Agriculture and Natural Resources Table Discussion

Agriculture is the number one industry in Missouri without even considering the transportation side – barges, trucks, trains that move ag products. Missouri is number two or three in beef production in the U.S.

Best cattle breeders in the states.

Lots of opportunity for growth and innovations in agriculture in Missouri.

Ag is afraid of the word “sustainability” but local Ag is the leader in sustainability. Farmers need to “own” it (the word sustainable) and take control of that term and those discussions.

Sustainability is a three legged stool:
   1) Have to make a profit
   2) Have to have access to the resources
   3) Have to leave it better than you found it

People care about where their food comes from.

What are the impediments? “Fear” – people are afraid to talk about GMOs. We are feeding the world (with GMOs).

Have to be careful about fragmenting ourselves (Ag – separating CAFOs and calling them corporate Ag when in most cases CAFOs are operated locally). There’s a lot of confusion on CAFOs – generally they are well managed.

Opportunities – much of the lower Meramec Watershed is close to St. Louis markets.

Our food is the safest, most economical food in the world.

There is lots of value to manure – organic fertilizer.

What’s needed to get more producers to adopt more best management practices?

Ag is the largest industry in Missouri – in order to grow jobs we need access to the resources.
The 150 feet along the river is the most productive – I don’t want to take it out of production with no compensation.

SWCD representative – It’s 25 feet with compensation of $500 per acre. The program doesn’t require planting trees – just let them grow up naturally. Can convert the land to a grazing system.

The problem is maintaining a fence in the floodplain – you’re required to maintain it through the SWCD program.

If there was a program to help farmers with how to feed hay (feed it in a ring – causes mud, run-off, concentrated manure.)

Maybe extension could come up with a design on best practices for winter feeding facilities and cost share programs through the SWCDs.

SWCD representative – we have a program and it’s very popular – but the costs can be high.

We need money to build the road to the top of the hill (best places to feed to protect the watershed.)

Ag is as big as it has ever been in this watershed and the river is in the best shape it’s been in for many years. That speaks to the environmental stewardship of our Ag producers.

See a bigger problem in the amount of city sewage (treated) going into the river.

The majority of farmers are not looking for the government to help them (with money) for improvement of farm operations.

Our biggest problem is the regulations and what we are not allowed to do on our own property.

Should be able to take gravel out of the rivers and keep brush out of the creeks.

Don’t always need a government program to fix a problem.

Farmer’s response to above comments: Farmers don’t plow anymore to cut down on erosion. It’s all working together as a system. The river works as a system and we can’t believe that we can keep things from changing. Nature does what it wants to do.

A lot of people would like to be able to remove gravel and willows but they are afraid to do anything because they don’t know all the regulations.

Some gravel removal is allowed but there are limits.
Corps and Fish and Wildlife, DNR are not willing to help or work with farmers.

Do we need an education program to help folks understand what they can or cannot do?

Extension shared Sustainable Agriculture Initiative – small, grant driven (up to $7,500 to producers) to do pilot projects or best practices.

Meramec is one of the most diverse streams in the entire Mississippi Basin – US FWS wants to work together with local producers.

Ag is not one of the perceived “problems.”

Benefits: Ag and river related tourism and business.

Wedding venues on farms, farms as learning/tourism locations --source of supplemental income

Wineries and grape production – lots of room for growing grapes – lots of potential, but grapes require a large outlay in the beginning and several years before they produce.

Marketing local Ag – “sell the experience.”

What Forum is best to share best practices on Ag – Extension? SWCDs?

Universities need to do more with Field Days – share best management practices there.

More focus on cover crops and smothering fescue.

Need to help the general population understand where their food comes from.
Meramec River Watershed Workshop at Meramec Caverns  
December 3

Natural Resources, Erosion, Streambank Stabilization and Sedimentation  
Discussion

First session:

What is the risk?
Natural resource protection is important. Some streams are degraded even when near conservation areas, e.g. Williams Creek in Jefferson County.

- It would be good if people in the basin could agree on a development strategy to protect the river and tributaries.
- Concern that people do not understand how important the river is as a natural resource, and how important it is to economic development – need to make a better connection between economic value of protecting the resource and positive impact on economy
- If river is degraded, can have negative impact on agriculture and tourism
- As population in the area grows, who is making decisions about development?

What works/what is needed:
- Buffer strips – leaving stream channels in forest – will project the channel, reduce erosion
- Need active program to protect family farms (e.g. Maryland has a good program)
- Expand MDC “Grow Native” program
- Volunteer associations are important
- Watershed groups to work to protect their river/streams

Second session:

“What is at risk? What species in particular?”
There was discussion back and forth regarding the data that has been collected, and that TNC has put together in the Meramec Conservation Action Plan.

The conversation then turned to the very specific issues regarding the Bend Bridge in Pacific. Someone asked “who is more important, the mussels or the people?” Another person asked “do you see agriculture as an asset or a deficit?”

What works, what is needed:
One comment was that land has been cleared right up to the streambanks and that this is what is causing the erosion. Removal of the trees has eliminated the ability to absorb flood water. (Someone asked what distance specifically do you
recommend that we maintain a riparian corridor? That area near the stream is prime farming ground.)

With time running out, the following two opinions were presented:

1. Too much gravel in the stream is problematic. The government has restricted gravel harvesting for the last 30 years and that is the problem.
2. Lack of wood in our systems is the problem. (Kelly Whitsett indicated that she has a good presentation regarding the benefits of wood within the system)
Dent County:
Each commissioner is responsible for roads in that District; responsible for roads; the county partners w USFS, wants to be a good steward; does not like regulations that are not clear or that set unrealistic standards that the county cannot afford – thus causing the county to close roads. (322 Creek crossings maintained by the County that have been assessed by outside engineering firm. 53 insufficient; 38 low water crossings are all deficient.)

Need better way to replace low water crossings. Funding for bridge replacement does not include replacing of a ford with a bridge, or replacing an small inadequate bridge with a larger bridge. Dent Count has the additional challenge of having to deal with three USACE Districts (Kansas City, St. Louis and Little Rock) for permits, depending on the watershed.

Valley Park:
It has a problem with erosion on Fishpot creek and seeks to protect parks, facilities improve creek quality with stream rechanneling…

Franklin County:
Public works roads and bridges in good shape, but heavy rainfall tests the bridge structures. The county would benefit from a flow chart that would identify the process to use in working with the various permitting agencies when preparing to repair or replace a bridge.

Jefferson County:
It has bridges that need to be replaced, usually smaller bridges that need to be longer to be effective. NEPA documents are a challenge for smaller counties with limited staff and especially when seeking to address a river that has already been impacted by the structure that you are seeking to replace. Jeff Co is seeking to give streams enough room to move naturally by restricting development too close to streams.

The US Forest Service:
Has priority watersheds –
   Phelps – Mill Creek;
   Big Basin which feeds the Current River; and the
   Meramec, esp Huzzah (and Courtois)

Huge demand, for bridge replacement in the forest service lands, but FS can only do about 1 bridge every 3-5 years with current funding. Stream restoration– currently thousands of fish barriers on streams that need to be addressed.
Other issues:
National wetlands data is not always accurate – says wetlands when actually a bridge is already there. (FWS wetland mapper is national data base and not always accurate at the local level)

Route 66 state park:
Trying to save the historic bridge over the Meramec.

USGS:
Doing stream gage collection with 265 gages across the state. Also doing scour studies by bridges.

City of Pacific:
The city has an effort to save 100 year old bridge. Only 3 of this type in the state and this is in best condition. New bridge is 650 feet downstream, so it has no impact on new bridge; $3.5 federal and $1.5 local. Need pedestrian crossing built into plans for new bridges.
Sewage Treatment & Stormwater Table Discussion

The dominant theme at both sessions was the need for education – education of residents, businesses, governments, and regulators.

The second theme was the scarcity of dollars to fund improvements that would protect the water quality of the streams and rivers.

**Municipal wastewater issues:**
One community is looking at a potential $6 to $8 million upgrade of their treatment plant to meet regulations and future growth. They don’t have the money, are looking for financial assistance, and are concerned that sewer rates will need to be raised to the point that it will be difficult to get citizen buy in. There was discussion of the EPA “2% guidance.”

It was mentioned that high ammonia levels are devastating to mussels and that mussel populations below treatment plant discharges are in serious decline.

We need innovative thinking regarding the reuse of discharges (i.e. irrigation water for golf courses). Also, there could be ways to implement low-cost modifications to improve nutrient reduction.

Small communities should implement green infrastructure to help manage stormwater, but there is concern that it could turn into a local regulatory nightmare.

There is a need to factor in the short- and long-term construction and maintenance costs of a sewer system in land use plans. (on-site either individual or cluster development vs. central collection)

**On-site systems:** Pollution in a stream in a state park is thought to be coming from malfunctioning septic systems.

There are many systems in the watershed that were installed before there were regulations and many installed when there were inadequate regulations. There were no perc tests or soil analysis; metal tanks that rust out were installed; there was a set number of square feet of filter field, regardless of expected usage or soil conditions. Also, it is believed that there are some sewer discharges w/o any treatment at all.

Many systems are in need of replacement; regular pumping does not occur and new systems that meet current regulations can be very costly.

Complaints are handled by the Mo.Dept. of Health who empower county health departments and enforcement is uneven. Health departments are concerned with human health, not water quality.
Benefits of Tourism and Recreations:

- USACE project could benefit Eco-Tourism
- Jobs
- Hunting, hunting harvest, donation to food banks
- Franklin County is usually in top 5 in MO for deer harvest
- Health benefits for outdoor activities and access to nature
- Educational opportunities (natural history, cultural history, geology, water)
- Outreach and education
- Low impact/non-polluting industry
- Selling point for Missouri state-wide tourism
- Sustainable

Opportunities:

- Meramec is a day trip from St. Louis
- Tie river more into Route 66 promotions
  - Local tourist go to river but not as much to Route 66 attractions
  - Visiting tourists go more to Route 66 but not the river
- Extend the Ozark Trail
  - Bend Bridge in Pacific can be a bike, hike, horse connection
  - Trails are more of a draw in lower basin, and can be more of a draw in upper
- Tourism is not yet accepted locally as a form of economic development
  - See MAYTAG and Paddle Forward (per. Pat Owen)
  - Franklin County Tourism committee is inactive, could be rejuvenated
- School field trips
  - Need more info on how many come, how do we get more
  - DNR does summer camp for inner-city youth, 4 weeks in June
  - Mines in area can be an educational opportunity
- Decibel level on boat motors, radios
- Need a stretch of the river preserved for studying, no boats
- Use mobile technology for virtual tours, guided tours, interpretive programs, locating bathrooms
  - Google World Wonders or similar site
  - Need to have bathrooms, possibly mapped and geo-located
Threats:

- Septic systems, CSO’s and urban runoff degrade water quality as river approaches Mississippi
- Speed boats – danger to swimmers, cause bank erosion, can be inconsiderate of other boaters
- Cattle still in river at places
- Asian carp
- Increased tourism is causing over-use of river
  - Saturdays in high season is not family friendly
  - No place but river for floaters to relieve themselves
  - Introduction of rafts enabled over-use and abuse
  - Power boats cause a lot of erosion
  - General dis-respect for the river, nature, and other people
  - Large scale events and no limits on number of people on the river

- Interpretive programs at parks -- attendance is on the decline
- Confusion over property rights and liability on gravel bars

Data Sources:

- Missouri Canoe and Floaters Association
- MO Parks (for camping numbers)
- MDC has hunting permit numbers
- Scenic Riverways