

Montpelier Planning Commission
July 12, 2010
City Council Chambers, City Hall

Subject to Review and Approval

Present: Jesse Moorman, Chair; David Borgendale, Vice Chair; Tina Ruth, Alan Goldman, Bethany Pombar and Missa Aloisi.
Clancy DeSmet, Planning Dept., and Rebecca Pfeiffer, Agency of Natural Resources.
Staff: Gwen Hallsmith, Director of Planning and Community Development

Call to Order:

The meeting was called to order by Jesse Moorman, Chair, at 7:00 P.M.

Review of Minutes:

There are only a sufficient number of members present to approve the May 10th minutes. Mr. Borgendale moved the Planning Commission approve the minutes for May 10th, with Ms. Pombar seconding the motion. The motion to approve the minutes was voted unanimous on a vote of 5 to 0.

Project Updates:

Multi-Modal Transit Center: The Carr Lot has been designated as a floodway by FEMA at this point. The city has appealed the designation and the appeal has not yet been decided. They received a request for more information from FEMA two weeks ago and have submitted the information they requested so they should hear relatively soon whether or not the appeal is successful or not. If the appeal is successful then they will move forward with all due haste on the transit center project as proposed. If it is unsuccessful, then it is not feasible to build the transit center there. However, there is some interest in the city continuing to develop the other things that were proposed for that lot, which include a park, parking, bike path and a pedestrian bridge that crosses between the Carr Lot and the rest of the Main Street area.

However, they added the transit center to the energy project for the purposes of environmental assessment, and that environmental assessment is proceeding at pace. There will be a public meeting on it on August 3rd. They have been working hard on getting a design that can be evaluated and completing the design of the energy plant so they have the environmental assessment information. August 3rd should be a moment in time when they know the results of the FEMA appeal and where people can really express their opinions about having a transit center as part of an energy plant or some of the other options they would be looking at.

That really covers the multi-modal transit center and the district energy plant at the moment. There aren't any new developments there except this week's City Council meeting the City Council will be appointing a committee to act as an advisory role for this entire project. The whole project really includes two parts. It is the district energy plant itself, and it is also what nationally is known as PACE which stands for property assessed clean energy and what the Vermont State Legislature passed as something called something CEAD, or the Clean Energy Assessment District. This would enable people throughout the city, whether or not they are connected to the plant, to make renewable energy improvements and efficiency improvements on their homes and pay them back ratably on their taxes like a water or sewer bill. It will require that the city vote to establish the district in an election in November. We will also need to change the charter to enable the city to sell energy in addition to water and sewer, and we will have to vote a bond that will cover both the PACE district and the district energy plant.

It is a big project and will require a lot of public outreach between now and November and they are looking to the committee that is appointed to help us do that.

Mr. Moorman asked if the district energy plant in any other way than timing related to the PACE project.

Ms. Hallsmith replied in a way because some of the buildings that would like to hook up to the plant could use the PACE funding to pay for their hookups. There are important linkages between the two, although they are not inextricably linked, which may turn out to be good news on either front. There have been some challenges already on the national level to the idea that another municipal tax might be ahead of mortgages and people's deeds so when banks foreclose on properties this energy type payment could be paid before the mortgage is paid if money is owed on it inasmuch as property taxes come before the mortgages on people being foreclosed on. The big secondary mortgage makers, Fanny Mae and Freddie Mac, are challenging this idea of these new districts. They are being used already in places like Boulder and Portland. We are hoping to use one here as well and hoping to help our legislatures understand the importance of energy and the importance of the fact that the cities need to be in this business to really achieve our low carbon and our renewable energy goals. There is already federal legislation that is being drafted to address the issue.

Mr. Borgendale asked if anyone anticipated any difficulties with the legislature about the charter change.

Ms. Hallsmith said they have so much they need to accomplish with the Legislature to make this energy plant work that it is likely to be part of a big package because the Legislature has to agree to let them build the plant. They have to agree to possibly a capital expenditure on the state's part. That would be part of that whole project. The charter change would be part of the package, and it will either go up or go down.

Montpelier Senior Center: The Senior Center project is moving forward. There is a grant to finish the feasibility study. One of the wrinkles at the moment is waiting for the final word on the amount of insurance the city will be paid for the fire, that there is a difference between bringing it up to the way the building was before and bringing the building up to code. They are just waiting for that decision to be made. The City Council will be taking the issue of the Senior Center and its ability to raise capital funds and have it own little nonprofit on their agenda as well. It looks like they will be able to move forward, renovate the building, put elderly apartments in the upstairs and continue to have the Senior Center in the basement.

Turntable Park: The same is true of Turntable Park. They are pretty much ready to go forward with construction on that. They have selected a project manager. The only last detail that needs to be ironed out is a legal opinion about where the city stands with the property, and they are expecting that any time now. Once they have that the grant agreement will be finalized and move forward with the construction of Turntable Park. Don Marsh, a local engineer, is the project manager. Of course, that involves remediating the hazards on the property. It is a Brownfields site with a lot of different contaminants but also restoring the old turntable to its original state. We'll have a nice historic park on the riverfront instead of an eyesore and a hazard which will be a big improvement.

REACH Program: They are moving forward with that. The staff of that program has completed some pre-program planning and now is ready to launch it on a trial basis with a group of people they have recruited for it, which is really exciting. They are also recruiting advisory board members now and are going to be convening an advisory board meeting later this month to move forward on that project. That is exciting for the elders in our community. For people who might not be familiar with the REACH Program, this is a project that was funded with funding from the U.S. Administration on Aging that enables us to set up a time exchange among people in the community, both seniors and other people, who are interested in helping elders and helping other people stay in their homes instead of needing to go to nursing homes. You will be able to join the program and make a commitment every month of a small amount of time to help with tasks you feel comfortable helping with. That might be like driving people places. Transportation is one of the real important needs that seniors have they are trying to fill with this program. You could be a volunteer driver or help somebody shovel their snow, do their gardening, rake their leaves, or whatever they need to manage to feel comfortable staying in their homes. There were a lot of cuts to these types of programs made in the state budget in the last round of budget cuts so this is an important program for our region and seniors.

There is also another grant program that isn't on the agenda she is going to be talking with the City Council about. It is a combination grant that has come out of both HUD and the Department of Transportation at the federal level that enables cities and towns, tribes, and other municipal divisions of government to apply for a sustainable community project that combines both a transportation element and a housing element. They are looking at what

The possibilities might be, but they are looking particularly at the end of Main Street where there will be a rather large problem with things like pedestrian safety, parking and access to parking once the new trains start running. She has been looking at how they might do a project that would involve the construction of some new housing, either connected to the Dickey Block or in a new building at the end of Main Street, and how we might restructure that corridor so we could complete the bicycle and pedestrian bridge that we actually do have as part of the Carr Lot project to make a safe passage for people from that side of the river so when the granite trains start running in earnest we won't be faced with real serious public health and safety problems. It is due August 23rd if the City Council decides to do it. That is what she will be doing this next month. The federal grants are really hard and take a lot of work. We can apply for a maximum of \$3 million, and she is meeting with the state on Thursday to talk about it some more.

Mr. Moorman asked if we had any news about the granite trains.

Ms. Hallsmith replied she doesn't know any more than she did before.

Floodplain Zoning:

Ms. Hallsmith said they would give the Planning Commission an introduction to floodplain zoning tonight. There is a lot to do to come into compliance with floodplain zoning. They would have worked on it sooner if they hadn't been so busy with the Master Plan, but it is the next priority they have and they really need to do it in advance of the rest of the zoning because it is separate from the rest of the zoning. This is what they need to enact to be in compliance with the federal mandates. Since so much of the city is in the floodplain it is important that the city be in compliance because it lowers the flood insurance rates for everybody that is paying for floodplain insurance downtown.

Clancy DeSmet, Planning and Zoning Administrator, introduced the Planning Commission to Rebecca Pfeiffer, Floodplain Manager with the Agency of Natural Resources River Management Program. She is present to talk about floodplain regulations and give a current update.

Rebecca Pfeiffer from the Agency of Natural Resources said she thinks the city went through an update a year or two ago. There are two types of flooding when they talk about flood hazard regulations and flood hazard planning. One is inundation flooding, and she showed a picture of Montpelier in the 1992 ice jam flood. Flood water heights were about 3 to 5 feet deep in the downtown area. Inundation flooding is when you have a lot of water that gradually rises and spreads out into the floodplain and gradually goes back down again.

Another type of flood hazard damage is erosion damage which is due to fast moving water of finding the path of least resistance during a flood. She showed pictures of a flood from three summers ago in the central valley here in Vermont. With erosion damage it is a lot

different than inundation flooding because the water rises very quickly and leaves very quickly, sometimes in a couple of hours and it moves all of the different material in its path.

Montpelier is a unique place in the state because you are at the confluence of a bunch of different smaller tributaries that all run into the Winooski River. The Winooski River is one of the major drainage basins in the state. These are all of the sub water sheds that make up the Winooski basin. In Montpelier you can see all of these small drainage basis all coming together right around Montpelier. There is the Stevens Branch that is coming from Barre City. From the East Montpelier you have the main stem of the Winooski River. Up north in Worcester you have the North Branch of the Winooski River. From down towards Northfield and Berlin there is the Dog River.

The next slide is a map showing disaster declarations by county in the state of Vermont. Part of that slide shows that Washington County has the most disaster declarations in the past 10 yeas in the state. Washington County has had 11 disaster declarations from 1974, which is about when most communities joined the National Flood Insurance Program. There is Barre and Montpelier in Washington County and they are both confluences and tributaries into larger rivers.

When they are talking about floodplains and planning for floodplain hazards we think about what kind of functions and values floodplains provide to us. Floodplains, as the name suggests, is an area which stores flood waters during a big flood. It helps to store the water while the main stems become filled with water from all of the small tributaries, and that is typically an area where we have very good agricultural and forestry land because it is areas that are trapping the different sediments that are coming from the flood water. It also provides reliable water power, especially in this area on the Winooski main stem. It is an area that provides for groundwater recharge which is very important in Vermont since a lot of peoples' water supplies come from groundwater. It provides for a water quality protection trapping sediments and nutrients that would end up in Lake Champlain otherwise. It helps to trap it into the soil. It helps provide for soil development through that sediment deposition. It is one of the most diverse areas for wildlife and riparian habitat. It is an area that we typically gather around. As Gwen said before, having a park down near the river is something that everyone in the community will enjoy.

She wants to give a brief outline of the National Flood Insurance Program and the National Flood Insurance Act and where we came from to get to where we are now. In 1927 was the flood of record in Vermont. After that and many other floods, private insurance left flood insurance because it wasn't profitable any longer. There were so many losses paid out and they weren't getting enough back in premiums because the only people who would buy flood insurance were the people who were continually flooded out who needed to buy it. In 1968 Congress enacted the National Flood Insurance Act and created the National Flood Insurance Program. The idea was to provide federally backed flood insurance to people who lived in flood hazard areas, or to anyone in the country who wanted to buy flood

insurance. It was a way of trying to transfer the cost of flood recovery and flood damages from the entire country to the people who lived in the flood hazard area. So instead of having everyone in the country paying for the 10 percent of people who floodplains they were saying people who lived in floodplains should then pay for the losses through their insurance premiums.

Then, in the mid 70's there were a few different acts that bolted up the language in the Flood Insurance Program basically requiring flood insurance if you were getting any sort of federally backed loan or mortgage and located in a flood hazard area. Vermont enacted some enabling legislation for communities to participate. In 1994 the CRF program was established, which is a community rating system of which Montpelier is one of the three participants in the state of Vermont. In 2003 the FEMA Modernization Program began. The modernization program is what brings us to this point right now. The Map Modernization Program is beamed at bringing update flood hazard mapping on a county wide scale to communities within the country. Right now Washington County is in the process of that map modernization.

Mr. DeSmet said their current maps are from 1982.

Ms. Pfeiffer said for most of Vermont it is somewhat typical to have maps that were made in the 70's or 80's and communities are still using those flood hazard maps. Rivers shift, change and move. Our floodplains change because of new development or changes in watershed development. The Map Modernization Program is a pretty hefty program. It took a lot of time and money and effort.

The Flood Insurance Program encourages states and governments to make land use adjustments acknowledging the fact that part of that community is exposed to floods. When she starts talking about the floodplain in relation to the National Flood Insurance Program the floodplain that the city has is called a special flood hazard area. That is the regulatory floodplain. Within that floodplain you can see the floodway so you can see the center part of that 100 year floodplain. The floodway is an area that she thinks of as the river's flood channels. It is the channel that is needed during a big flood event to move water. The regulatory floodplain people think of as the 100-year floodplain, but it is really the land that has a 1 percent annual chance. It means a flood many not occur 1 in 100 years or it could happen twice in one year. That happened in Ripton in 2008. They had two 100-year floods in one summer so it is just a matter of probability and chance.

Right now this is an example of the flood hazard maps that are similar to the types of maps that the City of Montpelier has where there is a flood insurance rate map on the left side and on the right hand side you have a floodway mapping. There are two separate maps. With the new maps you also go from town by town flood insurance which establishes those flood elevations to a county wide map and county wide flood insurance which identifies the fact

that water moves more than just within one community. In that flood insurance study they identified different flood problems and flooding events within the different communities.

Here in Washington County the area in the turquoise are areas that were preliminary maps that were presented in 2006 and 2007, and then there were the floods in Barre City that prompted many people to speak about some of the concerns about the preliminary maps that were presented. FEMA went back and restudied the Stevens Branch through Barre City and then coming in to the Winooski River here in Montpelier downstream to the Bolton Falls Dam. Other areas studied are in the yellow. Further downstream was incorporated with the Chittenden County updates and some areas in East Montpelier and Calais.

This is a summary of different E-911 points that they were able to identify as being in the floodplain. This is county wide. There are over 1,000 structures county wide in the floodplain, and you can see the majority of those are single family homes, mobile homes, commercial development, multi-family homes; government is another one. There are gathering areas which could be identified for emergency shelters for the areas such as schools and fire stations.

It's not just in Montpelier but all over the state of Vermont. A lot of Vermont is small towns focused on their rivers and that is where most of the town history began.

One of the things that the flood insurance maps aren't really able to capture is the worst case scenario. They are identifying a certain flood event that they can predict using topography on the ground, knowing how much water is expected during different flood events. It doesn't identify ice and debris jams which were the major cause of the 1992 flood here in Montpelier. They don't look at dam breaches; they don't incorporate that into the flood insurance study. They aren't anticipating the failure of culverts or bridges. If a culvert gets plugged or blown out, or if a bridge gets blown out, they aren't anticipating that in the flood study. They aren't taking into account the fact that the stream may change location based upon the erosion. The flood insurance studies aren't identifying situations like this.

We are looking at flood hazards generally. There are floods. You have injury and property damage. The town comes in and recovers and fills back where the back yards had been or fill back where property had been. They put berms up to keep water out and dredge the stream because it filled in during a flood event with a lot of different gravel, and then they put up a lot of rip rap to keep the stream from moving again. Slowly, after you do that people start to move back into those areas that were damaged. Then, the next time a flood comes through now you have more investment so it just keeps escalating each time and each time it becomes more expensive to recover after flooding.

Why don't we want to fill in a flood hazard area? On the top picture you have a house that is near the river with a beautiful view. Then, a developer comes in across the way and fills in part of that stream bank which was originally a floodplain. With that loss of volume to store

water now the water becomes higher during the next flood event because there is less area to store that body of water. You may start to have impacts on existing buildings by allowing for new fill and new development to come into the floodplain. It's not just fill but the houses or any of that associated development that comes in. It is just taking more volume out of that floodplain. It also exacerbates the potential for the stream to change. This is an example where you have a river that has very good access to its floodplain, wide open fields, and then someone came in and burned that up because they didn't want another house flooded, what happens is the water can't get out into the floodplain so now it moves the most erosive material which is its bed and its banks. Now the stream channel gets deeper because it keeps moving more of that material in the channel. Eventually, it is going to start to fail because it is going to become too deep in its channel. You will have the widening of that stream channel and mass failures or the landowner is going to start rip rapping that bank to stop the erosion from occurring. Then, if you let that site go eventually the stream is going to establish a new floodplain.

One of the things she wants to be aware of in Montpelier which is a receiving body for a lot of these rivers that have been going through these different processes is all of that material is coming down into these confluence areas where water slows down naturally as it intersects. Here is an example in Vermont of how dynamic our stream channels can be. You might not see too much on the Winooski because through the city it is pretty straightened and rip rapped in a lot of places, but up on the North Branch is an area where the river does have the floodplain access and there is more of a natural process going on. There are different parts of the Dog River and the Stevens Branch as it is coming around and the two rivers enter Montpelier. Those are areas where the streams still do have some floodplain access and some potential for movement. Again, in Montpelier with the channelized conditions in the downtown area it isn't as likely to make as dramatic a move, but you can have more of these effects upstream.

For the flood hazard regulation updates this is a process of the map modernization program where we are updating maps on a county wide scale so as the maps become effective the towns and communities in that county have to have updated flood hazard regulations that are at least compliant with the minimum federal standards. The town participates and enforces the flood hazard standards, and in exchange flood insurance is made available to everyone in town. The process is that it would start here in the Planning Commission. The Planning Commission would draft something that would be sent to the Agency of Natural Resources office for a review. They would do a review to make sure everything looks compliant with at least that minimum federal regulation. Any sort of revisions would go back to the Planning Commission. That would then get sent to the Select Board and come back to the Vermont DEC for a final review and then get sent to FEMA to say Montpelier is all set, checked out and all of their flood hazard regulations are compliant.

What are you tasked when you are looking at flood hazard regulations and flood hazard planning? This is from the Vermont statutes, and in bold it says **“To insure that the**

development of the flood hazard areas of the state are accomplished in a manner consistent with the health, safety and welfare of the public.” It’s not just about letting rivers have big floodplains so they can improve water quality but it is a health and safety issue, too, because people who are living in floodplains are people who may potentially need to be rescued during a flooding event or people who may be at risk of not being able to evacuate during a flood event.

There is also more information on the Department’s web site.

As an example of a safety issue this is a letter from the Thetford Emergency Manager, and he said part of his task as an emergency manager is to develop, update and coordinate disaster plans for the town. His role as Fire Chief has been to manage emergency scenes with the resources available. Most of these emergencies are single location events. Others like a wild land fire can be a single incident and multi-location events. Flooding could become a multi incident, multi location emergency event and pose very different problems. During a flooding event it may be many areas within the city that needs to rely upon emergency services. You should try to prepare the people in the community through flood hazard regulations, outreach, etc.

Another area that you can get some information is the Central Vermont Pre-Disaster Mitigation Plan. This is prepared by the Central Vermont Regional Planning Commission. They identify different potential areas that would be good for mitigation before the flooding occurs, areas that are problems in previous flooding events or areas that are identified that could become problems during a flooding event.

As you prepare flood hazard regulations their office has prepared several different models and the models are a place to start to work from. Depending upon what the priorities of the city may be you can then work from a certain model and then add or subtract as you see fit. Some of the things they have included in their models are instructions in the special flood hazard area. Substantial improvements to existing buildings are required to be elevated to prevent inundation into the building and water damage in the building. No new filling in the flood hazard area. It requires a project review sheet that the applicant provides to the city and substantial or major improvements to existing buildings would be added up and cumulatively calculated over three years and at the end it provides a certificate of occupancy when they are done with their project.

One of the things that Montpelier has as a benefit is the fact you have comprehensive zoning bylaws already. You already have established districts so there may be a downtown district, and you may also then have residential districts further upstream on the North Branch or on the Dog River as it is coming into the city. You may have other zones downstream of downtown Montpelier or upstream of downtown Montpelier. These are areas where you may want to establish stricter flood hazard regulations because there is more availability of other land to develop on and the impacts to the existing floodplain that is

there may be greater downtown if a flood every did occur. It is trying to help provide some flood relief and not making the problem worse by adding more development upstream of the downtown area.

Another option is the CRS program. The CRS Program is a FEMA program where a community applies and joins the CRS Program. The city residents who have flood insurance receive discounts on their flood insurance because of the different actions that the city takes. Montpelier is a CRS community. Currently, there is a 5 percent discount for any one in the city who has a flood insurance policy, and that is because the city sends out notification to different homeowners who are living in the floodplain. Some of the things they have added into their model regulations specifically for CRS communities are trying to develop some of those big key points and the city would also get credit for the higher standards and that credit could then translate into a greater savings for flood insurance policy holders.

One of the things they have in there is not allowing for new critical facilities in the floodplain. It seems like a no brainer but a lot of their town centers are in floodplains so our fire and police and ambulance bays are located there. These are areas that are obviously the first things to consider because these are mainly the services you need to rely upon during a flood event. By prohibiting new critical facilities from going into the floodplain it provides that planning and forethought.

Another thing they have is an additional elevation for substantially improved buildings or new buildings going into the floodplain if they do allow for new buildings in the floodplain. It is providing protection 18 inches above that base flood height, and it is just additional protection. The homeowners receive a much better insurance rate and lower insurance rate so it is a benefit for them, and it provides additional protection in case that culvert blows out or the bridge fails.

Another thing is no new fill in the flood hazard area, or another option is to require compensatory storage. Having subdivisions or planned unit developments is accessible by dry lined access. Again, this would apply to new subdivisions or planned unit developments. For substantially improved critical facilities that are already existing in the floodplain having them elevate to that 500-year flood where there is a 2.2 percent chance of flood so it provides additional protection for those critical facilities.

This is an elevation model showing that most of Montpelier is in the low lying floodplain area for a lot of the surrounding mountains. There is the North Branch and the Winooski River here going down, the main stem of the Winooski River here, the Stevens Branch coming in down here on the south part of the city, and then over here is the Dog River as it comes into the city. These major rivers are the rivers that are mapped by FEMA as flood hazard areas and there are all of these tributaries that exist in and around the city that aren't mapped as flood hazards but they are still potential areas of concern.

Here in Montpelier, Vermont the first flood insurance rate map was published in 1973 and then the current flood insurance rate map was done in 1982. From looking at the E-911 points that are in the floodplain there are 344 structures that are located in the floodplain in Montpelier. There are 262 policies within Montpelier, and that can include people in and out of the floodplain. There is \$46 million worth of insurance and 70 percent of the structures in the floodplain have insurance, which is actually a pretty good rate. In a lot of the communities there may be more something like 30 or 40 percent of the structures in the floodplain that have insurance.

To date from the beginning for when Montpelier joined the National Flood Insurance Program, which was in 1973, there have been 96 losses totaling \$1.5 million. Montpelier is an area that has seen some pretty big floods and there is also a lot of infrastructure in the downtown area.

This is just a summary of the different types of buildings that are located in the floodplain. It's a whole mix of different things, accessory buildings, commercial buildings, lodging, industrial, government buildings; there are 22 government buildings and 90 commercial buildings. There are 8 churches and 1 educational institution, which is the high school. There is a police and fire department in the floodplain. These are things to be aware of as you start to move forward and try to decide which direction the city may go in. There is already a lot of investment. How do you try to keep flooding hazards from getting worse for the existing development that is already in the floodplain and maybe looking at other areas upstream from the downtown area to see if there are opportunities for limiting development in the floodplain?

On the individual level people can make a plan. They can prepare a kit; they can practice and update their plans. They can get insurance. They can make sure they have the ability to recover from a flood and elevate their structures. From a city wide level that is where regulations can help. Understanding your known hazards and trying not to aggravate the existing risk to structures, taking steps to reduce exposure which may be elevating existing flood prone structures that have had a number of losses, trying to recruit the emergency response capabilities, and then on the state and federal level developing a way to identify those hazards and providing regulations to help communities to plan and develop incentives for communities.

To summarize, floods are coming to town. It's not a question of if but a question of when. Loss of life and injury and misery can be avoided or mitigated for and we can't afford to squander the remaining community assets and remaining community floodplains that may help to absorb some of that impact.

They know that streams and rivers change. They move and adjust to their surroundings. Many streams and rivers are vulnerable to dramatic and predictable erosive changes. It's

important not to increase the problem. It's important not to create harm to others and erosion can be avoided.

Ms. Hallsmith said since the floodway issue is so critical to the project they are doing maybe she could describe the difference between floodplain and floodway. That is an important thing for people to understand because the regulations are stricter and especially us as a CRS community need to manage floodway is quite different than floodplain.

Ms. Pfeiffer said under FEMA a regulatory floodplain is a special flood hazard area. The floodway is the main area of conveying water during a large flooding event. The way the FEMA regulations work a minimum standard is that no new encroachment of any type of buildings are prohibited from those floodway areas unless you can show you are not going to cause a rise anywhere within the rest of the floodplain by adding something.

Mr. Goldberg asked her to give them an example of a floodway in the city of Montpelier.

Ms. Hallsmith replied the Carr Lot. It has been redesignated as a floodway.

Mr. Moorman said the city is appealing that designation, right?

Ms. Hallsmith replied that is correct.

Mr. Goldberg said we wouldn't build on a lot like the Carr Lot.

Ms. Pfeiffer said the city would then have to submit supporting data to FEMA and they would respond saying they would review the changes. The city would have to submit the technical background to FEMA. There is always the option to do a restudy separate of this new map adoption process. It is called a Letter of Map revision which says we have more updated information and would like to revise our maps. You would submit that to FEMA. Right now because of the facts that the maps are going through this update process and there are changes being made to the maps it is an opportune time to bring this up. The City Council is probably going to be adopting new flood hazard regulations so it is on everyone's mind. Within the floodway there are no encroachments that would cause a rise to flood waters so that means you could do an engineering analysis to show that the development is not going to cause a rise. But, realistically small minor encroachments may be able to show that, but something like a large building in the floodway then it would be a causing a rise to other buildings. The FEMA standard is no rise which is 0.00 feet.

Mr. Moorman asked if they could mitigate that by making more storage.

Ms. Pfeiffer said it would have to be in the immediate area and given the lot it may be hard to do that, but she doesn't know exactly what the lay out of the multi-modal transit center would be and if that is a possibility. That would be something the city would work with an

engineer to see if it is a possibility. If only a small portion of the property is a floodway they may be able to change the shape or design in order to avoid the floodway. They could have minimal encroachment and they may be able to offset with some compensatory storage but it is difficult to show that in a lot of cases.

Ms. Hallsmith said going through the process there is a lot of uncertainty and a lot of costs that you can actually go through a fairly expensive process of doing some engineering to get to a no.

Ms. Pfeiffer said in Montpelier because they are at the confluence of all of these different major rivers in Vermont a lot of areas here in town were actually restudied by FEMA so other areas of the county might not have any changes to their flood hazard maps. The Winooski River was restudied. The Stevens Branch was restudied. The confluence of the Dog River to the Winooski River was restudied just because of the fact there were changes in the Winooski River that affect the Dog River so the areas in Montpelier would potentially change. That is actually a lot better than a lot of other communities. When they have done these restudies they actually get the elevation and topography data using lidar which can produce a 2 foot contour. It's kind of like a plane that flies above and radar from the skies. It is sending down a laser and then depending upon how it bounces back up you get an idea of the topography. It becomes a lot more accurate than the previous maps that have been made, the ones that were effective in 1982. They surveyed cross sections but they only do them for every 100 or 1,000 feet or so causing a lot more uncertainty. Basically, in Washington County the areas that were redone with the lidar topography and the detailed mapping was the Winooski River from East Montpelier, the Middlesex dam, through to Chittenden County, the Stevens Branch starting around Barre City and Barre Town up to the confluence, and the North Branch didn't really change very much.

Mr. DeSmet said the flood maps changed a lot. He has the 1982 maps digitally and he has the proposed maps from 2007, and when he lays them on top of each other there are certain portions that are significantly different. For example, the Senior Center at 58 Barre Street the floodplain goes all the way up past the playground on the 1982 maps. In the restudied maps from 2007 it doesn't even touch the front door. It's a significant change when they did a study in 1994 but the current maps are a lot different. The Carr Lot is one of those things that changed also.

Ms. Pfeiffer said Windham and Windsor Counties and Rutland County have already gone through this process and there are some communities where there are dramatic changes and shifts in floodplains because it is a complete change in how the town or city has related to its floodplain. Areas like the Carr Lot which were previously located outside of the floodway but still in the floodplain are now shown to be in the floodway. When you are looking at the flood hazard map you are looking at how much a volume of water or flow rate of water moving through the landscape and topography in town, how much water do we have to move through how much available land area? Up by the Senior Center where the floodplain

has shrunk it is probably because the Winooski River has cut down into its bed so it doesn't have so much floodplain access so more of the water is contained in the stream channel. Then, there are other areas where it may have changed because of surrounding topography.

Mr. DeSmet said if 58 Barre Street was not owned by a government, if that private landowner wanted to get a federally backed mortgage it would still have to pay for flood insurance, which is a good thing to have because a lot of the flood hazards happen outside of the mapped area which is another thing that is hard to predict. From a regulatory standpoint they can do certain things to that property that don't have to comply with the floodplain regulations because he has more specific data showing that the actual first floor of this building is higher than the base flood elevation. When he tries to convey that to a property owner in town they look at him cross eyed because it is very inconsistent. It's nice to have a newer map that we have more accurate data.

Ms. Aloisi asked if the flood maps take into account 30 years of development and changing from permeable to non-permeable surfaces and the increase of storm water that increases the river flows.

Ms. Pfeiffer replied when they map flood hazards from a FEMA standpoint they don't take into account storm water because it is a hard thing to predict. Where it is taken into account to some extent is when they estimate how much water is going to go through the landscape. You could model it as if it is something further up in the watershed like up in Worcester where there is more pervious surface and more infiltration into the ground and it is more forested and less development versus how you calculate the water running off a landscape in an urbanized area. It's not mapped in great detail where you are looking at storm water flows and the overflow of the storm water system into the stream channel. In some ways you have greater runoff, but in terms of flood storage during a flooding event the pervious and impervious surfaces don't make as much of a difference because your ground is so saturated but it makes a difference in how much water you have coming off the landscape during a rain event.

Mr. DeSmet said they could use it for a community rating system. If we are going to incorporate low impact development we could get more points and our 5 percent discount could become a 10 percent discount.

Ms. Pombar inquired what the maximum discount the city can get is.

Mr. Moorman replied 45 percent.

Ms. Pfeiffer said there is only one community currently in the country that has that rating. Right now Montpelier is a Class 9, which is a 5 percent discount. You go from the 9, 8, 7 range, and then to make that leap into the 6 and up it becomes a very intense process. A lot of times it is actually only communities that are almost completely floodplain or very heavily

invested in floodplain areas. The one town that is a Class 1 that gets a 45 percent discount they have moved very many structures out of the floodplain. They have moved whole neighborhoods out of the floodplain. It's in California. There are only 3 CRS communities here in Vermont and they are all Class 9. It is Bennington, Brattleboro and Montpelier. It is doing flood mitigation activities that could be relocating flood prone structures that are repeatedly flood prone. The city can basically sponsor the application for the homeowner for a FEMA grant to elevate the house or buy the property out and have it become open space.

Mr. Goldberg asked what we do with a small city like Montpelier where there is very limited space and the Carr Lot is extremely important to us and we would like to put a structure there. Is there some way we can mitigate with the federal government? We can't just give that up and go somewhere else.

Ms. Pfeiffer said she thinks right now the route the city is taking is probably the best avenue. They have filed the appeal with FEMA. The appeal is based on that estimate of flow and how much water is coming through the city at that time. There are stream gauge records throughout Montpelier that helped to estimate that so there is merit to the appeal. In terms of developing in that area, giving up the Carr Lot if it turns out the appeal is denied or it is still in the floodway, she would look at it as an area that is flood prone in Montpelier and an area that has had many different flooding events that have great affect on the economy and on the city's livelihood. Businesses when they get flooded 70 or 80 percent don't reopen. The further investment in the downtown floodplain you know there is a limited space, but on the other side of it you are setting more development to be affected during those large flooding events that may not come back. She knows it is a transportation center, but it is a hub of the city and having it in an area that is highly flood prone because it is a floodway it a give and take event.

Ms. Hallsmith said it is in the floodplain. There is a difference between the floodway and the floodplain. No, it isn't in the floodway.

Mr. Goldberg asked how far the floodway line comes in.

Ms. Hallsmith said it comes in quite far on the Carr Lot partially because of the damming effect of the Taylor Street Bridge. That is what makes the Carr Lot more flood prone than its surrounding areas. As soon as you are on the other side of the Taylor Street Bridge it narrows down again and it looks more like it does throughout town where it is really along the river banks. That is the other question people have had. During the last big flood here in 1992 the Carr Lot was high and dry. The difference between the 1992 flood and the kind of flood they are mapping for the floodplain maps is the difference between an ice jam flood where the water is backing up essentially from cemetery curve and a flood coming down the river. The ice jam flood came up the river, and they are mapping what is coming down the river.

Ms. Pfeiffer said in the city there are a lot of areas for water to get caught up between the different confluences and the different bridges across the main stem. Water really slows down. It comes flying out of the mountains and then hits the valley, which is Montpelier, and receives all of this water from all of the surrounding water sheds and everything slows down and gets high as it is waiting to move out. There is some ice jam effect that is taken into account on the North Branch and on the main stem of the Winooski, but the floods that are being mapped by FEMA maps they aren't taking into account ice jam flooding. They are really looking at all of these streams at flood stage what it will look like on the ground.

Mr. Borgendale asked whether or not these studies take into account downstream channel restrictions.

Ms. Pfeiffer said that is why the Chittenden County restudy was a very good thing because the Winooski River downstream of the Bolton Falls Dam was part of the Chittenden County restudy. As they are looking at how water is moving through the floodplain they are looking at the entire reach of area they have that elevation and graphic data for.

Mr. Borgendale said in the Midwest and the whole Greater Mississippi water shed that all of the downstream are against to restrict the river channel and dyking which makes the flood that much worse upstream. He wonders if these kinds of studies take that into account.

Ms. Pfeiffer said the Vermont River Management Program and the Stream Alteration Program very much restrict the ability to confine the river reach. We are trying to open our rivers back up instead of keeping them in their channels. There is a lot of really good floodplain access downstream of Montpelier and upstream of Montpelier, and that is part of why those open floodplains on the North Branch further north of the downtown area and along the Dog River are important areas because if there are more open floodplains upstream and downstream that is more storage of water that is not going to affect the downtown as dramatically. That is why it may be prudent in Montpelier to consider having different flood hazard regulations for different areas of the city. She knows it makes it more difficult for Clancy when he is looking at flood zoning regulations straight across the board for what everybody has to comply with but it may be more appropriate for a city like Montpelier because they are so heavily invested in one area of the floodplain but in other areas there are a lot of other opportunity to store flood waters and try and reduce the chance those areas will be developed.

Mr. DeSmet said just the fact that the majority of the downtown is in the Historic District if a building or structure is on the National Register it is currently exempt from substantial improvement requirements. What she is talking about having different regulations for different districts makes sense in Montpelier. We have such a large downtown district that is 89 percent contributing which means those structures aren't going to be changed. We aren't going to elevate City Hall because it would diminish the contributions.

Mr. Moorman said when we restrict stuff from the downstream upstream on the fringes so we don't further exacerbate problems like we are experiencing with the Carr Lot.

Ms. Pfeiffer said another option for the downtown area if it isn't something where you want to limit new structures going in or changes to existing structures they might allow compensatory storage. There are different ways you can build that are not going to restrict your floodplain storage. In Montpelier that is something you may want to look into, is by allowing a certain volume through a building footprint or fill for grading then you are providing flood storage either on that parcel if they can do some kind of easement or find another area to do some flood storage mitigation.

Mr. Moorman asked how close the mitigation areas have to be to the site of the fill.

Ms. Pfeiffer said the reason they haven't promoted it with a lot of communities is because they say hydraulically equivalent, meaning it is an area where you are building or your fill is impacting the floodplain you want it to be close enough so it is going to help to remove the impact from whatever development that goes in. You usually want it to be pretty close. One of the things from her point of view is if they are putting a building out on the edges of the floodplain where the flood waters aren't going to be as deep but enables a project in another area of the floodplain that does provide a lower floodplain terrace so the river is able to access a small floodplain more frequently. Typically, you would want to have it close to where the impacts from that development may be, but that may be something where mitigation may be appropriate where you say we don't have the ability to provide compensatory storage. Maybe there is another large project the city may sponsor using some of this mitigation.

Mr. Moorman asked if the activities upstream and downstream in other communities that we have no control over impact our flooding, right?

Ms. Pfeiffer replied that is part of why as a state agency when they go to talk to communities about flood hazard planning and flood hazard management they really encourage communities to consider their neighbors because what they are doing in Montpelier is going to affect downstream and upstream, and the same thing goes for all of the neighbors as well. They encourage all communities to consider reducing access.

Mr. Moorman asked why FEMA is doing this now and when can they expect it to be done again.

Ms. Pfeiffer said the Map Modernization Program was authorized by Congress in 2003 and it really hit its stride in the mid 2000's and 2005 and 2007, and technically it is over even though we are still going through this process. The reason why they did this on a nationwide scale is because the same situation Vermont is in a lot of states and communities have these

flood maps that are 20 or 30 years old and don't really identify the true flood hazards in the community any longer.

Mr. Moorman asked if it was because of intervening development.

Ms. Pfeiffer replied yes. It could be new development. In a lot of places in Vermont sometimes the river is no longer even in the mapped floodplain because it has moved or changed its course of location. It could be new development. It could be new structures, bridges or culverts. It could be changes within the watershed. Your watershed is primarily rural for agriculture in 1976, but now in 2010 it is primarily urbanized, or large portions of it have become more urbanized. In South Burlington and Williston urbanization is going to affect the flood hazard areas. As Clancy said before, the older maps and the changing you have seen just with Montpelier's mapping can show how those changes have impacted the flood hazard maps. Not just the river moving across landscapes, but a lot of our rivers in Vermont have actually cut down in the beds and there is less floodplain access. In some areas when they mapped it originally it was cut down in its bed and didn't have any floodplain access and now it has a lot of floodplain access and has recreated that over time. The day the flood hazard maps come out they are already out dated because the system is always changing.

Mr. DeSmet said even from the standpoint of our ordinance we are a CRS community so we already do above the minimal of the national flood insurance program. Three years ago when he started this job it was when the new maps came out. There was already a similar handout to what he has given out tonight that was done in conjunction with the Regional Planning Commission that we rushed through. He thought it was the document that was going to make our floodplain regulations up to snuff, but actually it didn't go far enough. That was two years ago and we got it through the Planning Commission and the City Council. Then, his colleague Rebecca noted some deficiencies. Up until this time and with the appeal of the floodplain maps he has been working with the ANR and the League of Cities and Towns to try to get an ordinance that is minimally compliant with the national program but goes above and beyond and does some things that could give us some more points so in the long run we have people who would have a larger discount because we did more. He went to FEMA a couple of times and became a certified flood manager. Just those three things gave us more points, too.

Mr. Moorman asked if they lowered their class level.

Mr. DeSmet replied yes.

Ms. Pfeiffer said it is in 500 point increments. 500 points gives you the 5 percent discount; 1,000 points gives you a 10 percent discount. Right now Montpelier has at least 500 points, but they are around the mid 600's. It sounds like a big step to go for another 350 points to the next step.

Ms. Hallsmith said a 10 percent discount on people's flood insurance would be a huge savings in Montpelier. It makes our housing more affordable. It makes the businesses more affordable.

Mr. DeSmet said it might attract people that want to buy it that aren't necessarily in the regulatory floodplain but because we are a CRS community someone on Prospect Street that has an erosion problem every couple of years can actually get hazard insurance and mitigate their damage, and it is more attractive because it would be a 10 percent discount rather than a 5 percent discount.

Ms. Pfeiffer said the more the discounts the people in the community get it adds up very quickly. It's the recognition of it, but it is also knowing you are doing your due diligence for the people in the city. One of the slides she had before was the options for CRS communities. No new critical facilities in the flood hazard area or requiring improvements to existing critical facilities in the floodplain to come to the 500 flood level is another. With critical facilities in the floodplain, if you prohibit them or have the existing ones protected to a foot above the 500-year floodplain that is 75 points right there. Having new buildings or substantial improvements elevated to a foot and a half above the flood elevation is 150 points. No new building in the flood hazard area or using compensatory storage is another 70 points. She has a model she has worked on that she hasn't submitted to the official CRS committee. She has done a preliminary estimate. Granted, this kind of the maximum extent of available credit for CRS so there are things that the city may not adopt. You get credit for having that standard applied in 30 percent of the floodplain. The general message is that just by adopting a few of these standards can make a big difference in making it to that threshold. Montpelier had their last review in 2007 and there are a lot of opportunities for getting to that next threshold.

Mr. Goldberg asked when does FEMA kick in with the building. What does it cover besides the normal insurance he has?

Ms. Pfeiffer said your normal homeowner's insurance does not cover any damage for flooding. That is pretty much standard on almost every single homeowner's insurance policy that is issued in most of the United States. If you wanted to get flood insurance on the private market outside of the Flood Insurance Program your only option is Lloyd's of London and it is a pretty high policy rate. Typically, they actually require the federal flood insurance as your deductible before they would even start insuring you. On the private market your homeowner's insurance would cover most damages for flooding. Your flood insurance policy if you had a national flood insurance policy on your structure the limits for residential buildings is \$250,000 and \$500,000 for commercial. The only thing that is required to make a claim on your flood insurance is that it has to be an event that affects two or more homes, or if you are in a situation where it is pretty rural and not a lot of dense development the flooding event needs to cover a certain area. You can have a flood insurance policy and if there is a storm water problem in the city where you have a basin that

continually overflows and if it affects more than two houses you can still make a claim on it even though it's not a river flooding situation. The basic building coverage, which is a lot of people get, they would just have the building coverage which is the replacement value for your structure. It doesn't require the building to move off its foundation. It is just in effect damages due to the flooding. You can also get contents coverage which would then cover all of the different things inside your house.

Mr. Goldberg asked if that would be part of the FEMA program.

Ms. Pfeiffer replied yes. With flood insurance policies the rating can be dramatically different whether you are located in a floodplain or considered outside of a floodplain. If you are outside of the floodplain, according to the maps, your rates could be \$300 a year, but if you are in the floodplain then your rates would become higher. In Vermont, and most of New England, a big issue is basements because a lot of areas in the Northeast have basements. They have a subsidized grandfathered clause for the flood insurance program. People who have those subsidized policies it isn't necessarily cheap. It's just that it is a lot less expensive than if you were actuarially rated so some people may have a subsidized rate but be paying \$1,000 or \$2,000 a year for flood insurance which could be a significant burden on homeowners. The flip side of that is that people who tend to be in floodplains don't necessarily have a rainy day fund waiting there for a flood come through.

Mr. Borgendale asked where could they see the current map of the 1 percent.

Mr. DeSmet replied he has it in its office.

Ms. Hallsmith said it is part of the Master Plan actually.

Mr. DeSmet said with the proposed maps people get confused. He had a person call about a property they looked up on the proposed map and the insurance agent said they didn't need flood insurance.

Ms. Hallsmith said in the current version of the Master Plan they do have the draft 2007 FEMA map. It is on page 31. They have also done an inset of the downtown where that new floodway designation is.

Mr. Goldberg asked if they wanted to do the Carr Lot can we mitigate downstream substantially off site. Could we go to one of our floodplains and try to make that more receptive so we could build on the Carr Lot?

Ms. Pfeiffer said a lot of that will depend on the result of the appeal. If it turns out that the floodway delineation stays as it currently is, there is that no rise standard where you hire an engineer to see if the impact of the volume of the building and whatever else associated with

it is going to cause any rise in flood waters, and that can be a hard standard to meet especially for floodways. It's a pretty good size floodway there.

Mr. DeSmet said it goes all the way to the railroad track.

Mr. Pfeiffer said because it is going to be mitigating the impacts of the flood elevation so far away from where the actual development is occurring you are going to show a rise throughout the city until you have floodplain access. It's just too far away if you did a project further downstream. If you did some work immediately in the vicinity on that lot, there might be a way to balance some of that but it needs to be done in a smart way because just having a building up on stilts may not really truly show the conveyance because there will potentially have debris and other things stuck on that building.

Right now because the appeal is still ongoing and they aren't sure if the city will submit information or not, or if Barre City is going to submit supporting information, we don't know what the timeline is. If neither Barre nor Montpelier provides supporting information her thought is that until FEMA issues its Letter of Final Determination is that their final determination is that these are the floodplain maps that will be effective. We don't really know when that date is going to be. If both the City of Barre or Montpelier provide supporting information then FEMA would review that to see if it has merit.

Mr. DeSmet said the question is that currently we are not compliant. Because of the indefinite period of the appeal of the map, would it be more strategic for us to adopt something a little more easy to digest and get compliant with the proposed map and then with implementation of the Master Plan and the municipal planning grant, and the revision of the zoning, would it be better to come into conformity?

Ms. Pfeiffer said understanding what their timelines are for the Master Plan updates and for doing the zoning bylaws, is that timeline a year from now, two years, three years? If you have time now and there isn't any other big huge project this might be a good time to delve in because you have 6 to 9 months to adopt the flood hazard regulations. There is always the option as well to adopt interim flood hazard regulations that would expire in two years. You could adopt complying bylaws on an interim basis and that would go through the Select Board. A lot has to do with scheduling.

Ms. Hallsmith said it was her opinion that given the relatively tight timeline on the flood compliance, there is six months from the time the maps are finalized. They anticipate the maps will be finalized soon but just not exactly when. Certainly, within the next few months they will be adopted and finalized. Meanwhile, the Master Plan is still moving through the adoption process. Right now it is at the City Council level. There is also a planning grant that we received from the state to do a boundary study for our zoning and our Growth Center and TIFs. That is going to take awhile so our zoning revisions aren't going to happen on a fast track. With the zoning they are looking at a year or two process to get to

the final product which is why she thought this was a good time to address the floodplain issues because we are on a tight timeline for this. This isn't a bad time to take on the floodplain issues, especially given all of the attention that the city has on it given the results, the appeal and the Carr Lot problems. It is a good time to raise peoples' awareness about the need to do this.

Mr. Moorman asked if they could move forward on these without really knowing what the final mapping is.

Ms. Hallsmith replied sure, but once the map is out then there is six months. That is when the clock starts ticking.

Mr. Borgendale said his understanding about the model ordinance is that it is built on a model that is attempting to maximize the points for our CRS case.

Ms. Pfeiffer said the review sheet that Ned provided is basically comparing Montpelier's current regulations to the minimum standards the city has to have to be compliant.

Mr. Borgendale said he sees there being multiple criteria here in terms of these things in the sense that obviously the best way to get more points is to put big restrictions on developing in the floodplain. Yet, our whole approach here is that the city to build up part of it in the floodplain in order to promote infill.

Ms. Hallsmith said that was also part of the argument for making our Growth Center rather large and focused on residential development outside of the downtown which is because we are so constrained both because of the limited land available but also because all of the land is in the floodplain which does make it harder to develop further in the downtown. There have been proposals that have come in which have been abandoned because they needed to meet these standards and they didn't want to.

Ms. Pfeiffer said she thinks infill is not necessarily completely opposed to flood hazard protection because of the fact that the floodplains are developed already. It gives an opportunity to provide additional protection to those existing buildings and infill is actually a good way to promote growth and also promoting sustainable growth. If you have a building that is already existing – it's not that you are going to knock down half of downtown Montpelier to open up floodplains – but when you have that infill and you have something new going into an existing building there is an opportunity there. The North Branch Apartments and some of the other historic structures weren't required to elevate above base flood elevation but what they did was protect their critical infrastructure in the building utilities and had their furnaces elevated and flood proofed so if there is a flood the electrical panels are elevated. You have those opportunities to help provide better protection to the buildings that are already there. That is probably why there are a few communities in Vermont she would suggest maybe having different flood hazard regulations for different

areas in the community because Montpelier is that type of city. There is some really dense development right downtown. There is already an existing flood hazard in downtown and we can't pretend it's not there. That might be an area where you do mitigation projects or the city promotes mitigation projects for trying to help individual building owners to do flood proofing of a building.

Ms. Hallsmith said it is true that Barre is also appealing some of their flood mapping partially because their floodway went right down their Main Street. It is hard enough for us with the Carr Lot in the floodway, but imagine if Main Street and State Street were in the floodway. It is a much more restrictive standard. What is the interplay between the two because they are upstream from us? Is there any likelihood that success there would lead to success here?

Ms. Pfeiffer said not necessarily. Downtown Barre City, which is the main area they are looking to appeal, is far enough away from downtown Montpelier where there would be a lot of effect, and actually quite a lot of that effect would be absorbed in the confluence. As the Stevens Branch is emptying into the main stem of the Winooski it backs up because there is so much water already in the main stem that it backs up first. A lot of that effect would be absorbed to some extent. She knows they appealed the maps but she isn't sure on what basis.

Mr. DeSmet said you can appeal on technical data or insufficient analysis. Ours was the opposite of theirs.

Ms. Pfeiffer said the City of Montpelier was appealing based upon the flow rates of the Winooski River, which has some merit to it, but on the Barre City side she isn't sure what they are appealing. If they did have some changes in their floodplain downtown – a lot of their downtown is similar to Montpelier's. It is pretty built out already so there probably won't be a lot of changes to their buildings.

Ms. Hallsmith said then there is the other question of be careful what you wish for. If we win the appeal but they decide that State Street is actually a floodway.

Ms. Pfeiffer said that is part of the submission of the technical data because Montpelier would provide that to FEMA. The preliminary maps that are currently out there stand unless you submit additional technical data, and then they would review it to see if they could agree with it.

Mr. Moorman said the appeal stuff doesn't hold us up on the zoning regulations.

Ms. Hallsmith replied no. The next step is for the Planning Commission to go through the proposed changes and then go through the regular zoning process which is quite similar to what they did with the Master Plan where they would go through the changes and decide on what changes we want to make, post a public hearing, hold the hearing, and then send the

changes along with the report to City Council, they post a public hearing, they hold a public hearing and they adopt the regulations.

Ms. Pfeiffer said they would recommend that before they send it on to City Council for review to come to the ANR offices to make sure you don't end up adopting something that is not going to be compliant. A lot of problems that a lot of communities have with the flood hazard regulations is that they think a line or word doesn't really matter and you cut it to make it more efficient and more streamlined but then it turns out you need that line in there because it's a minimum federal regulation or standard. The model she provided they have footnoted a lot of the things that talks about what is a minimum standard that you have to have, what is something we are recommending as Vermont DEC, so it culls out the things you need to really keep in.

Mr. DeSmet said the two documents that the Planning Commission have are the checklist and the current ordinance along with the recommendations. The documents the Planning Commission have are how the current recommendations to be minimally compliant would interplay with our current ordinance.

Ms. Pfeiffer said Model #2 is pretty similar to Model #5. Model #2 is just meant as a stand alone bylaw for communities that don't have zoning. Model #5 is the version for communities who already have zoning bylaws. Model #3 is a little less restrictive but Model #3 adopts an erosion hazard area. The Vermont Department of Environmental Conservation has gone through a pretty intensive process across the state to map erosion hazard areas. Most of downtown Montpelier is not going to have an erosion hazard area because it is pretty well channelized with concrete, but other areas of the city may have.

Ms. Hallsmith said they had some real erosion problems with the flash flooding we had a couple of years ago. Even the City Manager's house missed it by a whisker.

Ms. Pfeiffer said Model #5 is a relatively restrictive model that they usually start most communities out with. Model #3 is less restrictive in the inundation area, but it does establish an erosion hazard area where it is more restrictive. An area which may be prone to erosion may not permit new structures, but your inundation area outside of the erosion area may be more permissive to allow new structures on the fringes of the floodplain outside of the erosion area. She isn't sure how applicable that is to Montpelier. She isn't sure what mapping has been done for the erosion hazard areas.

Mr. DeSmet asked if she thought Model #5 is more appropriate.

Ms. Pfeiffer replied yes. Model #3 allows for new structures and allows for fill in the floodplain but it is requiring the structures to be elevated.

Mr. DeSmet said Montpelier already has two sections of the ordinance that deal with floodplain. The other stuff is the authority to implement it.

Ms. Pfeiffer said a lot of the language is taken from the language that is taken from the CRS documents about how to incorporate additional regulatory measures for points.

Mr. DeSmet said they aren't starting from scratch because we definitely have an ordinance where we simply mention there are provisions for violations for variances.

Ms. Hallsmith said she wonders if it would make sense in revising the zoning if they consolidated all of the flood hazard regulations in our zoning into one section.

Mr. DeSmet said from an implementation standpoint he doesn't think they should change it. Right now Article 3 is the basic permit, site plan, design review, conditional use and floodplain.

Mr. Borgendale said he knows they have made some effort to make it possible for somebody to develop.

Adjournment:

Planning Commission adjourned.

Respectfully submitted,

Gwen Hallsmith, Director
Planning and Community Development

Transcribed by: Joan Clack