

Welcome and introductions

Craig Evans – Fargo-Moorhead and upstream feasibility study

See notes

The different areas of flood damage and loss of habitat

How can we store water for both FDR and ecosystem restoration benefits

Now on Phase 1b – more detailed scope on where to go next

Phase 1a

Storage: 200,000 to 400,000 acre feet above fm

Could reduce flood stage by 1.6 feet

Phase 1b April to October 2008

Looking at Wild Rice River

Looking at storage sites mainly in Antelope Creek

Define the scope of what is next

Looking forward... looking at environmental benefits and impacts; local benefits; hydrologic and hydraulic models

Input questions:

Red River Watershed Study – includes the entire Red River Basin

Spearheaded by International Water Institute for LiDAR

Explanation of LiDAR for mapping the basin

Goal for Southern basin – Flown spring 2009 – data December 2009

Jeff Volk

Phase 1b

From last meeting there have been some information that came about as far as retention in Antelope Creek. SE Cass met with Richland county and determined that there were other potential sites and types of retention

Working on a model that includes timing, volume and impacts – sites that make sense

Southside flood protection plan

Protection from wild rice and red river

Outlining the area that the project will protect

Outlined the new flood plain based on current information

New project will prevent expansion of South Fargo flood plain

1997 was not a 100 year flood for Fargo going off the 13th ave gaging station

Flood control methods

- FEMA levees with and without diversion channels

- Channel extensions

- Storage inside of project

- Storage in the upstream watershed

Project selected: Wild Rice River Levee

Prevent the Wild Rice from going north

Prevent the Red from flowing West

Using a channel extension weaving through the Red River (North Dakota & Minnesota)

Need to store 4,000 acre ft of water, adding storage downstream (20-25 million)

Ring dikes for farmsteads in unprotected area

Whiterock is 972 – Fargo flood stage is 900

Red River 100 year flood is about 40 feet deep

Mapping Exercise

Canada willing to give money to us if they can do projects that will benefit Canada – if it saves them money they are willing – this is similar to FM offering money for downstream storage on a small scale.

Why can't we use other forms of storage other than farm land as temporary storage in specific circumstances.

Sargent – looking at water retention dams – very flat and have a hard time to dike up and back up a significant amount of water.

Some of the flood drains in Sargent county trickle and trickle into wetlands that take up to a year to dry out

Joined Richland county for a joint drain; trying to work watershed areas to better utilize funds and get people involved

Question: Flood Control where when considering flood control projects and where these projects take place.

Need to look at control over the Red and tributaries

The corps study is not just for FM – the process is if there is a target area they will look at it and tell you what could be done

Can we deal with more than one damage site with one project

Variety of different ownerships in wildlife reserve:

- Easement refuge on storm lake where water is stored

- Numerous WPAs

- Because of rolling topography they become

South Dakota

Looking at topography; soils that hold more water

Cutow – the whitelake dam and other structures

Retention – conservation district is looking at smaller water retention for livestock

Some potential in natural wetlands above the coteau

You do not get a 1 for 1 storage return the farther you go from the damage site.

The better the return the closer to the damage site.

Sargent county has 3 floodwater retention dams (controls)

Traditional dams on 3 sites that are separate watersheds but they are steep and would require several acres

Richland – Has advertised to land owners if they have any property and are willing to commit it for storage for Fargo Moorhead project – received a few responses on Wild Rice and not in Antelope Creek

Working on drain that directly affects Wild Rice River

Drain 39 sized culverts down and seems to be working and taking a bit off the top

Stack Slough – possible project there – lower end is about 2 miles and is tore up – trying to get that slowed down – natural – there is not enough money

Sites that were suggested by FM are too big and scaring their people – they feel smaller projects will be more positively received

Suggested dry dam on Bois De Sioux north of the state line a couple of miles – BDS is concerned about money getting tied up on dry dam – again looking at the area of control versus the area of the project.

Discussion on dry ice channel that was used when Lake Traverse backing up into the Little MN River

More discussion on state line dam – SD has a vested interest in protecting their wild life reserve south.

Referenced modeling effort by corps to perform certain scenarios downstream in south valley to obtain outcomes.

Randy – Silver Lake – water commission is doing a hydrology study starting at Rutland cage??

Purpose for dam itself not necessarily flood reduction

Lance talked about HEC RAS and MIKE 11 to learn about flows from Lake Travers to international boundary

Same things are happening up in Pembina and Roseau

Corps model will help better understand whiterock dam and lake traverse

Eddie – no drainage, should open it up in the winter – it just sits there and any rain we get it runs off

Cannot have drain tile on wetlands

How many gages in southern valley other than Rutland? 3 gages

Antelope Rutland Dwight and Abercrombie

Antelope used to only be peek only and recently become full time

Suggest getting Charlie Anderson to come to the meeting

Orwell in the 30s used to the primary water supplies for Fargo

Who would he talk to to get the Elevations of the slews? LiDAR could help

USGS Quad maps – be cautious as it only represents the day it was recorded

Jay Gilbertson - How far over will the LIDAR go over the line? Contact chuck fritz

Jack Lalor - Project resource benefits – Maple River Dam how is that managed? Some converted to grasslands. The board owns some to avoid easements. Mixture of ownership. Some of the land is farmed. Some is woodland enhanced. Grasslands – for wildlife

Jack Lalor - Dry dams and getting wildlife people behind it... wildlife production there could be an avenue based on the frequency of flooding on that type of habitat. He said that state wildlife may get behind something like this

Sargent County, Jack Lalor - the above question is something that we could be asking ourselves

Have Janeen and Leah visit with you on potential wetland sites – get feedback on areas that this will work – what are your damage areas – what are some of the things you are dealing with on your damage areas

Sargent – this would be a good place for a dam as an example, collect the data from all areas to see where and what can be done.

Answers from Farm bill in September. The Red River Basin is in the bill just not clear for what and to what extent.

Tom Jones - NRCS – drainage tile in small potholes done in a partnership could amount to significant acreage – would need buy in from wildlife organizations

All brings back to integration how do we integrate drainage for farm land, wildlife etc.

Volk – letting wetlands fill up could possibly be detriment to flood control – how to magically manage this effectively

Couple things to think about: Wetlands bounds – get Henry here to talk about this – hear what we have learned from this study

We all live in the bottom of a lake – Lance

Visit with water boards

Set up group that can talk about Fish Wildlife issues and brainstorm

End of October – Early November (back to Hankinson)