

**Topic:** Levee District Nutrient Farming

**Convener:** Chuck Theiling

**Number of people:** 9

**Notes (verbatim from facilitator):**

What is nutrient farming? Explain briefly.

Ed Smith wants control source

Therron discussion TNC demonstration farm on Mackinaw River

Clarifying plant, wetland, and nutrient interactions

When would this work relative to flood season

This won't work so well in open river because all gravity drains

Could nutrient trading go too far? Too many new projects

Are trading markets established? Yes many state and regional examples: TNC water funds

Can we incorporate government land as nutrient buffers

Hold water in the batture area or in levee district detention areas

Drought issues

Pump back irrigation systems for drought resilience

- Would have lots of other benefits too: water, nutrients, sediment

How is water flow managed with so many agencies and interests

- Very dynamic
- Needs to be holistic

Levee wars! Folks think Corps could regulate better

How does this get fixed → may need Dutch solution

- Need to be better prepared to avoid reactionary approach
- Need to control reservoir releases. Folks don't think storage dam are being used right

Role of wet seasons preceding flood seasons

Pick-Sloan plan not finished so adequate floodway was never completed

Lots of government plans don't get finished

**Topic:** What went right? What went wrong? The overall flood response to flood 2019

**Convener:**

**Number of people:** 7

**Notes (verbatim from facilitator):**

- 1) Huge amount of rain
- 2) Started raining early – massive amount of rain

Seep water

14 12-inch pumps

Temperature → 5 weeks

Levees held.

Seep water issue devastating

River high for 6 months

Technical aspect – communication is important

Farmland

Pumps – Shawn Sullivan

Environmental laws control

Illinois DNR – water resources plan

1/10<sup>th</sup> foot rise in flood level

What is different

Flood Chesterville plains are built up.

What can be done different in floodplains in Corps of Engineers districts

Floods of long durations

Flood protection, duration

Not a simple story

Flooding as a result of river being high

## Perception

Navigation system may have caused problem this year

Changes in river bottom, actively monitor depth of river, dredging

River changes →

Pumps → amount of water coming in

Permanent vs. temporary

Good soil →

None GT

Permanent pumping station request GT levee districts poor vs. rich

Big 5 levees

- Everything is cost share
- Bigger share has to come from somewhere

Hurricanes vs. floods

Upper Miss river not eligible for funds

Legislation to create resiliency loan program

Individual engineering for section of

No participation in National Flood Insurance

National Levee Database

City of Valmeyer 1993 flood

**Topic:** Climate Change

**Convener:** Caroline Pufalt

**Number of people:** 12

**Notes (verbatim from facilitator):**

Climate change – do as much listening instead of talking. Avoid talking about extremes – what can we /should we do now.

Have civil discussions, can't make progress without it

Recognition on Missouri River/MRRIC that Missouri River is changing.

Regardless of why – what is Corps doing to prepare?

Corps will repair many levees but not necessarily just the same – how can we plan for change?

PL 44-89 - rules - not efficient – hamstrung

Levee setbacks to prepare for more water

Midwest area has seen more extremes

We are challenged to not just do what we did in the past.

Government takes through willing sellers?

States should be more proactive

MRT – wide system plan

Upper Miss – has no coordinated levee system

Sometimes the only system is hoping that someone else's levee breaks first

Seems like Mississippi river is “filling up” with sediment  
floodplains fill up with sediment.

WRP –

Levee ground fills up

Navigation channel narrow fast water pushes sediment to the sides – that means raised floodplains  
and poor habitat

Water management – urban areas don't plan well or pay money

Farmers should not have to pay it all.

Transportation infrastructure – key

Corps and transportation not connected in FEMA

MFP payment

Subsidizing the wrong things! Pay to play?

If you do the right thing sometimes you lose out by comparison. Folks who fail get money for repairs. If levees are opened up or setback – then the whole system needs to be looked at.

Brent H. - There is room beyond levee districts to slow, hold water

We need to subsidize holding flood water. Farmers will figure it out.

Gravity drains – everyone take some water. A good way to be fairer and could be subsidized.

Every acre doing its part!

Government programs sometimes too restrictive

WRP – wetlands reserve program – can't hunt on those lands.

- Used to be landowner had more flexibility

Willing sellers are forced sellers due to floods beyond their control.

USFWS drainage through wildlife refuge

Money is not balanced. Too much for wildlife?

USACE budgets are not reliable. Farmers can't wait for budget resolutions process which is slow.

Agreement – we have more water, more extremes

Climate has changed – who knows why – but deal with it!

**Topic:** Assistance/support for community leaders to affect change in management improvements to manage flooding and repair levees

**Convener:** Stephanie Rhodes

**Number of people:** 21

**Notes (verbatim from facilitator):**

Need for network/coalition

County response/knowledge

School district

Cause of disconnect? Time frame for assistance

Could it be due to lack of crisis planning?

Meeting of key players occurred after flooding was already a major issue

Is the Corps going to do something to keep it from happening? Is there a plan?

Preventative vs. reactive

Most of this is cost shared → putting in measures – a lot comes down to “who will pay for it”?

Appears Corps worries more about navigation than flooding

One of Corps responsibilities is to maintain the navigation system

Plan H from 2008 never really got anywhere – there doesn't seem to be a workable plan

Floods are occurring much more frequently

Concrete, roofs, building of cities result in increase of flooding gets to river faster

Better drainage systems result in water getting to river quicker

Every state determines in their own flood plain development is there interest in a multi-state approach

Floodplain management - is there somewhere it is being done well? How do we build that advocacy?

State senator created - Northern Illinois established flood stone alliance – have been able to dramatically reduce flooding impacts to that area

Bring in resources for floodplain planning services – identify resources

Examples would be very beneficial

Illinois has been assertive in not rebuilding in flooding areas

What is acceptable level of development?

Anthony Heddleston is traveling in areas to provide information and guidance  
One of the first steps is looking at money outcomes

Flooding impact → no value assigned to transportation issues → people enable to get to work or having to drive 3-4 hours around to get to work

People benefit from protection provided by levee districts, but providing no funds to aide in assistance

Are there any cases in any states where other sources are receiving funding from outside sources

Way to find a way to calculate the value of the services provided - who uses the services - companies that travel those highways

Missouri has some fuel tax on barges

Finding a way to assess the values → the hidden values

There is a standard that is applied Corps-wide

Mike Bost sits on a committee that affects that standard

Discrepancy found that was in the "share"

Big Muddy has come within a foot of overflowing, but still not allowed to raise the levee

Is there a study that shows

Section 4 way – levee district has right to raise it to the level it was intended to be

How to initiate that survey? Data are available

Question of should it be raised? Cost? Implications? Impacts?

Big 5 – feasibility study about 4 years ago – but cost sharing wasn't really able to be done

Economic impact worth it? Feasibility?

Not aware of grass roots fundraising ideas?

Tax money from barges is going toward navigation, not toward maintenance used for locks and dams

It is a federal tax → only goes to navigational infrastructure

So the section the river does not have any locks or dams → they are still paying the taxes and taxes are being sent up north to the creation of the locks and dams

What can we do or what do we have that would give us what they want?

Flood water storage ideas always look at the area with the weakest levee

Might look at identifying small areas that are already weak and do not have any building or economic interest to create small basins

Major curve ball is the impact of seep water

East St. Louis improvements to levee system → imposed tax entire community in all three counties

Floodplains by design – state will help provide funds to do projects other than raising levee. Has goals to do things like habitat restoration.

General assembly – floodplains by design – Senator Taylor – Illinois Representative Halpin

- Need to have ag interest and insight and not just environmental insight

Ways to disseminate information

- Can't go direct – has to go through county

Coordination through all the schools can get information out very quickly

There is a huge disconnect where many people do not realize the importance or value of the river

Difficulty with getting straight answers

Barges are voluntarily taxing themselves

Keep levees healthy → need Corps coming up with ideas

Cost of studies and time that is required puts things at a standstill

Is there a way to streamline the studies?

Where did the money come from when the levees were initially developed?

Commentary calling for more upstream

They do have larger levees but they are getting more flooding

Needs of upper river vs. lower river

More wing dikes are like ice cubes going to cause water bottle to overflow



**Topic:** Holistic approach for solutions

**Convener:** Ed Smith

**Number of people:** 8

**Notes (verbatim from facilitator):**

Ken Phillips:

- USACE should look more at what's happening up north and how Upper Miss water is conveyed during heavy snow pack in a winter
- Concern more emphasis on recreation
- Better management and communication with folks in the South about what's happening up North

Kent Treece:

- Agrees with Ken, post 1993 has been helter skelter → before 1993 there wasn't a real problem
- River needs to be analyzed as a system
  - o Start meetings in the south and go north
  - o Need to consider impacts of Missouri River and its impacts downstream

Randy:

- We don't need more studies
- Look at it from a preventative measure
- Don't need to spend money on studies → spend money on solutions

Tharran

- Climate and land use are impacting floods
- Loss of 90% of Illinois wetlands
- 60% of Illinois floodplain is not available for storage

Ken:

- Chesterfield should be under water in 2019

Kent:

- People need to pay if they are contributing to runoff
- There should be a sense of responsibility for sharing the solutions
- Offer incentives to not farm or put conservation easement on floodplain farmland
- Land value going down → I don't want to lose out on value of my land if bought out at a depressed value

Randy:

- I want to make sure people know we bring value to local economics with farmland.
- Need to address replacing value of land to community beyond flood value
- Neighboring property taxes will go up
- Transportation needs to recognize that they need to be engaged on solutions

Ken

- We need to be proactive/not reactive
- Fear from family that government will just take their land. Holland does this. Government told people to move.

Prevention

Enforcement

- Farmers agree via head nodding that levee enforcement is needed → agreed that levee height and exceedance should be addressed

How do we get around the politics and financial influence of northern actors?

Ken

- Is there an assessment on how flooding is impacting different parts of the river?

Randy:

- The bridge being out of service hurts Cape and its economy

\*on a 50 acre field, three acres may not be productive, but conservation programs want all 50 acres, not just the three acres that could use help

Concerned as better management of the water

Sand and sediment is accumulating along edges of the river and doesn't allow the

Agreement that we need farmers and land managers to reduce soil runoff

Ecosystem services need to be valued

\*We need to know now what to tell our children about the land and their future.

- It's my future and my children's future at stake here
- We need good information to make good decisions

**Topic:** Solutions/Actions

**Convener:** Brent Hoerr

**Number of people:** 33

**Notes (verbatim from facilitator):**

Short term:

- Levee enforcement (height)
- Fully funding buyout programs in floodplains
- Congressional action to create flexibility under existing funding programs
  - o What are the diverse policy barrier that limit these programs

Mid-term:

- Payment in lieu of tax payments

Long term:

- River in compliance with Clean Water Act
- Human induced impacts to dead zone
- Refrain from flood fighting, move toward predictable system (what can flood)
  - o Raising level of protection
  - o Protecting property on interior/levee integrity
  - o Allowing/designing them to overtop (with minimal damages)
- Better management of river as a system (water, structure)

**Topic:** Who should pay for what?

**Convener:** Dean Klinkenberg

**Number of people:** 5

**Notes (verbatim from facilitator):**

See personal impacts and tough decision about how to allocate public money

Concerns about the future of levees and how we can manage the river

Can the scale of the project justify the economic impact?

Central question: who will pay for what along the river?

Decisions aren't clear-cut; many interest groups

Can we create more public-private partnerships?

Sometimes districts get penalized for making "the right decision" while others benefit (\$) from making "the wrong decision"

Why don't we account for damages to transportation systems and agriculture

Why do resources go to some places and not others?

Too many government regulations are pushing family farms out of existence and being taken over by big corporations

Some communities meet their own emergency needs

Misconceptions about how much federal government pays for

Some levees are federally inspected but paid for by local districts

Because resources are limited, not everyone can get everything they want

This year access to resources was very good but that may not happen again

Potential cut back of federal resources could have a major impact on how we manage the Mississippi – are we prepared for that?

Have we over built our infrastructure? Maybe that's the real reason we have trouble maintaining much of it.

Economic analyses might suggest one decision but ultimately decisions are made in a political context

**Topic:** Future plans at the Corps not yet announced

**Convener:** Matthew Lambdin

**Number of people:** 24

**Notes (verbatim from facilitator):**

- Discuss types of dikes and their purpose
- Roles and responsibilities at the Corps
  - o Vavigation vs. flood control

**Topic:** Flood control/contributions

**Convener:**

**Number of people:**

**Notes (verbatim from facilitator):**

River navigation improvements

- "Missouri river" is talking/prioritizing
- Locks and dams on Ohio River complete
- Corps maintains channels – different levels of funding
- Capacity of the river is not there
- How do you get the sediment off
- Water doesn't floor
- Dikes – habitat purposes
- Sediment collects, doesn't go down the sides
- Move material to anyone who wants it – solution
- Sediment for dredging placed in the river in St. Louis
- Environmental
- Cost
- Transportation is number one priority

Levee repair and maintenance

- Dredging is very expensive
- Future of dredging
  - o No long term plan to be proactive
  - o Corps is reactive
  - o Some short term – no long term plan
  - o We need to get ahead

2019 flood

- 42.5 feet – Corps showed at 16 feet above flood stage
- Those involved are busy saving farmland; throwing sandbags

We appreciate the Corps showing up

Accuracy of prediction is important

Flood control and contributing factors to flooding

- Water moves too fast – everywhere
- Runoff is a problem
- Concrete ditches – urban areas
  - o Retainer basins in urban areas
  - o Every person should pay a drainage tax
- The south is worried about the water from the north (MN, IA, all need to pay)
- St. Louis – passed laws to retain water. We all have water runoff
- Challenge urban areas to do better

- NRCS has helped with pipes – cost share – homeowners too
- Agriculture is also involved
- Get it out and to the south

#### State nutrient reduction strategies

- Soil and water retention basin

#### Future plans of the Corps

##### What is Corps planning?

##### La Grange, Illinois – major rehabilitation (affecting Cape)

- NESP (lock improvement, for given locks)
  - o Hasn't been funded for construction – is there more benefit than cost?
  - o 1200 vs 600 foot lock chambers
- New technology was slower than thought – caused delays, unique cranes, future lock improvements
- Headed to St. Louis next
- How can Mississippi River plan not include the Missouri River in Cairo too

#### Risk communication

- What are the best ways to share the messages
  - o School districts, commissioners
  - o What do you want? Brochures

#### Possible changes

#### Shared states: NE, IA, KS, MO

#### Cost share assistance

- Have to repair levee exactly as it was
- No flexibility
- Should there be a revisitation with Congress
- Sponsor has to instigate discussion
- No communication, changing staff
- Have to be asked before they can help – Corps

#### What do you value?

- Set backs – move levee farther away from the River
- Floodplains – not designed efficiently (may cost more than just buying the land)
- All have to have the same rules – sediment is good

#### Designing a setback

#### Big WRP project

1. Talk to the farmer

##### Drawbacks

- Corps changes staff
- Left hand has no idea what the right hand is doing
  - o Holistic approach – MDC, Corps has to work together (all groups involved)
- Make it equal – 1) Economics 2) politics
- Land owners need to have big input – fair prices

- Farmers bring millions of dollars into the economy
  - o Just as important to the local economy

What is important for the setback?

- 1) Protect transportation (railroad) barges
- 2) Key infrastructure (water towers, electric)
- 3) Set \$/acre