



FLOOD ADVISORY COMMITTEE

June 5, 2002

MEETING SUMMARY

The Flood Advisory Committee (FAC) meeting chaired by Clark Gilman, began at 10:00 a.m. at the Commission office (DRBC) in West Trenton, N.J.

REVIEW OF DRAFT MINUTES OF MAY 23, 2002

Mr. Hainly requested the word "only" be inserted into the second paragraph on page 7 between the words "can" and "be".

There being no other comments or corrections, the Minutes were accepted.

FLOOD WARNING RECOMMENDATIONS

An updated recommendations report with previous information left in to more accurately track the changes was distributed to the Committee members. The updated version will also be made available for any potential new funding. The report will continue to be updated from time to time to reflect any changes.

Mr. Fromuth provided an updated list of flood warning improvements funded or completed since April 2001. He noted a few items listed are within the scope of the recommendations report, but many are outside of it. The National Weather Service (NWS), U.S. Geological Survey (USGS), and PPL made changes that deal with specific gages and telemetry improvements.

The Committee reviewed some of the gages that are in jeopardy of losing funding through the President's budget proposal such as Tocks Island, Norristown, Penns Park, and Rushland. Mr. Hainly stated the three gages in Pennsylvania are currently in operation and the NWS has funding to operate them through this fiscal year in September. The potential loss of funds is if the funding for the national streamflow information program, which is a USGS program to fund stream gages, is approved at the suggested level in the President's budget. If this occurs, USGS will have to make some reductions in operations. He further stated that USGS is requesting to its best ability to restore the funding.

Mr. Fromuth reviewed some correspondence that has been issued in support of funding for flood warning improvements recommended in the report. This includes a letter sent from the co-chairs of the Delaware Basin Task Force to chairs of the Commerce House Appropriations Committee in support of the updated proposal. A more general letter was sent to other members of Congress for support of the updated proposal. And an e-mail updating activity between the DRBC and the Northeast-Midwest Institute in Washington, D.C. There are two tracks. One is the request for the specific flood warning recommendations. The other is for AHPS, as the President's budget has an additional 6 million dollars for the program.

DEMONSTRATION OF CORPS OF ENGINEERS FLOOD STAGE FORECAST MAPPING PRODUCTS

Mr. Jason Miller of the U.S. Army Corps of Engineers (ACOE), Philadelphia District provided the Committee

with a demonstration of flood stage forecast mapping products. The ACOE has been involved over the last three years with flood stage forecast mapping in the Susquehanna River Basin, in Snyder, Cumberland, Luzerne, Columbia, and Montour counties, Pa. He noted the project is run in an ArcView based system with slightly modified applications being added.

The flood stage forecast mapping is the non-structural portion of a project by the Baltimore ACOE to raise levees 3 - 5 feet above the flood level of Hurricane Agnes. Although some of the data is not finalized yet, it is 75% of a working model. Mr. Fromuth noted flood stage forecast mapping is one of the products the FAC recommended for trial applications in the flood warning recommendations.

The base map is a general area map for user reference. Data that appears on the base map will also appear on the flood inundation mapping. Building, roads, gage locations, major cities, land use coverages, water and sewer lines can all be included. Also included are digital ortho photography, aerial photography, building footprints with associated information, and spot elevations on every corner of every building, and highest adjacent grade. Field survey information including owners names, address and structural information, building use, tax assessments, etc. may also be obtained and included for buildings not protected by levees in the 100-year floodplain. Mr. Miller stated the main reason for this information is to assign a FEMA damage curve for content and structure for preliminary damage calculations by using first floor elevations and building uses. He noted data collection is the most time consuming part of the project.

To compliment the terrain data from the aerial photography, riverbed geometry surveys were also performed. All this information is used to bring up the flood response system input. Routine weather service stage forecasts are used at existing gages from a warning perspective. Emergency managers could utilize the forecast and inundation maps for planning purposes (i.e. evacuation, relocation recommendations, flood proofing) ahead of time.

Mr. Miller was asked if there was a way to show the extent or value of the homes that would be protected by levees under this program. He stated geo-references could be overlaid with the information being merged together to provide that data. It was noted this could be another valuable tool in case the levee breaks. It could be used for dam projects, and bridge modifications as well.

Mr. Gilman asked about cost sharing. Mr. Miller explained, in this case, the project prototype is about two million dollars. Federal money was used and the remaining balance is being shared between the local municipality and the PA DEP.

It was noted that Hurricane Agnes was in 1972 and was the event that triggered this process. It has taken thirty years to get to this point.

Mr. Hainly asked about electronic interfacing capabilities with the NWS AHPS forecasting products and the ACOE mapping products. Mr. Miller stated currently there is no electronic interfacing, it is manual input. However, discussions are ongoing.

Mr. Fromuth noted there is a program FEMA has been working on for several years called HAZUS, which is a risk assessment tool to be used for all different types of disasters. It was first developed for earthquakes and now for flooding. When asked if FEMA has had contact with the ACOE because of this database, Mr. Miller stated he was unsure.

Mr. Hainly asked Mr. Nickelsberg of the NWS if there has been any comparison of this model with the AHPS model and inundation mapping. Mr. Nickelsberg stated that in the Mississippi basin they are incorporating these types of maps with the probabilistic forecast, but is unsure where the base maps are originated.

REPORT ON WATERSHED ADVISORY COUNCIL MEETING OF MAY 14

A FAC sub-committee meeting was held on March 21 to review and revise the lead goals and objectives assigned to the FAC. A summary of the meeting listing the original goals and objectives and the proposed revised goals and objectives, as well as, comments that arose from the meeting on two of the objectives 2.1.C and 2.1.D was presented to the Watershed Advisory Council (WAC).

On May 14, Mr. Gilman attended the WAC meeting as the FAC representative and reported on what the FAC had done in terms of changing the wording for the goals and objectives for which they are the lead committee on. He informed the WAC the Committee had a problem with what damage might occur and how damage would be measured to riparian and instream ecosystems.

A new objective, 2.1.E has been added by the Waterway Corridors Committee (WCC) to cover flood damage and riparian ecosystems. Since the WCC will be working together with the FAC on many of their lead goals and objectives for the Comprehensive Plan, the WCC would also have the lead in addressing this objective as it relates specifically to ecology aspects of flooding but wants input from the FAC. The Committee reviewed the newest objective and agreed with it. They also reviewed comments from the WAC meeting about the concerns many had about the flooding versus ecology issue.

Mr. Fromuth stated he spoke to Mr. Dave Burd who is a member of the WAC and the FAC about this matter. Mr. Burd suggested, as a first step, to have a staff member from DRBC speak to the membership of the FAC to discuss the matter. Mr. Fromuth introduced Mr. Robert Limbeck, DRBC biologist, involved with assessments of streams especially in the lower Delaware basin. He is well versed in habitat change vs. change in stream channels and change in conditions. Mr. Fromuth also noted Mr. Limbeck serves as the DRBC staff liaison for the DRBC Waterway Corridors Committee (WCC). Mr. Limbeck spoke to the Committee about streams, channels, and flooding.

In reviewing the objectives, Mr. Limbeck suggested the FAC discuss the definition of "restore,, as the WCC will be looking into the meaning of it. He anticipated the WCC would replace "restore" with "stabilization." Mr. Gilman noted the Committee questioned what the definition for a "naturally functioning floodplain" was. Mr. Limbeck stated it means it is connected to the channel; the channel and floodplain are one and the stream is allowed to do what it wants to within its beltway.

There was discussion on how the new Comprehensive Plan might address mitigation plans. The Committee felt 2.1.C and 2.1.B addressed this concern. It was also stated that structures could be protected by retrofitting or elevating them, buying or moving them or by building a levee around them.

It was noted that there is a two-step recovery in the restoration process. The first step is to protect life and property and the second is to begin restoration. Mr. Limbeck stated if the priority is to protect infrastructure, then it should be done and obtain whatever ecological value you can. However, the definition of ecological values must first be determined.

Mr. Petrewski asked why the necessity of objective 2.1.D. Mr. Steigerwald stated that it was to cover areas where removal of levees may not be an option, as well as, those where removal might be possible and a more natural floodplain restored. Mr. Fromuth noted that the original tone of the objective was to return "x" acres of the basin to naturally functioning floodplain and remove "x" miles of levees and berms. As the Committee felt there was a need to change the wording to make the objective feasible, it was revised and left as an objective. He further stated that as it inter-relates with 2.1.B, the objectives may be combined once work begins on the implementation strategies. After some further discussion, the Committee decided to leave the objectives as they are for the time being as it may be determined that an objective such as 2.1.C could become an implementation step to achieve 2.1.B.

NEXT STEPS FOR DEVELOPING IMPLEMENTATION STRATEGIES FOR THE ASSIGNED

FLOOD LOSS REDUCTION OBJECTIVES

Mr. Fromuth stated although the exact dollar amount is undetermined at this time, the Committee has the opportunity to receive assistance in developing implementation strategies for the objectives of the Comprehensive Plan. The Committee reviewed a handout Item E-1, which was a short summary of the consultant work being proposed to have management steps created.

Mr. Fromuth stated that as this process is due by October 2002, this work will provide a way to begin obtaining detailed data and focusing on prioritizing the areas for pre-disaster mitigation.

At the last meeting, Mr. Gilman requested that the ACOE be given an opportunity to review this proposal for consultant work. Through the GSA, a list of contractors will be made available that could assist with the work. And as there is a lot of expertise on the Committee, the other approach may be to have several Committee meetings to develop the implementation strategies. The amount of time already spent, future time to be devoted to this project by the Committee, and the timeline involved was noted.

Mr. Hainly asked if the contractor work description should remain general in nature or be more specific and be prioritized by sub-basin or geographic area. Mr. Fromuth suggested adding one additional management strategy to the work description to have a priority assigned to the recommendations to the management strategies.

After some discussion, the Committee agreed in order to get the most meaningful product in the time allotted for the Comprehensive Plan, the best action the FAC could take would be to have a consultant tell them where the best place would be to start. Mr. Fromuth asked everyone to submit all their comments on the consultant work summary within the next week so a revised document can be distributed to the planners so the next step of hiring consultants may begin.

Mr. Sauls questioned the coordination process involved. He was informed that once the revised summary is provided to perspective contractors, an agreement can be signed and work can commence even prior to the next scheduled FAC meeting.

OTHER BUSINESS

The annual Alert Flows User Conference took place on May 29-31 in Philadelphia. It dealt with de-automated data collection systems.

In accordance with the FAC rules, the Committee is required to provide an annual activity report to the Commissioners. It was agreed that Mr. Gilman would work with Mr. Fromuth in the preparation of this report to be presented at the next scheduled Commission meeting of July 17.

NEXT MEETING

The next meeting of the Committee was scheduled for Wednesday, September 18, 2002 at 10:00 a.m. at the Commission office.

FLOOD ADVISORY COMMITTEE JUNE 5, 2002

ATTENDANCE

NAME

AGENCY

DROMASOZ, Bradley J.	New York City Department of Environmental Protection
FROMUTH, Rick	DRBC
GILMAN, Clark D.	New Jersey Department of Environmental Protection - Flood Plain Management
HAINLY, Bob	U.S. Geological Survey - Pa.
KANE, John F.	New York City Department of Environmental Protection
LIMBECK, Robert	DRBC
MARLOW, John	U.S. Geological Survey - N.J.
MILLER, Jason	U.S. Army Corps of Engineers
MUKADAM, Sheeba	DRBC
NICKELSBURG, Walt	National Weather Service
PETREWSKI, Gary	PPL
SAULS, George	U.S. Army Corps of Engineers
STEIGERWALD, Scott A.	Pennsylvania Department of Environmental Protection
TORTORIELLO, Richard	DRBC

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