## **MINUTES**

## SPECIAL COMMITTEE ON NATURAL RESOURCES

November 12, 2019 Room 548-S—Statehouse

## **Members Present**

Senator Jeff Longbine, Chairperson
Representative Ron Highland, Vice-chairperson
Senator Marci Francisco
Senator Dan Goddard
Senator Dan Kerschen
Senator Carolyn McGinn
Representative J. R. Claeys
Representative John Eplee
Representative Shannon Francis
Representative Annie Kuether
Representative Jason Probst

## **Staff Present**

Heather O'Hara, Kansas Legislative Research Department Jessa Farmer, Kansas Legislative Research Department Victoria Potts, Kansas Legislative Research Department Kyle Hamilton, Office of Revisor of Statutes Amelia Kovar-Donohue, Office of Revisor of Statutes Tamera Lawrence, Office of Revisor of Statutes Gary Deeter, Committee Assistant

#### Conferees

Major General Lee Tafanelli, Adjutant General and Director of Emergency Management, Kansas Adjutant General's Department

Chad Omitt, Warning Coordination Meteorologist, Topeka Weather Forecast Office, National Weather Service, National Oceanic and Atmospheric Administration

Terry Medley, Water Structures Program Manager, Division of Water Resources, Kansas Department of Agriculture

Tom Stiles, Director, Bureau of Water, Division of Environment, Kansas Department of Health and Environment

Earl Lewis, Acting Director, Kansas Water Office

Karen Woodrich, Kansas State Conservationist, Natural Resources Conservation Service, U.S. Department of Agriculture

David Williams, Chief of Hydrology and Hydraulics Engineering, Tulsa District, U.S. Army Corps of Engineers

Eric Shumate, Chief of Hydrologic Engineering, Kansas City District, U.S. Army Corps of Engineers

- Jud Kneuvean, Chief of Emergency Management, Kansas City District, U.S. Army Corps of Engineers
- John Grothaus, Chief of Planning Formulation, Kansas City District, U.S. Army Corps of Engineers
- Colonel Jason Ott, Director, Law Enforcement Division, Kansas Department of Wildlife, Parks and Tourism
- Linda Lanterman, Director, Kansas State Parks, Kansas Department of Wildlife, Parks and Tourism

# Others Attending

See Attached List.

## **ALL DAY SESSION**

#### **Welcome and Introductions**

Chairperson Longbine called the meeting to order at 9:05 a.m. He welcomed members, conferees, and guests and outlined the Committee's agenda for the day.

## **Overview of Committee Charge**

Heather O'Hara, Kansas Legislative Research Department, briefed members on the Committee charge. She said the Committee is directed to review the damage caused by the 2019 floods, its impact on various agencies, and determine the role of state government in relation to flood control, prevention, and accessing needed resources (<u>Attachment 1</u>).

## 2019 Flood Year in Review

The Chairperson welcomed Major General Lee Tafanelli, Adjutant General and Director of Emergency Management, Kansas Adjutant General's Department. General Tafanelli introduced Chad Omitt, Warning Coordination Meteorologist, Topeka Weather Forecast Office, National Weather Service, National Oceanic and Atmospheric Administration, who outlined the unusual weather pattern that produced the historic rains of 2019 (Attachment 2). He explained a "bomb cyclone" brought rains in March 2019 on top of snow pack in Nebraska and Iowa, which produced almost 100.0 percent runoff, causing the Missouri River to flood. May 2019 brought additional persistent rainfall in Kansas, which fell on the already saturated ground, filling Kansas reservoirs. He noted Tuttle Creek Reservoir rose 30 feet during this time period. He reported normal annual precipitation in Kansas totals 34-40 inches; 2019 totals brought an unprecedented 81.9 inches of rainfall.

Mr. Omitt responded to members' questions:

 The jet stream controls weather patterns, sometimes causing erratic patterns of rainfall; and Weather forecasts usually cannot be considered reliable beyond 14 days.

Major General Tafanelli, as Director of Emergency Management, traced the impact of the floods across Kansas and the actions taken by agencies in response. He provided details from Atchison, Doniphan, Leavenworth, and Wyandotte counties of historic crests in reservoirs, road closures, agricultural damage, and disruption of public water and wastewater services. He cited the state disaster declaration by Governor Kelly and the federal declaration of a disaster, which allowed public assistance for 70 counties. He identified 22 agencies that were activated to address rescues, evacuations, shelters, donations, transportation, and dams that were compromised. He outlined the recovery programs that provided assistance through the Federal Emergency Management Administration (FEMA) and other public assistance programs. Assessing the events of the flood, General Tafanelli emphasized the value of effective mapping, advanced planning, collaboration, and technical support. He commented on the challenge of persuading local units of government to be more proactive in advance preparation.

Major General Tafanelli responded to members' questions:

- Damage to agriculture and costs to businesses have not yet been totaled;
- The State has a good relationship with FEMA and appreciated its help;
- The U.S. Army Corps of Engineers (USACE) provided resources, such as sandbags, to address threatened dams; and
- Sedimentation might affect flood control, although sediment primarily affects reservoir capacity. A sedimentation study would be provided later in the day.

## **State Agency Responsibilities**

Terry Medley, Water Structures Program Manager, Division of Water Resources, Kansas Department of Agriculture (KDA), recounted KDA's responsibilities in relation to the historic flood. He cited the programs administered through the agency in addressing the needs created by the flood: participation in the National Flood Insurance Program; the Floodplain and Light Detection and Ranging (LIDAR) Mapping Projects; and he identified hazardous dams and threatened levees, the latter illustrated by the dam breach in Sabetha.

Tom Stiles, Director, Bureau of Water, Division of Environment, Kansas Department of Health and Environment (KDHE), reviewed the agency's response to the 2019 flood. He noted the flood's impact on wastewater facilities and the 14 public water supply facilities that were compromised. He recommended communities employ asset management and long-term investment in infrastructure systems to improve contingency plans.

Earl Lewis, Acting Director, Kansas Water Office (KWO), reviewed the stipulations of KSA 74-2608, which details the duties of the Kansas Water Office, to compile relevant information regarding water, develop a state plan for water resources management, and adopt guidelines for water conservation. He offered these recommendations: improve river forecasting and flood maps, and evaluate watersheds basin by basin. He also suggested an online portal to integrate data and agency information. Answering questions, he replied the pattern of floods and droughts is increasing, a fact that is being assessed on a federal level. He explained

sedimentation in reservoirs increases because of a flood, but is not the prime factor in causing a reservoir to flood (<u>Attachment 3</u>).

#### Break

The Committee briefly recessed from 10:35 a.m. to 10:45 a.m.

## **Federal Agency Responsibilities**

Karen Woodrich, Kansas State Conservationist, Natural Resources Conservation Service. U.S. Department of Agriculture (USDA), reviewed the services of the USDA that address flooding events (Attachment 4). Regarding the Environmental Quality Incentives Program (EQIP), she said it offers financial and technical assistance to private landowners, which, through the Kansas Disaster Flood Recovery Initiative, provides limited resources that align with conservation practices. In addition, the Emergency Conservation Program provides similar assistance to farmers and ranchers to restore farmland damaged by natural disasters. Likewise, the Emergency Watershed Protection Program will remove hazards and restore stream hydrology back to pre-disaster conditions; it also allows a landowner to establish a floodplain easement that will restore and enhance the functions of a floodplain. She cited one other program available to assist landowners in obviating future flood damage: the Watershed and Flood Prevention Operations Program, which is sometimes known as the Small Watershed Dam Project. The latter project has assisted in building 831 dams in Kansas. Answering questions, she replied federal funds are restricted to a given county and cannot be integrated with a multi-county project, and building more dams in small watersheds will provide further protection from flood damage.

David Williams, Chief of Hydrology and Hydraulics Engineering, Tulsa District, USACE, outlined the oversight of the USACE for the 30 flood-control reservoirs in the Arkansas River watershed, eight of which are in Kansas (<u>Attachment 5</u>). He stated the USACE regulates the watershed as a system and follows the policy of water release from reservoirs based on observed rainfall. The 2019 flood was historic, with the average monthly statewide rainfall the highest in the USACE' 125-year record. He cited detailed information for each of the reservoirs in the Verdigris and Neosho River basins, showing each of the reservoirs exceeded capacity in May 2019. He noted, without the reservoirs, flooding would have been much worse. Responding to a question, he replied the reservoirs were slowly being brought down to normal levels.

Eric Shumate, Chief of Hydrologic Engineering, Kansas City District, USACE, reviewed the two major flooding events in the Missouri River basin, which began in Montana (<u>Attachment 6</u>). Referencing the Kansas River and the Osage River basins, he explained the regulations for release of water from reservoirs—releases occur only when downstream conditions allow and flood control is the primary focus of reservoirs. Three phases guide the release of water. If water rises above the third phase, it is beyond the USACE' regulation authority. He recounted the March and May 2019 flooding events to show the surcharge impact on each reservoir. Answering questions, he replied the current flood control system is sufficient and the system is managed as intended. Flood control takes priority over removing sediment; sediment is more a problem when the reservoir is in the multi-purpose zone.

Jud Kneuvean, Chief of Emergency Management, Kansas City District, USACE, outlined the actions to be taken before a flood event (training, equipping, assessing, and monitoring),

during the event (support for agencies), and following the flood event (repair, assess, mitigate, and enhance). He provided a list of resources and equipment available from the USACE for flooding events; he commented the USACE provides both technical (trained personnel) and direct assistance, such as sandbag machines, to supplement state and local efforts. He recounted the flooding events of March and May 2019 and how the USACE provided assistance with both personnel and material. He reviewed the damage to both federal and non-federal levees and the concomitant rehabilitation efforts; he stated 54 projects have been approved for repair (Attachment 7).

John Grothaus, Chief of Planning Formulation, Kansas City District, USACE, presented the three phases for the 2019 flood response and recovery: stop breach flows, rehabilitate damaged levee systems, and reduce long-term flood risk (<u>Attachment 8</u>). He provided detailed actions for each phase and gave the current status of each. He noted a comprehensive series of studies for the lower Missouri River basin and the Kansas River basin; these studies are designed to initiate action as warranted as the studies progress. He commented on the influence of sediment on flood control as a way to reduce flood risk. Answering a question, he said the studies are funded 75.0 percent federally and 25.0 percent locally, and are designed as partnerships in order to engage the relevant communities.

The Chairperson referenced a study provided by Larry Biles, Kansas Forest Service, regarding the importance of riparian forests to sedimentation control, which was distributed to the Committee (Attachment 9).

## Lunch

The Committee recessed for lunch from 12:28 p.m. to 1:47 p.m.

## State Agency Responsibilities (continued)

Colonel Jason Ott, Director, Law Enforcement Division, Kansas Department of Wildlife, Parks and Tourism (KDWPT), recounted the work of game wardens during the flood events of March and May 2019 (<u>Attachment 10</u>). Explaining Kansas game wardens have statewide jurisdiction and are authorized to enforce all state laws, he stated the agency's law enforcement division coordinates with the Kansas Division of Emergency Management to respond to disasters such as floods. He reported, working with regional and local authorities, their activities centered around Atchison and Elwood, where they conducted search-and-rescue operations, as well as assisted with evacuation of affected citizens.

Linda Lanterman, Director, Kansas State Parks, KDWPT, after noting the economic benefits of the state park system, provided visual and factual details on how the floods impacted state park facilities and operations (<u>Attachment 11</u>). She commented on the agency's work with the USACE and the U.S. Bureau of Reclamation to address the damaged facilities and, assisted by FEMA, the clean-up and plans to rehabilitate the infrastructure. Responding to questions, she replied costs are not yet known and the impact of the floods on wildlife and vegetation has not been determined.

## **Review of Agency Requests**

Mr. Lewis returned to recap the hearing and offer recommendations (<u>Attachment 12</u>). He offered the following review of agency requests and recommendations:

- Streamgaging network enhancements;
- Enhanced State Emergency Operations Center;
- Enhanced Geographic Information Systems (GIS) mapping software;
- Provide models for flood inundation;
- Initiate a basin-by-basin evaluation and planning; and
- Work with Public Water Supply Emergency Planning to identify alternative sources and develop contingency responses.

Mr. Lewis noted the challenge in dealing with the increased frequency of flood events, and he commented on the amount of storage capacity lost recently due to sedimentation. He referenced supplemental information tracing storage capacity of Kansas reservoirs through the decades and the effects of precipitation and sedimentation (<u>Attachment 13</u>).

Conferees responded to members' questions:

- Developing a central clearinghouse or portal would provide a helpful resource (Mr. Lewis);
- Evaluating the basins would cost \$200,000 per basin (Mr. Lewis);
- The emergency services provided during the year were funded within budget parameters (General Tafanelli);
- The services of the USACE were adequate throughout the year (Mr. Lewis); and
- More resources for the small watersheds would be helpful, although this year the small watershed dams made almost no difference in mitigating floods (Ms. Woodrich).

A member suggested further attention and study be given to the effect of sedimentation on flood control. Another member commented future plans should include both extremes of rainfall—floods and droughts.

# Committee Discussion and Possible Recommendations for the Report to the 2020 Legislature

The Chairperson invited members to offer recommendations for the Committee Report to the 2020 Legislature. Members discussed a number of relevant issues: basin-by-basin evaluation, seed funds to assist local units of government in addressing flood issues, the need for a central clearinghouse for disaster events, working with landowners to address streambank stabilization through riparian vegetation, and floodplain easements.

The following recommendations were advanced to be submitted to the 2020 Legislature:

- The Kansas Water Office should conduct a basin-by-basin evaluation of Kansas reservoirs to determine where flooding is occurring, what damage has occurred as a result of flooding, and possible actions that could be taken to prevent or provide remediation for flooding events. Such an evaluation should include possible use of floodplain easements and long-range planning for future flood events. When basins are located in more than one county, the evaluation should focus on the entire basin, regardless of county lines;
- The House Committee on Appropriations and the Senate Committee on Ways and Means should consider a plan to restore the \$8.0 million statutory transfer to the State Water Plan Fund;
- The State Water Plan should include efforts to combat the build-up of sedimentation in Kansas reservoirs. The Kansas Water Office should provide information to the House Committee on Agriculture and the Senate Committee on Agriculture and Natural Resources regarding sedimentation, including the estimated timeline for clearing sedimentation to increase reservoir capacity and the associated costs. The sedimentation removal planning should include preventative activities such as streambank stabilization and prevention of field erosion;
- The Kansas Water Office will provide information to the House Committee on Agriculture and the Senate Committee on Agriculture and Natural Resources regarding lowa's system for reporting flooding events and providing resources to affected citizens and landowners. Such information should include suggestions for how Kansas citizens can best access information on flood events as they occur;
- The Kansas Department of Wildlife, Parks and Tourism will provide information to the House Committee on Agriculture and the Senate Committee on Agriculture and Natural Resources regarding damage to state property and infrastructure due to 2019 flooding events; and
- Adopt a Joint Resolution urging the Kansas federal delegation to make appropriations for the 2019 flood damage in Kansas and to ask for congressional authority for the Tulsa Division, U.S. Army Corps of Engineers, to create a study similar to the study being conducted by the Kansas City Division, U.S. Army Corps of Engineers, on river bed degradation.

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The Chairperson adjourned the meeting at 3:25 p.m.

Prepared by Gary Deeter Edited by Heather O'Hara

Approved by the Committee on:

December 18, 2019 (Date)