The first meeting of the Delaware River Basin Commission Flood Advisory Committee (FAC) was held at the commission's offices beginning at 10:00 a.m. on Thursday, September 7, 2000. A list of meeting attendees is attached (Attachment 1).

Rick Fromuth of the DRBC staff, stated that the purposes of the meeting were to establish ground rules for operation of the FAC, to elect a committee chair and vice-chair, to discuss a draft proposal for an improved flood warning system for major streams in the Delaware River Basin, and to address other committee issues.

The DRBC staff provided background on activity since the flood coordination meeting held at the commission December 2, 1999. At that meeting, participants from flood loss reduction organizations throughout the basin reported on their responsibilities and identified needs for improved flood preparedness, with an emphasis on flood warning. As a result of that meeting, the DRBC staff prepared a report summarizing the meeting and listing the recommendations by the participants. The report included two DRBC staff recommendations. These recommendations were the formation of a DRBC flood advisory committee and the development by that committee of a proposal for improved river flood warning the basin. The report was distributed to all meeting attendees for comments and was presented to the DRBC commissioners on January 26, 2000.

The DRBC commissioners authorized the formation of the DRBC Flood Advisory Committee with approval of Resolution 2000-8 at the March 8, 2000 commission meeting. The committee consists of representatives from 19 different flood loss reduction organizations in the Delaware River Basin. The DRBC staff coordinated with potential committee members, some of whom volunteered for membership. Potential members were approved by the Executive Director after review and recommendation by the commissioners. A list of the Flood Advisory Committee members is attached (Attachment 2).

The representative from a media organization has not yet been selected. In addition, the Delaware Department of Natural Resources and Environmental Control (DNREC) has delegated its representation to two other Delaware organizations. These are the Delaware Emergency Management Agency (DEMA), and the Water Resources Agency (WRA) at the University of Delaware who is serving as the county water resources agency representative.

Mr. Fromuth summarized Resolution 2000-8 and provided the names of individuals representing each of the organizations. He noted that in any matters that would require voting, each organization would have one vote, although non-voting representatives were welcome to attend the meetings.

Bob Hainly raised a question about the operation of the FAC in the event that one particular agency might control funding for a particular activity. Jeffrey Featherstone responded that the intended role of the committee is to make recommendations to the Commissioners to reduce flood losses, and there was no intent to control or interfere with funding mechanisms for recommended projects.

COMMITTEE PROCEDURES
Mr. Fromuth stated that because the FAC is authorized to make recommendations to the Commissioners, it is necessary to establish procedures for voting, designating alternates at meetings, and selecting officers. Using procedures recently adopted by the DRBC Water Management Committee as a guide, the members agreed to a draft set of procedures for the FAC. The draft procedures (Attachment 3) will be reviewed by the FAC and considered for final adoption at the next meeting.

The following points were raised related to the committee procedures:

**Voting Procedures**
When a consensus cannot be reached, Gary Petrewski asked that the procedures indicate that a vote will be taken and determined by a majority of votes.

Mr. Fromuth noted that the Water Management Committee addressed the possibility of voting via email and that, given the schedules and travel time of several of the FAC members, it might be feasible for this committee to consider voting via email. The FAC was in favor of using email for voting as well as other activities of the committee and corrections/changes to the committee contact list were noted.

**Election of Committee Chair/Vice-Chair**
Peter Gabrielsen, noted that in the Susquehanna River Basin, the SRBC coordinates the flood warning improvements program without a chair and vice-chair or a formal committee structure.

Mr. Featherstone felt that it was important that the DRBC Flood Advisory Committee be chaired by an outside organization rather than by DRBC staff.

The committee determined that alternates designated by the Governors to serve as DRBC commissioners may not serve as chair or vice chair.

Based on the success of SRBC's decision to include basinwide and state/county representation, Mr. Gabrielsen suggested that the positions of chair and vice chair be represented at both the federal and state/county levels in order to have basinwide representation (federal) and also a more local perspective (state/county). Based on these discussions, basinwide representation was suggested as the role for the committee chair and state/county representation for the vice chair.

Mr. Gabrielsen reiterated earlier concerns relative to funding and that his understanding of the committee's purpose was as an advisory committee. Mr. Featherstone acknowledged N.W.S.' limitations, as well as the DRBC's, relative to funding issues and also acknowledged the advisory status of the FAC. Solomon Summer, Chief, Hydrologic Services Division, Eastern Region Office of the National Weather Service, was nominated and elected as chair of the committee for one year.

Clark Gilman, Chief of Floodplain Management at the New Jersey Department of Environmental Protection, was nominated and elected as vice chair of the committee for one year and will, according to the committee's procedures, assume the role of chair after one year and a new vice chair will be selected. Mr. Gilman's successor will be a nominee from basinwide (federal) members.

**Assignment of Designees**
Bob Schopp felt that a letter to assign a designee for a specific meeting might be a little too tedious, especially if the member is unable to attend on short notice. Suggestions for designating alternates included: a phone call or email to the Chairperson and/or DRBC staff prior to the meeting; or, the designated alternate would attend the meeting and announce his/her representation for that particular meeting which would include the same privileges of the member including voting rights.

**SCOPE OF COMMITTEE ACTIVITIES**
The initial focus of the committee is to improve flood warning and flood forecast mapping in the basin.

**DISCUSSION OF PROPOSAL FOR BASINWIDE FLOOD WARNING AND MAPPING**

Mr. Fromuth explained the efforts of the Northeast-Midwest Institute (http://www.nemw.org) and presented the proposal, "Program to Improve Flood Warning in the Delaware River Basin," which through efforts of the Institute was presented at a congressional briefing on Capitol Hill in March 2000. Prior to the briefing, DRBC met with Mr. Summer and Mr. Gabrielsen, for their comments and suggestions for improvement on the initial draft. On March 30, 2000, members of the Delaware River Basin Task Force, including Sherwood Boehlert (R-N.Y.), Robert A. Borski (D-PA), Michael N. Castle (R-DE) and Rush D. Holt (D-N.J.) sent a letter to Congress urging full funding support to implement a flood warning improvement project in the Delaware River Basin. Although the final report gained the attention and support of the task force, funding was not approved as part of the President's budget.

Mr. Fromuth explained that steps for improving the data network were still conceptual at this point and suggested that the committee refine the proposal including cost estimates. Mr. Fromuth asked the committee to submit comments relative to the concept, the wording and/or changes to the proposal. As a "next step," he suggested the committee members submit letters of recommendation from their respective agencies to the task force in support of the proposal as well as a letter of recommendation from the FAC to the DRBC Commissioners. Mr. Fromuth indicated that the proposal has not been formally presented to the DRBC Commissioners; however, following the refinement of the proposal and the support of the FAC, a presentation could be made to the Commissioners for their support.

Relative to the report, Mr. Gabrielsen indicated that telemetry has improved for stream and precipitation gages and transmission is now much faster and more timely. He felt the committee should consider not only gaging locations but whether or not the data is in "real time." With recent advances in technology, Mr. Gabrielsen felt is was important to define and upgrade data equipment.

Scott Steigerwald questioned whether GIS mapping procedures relative to format, etc. had been determined. Mr. Fromuth indicated that the Army Corps of Engineers (Corps) has the most advanced procedures which he followed in drafting the proposal. Mr. Steigerwald suggested that for high damage areas there may be some small grants available to local communities to obtain GIS flood stage maps for their own use which, in turn, could reduce local damage and also help us to collect necessary data as "pieces" toward the larger model. Local businesses that stand to benefit from loss prevention may also provide incentive for funding within their communities.

George Sauls indicated that the Corps has non-structural flood damage protection alternatives including cost sharing with local communities to share construction costs, as an example, for a flood warning system. The Corps maintains reliable streamflow data associated with reservoirs for the Lehigh and Schuylkill basins. Although stream gage and precipitation data is available for Corps operations, flood stage mapping is still needed. The Corps is also in the process of real time forecasting for their operations use, as well.

Mr. Gabrielsen felt that the committee might begin to work on some of the core areas of the proposal, including mapping, data collection, improved forecasting through Advanced Hydrologic Prediction Services (AHPS) and outreach by determining additional forecast points and gages, and creating interest and building support (aside from funding), through media, various users and agencies.

Mr. Gabrielsen felt that initially the committee should begin a comprehensive gage inventory in the event funding becomes available. Where are the gages needed and why? Where are there holes in the network? In addition, he suggested that the committee should evaluate and define GIS needs and requirements relative to the proposal and engage in public outreach by distributing and educating the public on the use of rain gages, and networking with local spotter networks to create grass roots data collection. He noted that the public
outreach efforts benefit flash flood warning and can be done right away without additional funding.

Mr. Schopp indicated that some funding from the natural hazards initiative may be available to help supplement flood forecasting efforts. The initiative has had funding increases from year-to-year and the second initiative includes a proposal for federally funded streamflow gages in order to reestablish older gages that have been discontinued and place new gages, including DCPs, where they are needed.

Mr. Gabrielsen reported that one resource available through the National Weather Service (N.W.S.) infrastructure might be the local outreach capability of their Warning Coordination Meteorologist (Binghamton and Mount Holly offices) to provide local outreach within communities as part of their spotter network training in order to gain local support for activities of the FAC.

Thomas Baumgardner agreed that several tasks could be completed by individual agencies with existing resources. He suggested reviewing the proposed budget and stressed the importance of defining the gage network in terms of the "most vital" as opposed to what is needed by creating two to three program levels for possible funding. From a congressional stand point, if the program were given less money, where would it go? By creating several levels for the funding, it shows Congress the benefit to constituents of "some" good work.

Mr. Hainly indicated that U.S.G.S. would probably be able to provide an inventory, including those that provide real time data and also discontinued gages, over the past ten years. Mr. Fromuth explained that we recently received GIS data layers for all gages and asked Mr. Hainly to review, edit and refine that information which does not include discontinued gages.

Noting the excellent comments and suggestions made by the committee relative to the proposal, Mr. Featherstone indicated that the proposal would need to be refined by the FAC and approved by the end of January 2001 in order to be prepared to support for the proposal for inclusion in the budget.

Mr. Summer suggested that each agency "do their homework" relative to gaging inventory, data requirements, GIS requirements, mapping requirements and outreach possibilities and meet in December 2000 to summarize and finalize the proposal.

Relative to the gage network, Mr. Sauls explained that the Main Stem was different than the upper Lehigh basin and suggested determining the gage network by identifying the potential damage centers for which the gages are being proposed.

Citing the success of the Bloomsburg (PA) project, Mr. Steigerwald emphasized providing GIS products that local communities can use to prevent flood loss.

Noting that emergency managers were probably most in touch with local communities and able to identify the necessity for potential flood and precipitation gages and also problem areas, Mr. Fromuth suggested that each agency submit via group email (by early October) any problems areas that their agency feels should be addressed. Mr. Fromuth suggested that these problem areas be summarized so that the committee might address the problems areas where flood and precipitation gages are most needed.

Dave Thomas questioned the basis for the "need" for flood and precipitation gages and how their locations were determined. Since the operation of gages is usually an expense "shared" by communities, agencies or businesses that are mutually benefitted by their operation, Mr. Schopp explained that the main purpose was for water supply with flood warning as an added benefit. Water supply and identifying hazard priorities have been the basis for the proposal for federally funded streamflow gages Mr. Sauls explained that the Corps utilizes gages to monitor flood control operations downstream from the reservoirs. It was explained by N.W.S. that flood gages are used to protect life and preserve property. These gages are located above damage areas based on historic records (100 years) of damage correlated with population data in coordination with
Mr. Thomas expressed concerns that the historical data and current gages did not seem to be producing results as far as removing population from harms' way. For instance, he indicated that some people and properties in vulnerable areas were either elevated or bought out to remove them from harms' way. Mr. Thomas felt that data should be used to predict events and provide lead time to evacuate to save lives and property, if possible.

Mr. Gilman reminded the committee that the City of Trenton has not seen a major flood since 1955. Through the gaging system and data collection, FEMA and Green Acres of Trenton have joined resources in the area of Assunpink Creek to buy out residents and eliminating further loss of property.

Mr. Summer expressed that lead time is the primary goal when issuing forecast warnings and advisories. The forecast warning system, began in 1890, along major U.S. rivers and as people moved away from these rivers to tributary areas, the system has expanded in order to provide accurate "real time" forecasts for necessary action.

John Mulhern indicated his agency is paying for operation of at least six gages for various reasons, which includes one on the Christina River to collect data for flood warning and another to determine whether flooding at Milford is from the Bay or from within the basin.

Mr. Steigerwald cited how a large Bloomsburg industry has utilized river forecast and gage information for flood loss reduction by saving an estimated $500,000 in lost production due to mobilization costs. With adequate lead time they save millions in inventory and equipment (motors). Using the same information, the City Bloomsburg is now in the process of identifying handicap and infirmed individuals in the event of a flood preventing possible loss of lives.

Mr. Gabrielsen cited the value of Doppler radar precipitation data in calibrating more accurate rainfall estimates and rates to expand flash flood warning areas. The radar network provides spatial data relative to the rate of rainfall and guidance for flood warnings and watches and possible mitigation. The entire basin is covered by the Doppler system and rainfall estimates are available on a county by county basis in order to provide flash flood warnings with lead times.

Dave Thomas encouraged the committee to use the system and products that are presently in place and perhaps are not being used to their full potential, rather than loose valuable time, possibly years, on initiative or ground work activities such as more data collection development. He noted that Congress is reluctant to keep financing data collection systems and that they are almost always the first to be cut from the budget. Since the current system provides 85-percent coverage, activities directly linked to mitigation would capture the attention of Congress and the most funding. He recommended to continue to develop products that show a direct correlation to mitigation.

Mr. Fromuth explained that in 1996 emergency managers realized the usefulness of the flood warning system and at the same time identified forecast misinterpretations and the lack of flood stage maps as deficiencies in the system. As a result, fire and emergency personnel did not really have good information. These are the types of problems the committee is faced with addressing, and Mr. Fromuth questioned how to attract FEMA's attention: Should we re-evaluate the existing network to perhaps eliminate gages that are no longer necessary and determine where new gages are needed? What types of activities would attract FEMA's attention?

As an example, Mr. Thomas indicated that the Bloomsburg project did not stop with the development of flood stage mapping but also demonstrated the benefit of property protection, which is the mitigation aspect sought by FEMA. The Bloomsburg project began as a partnership to benefit a local business and evolved. Ultimately
the entire Bloomsburg area benefitted. As with the State of Delaware, he also suggested partnerships which involve and benefit local communities. He indicated that Congress and also the state houses are more willing to approve funding in which the community has a vested interest and also contributes toward the effort. Mr. Thomas also emphasized the planning aspects of the use of data and use in developing goals.

According to Mr. Thomas, community interest and involvement, as well as a willingness to cost share is also a way to attract FEMA's attention for possible funding for flood loss reduction. Mr. Thomas indicated that funds are also available through the states or annually through federal agencies such as the Corps by district or NRCS. Mr. Fromuth suggested that those communities in the basin that would benefit from gaging and mapping be identified as priority areas for possible outreach and cost sharing.

Mr. Gilman pointed out that FEMA has recently completed a restudy of the Delaware River. There are new flood insurance studies of the Delaware River based on more recent Corps hydro analysis and mapping. Mr. Thomas indicated that was why he was emphasizing efforts be directed to the subbasins and tributaries, "working back" toward the watersheds (rather than the Main Stem) in order to obtain flood plain data and better mapping in those areas.

Flash flooding was identified as one of the "gaps" in any flood warning system. Mr. Fromuth explained that it is very hard to establish a prediction system based on events that occur away from larger streams, such as flooded streets due to flooded culverts, flooded cars, etc. Any lead time of less than two hours is not enough in flash flooding situations. He noted that the N.W.S. has a flash flood warning program and publishes daily flash flood potential, by county; however, there is not a warning signal. It was suggested that based on N.W.S. information, perhaps a warning notification system could be devised through volunteers.

Mr. Gabrielsen reported that the National Flood Forecasting Warning Program reported 53 minutes as the standard lead time for flash flood warning. Noting our hillier terrain, probably the best lead time we might expect would be 60 minutes. He also noted most flash flood fatalities are related to people driving on flooded roadways. The Susquehanna River Basin has instituted public education programs to identify river crossings, local flash flood areas and have created video tapes and included flash flood information as part of their drivers' education programs.

Mr. Fromuth indicated that although our Web page includes flood information, it does not reach the numbers of people necessary and perhaps brochures or public meetings in vulnerable areas would be a way of disseminating information.

Mr. Baumgardner suggested a Kids' Page as a "tool" for public education and information, citing that many adults also "hit" these pages.

Mr. Fromuth reported DRBC's efforts in locating science teachers of seventh and eighth graders throughout the basin to include flooding in their science curriculums.

Finally, the committee suggested that the proposal be better related to shortcomings in the present warning system and keyed to areas with high damage potential. This could make it more consistent with FEMA's property acquisition programs and potentially improve funding opportunities. Members were asked to provide information on their particular flood warning and evacuation problems to DRBC by Friday, October 6, 2000. This information will be used to improve the proposal. Committee members noted that the non-flood benefits of stream gages resulting from a revised proposal should be cited to emphasize their importance. A re-draft of the proposal is expected in December.

OTHER FLOOD WARNING AND MAPPING EFFORTS

At the December 2 meeting, the U.S.G.S. presented information relative to flood stage forecast mapping. Mr.
Fromuth wanted to make sure the committee's efforts were not redundant to U.S.G.S. efforts and requested information as to where in the basin their work is being conducted.

The flood warning system is a small part of flood loss reduction, which includes stormwater management, property acquisition and stream corridor restoration. State stormwater management programs address flooding as well as water quality. In addition to a better warning system, Mr. Fromuth asked the committee which of these areas should be emphasized.

For example, FEMA's community rating system, which is a proactive flood plain management program and project impact, which is a program for flood awareness as well as funding are community based incentive programs for flood loss reduction. Relative to the proposal, Mr. Thomas reiterated the need for identifying and targeting potential areas of disaster, in advance. The mapping aspect of the proposal would be beneficial in identifying building footprints and elevations and be helpful in identifying potential loss. Mr. Thomas identified mapping as a warning system that must be followed up by proactive efforts.

Mr. Gilman indicated, at least in New Jersey, there are many problems actually acquiring monies from FEMA for flood damaged properties. Barriers for acquiring supplemental monies are even more difficult, because communities must "front" the money and apply for reimbursement.

One overall objective of the committee is flood loss reduction, with specific focus on flood warning and mapping as a priority to the committee and especially emergency personnel. Based on the types of problems committee members may have experienced, there may holes in the network and another component to the proposal may be needed to make funding more relevant. As an example, Mr. Fromuth suggested a compilation of individual properties and their vulnerability to flooding to identify potential properties to correlate with the gaging request. Non-flood benefits of stream gages should be cited to emphasize their importance.

Mr. Fromuth mentioned FEMA's HAZUS (Hazards U.S.) program for monitoring hazards such as earthquakes and that now includes floods. Over the next five years a GIS database and models will be developed for communities or regional agencies to assess flood damage potential. Models will be developed and tested and combined with census data as an approximation of flood damage. The program is not complete but appears to be a useful tool in identifying areas of potential flood damage. The data will available to the public.

Citing FEMA's recent interest in reevaluating their flood plain regulations, Mr. Fromuth suggested that the committee may want to address the consistency of basin flood plain regulations as part of flood loss reduction. The current regulations continue to permit damage by allowing fill in the flood fringe.

Mr. Fromuth asked if there was an interest by the committee in considering changes to the DRBC flood plain regulations. He brought up the issue because of FEMA's proposal to re-evaluate its flood plain policies and recent policy statements by the Association of State Flood Plain Managers. He noted this was a complicated matter because of property rights issues. Mr. Thomas noted that more restrictive flood plain regulations had not been a practical approach since the beginning of the flood insurance program. Mr. Gilman stated that land dedicated to flood open space is considered a public purpose and must be purchased. He noted that the one-foot freeboard requirement in the DRBC flood plain regulations probably goes as far as any of the existing regulations. It was suggested that the FAC is not the forum, at this time, for determining the feasibility of more restrictive DRBC flood plain regulations. Mr. Thomas suggested that this issue should be part of a larger debate.

Mr. Petrewski questioned why the DRBC flood plain standards were different than those of the states. Mr. Featherstone noted this is because FEMA did not agree to adopt the DRBC standards as basin-wide standards. He noted that flood plain standards are considerably more fragmented than water quality regulations, given the number of municipalities involved administering flood insurance requirements. Mr.
Gilman noted that New Jersey's flood regulations are even more restrictive than those of the DRBC. Mr. Petrewski suggested that the role of the DRBC should be to develop flood criteria that would apply at particular locations consistent with state regulations as opposed to developing separate criteria for the whole basin. Mr. Thomas stated that FEMA's "no rise" rule for the floodway is an example of a regulatory tool which allows some flexibility for the amount of fill depending on the site specific hydraulics and can accommodate differences in fill regulations while still meeting a regulatory goal of no rise in the floodway elevation. He suggested that this issue of consistency in flood standards should also be part of a broader discussion.

Mr. Thomas asked the committee to always create a digitized version of any data they may have for possible inclusion in other databases.

NEXT MEETING

The next meeting of the Flood Advisory Committee was set for Tuesday, December 5, 2000 at 10:00 a.m. at the Commission office in West Trenton, New Jersey.

Attachment 1

FLOOD ADVISORY COMMITTEE
September 7, 2000

ATTENDANCE

<table>
<thead>
<tr>
<th>NAME</th>
<th>AGENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baumgardner, Thomas</td>
<td>National Weather Service (N.W.S.), State College, PA</td>
</tr>
<tr>
<td>Blum, Gail</td>
<td>DRBC Staff</td>
</tr>
<tr>
<td>Burd, David K.</td>
<td>Merrill Creek Reservoir</td>
</tr>
<tr>
<td>Chiaramonte, John</td>
<td>N.W.S., Binghamton, N.Y.</td>
</tr>
<tr>
<td>Featherstone, Jeff</td>
<td>DRBC Staff</td>
</tr>
<tr>
<td>Gabrielsen, Peter</td>
<td>N.W.S., Eastern Region Headquarters</td>
</tr>
<tr>
<td>Hainly, Bob</td>
<td>U.S. Geological Survey - PA District</td>
</tr>
<tr>
<td>Merritt, Pamela</td>
<td>DRBC Staff</td>
</tr>
<tr>
<td>Mulhern, Sean</td>
<td>Delaware Emergency Management Agency</td>
</tr>
<tr>
<td>Nickelsberg, Walt</td>
<td>N.W.S., Mount Holly, N.J.</td>
</tr>
<tr>
<td>Petrewski, Gary</td>
<td>PPL</td>
</tr>
<tr>
<td>Quinodoz, Hernan</td>
<td>DRBC Staff</td>
</tr>
<tr>
<td>Reuber, Michael</td>
<td>National Park Service</td>
</tr>
<tr>
<td>Rush, Paul</td>
<td>New York City Department of Environmental Protection (DEP)</td>
</tr>
<tr>
<td>AGENCY</td>
<td>NAME</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>Delaware Emergency Management Agency</td>
<td>John P. Mulhern</td>
</tr>
<tr>
<td>University of Delaware Water Resources Agency</td>
<td>Gerald Kaufmann</td>
</tr>
<tr>
<td>New Jersey Department of Environmental Protection</td>
<td>Clark Gilman <em>(Vice-Chair)</em></td>
</tr>
<tr>
<td>New York Department of Environmental Conservation</td>
<td>Robin Warrender</td>
</tr>
<tr>
<td>Pennsylvania Department of Environmental Protection</td>
<td>Scott Steigerwald</td>
</tr>
<tr>
<td>New York City Department of Environmental Protection</td>
<td>Paul Rush</td>
</tr>
<tr>
<td>New Jersey Office of Emergency Management</td>
<td>Anthony Mangeri</td>
</tr>
<tr>
<td>New York State Office of Emergency Management</td>
<td>John Dinuzzo</td>
</tr>
<tr>
<td>Pennsylvania Emergency Management Agency</td>
<td>Anthony Camillocci</td>
</tr>
<tr>
<td>Federal Emergency Management Agency</td>
<td>Dave Thomas</td>
</tr>
<tr>
<td>Natural Resources Conservation Service</td>
<td>Elbert Wells</td>
</tr>
<tr>
<td>U.S. Geological Survey - New Jersey District</td>
<td>Bob Schopp</td>
</tr>
<tr>
<td>U.S. Geological Survey - Pennsylvania District</td>
<td>Bill Werkheiser</td>
</tr>
<tr>
<td>National Weather Service - Binghamton Office</td>
<td>John Chiaramonte</td>
</tr>
<tr>
<td>National Weather Service - Eastern Region</td>
<td>Solomon Summer <em>(Chair)</em></td>
</tr>
<tr>
<td>National Weather Service - Mid-Atlantic River Forecast Center</td>
<td>Thomas Baumgardner</td>
</tr>
<tr>
<td>National Weather Service - Mount Holly Office</td>
<td>Walt Nickelsberg</td>
</tr>
<tr>
<td>National Weather Service - Eastern Region</td>
<td>Peter Gabrielsen</td>
</tr>
</tbody>
</table>
Voting. Decisions will be made by consensus, whenever feasible. When a consensus cannot be reached, a vote will be taken. Decisions on recommendations that would require commission action require a majority vote with 2/3 of the members (12 members) present in order to hold the vote. E-mail voting may be used when a vote is required and 2/3 of the members cannot be present. For recommendations on staff activities with no Commission action required, only a consensus and/or majority vote of members present will be required. The Committee Chair will prepare a report expressing the opinions of the dissenters including reasons why a consensus could not be reached.

Quorum. No quorum is needed to hold a meeting.

Committee Chair. Responsibilities of the Chair include: conducting meetings, consulting with Commission staff on meeting agendas, and reporting to the Commission once a year. The Committee will have a Chair and Vice Chair. The Vice Chair will carry out the responsibilities of the Chair when the Chair is not present. Alternates representing the governor on the Commission will not serve as Chair or Vice Chair. The term of the Chair and Vice Chair will be one year. After completion of the Chair's term, the Vice Chair will assume the role of Chair and a new Vice Chair will be selected. The Committee will endeavor to ensure that, over time, members elected to the positions of Chair and Vice Chair represent all member interests. The chair and vice chair will be selected so that one represents federal interests while the other represents state/local interests. Each office will rotate from federal to state/local or state/local to federal representation in the subsequent year.

Designees. Members may send designees to Committee meetings. However, a member may only assign a designee for a specific meeting. The designee will have the same privileges as the member including voting rights.
**Meeting Schedule.** Meetings will be held four times a year, unless the Committee decides otherwise.