or any dots to vote with and there won't be a lot of walking around. We're trying to balance the Comprehensive Plan process, with lots of dreaming, but also with lots of data and we want to make sure that the plans and the ideas that we put forth in the Comprehensive Plan are based on sound science and sound data and that's why we're here tonight. Lots of good ideas have emerged. We've talked about the river on a couple of occasions. It came up as part of the Core Values for this town. It's very clear that the river is the physical and emotional center of this town and the Comprehensive Plan will reflect that and the Core Values that are put forth, will place the river front and center. When we had the meeting about the Town Center, the first conversation we had was about the river, because we can't talk about downtown Milton, without discussing the river that both draws people to downtown, but also sends businesses running when the river

overflows its banks, so we need to be clear what our opportunities and options are and we've got to be realistic about what the river is going to do to and for downtown Milton. We'll also continue to discuss the river, at subsequent meetings. On August 23rd we're going to have a discussion about open space, recreation and environmental protection. Obviously, the river will come up again then and then on November 20th, we're going to have a special conversation about Front Street, which is a main entrance into town, overlooked. It's neglected. It runs parallel to the river. It gets flooded. There seem to be opportunities there. Clearly we've got to do something about Front Street, so we'll be discussing the river again in November. These are all on the town website and we also have a Facebook page, called Milton Plan, so if you want to check. At subsequent meetings, we will hand out another flyer. We've handed them out a few times with all of the dates, but we'll just make sure that these are on people's radar. As we move forward and start talking about the river and what our options are, we want to establish a baseline about what the river is doing, what it's going to do over the next several years, the next several decades, so we've invited Susan Love to come and present to us. She also has brought Michael Powell. He's the Flood Plain expert from DNREC. Susan is a Resource Planner from DNREC. She is the sea level rise expert, so she'll talk to us a little bit about how sea level rises will affect the river and then we'll just kind of have a free flowing conversation, she's got lots of information. Would you prefer holding questions until the end?

Susan Love, DNREC, Resource Planner: No, because that's boring. Let's ask questions as we go along. If it gets out of hand, you can...

Barry Goodinson: Oh, I don't mind stuff out of hand, so don't worry. Feel free to interrupt. Ask questions. If we have time at the end, we may ask for general comments and ideas that people have that we could think about for the Comprehensive Plan, but just remember, the conversation about the river is going to be an ongoing one, so there will be opportunities to discuss the river in other contexts. With that, let me introduce, Susan.

Susan Love: Great. Thank you everyone. Thank you Barry and Hal for inviting me. Hal cornered me at a League of Local Governments meeting a couple of months ago and said would you be willing to come to Milton and talk about this stuff? I said, thank you, I would be so happy to come and I'm so grateful that there are so many of you here today. If we dim the lights will everybody stay awake? Good. Can you hear me? Okay. My job at the Department of Natural Resources and Environmental Control ("DNREC") for the past five or six years has been to explore the issues of sea level rise in the State of Delaware and I'm here primarily to talk a little bit about that, but because I can't help myself and because I love the rivers in Delaware. I think Milton is a wonderful town with really great opportunities for riverfront recreation and development. I'm going to stick a couple of other ideas and information in as we go along. But the river is an opportunity for you guys. It's beautiful. It's a recreational amenity. It already is a recreational amenity. It has the ability to perhaps be a bigger draw for people, tourists and residents in the future, but it's also a threat in many ways and I think you may already have some flooding issues today and Mike is going to talk a little bit about some of the those issues, but as we move into the future, climate change is going to make some of your flooding issues worse, as we go and they need to be addressed and thought about now and I'll talk a little bit more about that. There was a report from NOAA that I got in my hands at 4:00 this afternoon, that's done a comprehensive assessment of flooding issues on the east coast and they have found that

using tide gauge information from Lewes, which isn't so far away from here, they have found that nuisance flooding; some of that routine, every couple of months flooding, that this road is underwater again, it has increased 304% since the 1950s. So I've heard throughout the state, we're flooding more frequently. We're seeing these roads go underwater more. I'm having water in my basement more often and now that's actually been substantiated by some data that's coming out of the Federal Government and I don't have that report yet, but I will very soon. The science is following what people on the ground are already experiencing. It's flooding more frequently. So I really encourage you to think about this, as you move forward with your planning and visioning for the future of this town and the Comprehensive Plan is such a great opportunity to really do that and think far, far into the future and put some things into place and start thinking about them today, that might take 20, 30, even 40 years to implement. But by starting them today, your kids and your grandkids will be able to see those through and enjoy the results of that. I just want to point out you all live here, or love this place; you know where you are, but you're in the center of a really diverse and valuable landscape; both for natural resources and for agriculture and for recreation and this blue circle (can everybody see that?). Okay, good. This blue circle is your town and all of the green and light green stuff around there is conservation land and wildlife habitat and you've got conservation, agricultural land all over and your town is the bridge between a lot of this land; which not only needs wildlife habitat, water quality benefits, but also recreational amenities and tourism. So you're a link, you're a key link and that river is really the key piece, linking all of these little ecosystems in the state. As I said, the river brings you lots of opportunities and this is Kyle, our Intern. Say hi, Kyle. Last week Kyle and I and staff from our program went up the Broadkill River and got to experience it from Lewes, all the way to downtown Milton. We could not get out of the boat and have lunch and a beer, like I wanted to; because we were on state time, but I hope to repeat that very soon, on the weekend. So you have a great amenity. It was a beautiful day. People would really enjoy doing that, not on state time, but again there are risks that come with living so close to a river. So, already as we said, Milton already has some flood plain issues and this map, the blue outlines the designated and mapped flood plain in Milton today. It's a little hard to see. It covers a lot of the downtown area and this is where I hand it off to Michael Powell.

Michael Powell: Thanks, Susan I appreciate it. I'm a scientist for the DNREC Division of Watershed Stewardship and I just wanted to say a few things that are going on right now in the world of flood plain management, it's a busy time. Delaware Senate Bill No. 64, legislation that was passed two years ago in 2012 formed a Flood Plain Drainage Advisory Committee and the committee came up with several recommendations for flood plain and drainage standards that would alleviate flooding and drainage issues. I'm sure quite a few of them would be very applicable to the Town of Milton and that report from that committee is available on the DNREC website, if you just look for the Senate Bill 64 Flood Plain Drainage Advisory Committee. The only other thing I wanted to mention is that all of the flood plain maps in Sussex County are being redone by FEMA. There have been preliminary maps issued for the entire county, including all of the Town of Milton's flood plains and as a result of these new maps coming out, our department is working with all communities in Sussex County to encourage that they update their flood plain regulations. I realize that the flood plain regulations are not the purpose of

this evening's meeting, but they are very much a partner to the issues that are being discussed tonight. So the new maps from FEMA are expected to become effective in March of 2015 for Sussex County and we are working with all of the communities in Sussex County to make any flood plain regulatory changes that they may wish to make by that date of March, 2015. I saw a gentleman here with his hand up.

Unidentified Speaker: Is there a website where we can see these maps?

Michael Powell: Yes. There is. You can see them on the DNREC website, and I've got a card. What I'd like to do is give you my business card and if you want to call me at work, I can show you how to do a side by side comparison of the current FEMA flood plain maps and the proposed preliminary maps. Would that be okay?

Unidentified Speaker: Yes, thank you.

Michael Powell: Because it's a long website and I don't want to get it wrong. Thank you. Susan, I'll turn it back to you and I appreciate the time.

Susan Love: Please speak up as we move forward. Mike is a great resource and he's doing some really good things in the state. Barry, you said there's a website. If we send you some links for some of the state information, can you put that up and then those of you who are computer savvy can figure out some of these websites on your own, but then if you need additional assistance using them, sometimes it's not as intuitive as it could be. We're happy to help you navigate those.

Barry Goodinson: Yes, absolutely.

Susan Love: So, there's already flood plain issues. There's routine flooding that happens in the Town of Milton today. Unfortunately, there are some emerging threats that is going to make that worse in the future. One of those threats is sea level rise. sea level rise is one of the major impacts of global climate change and probably the most major for the State of Delaware, at least one of the most immediate. I've been researching this for five or six years; we have a statewide plan and there are some handouts up front. We can also give you those maps that we made and you can put them up on the website. We have a statewide plan for sea level rise. It's a major issue for the State, that we're taking very seriously and we are working with several municipalities to help municipalities also address these issues at the local level. So sea level rise is an increase in the average tide height, over time and it affects, not just the coastal area; the coastal area that you think of, but also tributaries inland, like Milton. It's a result of the expansion of ocean water and tidal water, as it warms. As water warms, it takes up more space and then melting of glaciers and ice caps. You get more water coming into the system; it's getting warm; it's taking up more space. We're already seeing the impacts of this, as documented by that report. It's also influenced here in Delaware by subsidence, or sinking; so our land surface is actually sinking, as well. So we have a double problem in that the land surface is sinking and the seas are rising. The potential impacts of this are that you're going to have increased extent of that periodic flooding that happens during storm tides, or high tides; some of which I think you're already seeing in Milton and around here. You may see permanent inundation of some of the land surrounding the river. So dry land now, or wetlands, is going to become permanently inundated by water. You may have salt water intrusion issues. Your fresh water up here in the Milton area, but over time that salt line is going to come inland; which is an issue for both surface waters and fish and habitat and vegetation species, but we're also concerned about it getting into

groundwater and drinking supplies; particularly more in the coastal areas. So we're looking at that statewide. Rising water tables are also a concern in Sussex County. As water tables rise from this, you may have problems with septic systems and water in your basement and things like that and all of these things have all kinds of secondary economic and social and environmental impacts. So those are the big four things that we're concerned about. sea level rise is happening today in the State of Delaware. It's not something that's going to happen in the future. We have an average annual rate of 3.35mm per year, which is like this much; but, over time, that adds up, so in the last 100 years we've had 13" of sea level rise. That is very significant, particularly because a lot of our buildings, a lot of our infrastructure was built 50 years ago, for a different tidal range, or we'll be building things now that will last 50, 60, 70 years, so we need to be very cognizant of where that tide, where that water level is going to be to ensure that the things that we build today, are going to still be in existence at the end of their useful lifespan. That's why planning for these issues is so important, for the Town of Milton now, because where you're going to invest, where you're going to develop, where you're going to have downtown districts, is going to be really important to look at these. So as I said, sea level rise is going to affect the entire state, not just the Town of Lewes, not just Rehoboth, it will affect areas in Wilmington; pretty significant impacts in the City of Wilmington, to the port, to transportation infrastructure, to communities and to the baseball stadium up there, Blue Rock Stadium, eventually; and then of course, at the beaches and in inland towns like Milton. So I want to show you this. About five years ago we went through a process where we came up with some planning projection for the state, to the year 2100. And that's really the best scenario planning we can do at this point. We're looking to do some better projections to 2050 and 2060 when some of us might still be around, but knowing what it's going to look like in 2100, we can sort of project out what we might have in 50 or 60 years. The data at the time was saying that by 2100, in about 100 years, we could expect to have anywhere between half a meter and a meter and a half of additional height on our tide, so a meter and a half is about 5' and half a meter is about a foot and a half. So that's a pretty big range, but in low lying areas like Delaware, even a foot and a half of sea level rise can be quite significant, particularly for infrastructure, sewer plants, drinking water plants, transportation and so we handed out some maps that have these layers on them. We did a bathtub model for the state; so we could sort of see what that would look like in the future. So just imagine if you would a giant hand just pours water on the state to a half a meter of elevation and we made a map and then we poured more water on the state, to a meter and a half of elevation and we made a map. These maps are great for planning purposes; they don't take into consideration a lot of the erosion that could happen, or any preventative structures that we might build, or if we build a sea wall at the base of the Delaware Bay all the way to Cape May; we might consider doing that at some point. But we haven't done any of those things. So this is just an idea of what the future could look like. So the blue area on this map represents about where high tide is today. I think it's a little exaggerated this far up in the tributary, but it gives you kind of an idea for planning. The green shows you where half a meter of sea level rise would be in 2100 and if you can see that map, I know I'm sort of in the way; with a half a meter of sea level rise you lose a lot of your park area, right downtown on the river. So, in the next couple of decades,

you're going to see more and more flooding in that area. That's your lowest lying area and it's very beneficial to the town that that's already in park land, instead of densely developed or instead of having a sewer treatment plant there, or something like that.

Barry Goodinson: Susan, could I just interrupt?

Susan Love: Yes.

Barry Goodinson: I want to make sure that I'm reading this, so Front Street is along here? Is that it?

Susan Love: Yes.

Barry Goodinson: Okay. So it's showing Front Street underwater currently?

Susan Love: Yes and does Front Street flood now?

Barry Goodinson: Yes.

Susan Love: Fairly frequently?

Barry Goodinson: Yes and so it's just going to continue to move.

Susan Love: I can't get down here when it floods; it's too far away. There are too many flooded towns on the way down. In a boat though... Again, it's a little bit exaggerated, but the blue is sort of what the conditions are like today, in a very high tide situation, or a small storm. Then the green is half a meter. The yellow is a meter and then the red is a meter and a half. These red, yellow and green areas show where the high tide line would be, not where the flood plain would be, so imagine, if you would, the water surface becomes where we're standing right now at the fire house and then in a storm, water would go further inland and frequently. So this is what all of the coastal towns, all of the riverfront towns in Delaware are currently dealing with and it's going to be slow and incremental, but there's a lot of things that we can do between now and 2100, to develop properly, to build living shorelines, to build erosion control and Mike has lots of ideas for that, as well. So in addition to that, and I'm like the bringer of happy news, climate change is also going to impact precipitation rates in the state and all indications are that in the next coming decades, we're going to have more rainfall than we have in the past. So envision now a world where you have more water coming out of the sky and filling up your drainpipes or your stormwater ponds and a higher tide, so the combination of that may also make some flooding problems worse, in your town. The winter precipitation change could be anywhere from 20 to 40% more, than it is today, in 2090, 2099 and just increasing from now to then. We've seen some increased heavy precipitation events and those are also predicted to go up in the future from about two days a year, where you get these really big 2" storms, to three days; and maybe that's not two to three days may not be such a big deal, all over town, but there may be some properties where that extra flooding is like the straw that breaks the camels back. So know, that in addition to Delaware sinking, water's rising, we're also having more water come from the sky. These are all things that we can deal with, but we're going to have to make some good choices.

Unidentified Speaker: You mentioned about the land sinking. I wanted to think that that was just at the shore. Is that across the state?

Susan Love: Yeah, it's across the Mid-Atlantic, as a matter of fact and it's from the last ice age and it's called tectonic subsidence. So I'm not a geologist, but what happened 12,000 years ago, there's a glacier that came down to about the Poconos and it because it was so heavy, it actually pushed that land mass down and sort of pushed us up, kind of

like a seesaw. As that glacier has receded, that land has slowly been rising up and in doing so, New York and New Hampshire are actually coming up and Delaware is becoming depressed. It's ever so slightly, however, that coupled with sea level rise is becoming a substantial issue and over time... right now the rate of subsidence and the rate of sea level rise is about the same, so about half is coming from us sinking and half is coming from the water coming up; but in future years, the contribution of subsidence is going to be 10%, or less, because the sea level rise rate is going to take over and be the controlling factor for that.

Jeff Dailey: Is it also that the seal level is rising and so the ability of the Atlantic Ocean to saturate more land inland is increasing?

Susan Love: The height of the water comes up and so as that height comes up, it spills inland, and the land is sinking a little bit, so you're going to see over time, Delaware is going to shrink and our statewide assessment at a meter and a half of sea level rise, we found that up to 12% of the state's land mass will be underwater. That's really significant for a state as small as we are. So now you have to worry about Maryland coming in and violently annexing us, because we don't have enough land mass to be a state anymore. And Rhode Island is also suffering from this, so we will still only be the second smallest state, Rhode Island is losing lots of land as well. This is a problem up and down the coast. We're working with other states around the region and nationwide, actually, on these issues and we're having similar issues. The nuisance flooding is going to become worse and worse and worse; but when we have big storms and the reason that Sandy was so devastating in New York and New Jersey was not necessarily that it had a big storm tide. It was a pretty big storm tide, but it was added to another foot and a half of tide, since the 1800s; so that's really where you start... when your base tide height is 2' higher than it was 100 years ago, and you get that same 3' storm tide from a nor'easter, the impacts become greater and greater and greater and it's going to become very expensive for the state to help all of the municipalities with the flooding issues. What we really want to do is encourage good planning, Comprehensive Planning to really look at these issues, so that in 20 or 30 years, the state and the municipalities and the Federal Government can still work together to resolve some of these issues, without us being completely underwater with projects. The drainage and flooding funds are overstretched right now and so the funding may not be there in the future to do some of these projects. So there are many ways that we can address these issues and the best thing you can do is start preparing... we have another question.

Kristy Rogers: I just want to say we are recording for transcription purposes, so if there are any questions, please use the microphone. Thank you.

Susan Love: So we can deal with these problems and it's a really great thing that we were having this discussion tonight, because it starts with talking about it and thinking about what the future might be and coming up with ways to reduce your risk of flooding and that's a choice that the community will make together over time and if you want help from me, if you want help from Mike, we're here to help walk you through that and we're very happy to do so. So there are four things you can really do to address sea level rise and existing flooding issues that you have. You can protect your land surface by building up walls and dikes and we just finished a major dike restoration project in the City of New Castle, to prevent flooding up there. It was very expensive, very long, very

traumatic for those of our staff who were working on it for three years. We got it done. You can retreat and move away from flood prone areas and that's going to be something that will likely happen in this state, in certain areas, not everywhere, but there may be areas where it just doesn't make economic sense anymore to continue to have businesses or people living there anymore. You can accommodate and Mike has lots of recommendations for doing this; you can accommodate the flooding by building buildings higher, it's called free board, giving a little bit more elevation to those buildings; you can raise roads up out of the flood plain; you could raise land up out of the flood plain, though that has impacts because often when you fill land, the land next to it floods more frequently. That water has to go somewhere, right? Water gets displaced around. You can change your behavior and many people have done that. People in coastal areas sometimes check the tide chart before they come in and out of their communities. I don't drive on Route 9 in a full moon, because the last time I did it, I had to get a new clutch in my car; I think the salt water that I drove through, it wasn't even a storm. It was a beautiful full moon night and the road was just underwater everywhere. So these are things that people are doing, but one of the things that I'm really here to advocate for is avoidance. By understanding the flooding issues and where the flooding may occur in the future, you can avoid making major investments in this area and thereby reduce your risks in the future, so we're working with lots of people. In fact, every state agency has now been directed by Governor Markell, to not build new buildings and infrastructure in flood prone areas and we're working on guidance for that. So the state is taking this very seriously, because we recognize that we're putting ourselves at risk, we're putting people at risk, we're putting our financial health at risk, by continuing to build things in flood prone areas and I hope that you really think about that, as you develop your plans for the town. Yes, Sir.

Richard Miller: Do you think that FEMA will have to adjust it's subsidy on people who build in flood plains?

Susan Love: I'm going to let Mike take that one.

Michael Powell: The question had to do with flood insurance and FEMA will do what Congress tells them to do. FEMA as a federal agency, doesn't have any authority to drastically change their flood insurance rates, but Congress does and you may be familiar with the Biggert Waters Act of 2012, well the flood insurance program has been in the red since Hurricane Katrina. It had been in the red on certain storms before Katrina, but was able to pay back the claims in the good years. Katrina put that program into the red so far, that basically the actuaries told Congress, there's no way we will ever have enough below average years in a row to possibly take in enough revenue to go back into the black and then Hurricane Sandy was just a repeat of another event that makes it clear that the National Flood Insurance Program isn't solvent, so the tools that Congress gave FEMA, by the Biggert Waters Act was to gradually phase out below actuarial premiums for certain classes of buildings that pay less than their actuarial rate; older buildings, buildings in flood plains that are non-primary residences, businesses, all of these categories of buildings were identified by Congress as buildings that should very quickly begin to pay their actuarial rate for flood insurance. That lasted two years before the Homeowner's Affordable Flood Insurance Act of 2014 rolled back a lot of those painful rate increases, so what Congress will choose to do with that program, is

really anybody's guess at this point, but...

Richard Miller: Do you know how the feelings of our congressional representatives...

Michael Powell: I'm not really familiar with how they voted on the first legislation to increase the rates, nor how they voted on the second piece of legislation to phase back the increases. They didn't eliminate the increases, they softened them.

Richard Miller: Thank you. There was another question I had and it has to do with the use of the river, so just to jump ahead to that possibility. At low tide is the river considered navigable?

Susan Love: It depends on who you ask. So if you ask me, I'm a kayaker, so yes, it's navigable all the way up to the dam, right? If you ask the Army Corps of Engineers, they would tell you that the only navigable rivers are the ones that they maintain and dredge and I don't believe that the Broadkill, there's no navigation... The Army Corps of Engineers no longer dredges the Broadkill, because it's commercial navigation; they don't do a whole lot of recreational navigation dredging.

Richard Miller: That brings me to my next question. One of the concepts that this Comprehensive Plan is starting to develop is the use of the river, aka cruises, paddle boats, that type of thing. Would that kind of commercial enterprise warrant the Army Corps of Engineers dredging the river?

Susan Love: It's interesting. I don't always understand how the Corps makes it's decisions.

Richard Miller: Neither do they.

Susan Love: Often it's by Congressional dictate, so here's what I would recommend to you. If there's something you think is a good idea and you want to go after it, and you all agree, put it in the Comprehensive Plan. There's no harm for not getting it accomplished, but it starts that idea rolling. To do a project like that probably would take decades to lobby the Army Corps of Engineers to do it; though the state also does sometimes dredge rivers and there's a project in Leipsig that's being envisioned right now, to provide them with some navigation. Not for big cruisers or paddle boats, but river boats.

Richard Miller: Well, I'm talking about a concept like a water taxi.

Susan Love: I think you probably have enough depth here for a water taxi, at this point; or with a minor dredging project, so you never know what's possible, but you've got to plant the idea and figure out how to go about doing it.

Richard Miller: I just did. Thank you.

Susan Love: And there you go.

Steve Crawford: I have been talking about this. I'm glad that you brought it up. The guy that has the water taxis, a friend of mine, his wife is the daughter of a very good friend of mine...

Richard Miller: Dave Greene.

Steve Crawford: Yes and he's no longer a Greene, he's now a Cunningham, because he married into that family; but I wanted to let you know that he's talked to me and we have some very good plans... right now it's just conceptual about bringing his taxi and finding a place for him to dock, so people can get on there safely. He said that he doesn't really have a whole lot of problems; there are some areas at low tide, that he gets a little concerned about, but he's able to navigate there. My concern is how much flooding actually occurs for those shops downtown.

Richard Miller: That's why I brought that up. The high tide with Route 1, with these kind of scenarios, would really make that unnavigable.

Steve Crawford: Right. My concern is that there is some silt; it's not as deep as it once was and I believe it was back in 1962... who's here that would know, back in 1962 I think was the last time it was dredged. It could be dredged again and the thought is and I don't know, I haven't gotten a good answer from anybody, but the thought is that if we dredge it, at least down to Route 1, that it would hold back some of the volume of water that comes into town. It would at least absorb some of that so it didn't hit the shops.

Michael Powell: When you get a chance, I'd like to respond to that.

Steve Crawford: Well, actually I was going to ask you to respond to it earlier, but he brought it up, but we could go ahead and let Mike talk about that, because that's a big thing, Mike and I knew that you had that answer because I talked to Frank Porquio earlier.

Michael Powell: I don't have a precise answer, but the best information that we have is that while there might be a lot of good reasons for deepening the channel for navigation, we are of the opinion, at least the folks in DNREC that I've spoken to, that there's probably no evidence that we know of that it would have a significant affect on flood abatement. It wouldn't worsen the flooding problem; it probably wouldn't help the flooding problems, so that's our best information. Don't expect deepening the channel from Union Street down to Route 1 to have any affect on flooding.

Susan Love: I don't know. Maybe Mike knows. I've heard a lot of people reporting in inland bays, that after the Assawoman Canal was dredged, that they reported more flooding issues than they used to have. That's just word of mouth. There's been no studies to back that up, but people have seen that effect afterwards and it could just be sea level rise or it could be more storms. While the next question is coming, I did want to say, those issues that you brought up about not just navigable depths but navigation under bridges, is something that is very important and DeDOT is actually starting to... shh, don't tell anybody... but they're doing the right thing, without being told, they're starting to build bridges up a little bit more to allow for additional navigation height to accommodate for sea level rise.

Ginny Weeks: Good evening. While speaking about all this, people have made a major investment in their land purchases along Front Street and along the river. I want to know how government works in Delaware. Does the State mandate, or in terms of an emergency with our planning, or does the Town control it? At some point, is the state going to say look guys, we don't want you building here. You can't build here.

Susan Love: No. That is all dictated by local zoning and local building codes and the state is here to help you make good choices and to give you data and information to make good choices, but all of those local decisions are up to the municipalities.

Ginny Weeks: So the state doesn't set any setbacks from rivers or anything?

Susan Love: We... no. There are many of us in DNREC who would love it if the State had that authority, but we do not, and so it really is up to you and that's why I'm here today; that's why Mike's here. Mike has model ordinances for flood plain, the FEMA base flood plain ordinance may not be protective enough and so the state would like to see municipal governments have Codes that are stronger and more protective of structures and public safety, than is required by FEMA and we don't mandate that, but

we're here to help lobby for it and advocate for it and help you build some of those good Codes into...

Ginny Weeks: Are we locally required to follow the FEMA rules and regulations? I'm trying to look for something that will help us put oomph in our ordinances.

Michael Powell: Sure. So the Town of Milton joined the National Flood Insurance Program, probably back in the 1970s, most communities in Sussex County joined in the mid to late 1970s. FEMA does have minimum flood plain regulations. Briefly, they do not prohibit building in the flood plain. They don't prohibit sub-dividing the flood plain. They do set a 100-year flood level on their maps and they do require that the lowest floor of residential buildings be elevated to or above that level and the lowest floor of non-residential buildings, like commercial buildings, be elevated or flood proofed to that level. So the Town of Milton chose to join the National Flood Insurance Program 35 years ago and is required to have, in their local, municipal zoning and building codes at least those minimum federal standards, in order to remain in the National Flood Insurance Program.

Ginny Weeks: Thank you.

Susan Love: Mike, tell them about a couple of your Best Practices that the state would like to see this town enact.

Michael Powell: Sure. The FEMA Standards are widely recognized as very low standards. A lot of flood damage occurs when buildings are constructed with their floors at that minimum 100-year flood level. There's a tremendous amount of uncertainties in the studies that were done to set those 100-year water surface elevations. So if you think about it, if you building your house at that 100-year level, that minimum requirement, there's a 50% chance that the modeling may have underestimated it and you will get flooded in the 100-year flood event that you were intending to avoid. Sea level rise is causing those 100-year water surface elevations to gradually increase over time. The FEMA maps do not look into the future and give you 100-year flood protection in the future. They are very much a snapshot of current conditions, so if you think that flood risks are increasing, or if you think that flood modeling is uncertainty and I personally think both of those things are true, then elevating the floor of buildings to that minimum standard is leaving you with a lot of residual risk to those buildings and the Senate Bill No. 64 Flood Plain Drainage Advisory Committee that I mentioned a few minutes ago, created a document, a consensus document. That Committee had a wide range of members, builders, realtors, community officials, Committee of 100 was on it, a wide range of viewpoints and they recommended that 12 to 18" of free board, above that 100-year FEMA level is what we recommend towns strongly consider for new development. That won't do anything for the legacy of existing development that is below that level. The businesses along Union Street, along the river, the theater, the gas station that I used to go to when I was younger and that went out of business and I don't remember the gentleman's name, but I know people in here probably do; the older man who ran that place, told me after a flood in 1998 that he was just tired of having water in his garage all the time and I don't think they ever reopened after that storm, or they didn't reopen... they weren't opened for long after that storm. I'm talking about Loughlin's. So, the Senate Bill No. 64, Flood Plain Drainage Advisory Committee recommends a number of higher standards, 12 to 18" of free board. The businesses along Union Street, both

sides of it in the downtown area, as you come up from the river and head uphill towards where we are here tonight, the first few businesses on both sides of the street are non-conforming to that 100-year flood level, by several feet. I don't have exact numbers, but I believe they are 2-3' below that 100-year flood level, so one of the things that we would recommend towns strongly consider, is doing an assessment of the buildings that are in that high risk area and possibly looking for just exactly how non-conforming are they to that 100-year flood level; how non-conforming would they be to maybe just a 10-year level of protection and our department can provide assistance to communities that may want to do that sort of assessment. The problem is once you do the assessment, you run into the reality that there aren't any easy fixes for those kinds of situations. You've got minimal setback from the street to the sidewalk, to the vestibules of the buildings. You don't have a lot of room to work with. You certainly don't want to make it difficult for people to get from the street to the sidewalk and up into businesses that might be a little bit higher, but there probably are some things that could be considered, so just throwing some ideas out there and our department would love to work with the Town of Milton to maybe identify a way to do that kind of a risk assessment and figure out what sorts of (and I think the slide is still up here) accommodations or protection type projects might make sense.

Susan Love: Tell them about money. How do they get money...

Michael Powell: That's a good question. I think I'll hand that over to you.

Unidentified Speaker: Mike, before you go, can you give us some more examples of accommodations that might be appropriate?

Michael Powell: Sure. The most common way that commercial buildings are designed to protect against flooding, because lifting a commercial building several feet above street level is not practical in many cases, but putting a flood proofing barrier is a lot more practical. We've actually seen a lot of businesses in Delaware, in that kind of inner tidal zone, Shone's Lumber in the Industrial Park that's right off of Route 4 in Stanton and several other businesses in that low-lying Industrial Park flood-proofed their business. They selected a level above grade and fortified the exterior walls and waterproofed them and put removable flood barriers along the doorways. That's really not all that uncommon. So that would be called "dry" flood-proofing. "Wet" flood-proofing is where you maybe elevate the floor of a business and make some kind of an allowance for flood waters to go into the building, underneath a floor that's maybe 18" or 2' above grade, so you're going to take water into the building, but you're going to try to put anything that's vulnerable on like a false floor above the flood waters. You might not be able to get to a 100-year level of protection with something like that, because the floor might be too high above the sidewalk, but it's all about trying to find that balance between something that's workable, given the situation and the level of protection that you could get from it. There's obviously going to be access issues if you take any of these buildings and put them very high above the sidewalk, but are there vestibules that maybe could be used as kind of an access way where the ramps or the steps could go up 18". 18" would be a huge, huge increase in protection beyond just having the floor of a building at the street level. It wouldn't get you to the 100-year flood level, but you're not required to. You're required for new construction to be at that 100-year flood level, but if you have a non-conforming building and you can give it some level of protection, that's

perfectly fine within the regulations. So those are the two most common for commercial buildings, “dry” flood-proofing and “wet” flood-proofing and then for residential buildings, you see a lot of people lifting their houses up onto higher foundations. I can't see a great number of houses in the Milton area that would strike me as good candidates for that, but some of the businesses might have some potential for projects.

Susan Love: Are there other questions?

Michael Powell: You were about ready to talk about money.

Susan Love: I was going to talk about money, because it looks like people are getting tired and money always wakes everybody up. You have a question.

Barry Goodinson: Susan, do you have the chart that showed if they went to that foot and a half higher, the initial cost and then the overall savings?

Susan Love: I do, because I have every presentation I've done for five years on my drive right here and in fact, I have the ones that Mike has done recently, so actually if Mike would want to keep them talking...

Michael Powell: The only thing I would say is just that every building has a different cost for these kinds of projects. If you meant the cost of retrofitting a building to a higher level; that could vary tremendously from a small building, that could be easily lifted, to a larger building that might have to be dry flood-proofed and then the other thing is the insurance premiums are highly variable. Anyone who has ever dealt with the flood insurance program, knows that the rating process is like some kind of code that only three actuaries in Washington know how to crack, but the bottom line is, the lower you are below those 100-year flood levels, the higher insurance is going to be, so generally anything that you can do that's affordable, that's going to get the floor of that building up to or closer to the 100-year flood level, is going to have a tremendous affect on insurance savings. The way the insurance rating process goes is, every foot you go below that 100-year flood level, you start getting flooding maybe every 25 years, if you're a foot below, but if you're 2 or 3' below you may get flooded every five or 10 years. So they really build that frequency of flooding into the rate process. A building that is 2 or 3' below the 100-year flood level is probably paying an arm and a leg for flood insurance and getting them up closer to that 100-year flood level is really... every building has a different cost benefit on how much it would cost to bring it into compliance and then you've got the savings to calculate. So it's really kind of a conversation that should happen between a homeowner and their insurance agent and a contractor, to give them some kind of an idea of what the cost might be for the specific retrofit that they have in mind.

Susan Love: I want you to do these two slides, if you would.

Michael Powell: Okay, sure. So, this slide is basically saying that the chance of flooding over a 30-year period, this goes to that minimum level of protection that I was mentioning earlier. You've got a 26% chance of getting flooded in a 30-year mortgage, if your floor elevation is right at that minimum base flood elevation that FEMA recommends. So it's a very low standard. I think we would all agree that if we build a house and we're told that there was a 26% chance of having a flood or a fire, those aren't very good odds in a 30-year mortgage period, but that's the chance of the water getting up to that 100-year flood level, or above it, in a 30-year period is 26% and that doesn't include sea level rise; it doesn't include uncertainty. It could very well be higher than

that in some areas. The 7% chance is if you go just a little bit higher than that 100-year flood level in the Town of Milton there is a 500-year flood level, which is usually about 18" above the 100-year flood level in coastal Delaware. By going that extra 18", you would cut your chances of the water ever getting up into your floor from 26%, down to 7% and this is just an idea of how long it might be before you would break even in your flood insurance premiums if you chose to go that extra, let's say 18" and they're using a 100-year flood elevation vs. the 500-year flood elevation. I'm just going to say, if you built your house to the minimum standard, or built it 18" higher, within 5 to 10 years under most situations, you're going to already save in flood insurance the extra two courses of block that you put into your foundation and the slight bit of maybe more steps and utilities and if you keep calculating beyond that break even point of 5-10 years, you could see that by the time you've gone out into the full term of a mortgage, you're saving many thousands of dollars and it varies a lot from building to building. If you're in a position where you could build to a higher standard and if you think you're going to be carrying flood insurance for a significant period of time, it's an absolute no brainer that you go up a foot or two higher than the flood level and it will pay for itself in flood insurance over the lifetime of the building.

Susan Love: So we're throwing an awful lot of stuff at you and we're happy to come back, if you want us to. I want to sum it up in a way. There's existing structures that flood and so the Comprehensive Plan can think about what might be good to do for the existing structures that are flood-prone now. Is the town going to help those business owners and homeowner's with their flooding problems? If so, what are you going to do? Are you going to do infrastructure projects? Are you going to build a sea wall? Are you going to build a tide gate, that closes off the river? Are you going to help them navigate the FEMA Process and do dry flood proofing projects? Are you going to raise that road? So there are a lot of things to do for existing flood issues. Then there's the vacant land, the areas that haven't been built on yet, or that will be redeveloped. This is really where it's hard. What do you want to do with new structures? Do you want to avoid new flood risks? I would say you have a great resource along the river and park land and recreational uses is a great use for that flood prone area and you guys already have some of those areas, because when the flood waters recede, nothing's really hurt. The swings still work, the path is still there, the benches are still there, the damage is minimal and most people see the waters rise and go home and go uphill. That said, if that's not the decision the town wants to make, I know that land is economically valuable, people like to have businesses right there. It can be an amenity. If you want to develop in those areas, how do you want to improve your flood code? Your flood plain ordinances? Do you want to be more restrictive? Or do you want to build a base flood elevation? Is Milton in the Community Rating System?

Michael Powell: They are not.

Susan Love: So that's another thing you might want to consider, is that if your flood code is... if you get a certain number of points, with FEMA and Mike can talk more about this, by going the extra mile you can actually qualify for flood insurance rate discounts for your resident's. So that's a carrot that FEMA offers for communities to go above and beyond what benefits everybody in the community. So those are things that you can consider and then there's some of the natural things that you can do. I noticed a

lot of erosion along the shore line, so you can think about other projects the town might want to consider; bank stabilization, living shore lines, which is a gentle, nice way of protecting against erosion and you're going to talk about recreational amenities. So I'm going to jump really quickly into money. There is money out there if you're savvy and if you put your ideas down on paper. That's really where it all starts, is getting the ideas on paper so that if you're not in Town Council next year, people can continue to pick it up, because these things can take a long time. There's federal money available through the Hazard Mitigation Grant Program and I believe, Mike correct me if I'm wrong, you need to have a Hazard Mitigation Plan for the town, in order to qualify for those. The Hazard Mitigation Plan sets out the flood abatement mitigation projects that you'd like to do. News flash: this just in. The Hazard Mitigation Program now will also help with preventative flood, so wetland restoration is now eligible for funding, under this program and before it was just raise your house and things like that. So they're looking to be more proactive, as well. There's funding available for my program, the Coastal Management Program. Every year we have a small grant available for coastal resiliency. We can't pay for on the ground implementation, but we have done projects in Slaughter Beach where they've identified all the homes that needed to be raised and they paid for a consultant to do that work, through our program. The Town of Frederica right now is involved in a Comprehensive Plan process just like this and they got a small amount of grant money from us to hire a consultant and we're working through a similar project. The Town of South Bowers got some funding last year and they got really good road elevations for their entire town, which they're now using to plan for sea level rise and they're actually working through an ordinance to not require, but to allow new homes to go up to about 2' worth of free board in that town. It's a problem there because of height restrictions. In the beach communities it's a competition to see who can get highest, so they can see the ocean, so in addition to raising up the base floor elevations, they also had to talk about how they were going to cap it on the top, so that's been an ongoing discussion for them. So we've got coastal program money, we've got Hazard Mitigation Grant funding. There are some federal opportunities coming and I would encourage you to really pay attention to this. There's some Housing and Urban Development money coming out from H.U.D. for Sandy resiliency and so any county or municipality that had a Disaster Declaration since 2009, which is pretty much the entire country, is eligible for some funding. There's a year of planning grants available and then they'll select some for implementation and I haven't seen the grant criteria, but it's possible that this could be a really good opportunity for towns that really want to dig in and do some resiliency flood abatement work. I'm missing some, but if you have a good idea and you talk to enough people, you can find some funding to do what you want to do and so, I'd encourage you to put these ideas down on paper and that's really where it starts.

Richard Miller: As towns and governing bodies plan ahead, all the data is based on a fixed criteria, 100-year, 500-year. The actuality is we're always moving toward that corridor, or it's coming toward us, because of the other data that you're giving us. Is there an acceleration factor, or sub-constant, that could be built into an ordinance, or a provision that would allow for _____ inflation adjustment? In this case, it would be rising of the water adjustment?

Susan Love: I don't see why not. That's sort of a legal question and there's legal

assistance available. Georgetown University is dying for some projects like this to work on from a legal perspective.

Richard Miller: In other words, we're only at point three, I think you said, per year?

Susan Love: Yes and so you could say we want base flood elevation of... or we're going to have 2' of free board until such time that the tide is an average of this height, and then we're going to go this far up, because the FEMA maps don't take into consideration sea level rise. And who knows when they're going to get redone.

Richard Miller: The other side to that is, if that's what a standard ordinance is written to, my opinion is it could be easily challenged because there's no governing body at the federal level to back that up.

Susan Love: There are lots of federal reports that come out and there was one recently and I think there is a federal body that's made up of all the federal agencies, that comes out with projections for sea level rise and climate change. They're not always localized, or as localized as they could be and they came out with a report last year that actually increased... our upper level in the state, the last time we looked at the data, was a meter and a half. They're saying it could be more like two meters to 2100, so the state has a body right now and we're on the hook to come back together with a technical committee and come out with new scenarios for sea level rise to 2100 and the Executive Order 41 is tagged to that group's scenarios and projections. If that body was codified in some way, it might provide enough for municipalities to tie ordinances to, but right now it's not in State statute.

Richard Miller: The other issue, I may have missed the answer, but how often does FEMA update their flood plain plans?

Susan Love: That's another Mike question. I'm so glad you're here Mike.

Michael Powell: Sure. Sussex County was last remapped in 1995 and those changes were pretty minor, so we've got changes in 2014 that are scheduled to go into effect next year and I would say that updating their flood plain maps in the past has been on maybe a 10-20 year cycle. I think the technology is changing a lot to make it more affordable to update the flood plain maps, so I would expect that while they are not beholden to a certain schedule, I would expect that they're moving in the direction of probably more frequent updates.

Richard Miller: So theoretically, a governing body could base their ordinance on the FEMA standard and then put that acceleration factor in.

Michael Powell: What we recommend is building in some kind of a safety factor above the FEMA levels. You could think of that as an acceleration factor, but I guess thinking out loud a little bit, would that require you to predict how long a building would be lasting when it was constructed to determine whether it should get 30 years worth of additional protection, 50, 75, I don't know. There would be a lot of... I think those kinds of questions are the reasons why most communities just have adopted some level of additional protection, like 18" is fairly standard right now. I actually don't know whether the Town of Milton has any free board in their flood plain regulations. I don't believe they have 18" of it, though. You could go above 18" for certain kinds of projects; critical facilities and buildings that have a long and highly invested lifetime would probably be examples of buildings that maybe would warrant even more than 18" of that additional protection.

Richard Miller: Thank you. Well the Historic District especially, they would have to be protected almost at all costs.

Michael Powell: Well the Historic District is an entire other issue, because FEMA actually allows communities to exempt historic structures from the flood plain regulations, if the flood plain regulations could potentially make it difficult for a structure to retain its historic designation, which is a valid reason. I mean, if the regulation would force you to do something to a building that had been damaged, that would change its outside appearance and make it no longer an eligible historic resource, most communities, including the Town of Milton have exemptions so that someone would not be forced to further damage their historic asset recovering from a storm, by making alterations to it that would be a historic problem. But the balance there is that no one wants to see historic downtown areas keep getting flooded because everyone throws their hands up and can't figure out what are we going to do following this flood. We don't want to change the appearance, because that would cause impacts to the Historic Preservation assets, but at the same time, they're just going to keep flooding and that's got its obvious issues, as well.

Susan Love: I'm out of stuff to say. It's very unusual.

Jeff Dailey: I'm never out of things to say. This is a rather unwieldy question and the Army Corps of Engineers was mentioned earlier. You know, unique is our middle name here in Milton. We have one of the earliest and largest earthen work projects was what is now Mulberry Street and what has made Wagamon's Pond. 100-year floods, 500-year floods, they're like the perfect storm. You have the nor'easters pushing the ocean up the Broadkill at high tide and then all the groundwater, including Wagamon's Pond, which is retaining water, but is flooding into the river, it creates those horrible scenarios and all I know is that Wagamon's Pond is kind of like a reservoir. We know about nor'easters days in advance. In the New Orleans area, in the Delta, there was draining of such reservoir type... you get my drift. Is there anything that is done that you know of, have any studies been done, that would tell us if we brought the water level in Wagamon's Pond down, we could alleviate some of the horrors of a 100-year flood?

Susan Love: I saw Mike nodding his head, but I'm going to take a step out and then I'm going to give it back to Mike for real information. Things like that, water storage; there are really great examples from the Netherlands, where they're looking at these issues, because what you really brought up is that you can't do a lot really about the water coming in from the ocean, but there is an opportunity to hold some of the water that's coming down from the sky and the Netherlands is working on all kinds of really neat storage areas; amphitheaters that actually drain water and hold water in a big concrete pond until the storm is over and then they can let it go. Parking garages, not like Milton is necessarily going to have parking garages any time soon, but maybe. Parking garages that hold water in the event of a storm, so lots of things like that, things you wouldn't normally think about are being tested and tried with lots of success and if you can chip away at the flooding problems, you take a little bit of water from here, it keeps the water level down, you might be able to keep the water level below that 18", where new homes are being built, or new businesses are being built, but Mike has real information from this country.

Michael Powell: It's not that much. I don't know whether... and I'm not that familiar with

the spillway at Wagamon's Pond, I know in general, the ones that are maintained by DelDOT or the DNREC Fish and Wildlife Division, do attempt when a major storm is predicted to make an assessment, whether there's an opportunity to take boards out before the storm, draw the water level down to a point where maybe the first couple of inches of rainfall can be contained in the pond and not just spill over into the tidal areas, but I don't know the specifics of Wagamon's Pond and I don't know and I'm not familiar enough with the water control structure to know how much opportunity there is to essentially use it as a retention pond to get some amount of rainfall retention. In theory, if you could do that and you had a storm that was both a significant rainfall event, running water down the watershed and storm surge, which is a pretty typical type of nor'easter event or a hurricane... Hurricane Irene, back in 2011, dropped about 7" of rain in this area and was accompanied by a storm surge up the Broadkill River, so in theory, yes, you can operate those structures in a way that maximizes some amount of flood alleviation, but it's on a structure by structure basis and it should be done for Wagamon's Pond if it's possible to do it.

Susan Love: That's a great project for my grant program. If you wanted to get engineering assistance to do a hydro-logic, hydrodynamic flood project down here. I'm not an engineer, so, but that could be done. You could study where the water would go and some fixes for that and look at and model what might happen; is Wagamon's Pond appropriate for that kind of use and if so, what would it take? Grant programs like mine can pay for all the engineering studies, that would make that happen and then you would have some real good data and information. Write this down. You would have the data and information to know whether that was feasible or not, to move to the next step and that kind of stuff is exactly what you need to write down in your Comprehensive Plan. You don't have to accomplish it all next year, you don't have to accomplish it all in the next five years, but by going through the critical group think process; getting those things down on paper; knowing what steps you can take and then opportunistically jumping on the ones that present themselves, you can really make a lot of progress over the next five or ten years. Any other questions?

Barry Goodinson: Yes, I have a couple. I guess one is about the ongoing help that we might be able to turn to you for, because I think I've understood about a third of what we've talked about and the idea of sitting down and putting this into a Comprehensive Plan seems pretty daunting and I want this Comprehensive Plan to be as substantive as possible and as specific as possible. It would be easy to speak in generalities about the need to prepare and just file the Comprehensive Plan that way, but that's not what we're trying to do here. We want something to be more substantive, so towards the goal of substance and understanding that we're not hydrologists, how much more of your time can we demand, or ask, or beg?

Susan Love: I will tell you that Executive Order 41 signed by Governor Markell last September directs state agencies to help municipalities do just this, so I have a directive from the Governor to help you, so does Mike, by the way.

Barry Goodinson: I love that man.

Susan Love: We will help to the extent that we can and if you need somebody to draft some language, if you need some maps. Like I said, the small Town of Frederica got a grant from us to hire a consultant to do this, but I think that we can help you with our

own staff. This is important and this is what I tell everybody, in that we don't have any ability to regulate this. We don't have any ability to really... except with our own projects, we can just encourage people to do Best Practices that we're talking about and this is where it happens, in this room, and in your plan is where it gets started. So I am dedicated to helping municipal governments get it done and get it done right, get those ideas on paper and then help you implement, so I'm happy to do as much as I can, within reason.

Barry Goodinson: Okay. I'll push you until you tell me that we're not being reasonable anymore.

Susan Love: No is a full sentence. I learned that from my boss.

Barry Goodinson: Also, what about when you took your boat ride up and as you were walking around, what do you think is the low hanging fruit? What are the things that we could put at the beginning of the Comprehensive Plan? Because I'd love for this Comprehensive Plan to have some early wins, so when the town sees the Comprehensive Plan being operationalized, we can see that this thing has merit and there's reason to keep on pushing to the end of the 10-year horizon of the Comprehensive Plan, but the way to get us pushing to the 10-year horizon, is to make sure that we're successful in years 1, 2 and 3. So what's the low hanging fruit?

Susan Love: It's not necessarily low hanging fruit, but it's opportunistic and it's happening now and Mike will be working with all of the towns to improve the flood plain ordinances and I think by highlighting that you intend to do that in the Comprehensive Plan and then doing so, with Mike, is a great way to show progress. You guys have thought about and understand your flooding problems, way more than I do. I just have a couple of maps, but I think that's a really good way to start. Everything takes time. Even doing a park beautification project, could take 2 or 3 years, to get the funding lined up and getting the designs and things like that. I noticed you had a rain garden and some swails right across the river here, which is great and small projects like that are great, if you can identify additional ones to go after. I think identifying and moving on grant funding for some of the additional studies that we've identified, is a really good way to start, so a drainage and flooding study, a Hazard Mitigation Plan, putting that in writing and then... I know the last thing anybody wants to do after planning for a year and a half, is write another plan; but they'll be more specific and targeted. This is very wide and then you kind of drill down over time. There are some erosion problems right out here and I don't know who owns the land, that could be addressed. You could do some engineering for and rally some people around. There are many groups in the state who want to do living shoreline projects, soft shoreline stabilization, you may be able to lobby some of them to come out and provide you with some assistance for those problems. There's Parks and Recreation money that's available too, you can compete for, so depending on what you come up with for a riverfront and community amenities, you can go after that; not just by the river, but throughout town if you need tot lots and basketball courts and things like that. Implementation is hard and even making some small progress with what you put in, is going to be a huge step forward.

Michael Powell: This might not be in the normal purview of a Comprehensive Plan, but one of the things that I think about in a town like Milton is that the issue of flood insurance earlier and the handwriting on the wall that I see, with the flood insurance

program is, it's going to eventually get so expensive that it becomes even more of an economic hardship for buildings that are in high risk areas and that affects the vitality of a place like downtown Milton, where you have a business district core, that happens to be also at the same time full of non-conforming buildings and in the lowest part of the community with flood plain areas, so there's a real challenge there. Is the flood insurance program going to threaten the vitality of certain businesses by making insurance expensive. One of the frustrating parts about what Congress has done with the flood insurance program is they've ordered rate increases, but it's very difficult for business owners to... and I'll just speak about business owners, because I think that's most of what we have here in town, in the low-lying areas, but not all and it really doesn't matter. Residential or commercial buildings have a hard time understanding what is the cost of flood insurance likely to be a year from now, five years from now, ten years from now, if I do nothing and what are the specific things that I could do to bring down the cost of flood insurance for my building? Part of that means probably having a survey done to see how non-conforming to that flood level some of the buildings are; but it strikes me that we're really only talking about a couple of dozen structures. We provided assistance to the community of Prime Hook Beach to do something similar and we're talking about 150 houses in the flood plain and the idea was which are the buildings at highest risk? What are the specific parts of the building that are at the highest risk? How low-lying, below the flood levels are those areas? And, what are some things that the owner of the property could do to alleviate their flooding problem and what would the consequence on flood insurance premiums be? Could they really bring their rates down? So, I don't know if a Comprehensive Plan gets into informational activities or those kinds of risk assessments, but I think it would be really well worth doing and I came here to say that I think we can help you with that.

Susan Love: And of course for the downtown district, the other thing that the Comprehensive Plan really does is it says where you're going to encourage businesses to locate in the future and so if you're concerned about this, and you're concerned about the vitality of the business district, you may want to consider thinking about this and this is hard. This would take a long time, about coming up with a business quarter uphill and starting to encourage businesses to locate outside of the flood plain. There's the new Economic Development legislation from the Governor and so there may be some money for some of those kinds of programs. There's a Main Street Program that assists towns to do some planning like that. There's hard decisions. Zoning decisions that can be set forth in the Comprehensive Plan, but implementing them would take a long time.

Barry Goodinson: The other side of that though and I think the town is thinking about applying to be designated one of those downtown areas, I think at a future Town Council meeting they're going to vote on that; but the other side of that is if we're encouraging people to build away from the river, so suddenly and we are starting to think of areas away from the river and up the hill, as commercial area; then it could have a positive affect on the value of the properties up the hill; but it could have a negative affect on the properties down the hill and I don't want to just be blind to that reality, so there could be a possibility that we would build into this plan, or we may find ourselves as we're looking at these maps, discovering parts of the town that just aren't suitable for building, or for business, which could depress the value of those properties, so are there other

monies available to help make those current landowners whole? How do you take the sting out of that? Because that's going to be an issue. We can write the Comprehensive Plan in a particular way, but the political piece of it is going to fall to the Mayor and the Town Council to accept or to reject this.

Susan Love: I wouldn't really encourage... at this point I would encourage you to maybe increase the commercial or business corridor up the hill; but without really taking it away from the lower part; but really think about how if some of these properties were to be redeveloped, how would you like to see them be redeveloped? Is there a waterfront development zoning area? A lot of larger cities have that, that waterfront zoning requires a certain setback from the water and I'm not sure what your setbacks are in town. 50', is there? Okay. In Wilmington there's a waterfront development district that requires access along the river, so that there's continuous walkability along the river. It worked really well by the baseball stadium and they're taking it to the other side, so anything new that gets developed there is going to have to provide access along the riverfront and you could have more protective flood zones down there. Long term, the property values will likely go down, because of consistent flooding, because the flood insurance is going to become so cost prohibitive and at a statewide scale, there's not a lot of programs available. The state does not have any programs to buy people out. The Federal Government has programs to buy people out, but you have to show repetitive flooding; you have to meet a lot of criteria; and, those funds, I think, are going to be more and more taxed and stressed over time, because it's not just Milton. It's not just Delaware, it's New Jersey, it's Mississippi, it's New Orleans, it's everywhere across the states that are feeling the pinch from this. But it's important to really think about these stressors and these challenges that are happening and in 30, 40, 50 years where do you envision... how would you really like to see this town look and put some of those things in place today. I saw hands.

Unidentified Speaker: I have a question. I think it's maybe for Mike. Since some of these areas are in the slope down area, has there been any thought or conversation about pretty much raising the roof on some of those businesses and then raising the floor and use that then sub-space for pass through?

Michael Powell: I'm not sure how much thought's been given to that. I can remember after a flood that happened here in 1998, I remember there was some discussion about the potential for that, but I know there were questions about how high above the sidewalk would the floors have to be to provide protection and how would you deal with accessibility issues, given the constraints, so I don't know the answer. I don't know how much thought, perhaps individual business owners have given to that idea. My guess is that some kind of engineering or survey assistance would probably help people understand what would the level need to be to provide some kind of... No one wants to make an investment, unless they have some kind of an idea what the return on their investment is going to be. How much would I save in flood insurance if I took some kind of protective action like that? How often should I expect to get flooded in the future, if I do nothing? How much less frequently should I expect to get flooded, if I take some kind of protective or elevation project and I think it's a technical question. You need to have cost estimates, engineering and survey work and be able to visualize, that's the other big scary part of projects like this. I was involved in a project, kind of

like that, up in Delaware City and one of the biggest challenges to a project like that is what's that streetscape going to look like if we actually do some of these things, so people are nervous about change?

Unidentified Speaker: Good enough. Thank you.

Jeff Dailey: Hearing Mr. Goodinson's questions and then the other comments and then the fact that we have two of our elected representatives here, it dawned on me, we have a barometer right here in Milton and that is the public library, which is a state and I guess Sussex County may cheap in, funded building and my goodness, they must be looking at themselves as an asset and whether they're going to do this pass through under shelves and shelves of books; or whether they're looking towards relocating that building. We might have answers at our disposal that we don't have to look very far for.

Susan Love: And talking to some of the major assets that you have down there, to see what they might want to do in the future...

Jeff Dailey: But that's government. That's not private enterprise.

Susan Love: It's not the State, so I don't know... is it the County?

Barry Goodinson: It's a county library.

Susan Love: It's the County. And I will tell you that Sussex County, the majority of the Sussex County Council persons, as they exist today, are not real concerned about sea level rise.

Jeff Dailey: They're immune to that. Is that right?

Susan Love: It is not a high priority for them.

Jeff Dailey: Well God bless them, everyone. Thank you.

Susan Love: That's a great win. I will say Executive Order 41, that we're working on now at the state, tells state agencies to avoid building things in the flood plain. Number one. Don't build it there. If you have to build it there, for some reason, because it's water dependent, building a dock or a bath house, or because you're providing infrastructure to somebody who needs it, that it must be built either 18" of free board or higher, plus sea level rise, so we may be building things today three feet higher, or four feet higher, if we expect them to live until 2100 or 2080; so hopefully you'll see the state leading the way on some of those decisions. I know a lot of us are talking about retreating at the state; we have a lot of state facilities that are in very risky areas. My facility is one of them, St. Joan's Reserve in Dover and in 100-years it will be completely surrounded by water and we're really thinking now, about what are we going to do? What's that threshold at which we can no longer operate this facility and what are we going to do. And it won't be me making that decision, but it will be the next generation and we want to set those wheels in motion. We're talking about moving other facilities around the state. We're just picking them up and moving them back and looking for land and we're looking at building new facilities in areas that do not flood and even looking at the roadway system. Are those roads likely to flood in the future and cause an access issue? Or are they going to be safe? We're really taking this seriously and you might be able to look to some of the state facilities in the future. I wouldn't look to Sussex County any time soon. But I'm working on them. I'm working on them hard. Was I politically correct enough? Okay. Yes, Ma'am.

Mary Schwanke: Thank you. I'm on the Board of the Historical Society and I'm looking at this map and I'm remembering that when this town was founded, over 200 years ago,

it was the Broad River and we're looking at a broad river here and the first commercial street in town I think that was developed was Broad Street and the Carey store was on the corner, so I think our fore-mothers and fathers planned this town around a broader water area and water resource and we have to look back at that and maybe look at building up, like they did originally. You know, Puddin Hill is up, because that's where the workers lived and so maybe our historic area, we just have to make it more historic; draw it back further, because that's where we started as a town.

Susan Love: And that's true. Before the flood insurance program, I think people were much more wary about building in flood prone areas and when you go to Lewes, all of downtown Lewes is not in a flood plain, not in a sea level rise zone, but all the stuff that was built in the 60's and 70's goes underwater frequently. We've really gotten away from being risk adverse with where we place structures in the past 40, 50 years. I hope we get back to it. Any other questions. So I'm happy to come back in future meetings. I'm sure Mike would be happy to come back, as well. Next time I won't drive a state vehicle so I can visit Dogfish Head on my way in or out. That was a critical mistake today. I'm happy to continue these conversations. We've given you a lot of stuff to chew on. We've thrown 1,000 programs at you. We've thrown maps at you. We're happy to provide additional web links for your website...

Barry Goodinson: Can we get a copy of your PowerPoint?

Susan Love: I can give you a copy of the PowerPoint. I'm actually going to augment it with the two slides that Mike gave, so I'll resend it to you, so you have all that information. So we're here to help you and we want to see you really consider these issues, because I want to see the Town of Milton be successful and dry in the future.

Barry Goodinson: Well thank you both. It was great. I think we probably have... I'm actually depressed. We're going to have these distopian nightmares tonight.

Susan Love: Think of all the towns that aren't doing all this.

Barry Goodinson: No, it's a great opportunity. You've given us tons of information to work with, to really make this plan bold and realistic. I guess maybe what we'll do is we'll hold off. We've had good participation throughout the course of the evening, so I think we can hold off on additional, unless anyone has anything burning that they'd like to add or statements or questions they want to throw in at the last minute here, but remember we've got several more of these meetings. A couple of them will focus pretty closely on the river, as I mentioned.

Richard Miller: Barry, just a quick point. Can I ask Mike, is this available as an overlay, these two maps? Because they're different scales.

Susan Love: We can make whatever maps you want. Those were our maps.

Richard Miller: I understand.

Susan Love: We'll get you whatever you want.

Mark Quigley: I have a question for Hal and Jocelyn. Any thoughts or comments?

Hal Godwin: I'm just really happy that now the whole town knows what resources we have here in Mike and Susan. Both of us have worked with them both for years and know that they're a valuable resource for local government and I'm glad now that Milton's Planning and Zoning Commission, as well as the Mayor know that we have these friends right in our community with such a resource to help us get through difficult projects like the Comprehensive Plan.

Barry Goodinson: Thanks to Hal and Jocelyn. They keep on connecting us with these resources that we didn't know about and we're really bringing some experts to this process that we certainly, or I certainly don't possess, so it's really very, very helpful. So thank you. Our next meeting is not until the 13th, which is the Historic Preservation conversation. We're still working... I went up and met with folks from the State Historic Planning Office last Friday and started conversations with them about what resources and what direction we need to have that conversation going. I'm sure the river is going to make its presence known in that conversation as well. Check out the town website, check out the Facebook page to keep abreast on when the next meetings are.

Mark Quigley: Fred had gotten back to me with two dates and times. Is that open for discussion now?

Barry Goodinson: Sure.

Mark Quigley: He mentioned September 16th and 23rd, between 1 and 4 pm at the theater.

Barry Goodinson: This is the conversation about cultural resources in town. It was the one date that we had not yet pinned down. We were hoping to have it at the theater. We thought it would make sense to have that conversation at the theater, so September 16th. We have a regular Planning and Zoning Meeting that night. Well, actually that's at night, so at 6:30 and then the 23rd, that probably would work better. So do we want to go with the 23rd. Alright, we'll add that to the website.

b. Comprehensive Plan survey contents and method of distribution.

6. Adjournment

Barry Goodinson: So with that, can we have a motion to adjourn?

Lynn Ekelund: I move to adjourn.

Barry Goodinson: Oh, the Mayor has something.

Mayor Jones: You had a b. on your agenda.

Don Mazzeo: The survey.

Barry Goodinson: The survey. We're not going to be talking about the survey tonight. Thank you. So we had a...

Mark Quigley: I motion to adjourn.

Barry Goodinson: Second, please.

Don Mazzeo: Second.

Barry Goodinson: All in favor say aye. Opposed. Motion carried. Meeting adjourned at 8:12 p.m.