

Meeting Minutes Tuesday, August 7, 2012 2:00 p.m. to 4:00 p.m.

- I. <u>Welcome and Introductions</u>: Present were Bill Sheehan, DEP; David Putnam, UMPI; Mike Eisensmith, NMDC; Richard Coleski, NOAA; Brian Longstaff, NMDC; Ken Murchison, NMDC; Joella R. Theriault, NMDC; and Bob Watson, MDOT. Also attending via teleconference: Joseph Young, MDOC; Dan Walters, USGS; and Tora Johnson, UMM.
- II. Overview of the Washington-Aroostook Regional Plan: Mike Eisensmith provided an overview of the HUD Sustainable Communities Planning Grant Program. The planning program includes such elements as healthy communities, transportation, brownfields, and a number of other components. A team of four, known as the 4 horsemen, wrote the grant application, which includes both Aroostook and Washington Counties. This plan may lead to obtaining additional monies to get the materials we need, such as LIDAR data, updated floodplain maps, etc.

At this time, the focus for FEMA is doing mapping along the coast. They are investing millions of dollars mapping the coast. Hopefully, within the next 5-10 years, the rest of the State's mapping will be completed. Joe Young explained that over the past few years, there has been an increase in the level of flooding

along the coast, which is why FEMA began mapping that location. Existing floodplain maps are just plain old and inaccurate.

Ken Murchison explained that Tora Johnson would be the liaison between Aroostook and Washington Counties. Tora reported that there are a number of things underway right now. They have LIDAR data for all of Washington County up to Calais. They have a slosh model developed by NOAA, which looks at water vulnerabilities. The University has done a lot of work with natural resources and analysis, but has not looked at inlet flooding.

The University of Maine at Machias offers a series of classes and those include training not offered at other university sites. They have had Fort Kent students come take classes, such as municipal GIS classes, scenario building, modeling, and Community Viz. They also have remote courses with LIDAR and GIS 2.

Bob Watson reported that in looking at the last three year's activity with climate, they are finding that they need to double the culvert sizes. A 50 and 100-year occurrence is more frequent then in past years.

Streamstats is a USGS Program used by municipal officials to give them an idea of stream flow and how to better plan activities. This program measures high and low flow predictions as well.

Regarding geothermal, David Putnam states that geothermal will not change because of climate changes. UMPI is spending more on air conditioning then what they would have spent of cooling with geothermal. While it is not possible to control climate, it is possible to take action on such things as transportation. David Putnam mentions fail safe and backup systems are two actions. We need parallel systems in place. We need to look at designing infrastructure for sustainability.

Other discussion:

- Mike Eisensmith pointed out the need to look for strategies that make an impact.
- III. <u>Discuss Climate Change Tasks</u>: Ken Murchison's next step is to make this plan more of an Aroostook County Plan. As it is now, the workplan is geared more toward coastal then inland.
- IV. <u>Open Discussion</u>: Each Member shall present three human impacts of climate change for discussion at this first initial meeting.

• Bill Sheehan:

- 1. Water for irrigating crops- There is an issue with how will you store water to have it available for agriculture. The State has regulations in place for storing water. While being able to measure stream flow is very important, there are very few stream guage stations in Maine.
- 2. The forestry industry uses some ponds but these are no longer legal. It is very hard to impound from streams.
- 3. There is a huge impact on agriculture because of later snow cover and more erosion.

Bob Watson:

- 1. There is existing infrastructure to deal with flash floods
- 2. We are seeing more and more of adjacent land uses where you have a road system between a mountain and a river. That creates conflict for infrastructure. Years ago, between every farm, there was a line fence, but over the years fewer farms and line fences; now have massive farms with no way to slow down the water. Farms also have bigger equipment.
- 3. This is an opportunity to bring in agriculture. NRCS has a program to capture top soil and put it back in the fields.

• David Putnam:

1. In 2008, there was a heat wave in Russia and it wiped out the ???????

- Right now, the heating problem in the mid-west is affecting corn. We don't have enough stockpile. We need to preserve our farmland. We are converting our fields to residential use.
- 3. Ecological: We have the last three rivers in the U.S. for trout. We don't advertise it and we should. Climate change is better for warm water species.
- 4. Invasion of turkey vultures, bird watching have climatic value. When climate changes, it changes the whole landscape.

Richard C:

- 1. Air conditioning and energy change in tourism, shorter season with snow pack. How do you cope with inconsistent weather patterns.
- 2. Wildfires dry July following a wet June; very inconsistent. How do people cope with this as it becomes the norm.
- 3. More concerned with F2 tornadoes.

• Joseph Young:

- 1. We're seeing more frequent and more intense storms. Seeing more damage to homes and to life. The primary issue is loss of life.
- 2. We can't keep up with the cost of mapping because cost is so great. The State and local government will not put an effort into mapping.

• Dan Walters:

My role is primarily a resource; to bring scientific research and continue to provide guidance on how things are changing. Part of the overall plan is to capture all major points made, health, economy, ecosystem, etc.

Tora Johnson:

I see myself also as a resource. One key piece for Washington County is things we cannot envision, such as consequences. One way to get feedback is high on the list. We want to inform people of the number of risks but we want to see what we can't envision. We do not want to alarm people, but one way to approach this is to provide

the information as a useful tool; approach it with things to consider, such as implementing/guarding against future loss. Look at this as a tool kit.

VI. Other