

Delaware River Basin Commission's Role in Flood Loss Reduction Efforts

DRBC Flood Advisory Committee

One of the major strengths of the Delaware River Basin Commission (DRBC) is its ability to bring together various government and non-governmental stakeholders from throughout the watershed that otherwise might not have the opportunity to work together on issues of shared interest because of various jurisdictional boundaries and their associated limitations.

An excellent example is the DRBC's work over the past five years to help coordinate efforts to improve flood forecasting and mitigate flood losses in the basin. Specifically, the DRBC's Flood Advisory Committee (FAC), which is comprised of representatives from many of the state and federal agencies responsible for flood loss reduction throughout the watershed, developed a report with recommendations for addressing basinwide flood warning deficiencies. The organizations represented on the FAC have worked cooperatively to implement several of the recommendations, which include:

- Installation of additional precipitation and stream gages;
- Correlation of gage readings with flood stages;
- Improved flood modeling;
- Development of web-based, graphical flood warning products; and
- Public outreach to educate users about flooding and flood warning information.

These efforts played a positive role in helping to protect the public during the recent main stem Delaware River flooding.

The DRBC also led a multi-year effort that resulted in the completion of the Water Resources Plan for the Delaware River Basin, a 30-year, goal-based framework that will serve as a guide for all governmental and non-governmental stakeholders whose actions affect water resources in the Delaware River Basin. This basin plan, released in September 2004, was the product of consensus of a cross section of public and private water resource organizations and interests. One of the elements of the plan is the protection of stream corridors, including flood loss reduction. The DRBC's FAC helped develop the objectives related to flooding. These focus on:

- 1) Improving the basin's flood warning system; and
- 2) Assessing flood damage risk to prioritize and implement actions to reduce future flood losses.

The realization of these objectives is the function of many organizations rather than a single entity, but the plan represents a common view of the direction for the basin.

Flood Loss Reduction Priorities Recommended by DRBC Staff

Largely resulting from ongoing discussions among the FAC and others, DRBC staff believes the following flood loss reduction priorities should be advanced:

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- Develop Federal Emergency Management Agency (FEMA)-approved flood hazard mitigation plans for states, counties, and municipalities to comply with the federal Disaster Mitigation Act of 2000 and maintain eligibility for disaster mitigation funding. These plans form the basis for communities to receive cost-shared federal funds aimed at flood mitigation. Both structural and non-structural measures may comprise such plans.
- Implementation of the flood warning improvements outlined in the DRBC’s “Recommendations to Address Flood Warning Deficiencies.” These May 2002 recommendations were developed through the input of the flood warning and mitigation experts who comprise the DRBC’s FAC. They include:
 - Expansion of the U.S. Geological Survey (USGS) stream and precipitation gage network.
 - Accelerated development of the Advanced Hydrologic Prediction Services (AHPS) by the National Weather Service. The AHPS products are on-line and represent the biggest improvement in the availability of flood forecasting information in decades. Providing real-time stream stage and flow data is the backbone of the flood-warning system.
 - Increase National Weather Service, USGS, and U.S. Army Corps of Engineers funding for the development of flood stage forecast maps to be integrated with AHPS.
- Update the 1984 Delaware River Basin Survey Report by the U.S. Army Corps of Engineers as a means of accelerating the completion of flood mitigation plans for the main stem Delaware.
- Increase federal funding for local pre-disaster mitigation efforts, including floodplain property acquisition and flood proofing.
- Target FEMA map modernization funds to those municipalities where flood conditions have changed due to development.
- Strengthen floodplain regulations consistent with “No Adverse Impact” recommendations by the Association of State Floodplain Managers.
- Maintenance of existing flood control structures. Consider new structures only when economically supported and consistent with recreational and ecological objectives.
- Adoption and enforcement of stormwater management regulations.
- Expansion of flood plain and flood safety education programs.
- Use of snowpack-based storage management programs for water supply reservoirs should be evaluated, while recognizing the limited seasonal availability and marginal risk reduction offered by this type of flood mitigation. Evaluation of such programs must consider the supply risk incurred to the 1954 U.S. Supreme Court decree parties in their implementation. In the Upper Delaware River Basin, such programs require unanimous approval of the decree parties.

Visit the DRBC web site at www.drbc.net for more information.