

Nutrient Management in the Lower St Francis Watershed

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Based on recommendations collected and discussed during the Feb. 19 meeting, we revised the project goals and action items.

Goal #1: Increase awareness and understanding of basic nutrient management.

Goal #2: Increase adoption of Best Management Practices that maximize nutrient use efficiency and decrease nutrient losses from ag lands.

Goal #3: Identify and provide access to innovative technologies that can assist farmers with implementation of BMPs and increase of nutrient management on their operations.

NO CHANGES OFFERED.

Action Items: [{TO BE DISCUSSED BY GROUP}](#)

1. Expand steering committee to coalition that includes commodity groups (corn, soybean, rice), Delta Center and Missouri Rice Research farm. RETAILERS, CCAS, COOPS

2. Develop a communications plan to increase awareness and understanding of nutrient management (goal #1, #2). Includes compiling available information about nutrient management, re-packaging, if necessary, and distributing through Coalition partners to reach every farmer in watershed/Bootheel . PROVIDING REFERENCE AND GUIDANCE. PUSH ECONOMIC BENEFITS. FINE TUNE FERTILIZER RATES?

[{scope is something to be discussed}](#).

IMPORTANT TO GET BUY-IN FROM COMMODITY GROUPS. LOT OF LIKE-MINDED PEOPLE IN DELTA REGION. EFFORTS FOR WATERSHED WILL BE APPLICABLE TO BOOTHEEL.

DELTA REGION IS BOOTHEEL, TO MISS RIVER, TO TENN AS WELL. WIDER AREA, TRYING TO GET SOY/RICE/CORN ON BOARD WANT TO DEAL WITH WHOLE DELTA AREA, BIG PICTURE. PROS: \$ FROM CORN, LOOKING TO HAVE IMPACT ON LARGE AREA AND # PEOPLE.

NARROWED TO ST FRANCIS MAY NOT BE OF INTEREST. DEPENDENT ON GROUPS' BUY IN AND RESEARCHERS. SC TALKED WITH RICE COUNCIL ABOUT DEMO TECHNOLOGY AT FARM; "SOUNDS GOOD. GET WITH DELTA CENTER AND LET'S TALK." GENE STEVENS AT DELTA CENTER WOULD BE INVOLVED. NEITHER SCOTT NOR PAT HAVE TALKED WITH THEM.

WE NEED TO FOCUS ON BOOTHEEL. DEALING WITH NRCS 590, MO NUTRIENT MANAGEMENT.

CORN DISCUSSED AT STATE LEVEL; CONCERN AND SKEPTICISM ABOUT DEALING WITH CONCERNS OR FORCE-FEEDING AN ISSUE.

ADD ACTION ITEM TO IDENTIFY NUT MGMT NEEDS?

Bob Ball: STRONG FEELING THAT WOULDN'T MAKE MUCH HEADWAY UNTIL FARMERS STARTED DOING SOIL TESTS. THRUST WOULD BE ON THAT. 590 STANDARD IS COMPLICATED. SINGLE OUT THAT SOIL TEST IS BASE OF REFERENCE. MAKE THAT THE FOCAL POINT AND LET THAT GUIDE AND DIRECT WHERE TO GO NEXT.

Sc: RELATES BACK TO NUTRIENT MANAGEMENT NEEDS. WHAT ARE THEY? NEED A SOIL TEST TO KNOW.

HOW TO DO A SOIL TEST. DO IT WELL. HOW TO INTERPRET RESULTS. HOW TO BUILD A NM PLAN BASED ON THOSE RESULTS.

Bb: GULF TASK FORCE MET. MO dnr WAS THERE AS SIGNATORY. MO WILL DO ITS PART TO MINIMIZE NUT RUNOFF. MEETING SET WITH dnr REP. VERY INTERESTED IN THIS PROJECT. SEE MORE CONCERTED EFFORT FROM STATE GOVERNMENT OVER TIME AND FOCUS ON NUT MGMT. KICK OFF WITH EMPHASIS ON SOIL TEST.

Sc: EQIP WILL BE CHANGING FROM PACKAGE DEAL TO SINGLE PRACTICES; NOT EXTENDED CONTRACTS, LIMITED TO 3-YEAR CONTRACTS. IF NUT MGMT COULD BE STAND ALONE PRACTICES, MIGHT OPP'TY FOR FUNDING. DEPENDS ON MO NRCS.

Bb: HAVE EQIP SIGN UP IN JULY. BOB WORK WITH PROGRAM STAFF TO INCLUDE OFFERINGS. SOIL TEST WOULD BE COMPONENT OF PRACTICE COVERED BY EQIP. OFFERING FOR 2009 EQIP SIGN UP: FOR 590, REMOVING BASIC OPTION FOR CROPLAND (REMAINS FOR PASUTRE/HAYLAND). COULD MAKE EXCEPTION FOR THIS WATERSHED? VARIABLE RATE P AND K OFFERING. SPLIT NITROGEN APPLICATION OFFERING. PRECISION N MGMT. COST OF SOIL TEST INCLUDED AS COMPONENT COST.

Pd: FARMERS RELY ON DEALERS FOR INFORMATION. IS IT LIKE THAT IN THE BOOTHEEL? INVOLVE CCAS, RETAILERS, COOPS?

Sc: CONSULTANTS MAY BELLYACHE ABOUT 590

NEED BETTER DEFINITION OF HOW MANY PRODUCERS NEED HELP WITH BASIC SOIL TESTS? WORK WITH NASS TO LOCALIZE SURVEY TO BOOTHEEL TO DETERMINE SOIL TEST USE IN BOOTHEEL?

SW: SMALLER SCALE FARMERS LESS LIKELY TO DO SOIL TESTS. MAY NOT HAVE/USE COMPUTERS.

Bob: WILL ASK NASS FOR ANY INFORMATION ABOUT NUT MGMT INFORMATION IN BOOTHEEL.

WHEN DO WE ASK OTHER GROUPS TO GET INVOLVED? SCOTT/PAT HAVE BEGUN INITIAL OUTREACH TO THOSE GROUPS.

ENVIRONMENTAL RESOURCES COALITION (ENV'AL ARM OF MISSOURI CORN GROWERS) BASED IN JEFFERSON CITY. BETTY WYSE IS CONTACT PERSON.

Bob will talk with ERC and point in my direction.

PETER GOT CIG. CONTINUATION OF 3-YEAR PROJECT. USING CROP SENSORS. MAY WORK WITH 2-3 FARMERS IN BOOTHEEL TO EXPAND TECHNOLOGY? NEED TO DISCUSS WITH PETER. DARREN SMITH IN WATERSHED, IN CSP, IS WORKING WITH PETER ON THIS PROJECT. FINE-TUNING ALGORYTHING TO MAKE IT COMMERCIALY AVAILABLE.

Topics to be covered include:

- water quality issues/concerns in the Bootheel regarding nitrogen and phosphorus and what impacts these nutrients may have on hypoxia in the Gulf;
- a complete nutrient plan that meets the NRCS 590;
- phosphorus needed by plants, soil availability, and losses;
- nitrogen needed by plants, availability and losses.

3. BETTER UNDERSTAND NUT MGMT NEEDS IN BOOTHEEL. Survey Bootheel farmers about current nutrient management practices (goal #2). CTIC has an existing web-based questionnaire that could be tailored to use in the region. If this was done summer/WINTER 2008 and summer/WINTER 2009, we could measure change in BMP adoption.

4. Identify appropriate technologies that can help Bootheel area farmers with nutrient management (goal #3). Includes: VRT for phosphorus, correcting pH, VRT/canopy sensors/real time technology for nitrogen, remote sensing irrigation and chlorophyll meters.

5. Provide demonstrations and/or research studies on these technologies at area research centers (goal #3) {need to discuss with researchers}. DELTA CENTER DOES HAVE RESEARCH ON NUT RATES, DOLLARS, ETC. PAT DIDN'T REACH GENE STEVENS. PAT/SCOTT NEEDS TO CONTACT AND DISCUSS. SOME RESEARCH PARALLELS SCARFT'S.

6. Provide (with additional funding?) soil sampling and stalk sampling to farmers (goal #1, #2). Includes education about importance of this practice and technical assistance/guidance based on results {need to discuss with Mike and Dave}. HAVE CONTACT WITH FARMERS THAT AREN'T TOO ADVANCED WITH SOIL TESTING/NUTRIENT MGMT.

Questions to discuss with steering committee:

- Feedback on revised goals and action steps
- Should this be a Lower St Francis or Bootheel region project?
- What individuals should be approached/invited to join coalition?
- Next steps?
 - Invitations sent to others to join Coalition
 - Schedule meeting of Coalition
 - Compile information about nutrient management

If we were to build a web site for this project, what would we need/what would be best to have on the site?

NEXT STEPS

TALK WITH CORN/SOYBEANS/RICE GROUPS ABOUT PARTICIPATION AND INTEREST

BOB: CONTACT NASS AND ERC

PAT/SCOTT: CONTACT DELTA CENTER

SCOTT: TALKED WITH VICE CHAIR OF RICE COUNCIL (WORK THRU RESEARCHERS; DISPLAY EQUIPMENT? DISCUSS WITH GROUP) DIDN'T SEE PROBLEM; HAVING RESERACHERS INVOLVED IS IMPORTANT

SOYBEANS: IDENTIFIED FOLKS IN AREAS ON STATE ASSN.

SCOTT TALK TO MICHELLE ABOUT SOYBEAN

STEVE: CONTACT COTTON GUYS

BOB: MOAG INDUSTRIES: STEVE TAYLOR NEW DIRECTOR (FROM ERC)

Bob: MO DNR (NOT VISIBLE PLAYER)

Missouri farmers association: largest commercial ag dealer in the state (northern end of bootheel, not in watershed)

SCOTT: WILL TALK WITH REGIONAL REP OF FARM BUREAU