

**Presentation to the  
Mississippi River Commission  
17 August 2016**

**Damages from increased flooding of the MS River**

**Summary**

Over the course of time, the Corps has done a great job in reducing the impact of overall flooding along the Mississippi River. Some have seen a great benefit but there are those of us who are experiencing a detrimental impact.

Chief Engineer of the Mississippi Levee District W.E. Elam had a plan to straighten the river which would speed water flow to the Lower Mississippi River Valley (LMRV) but also recognized the need to get the increased flow all the way to the Gulf. The Corps has straightened the river which has sped the flow to the lower Mississippi River but has also built additional levees and training dikes that constrain flow but they did not provide for the additional outlet to handle the increased flow. As a result, since the early 70's I have seen my average flood (defined as covering 80% of my property or more – 43' on the Natchez gauge) increase from an average of 15 days/year to over 75 days/year excluding 2016. The average flood height has increased by over 7.5'.

**Environmental Impact**

1. Tree regeneration of certain species has virtually stopped as well as the deposits wipe out existing stands of trees
2. Increased erosion along the East Prong of the Homochitto River
3. Soil type changing due to depositions
4. Certain game populations decreasing or no longer exist in certain areas
5. Increased silting of lakes and historical waterways

**Other Impacts**

6. Loss of hunting, fishing and other recreational activities
7. Loss of access to personal property

**Request**

- a. We are requesting that the Corps manage the MS river water levels by adjusting the flow through the Old River Control Structures with the goal of maintaining the MS River level to as low as possible at all times while still maintaining adequate height for river traffic. Current practice seems for the Corps to intervene only near catastrophic situations.
- b. We would like to see the flow split published on a daily basis similar to the river stages.

- c. The Flood Control Act (FCA) of 1954 authorized the corps to construct the Old River Control Structure but makes no mention of a 70-30 split. Please advise where this split ratio originated.
- d. Various reports that the Corps has published discuss the massive levee system along the river. In the area south of Vicksburg there are no levees rather the corps relies on the hills some 5 miles to the east of the river as part of their Flood Management Plan. What authority has been given to the Corps to confiscate my property without due process of law.
- e. One item I have noticed in the various laws that govern the Corps' work is something similar to this that appears in the FCA of 1954 "That no flowage rights are to be acquired by the United States ". Under this law, the Corps is not authorized to pay for flow easements. This does not mean the Corps can flood my property and not pay for it. It means they cannot cause additional flooding to my property because in America my property cannot be taken from me without due process of law and appropriate compensation. Increasing flooding on my property from 15 days average prior to 70's to over 75 days on average today is a violation of what is written into the various documents. The Corps' job was to evaluate if any additional flooding was to be caused. The Corps has to correct the flooding issue.

#### **Details**

1. Tree regeneration of certain species has virtually stopped.
  - a. In the mid '90's I planted over 1200 nuttall oaks trees and followed that up each year for several years planting a few hundred trees each year. The first year I planted we had some 4 months of flood which killed almost every tree planted subsequent plantings saw some trees reach almost 20' however most have died as they went under water during the spring. The 2011 flood killed every tree that I had planted that had not reached 20'.
  - b. In 2009, we cut out all the sweet gum, hackberry and other undesirable species to leave mast producing trees such as nuttall, pecan and persimmon in strips about 200 yards wide by up to a mile. We have had no lasting hardwood regeneration in these areas. We have seen the trees get up head high only to be killed when the water exceeded their height for a prolonged period in the spring.
  - c. Quotation from Tom Middleton, a forester that I use: "Troy, the biggest impact I have observed on the river and in bottomland hardwood stands over the last 37 years is not so much the level of the river during floods (which is by no means good), but the duration of the floods. The duration has a severe impact on timberland by staying on the trees during much of the growing season which affects growth and increases mortality. When I first started my career, it was rare to see flood levels beyond May and most flood waters were gone by March and April.

In addition, with this duration of flood water, regenerating these stands have become next to impossible. If you clear cut a bottomland tract (which I have never recommended) or even create a large opening about all you are going to get back is cacklebur. I now take out the minimum number of trees, creating a small opening and hope for the best (need a lot of luck)."

2. Increased erosion along the East Prong of the Homochitto River

- a. The flood waters back up the main channel of the Homochitto river until reaching a lower area then flows into the Becks Bay area. From there it reaches the Buffalo River, East and West Prongs of the Homochitto River flowing down these rivers to Lake Mary and back out to the MS River. This is causing increased erosion along the East Prong due to greater frequency of flooding and more flood water during each event. The 2011 Flood Report page II-7 states "One distinct feature of the LMRV is the formation of natural levees along the banks of rivers and the associated backwater deposits dominated by dense alluvial clays that historically supported extensive wetland areas. The banks of the river can be as much as 10 to 15 feet higher than the lowlands farther back from the river. Because of these natural levees, drainage within the floodplain, frequently flows away from the Mississippi River to lower elevations near the valley walls, except near tributary confluences. Bottomland drainage is provided by streams running parallel to the river and joining it through major tributaries or at points where the river meandered close to the valley wall. The clays that formed these features have low permeability and limit the ability of rainwater to infiltrate the ground surface (Kleiss et al. 2000)."

3. Soil type changing due to depositions

- a. We are seeing an increase in sand deposition that is killing hardwood trees leaving only Willow behind that has the ability to adapt to the changing soil conditions.
- b. Deposition, particularly sand, onto farming areas decreases the viability of the farm and impacts the type of crops that can be farmed.

4. Game populations decreasing or no longer exist in certain areas

- a. Last August the river flooding caused a huge loss of whitetail fawns. The deer, bears, turkeys, rabbits and other game are severely impacted due to stress, loss of habitat and drowning due to the floods.
- b. Fawns in this area are typically born late July and early August. Last year the fawns were born in the hills. This becomes their home area thus not migrating into the swamps.
- c. Unlike deer and hogs, turkeys and squirrels do not migrate as the flood waters come in. Turkeys go up in the trees until they die of starvation. It takes several years of short duration floods to reestablish the turkey population. This last flood will have wiped out our turkey population. As for squirrels, they can survive as long as there are tree buds or leaves on the trees. Prolonged flooding during the winter months reduces the squirrel population as their food supply diminishes.

5. Increased silting of lakes

- a. Foster lake, also known as Mud Lake, is silting in. The lake level is rising and covering more area and killing hardwoods. Despite the level of the lake rising, the lake is also getting more shallow.
  - b. There is one small area near my property that was a small lake when I first started hunting the area when I was in high school. The lake no longer exists. There is another one nearby that is almost gone and exist only in an intermittent state.
  - c. The narrows no longer dries up in the summertime as it once did. The low water stage is some 10' higher now than periods prior to the 70's.
6. Loss of hunting, fishing and other recreational activities
- a. With the prolonged duration of the flooding we are losing our ability to access the property for hunting. This past season we were only able to hunt a few days in November. Even then most of the deer had moved out by that time. I only saw a few yearlings that were trapped between the rising water to the east and the river to the west.
  - b. We were unable to access the lakes for most of this year and similar limited access on an increasing level. The water height prevents us from getting down the road to Lake Mary. There are no public boat launches except at the lake.
7. Loss of access to personal property.
- a. I cannot access my property on an ever increasing basis.
8. Training Dikes
- a. The Corps performed a study "The effect of river training structures on flood heights on the Middle Mississippi River" by E.J. Brauer, P.E. *U.S. Army Corps of Engineers, St. Louis District, St. Louis, MO, USA* on the effectiveness of the training dikes. The report said they were effective in maintaining the river channel to an adequate depth such that the channel had not required dredging since 1973. Is there such a report for the Lower Mississippi River Valley? What is the history of the training dikes in this area such as when were they constructed?

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