



MISSOURI DEPARTMENT OF NATURAL RESOURCES

FRAWG Meeting
Sept. 20, 2019

**Flood Recovery Advisory Working Group
September 20, 2019
9:00 a.m. to 12:00 p.m.**

Lewis and Clark State Office Building LaCharrette Conference Room

- Chris Chinn, Director of the Missouri Department of Agriculture (MDA)
 - Welcomed the working group and audience members.
 - Explained her and Carol Comer, Director of the Department of Natural Resources (DNR) will be co-chairing the working group.
 - Announced next meetings dates;
 - October 17th, 2019 from 1:00 PM-4:00 PM
 - November 22nd, 2019 from 9:00 AM-12:00 PM
 - December 9th, 2019 from 9:00 AM-12:00 PM
- Dru Buntin, Deputy Director of the Missouri Department of Natural Resources (DNR)
 - Explained this meeting's agenda was to include presentations from the USACE addressing some of the questions asked by working group members at the August 27 meeting. Questions not answered in presentations are to be addressed in future working group meetings.
 - Walked through all of the questions from the previous meeting and asked if any stakeholder had other topics they would like to add.
- Randy Railsback, Green Hills Regional Planning Commission
 - Asked to add the topic of alternative funding sources for emergency levee repairs. Explained how waiting for USACE or FEMA to assist takes too long especially considering how the river continues to fluctuate up and down.
- Tom Poer, Missouri and Associated Rivers Coalition
 - Wanted to add the topic of reservoir capacity and river conveyance. Wants to know what the status quo is and how can it be changed.
- Roger Hugenberg, Ursa Farmers Co-Op
 - Suggested adding the topic of fixing locks and dams that have surpassed design life. Believes that topic goes hand-in-hand with discussions on levees.
- Dru Buntin, Deputy Director of the Missouri Department of Natural Resources (DNR)
 - Added the suggested topics to the list.
 - Addressed Bill Jackson's, Missouri Levee and Drainage District Association, inquiry from the previous meeting regarding Congressman Sam Graves' proposed legislation on river management. Explained the bill had been referred to subcommittee on natural resources on April 10. No action has since been taken on it. Senator Hawley's sister legislation was referred to subcommittee as well, on May 21, and has likewise not had any action on it since.

- Dru explained that Congressman Graves has presented similar legislation the past 4 years and each time the legislation has not gotten out of committee.
- Chris Chinn, Director of the Missouri Department of Agriculture (MDA)
 - Introduced Jud Kneuvean of USACE Kansas City District.
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 - Explained his role as Emergency Management Chief for KC District.
 - Presented map of Midwest and pointed out the 98th meridian; explained most of runoff is to the west of it.
 - Went over history of Pick-Sloan Plan of 1944.
 - Pick-Sloan Plan set the stage for much of today's operations such as USACE focusing on navigation and flood control, gave authority to construct irrigation sites, dams, power plants, levees, etc. Jud clarified though that just because it came with authority did not mean it came with appropriations.
 - Went over history of PL 84-99 levees.
 - Explained the difference between PL 84-99 and 100% Federal levees.
 - Discussed this year's flooding and how widespread it was.
 - 106 Requests For Assistance (RFA's) to KC District with 66 Project Information Reports (PIR's) conducted. Of those 66 PIRS, 43 have been approved.
 - Jud then went through and answered the following questions that arose from the August 27 meeting;
 - Question regarding dispute resolutions.
 - Jud explained every repair has to look at the benefit-cost ratio. USACE works with levee districts on this and sometimes have to change the scope of the levee rehabilitation. Explained how levee districts can appeal and it will go up through USACE.
 - Question on converting PL 84-99 levees to 100% Federal levees.
 - Jud said this is possible but it takes congressional authorization. When doing this, the impacts on other levees must be considered.
 - Question on whether flood protection between rural and urban areas is fair.
 - Explained USACE generally follows the same designs when constructing urban and rural levees. Did say with urban areas, they will maybe put in place more pumping options than in rural areas.
 - Question on emergency reimbursement and repairs.
 - Jud explained how USACE is not a granting organization and how USACE does not reimburse the work they do prior to, but can credit their in-kind work.
 - Question on if the design of levees can be changed.
 - Jud said that yes, can make them bigger, taller, wider, etc. Just depends how much you are willing to spend.
 - Question regarding the relationship between in-river structures (like dike notching) and locations of levee breaches.
 - Jud said there is no data to support that... all breaches that occurred this year were from overtopping first.
- Chris Chinn, Director of the Missouri Department of Agriculture (MDA)

- Introduced Eric Shumate of USACE Kansas City District.
- Eric Shumate, USACE Kansas City District
 - Explained his role in Hydrologic Engineering for USACE KC District.
 - Talked about how every flood is different and no two are alike.
 - Said the March flood event was even different from the May-June event this year.
 - Explained how Gavins Point is a pass through reservoir and does not offer flood storage like the others do. Provided a visual comparing it to other reservoirs... "If Gavins Point is a measuring cup then the others are 5 gallon buckets."
 - Described the MO River Mainstem Reservoir System Master Manual.
 - Out of eight priorities of USACE described in the Master Manual, seven require access to water whereas flood control requires available space. This means seven of the priorities need water in the reservoirs.
 - Explained how there is no one priority over the others, any can be a priority at any point in time.
 - Talked about the different types of runoff to include rainfall, plains snowpack, and mountain snowpack.
 - Talked about losing space due to sedimentation in the multiple use pools, but said they still have the same amount of storage in the flood storage pools.
 - 18 reservoirs in the KC District
 - These reservoirs have a large flood storage capability than compared to others due to not having to put water in the system for the other seven USACE priorities.
 - Truman Reservoir has 4 MAF of flood storage capacity.
- Col. William Hannan, Jr., Commander USACE Kansas City District
 - Wanted to add that if USACE had drawn down pools prior to flooding, it would not have helped at all because the rainfall events were below Gavins Point.
 - Wanted to reiterate that in drought years they need to have water in the reservoirs rather than flood storage space.
- Brent Hampy, U.S.D.A. Farm Service Agency
 - Asked Eric to explain more on purposes of Master Manual and USACE's priorities.
- Eric Shumate, USACE Kansas City District
 - Life safety will always be number one priority. But again, there is no one priority over the others, any can be a priority at any point in time.
 - Explained that John Remus said cycling for nesting birds does not impact flood control. They haven't done any cycling in a while though because of flood control taking precedence.
- Adam Jones, Mississippi River farmer
 - Asked Eric where he was referring to when talking about navigation. Down to New Orleans? On Mississippi River too?
- Eric Shumate, USACE Kansas City District
 - Answered Adam by saying just the Missouri River.
- Chris Chinn called for a 15 minute break.
- Shawn Sullivan, USACE St. Louis District

- Talked in depth about the upper Mississippi River lakes and levees.
- Went through USACE priorities and management strategies.
- Described lessons learned from the 1993 flood.
- Said 2019 flood was not as high as 1993, but it lasted longer than the 1993 flood.
- Provided pictures of levee overtops, breaches, and different types of flood protections.
- Explained how the Corps is working with UMRBA to figure out how to better manage the upper Mississippi River.
- Lucy Fletcher, AgriServices of Brunswick
 - Asked Shawn and Jud to re-explain how the benefit-cost ratio is calculated. Made the point that when we look at all the floods combined and the expense over the years, it adds up.
- Jud Kneuvean, USACE Kansas City District
 - Explained how each event is calculated individually and how they look at the benefit/cost with and without levee projects in place.
 - Jud said they do this because they are just looking at rehabilitating and not building a new project.
- David Shorr, Coalition to Protect the Missouri River
 - Asked how new projects are evaluated.
- Jud Kneuvean, USACE Kansas City District
 - “Great question for John who is in Planning for the KC District!”
 - John said they look at long-term costs and benefits when constructing a new project, typically 50-100 years.
- Adam Jones, Mississippi River farmer
 - Referring to Shawn Sullivan’s presentation and how he had mentioned a couple of times that PL 84-99 districts have been struggling with maintenance funds. Adam says they are struggling because of the continued flooding that has been occurring over the years and that needs to be factored in.
 - Adam also talked about locks and dams and how he understands they are not designed to assist with flood control. But did want to acknowledge that the nature of locks and dams creates pinch points on the rivers which does impact flood risk.
- David Shorr, Coalition to Protect the Missouri River
 - Asked if levees in Illinois are taller than in Missouri?
- Shawn Sullivan, USACE St. Louis District
 - Answered David by saying there are levees that have exceeded their authorization by about 2 feet.
 - Went on to discuss how flood fighting changes the capability of levee systems down river.
- Roger Hugenberg, Ursa Farmers Co-Op
 - “So what are you saying Shawn? Do you think we shouldn’t flood fight?”
- Shawn Sullivan, USACE St. Louis District
 - Answered Roger by saying it does change the system during flood times, and therefore it should be a question discussed by the working group.
- Roger Hugenberg, Ursa Farmers Co-Op

- Talked about how discussions used to be more prevalent regarding what technical flood stage was. Explained how where he is (Canton, Missouri) technical flood stage is 14 feet, but how the floodwaters this year got up to 22 feet. Roger thinks that's something that needs to be discussed again.
- Adam Jones, Mississippi River farmer
 - Described how the flooding this year turned 30 minute commutes to four and a half hour commutes for a lot of St. Louis workers. Wanted to know if the Corps of Engineers accounted for that in their economic analysis.
- Shawn Sullivan, USACE St. Louis District
 - Answered Adam saying yes, increased traveled costs are accounted for in the economic analyses.
- Ron Walker, Director of State Emergency Management Agency (SEMA)
 - Further explained the \$6 million of state funding that is to be used for PL 84-99 levee rehabilitation. In PL 84-99, local levee districts must provide 20% of the funding for maintenance and repairs in form of cash or in-kind services; Corps of Engineers covers the other 80%. The \$6 million can be utilized by levee districts to help cover up to 75% of their 20% contribution. Ron explained SEMA and USACE would be making further announcements on this in the next couple of weeks through the Kansas City and St. Louis USACE districts. USACE will help disseminate information to local levee districts.
- Dru Buntin, Deputy Director of the Missouri Department of Natural Resources (DNR)
 - Asked Jud with USACE Kansas City District to talk about section 106 and NEPA.
- Jud Kneuvean, USACE Kansas City District
 - Explained that when USACE does the work on levee rehabilitation, USACE takes care of section 106, NEPA, and all environmental assessments within the predetermined parameters. Said there is no need for local entities like municipalities or levee districts to duplicate this work.
- David Shorr, Coalition to Protect the Missouri River
 - Asked Jud if those assessments were financially covered by USACE or the local levee district?
- Jud Kneuvean, USACE Kansas City District
 - Jud answered David saying USACE covers it.
- Rob Hunt, DNR
 - Explained all PowerPoint presentation slides and the meeting video would be made available online.
 - Explained how public comments would be taken.
- Public Comments:
 - Carol Pufalt ..., from St. Louis on behalf of the Sierra Club
 - Explained she is a delegate on the Missouri River Recovery Implementation Committee (MRRIC).
 - Talked about how the working group has gone in depth discussing mitigation and levees.
 - Explained how the mainstem reservoirs cannot save the lower river, rather that is the job of the levee systems.

- Explained how when the levee plans were first laid out, they were supposed to be 3,000-5,000 feet away from the channel. Said this did not happen for various reasons.
- Referenced the Galloway study and hoped the working group had a copy for reference.
- Acknowledged that levee setbacks would be hard to do, but thinks the committee should work to find places to allow the river to roam freely.
- Argued how the management of the river system has harmed fish and wildlife habitat. Said the Big Muddy National Fish and Wildlife Refuge was a great example of creating places to allow flood mitigation and creating diverse wildlife habitats.
- Maisah Khan, Water Policy Director for the Missouri Coalition for the Environment
 - Thanked everyone who was involved in flood fighting.
 - Expressed her disappointment that the Governor did not appoint anyone with a conservation or environmental perspective to the working group. Also expressed her disappointment that the Governor did not appoint a hydrologist to the working group.
 - Discussed how at the first Flood Recovery Advisory Working Group meeting, the Governor said, “We can’t keep doing the same things and expect different results.” Said she agrees and explained how the current river and levee system was not built with climate change in mind.
 - Asked the working group to not only consider recovery but to also consider resiliency. Said one way to implement resiliency is to use natural infrastructures such as floodplains and wetlands.
 - Wanted to be clear that she was not advocating to get rid of all levees. Rather, wanted to identify pinch points where setbacks and natural infrastructures can have the greatest impacts.
 - Described how the working group has been focused on conveyance, but challenged the members to consider what increased conveyance capacity will do down river. Described how increased conveyance creates algal blooms and nutrient overloading downstream.
- David Stokes, Great Rivers Habitat Alliance ...
 - Said he was not going to repeat statements that had already been made during the public comment period. Iterated that he agreed with all that Maisah said.
 - Brought a few different studies for the working group members to review and have for reference.
 - Said his main point is that we keep digging our own hole by authorizing same practices of the past.
 - Advocated for floodplain development to cease, and explained how the more concrete poured in the floodplain the worse it will be down river. Wants paving over the floodplain to stop.
- Carla Markt, Holt County Commissioner
 - Expressed how much she respected the working group members and the job/responsibilities they are taking on.

- Explained how something that has not been discussed as much by the working group was the railroads in northern Missouri floodplains. Explained how after each flood, the railroad companies raise the tracks more and more. Said how the water comes in and is being landlocked by the tracks and that needs to be considered by the group.
- Reiterated how many people and jobs are impacted by flooding, and how the economy as a whole suffers due to these floods.
- Roger Fischer, Callaway County Commissioner
 - Had handouts for the working group members.
 - Said how he is tired of the levees being put back in the same place at the same height.
 - Explained how we all owe it to the taxpayers to do it once and to do it right.
 - Believes it's simply a matter of mathematics; find out how much water, how high it will get, and how far back to set the levees.
- Jim Karpowicz, Missouri River Relief
 - Expressed how he does not think building levees higher makes any sense.
 - Said how it is not possible to overtop the Big Muddy Wildlife Refuge.
- Ted Heisel..., from Pacific Missouri
 - His family farms along the Meramec River.
 - Explained how he farms and uses the river for recreational purposes such as kayaking. Says there needs to be a balance when managing the river.
 - Said how one person's super levee creates another person's flood.
- Chris Heil, Ray-Carroll Levee District and farmer
 - Explained how locals need to see streamlined resources.
 - Described starting an application process at the beginning of August for rehabilitation, and "thanks to the Farm Service Agency dragging its feet" have just now gotten approved.
 - Thanked Marty Comstock with the NRCS for being prompt on getting him answers.
 - Explained the costs to the county, farmers, and small communities.
 - Wants to cut the red tape.
 - Acknowledged that fish and wildlife is important, but that sometimes human life and economics are more important.
- Chris Chinn concluded the meeting.