

**Navigation and Ecosystem Sustainability Program
ECC Conference Call**

July 10, 2007

8:30-9:30am

Call-in Attendees:

Rich Astrack, MVS

Ken Barr, MVR

Mark Beorkrem, NIC

Jack Carr, MVR

Sharryn Jackson, MVR

David Kelly, MVS

Dick Lambert, MN DOT

Rich Manguno, MVN

Jeff McGrath, MVP

Barb Naramore, UMRBA

Katie Nelson, MVR

Rebecca Soileau, MVP

Chuck Spitzack, MVR

Brad Walker, PRN

Scott Whitney, MVR

Susan Wilson, MVS

Rich Worthington, HQ

Minutes:

1. Global Grain Model and Scenario Report

- Jack Carr gave purpose of call: to discuss global grain model and scenario report. Also, to give progress of Economics products.
- Chuck Spitzack will be sending out the schedule for preparation of interim report and schedule for review and comments.
- Distribution date of the Draft Economic Re-evaluation report is 15 AUG 07.
- Comments need to be received by 7 SEPT 07 to be included in report. All comments due 15 SEPT 07, (30 days after distribution of the draft report). Your comments will be characterized in a letter report.
- If there are comments made earlier that weren't adequately addressed please repeat those comments so they become part of formal comment process.

GGM and Scenario Report:

Spitzack: Please submit comments in writing on scenario report to Jack Carr.

Brad Walker: We were looking for specific references to studies and specific names in organizations that had input into table 9 (Scenario Report, Final Grain Model Input Specifications). They were not included in the report. Are they going to be included in the report? Two areas of concern: corn yields and US area of crop land: where did those variables come from?

Manguno: Yields (low traffic scenario corn) are a result of historical trend of yields for US and for other producing regions in world. Number you see for US, 1.6 bushel per year increase, is not actual value used. It's a way to describe what is captured in model. It's a national average. Country is broken up into a number of producing regions in model. Aggregate= 1.6 bushels per acre per year increase. High traffic scenario corn of 2.0 bushels per acre per year increase is based on a shorter term period of record that is reflective of some higher growth. Also, a higher number was suggested by National Corn Growers. That's the source of those two values. Just like in the low, 2.0 isn't a particular value used. Model is run on particular values for each region.

Walker: My concern is these are optimistic and short term. They are heavily dependent on usual conditions and don't take into account water and nitrogen availability, and erosion. They are really just forecasts of business as usual for 50

years. Low traffic is essentially the same. None of these negative possibilities are considered in model and they are highly likely.

Walker: We have reached a tipping point. Nitrogen up to \$500/ton. Issue of oil shortages over 50 years not considered in model.

Lambert: We don't have wind power in model either do we?

Walker: How do you produce nitrogen fertilizer from wind?

Lambert: It takes place of generating power from electricity.

Barr: I don't believe Wilson considered oil constraints as part of his forecasts.

Walker: Did he include soil fertility problems, water issues, loss of soil from erosion, and fact that a lot of prime farm land is being lost and will bring down yield averages.

Carr: That is one opinion. Dr. Wilson used the idea that the future is continuation of past.

Walker: As for acres that's not true. A couple hundred million acres of farmland lost in 50 years. (This was actually 55 years from 1950 when there were 1,159 million acres of land in farms, approximately the peak. By 2005 this had dropped to 933 million acres (226 million acre change). This is from USDA information. The last 25 years is confirmed by the graph added in the addendum to these meeting notes. Land in farms includes Cropland, Pastureland and Rangeland. Cropland is what we should really be concerned about.) You are predicting 0 land lost in next 50 years- that's unrealistic.

Barr: In terms of yield – base case-does summary document state 1.6 is what Wilson used as historic trend?

Carr: Participants in workshop suggested 4% high traffic.

Manguno: I don't remember 4 % number.

Barr: National Corn Growers talked about increase in corn yields 2% for low and 4% for high traffic scenarios. This refers to growth in corn yields. See National Corn Growers comments attached to Scenario Report.

Walker: If you use 2% or 4% annual growth compounding results in very large yields. 150 bu/acre compounded for 50 years at 4% results in yield of 1100 bu/acre. Corn grower representative tells us we should expect 1100 bushels per acre. Is that a reliable source? I know you didn't use that in the model but that is what they are saying.

???: Do you have that in published literature?

Walker: That is what the Corn Growers said in the scenario development report.

Beorkrem: Jack, what kind of comments did you get on this from EPR?

Carr: None.

Beorkrem: What about comments they made on GGM itself?

Spitzack: We will characterize comments to date as part of the interim report. The EPR Panel is sending a final report on their review in October 2007.

Beorkrem: You won't use their comments in the re-evaluation study?

Spitzack: We have used their comments through workshops and meetings. The draft report is the first document for formal review. We have gotten pieces out to people but comments need to be done in context of the review in whole.

Beorkrem: We won't see comments until 15 August draft review or October?

Beorkrem: So you have their comments but we don't.

Spitzack: We have comments on products but not whole report.

Barr: We have no final panel comments.

Beorkrem: Other than participation in February and June workshops, they have not formally reviewed scenarios?

Carr: No, our intent was to send them what we have distributed to you (Scenario Report) along with notes summarizing discussions today. We will include your input in the Scenario Report that we send to the Peer Review Panel.

Barr: Can we move on to US area and production? 107% low and high traffic.

Manguno: Yes, that was the base case assumption.

Walker: Is this 107% of 2004 corn crop land or all crop land, or all farmland?

Barr: Grain Forecast is all grains including corn and soybeans. Cropland is all tillable acreage.

Manguno: This would be an increase in acreage devoted to corn, soybeans, and wheat in total. Doesn't include pasture.

Walker: Then that means you have all this crop land for 50 years remaining constant that is literally impossible; you disregard any farmland loss due to conversion to other uses. I find that hard to believe considering history.

Manguno: This number is not based on history. The increase of whatever the stated percentage is doesn't happen automatically. That 7% value is an allowable increase as the model tries to solve. It will allow it to go up by 7% in attempt to find equilibrium. In case of these two scenarios I think it's the case that you wind up using the 7%. You probably do it fairly early in the time sequence. It's amount allowable for an increase. The model doesn't automatically put it into production.

Walker: Assuming most coming from CRP program. You have an upper number of 107%, but your base is constantly decreasing.

Barr and Jackson: You're talking about urban expansion. We have been working with this. In Illinois we were able to come up with a figure of 0.1% crop land affected by construction in 2004. The amount of Illinois land in farming has declined at an average rate of approximately 10,000 acres per year since WW2. Land in farms for Iowa has decreased about 10% from 1950-2005.

Walker: 19 year period 70 million acres lost national cropland acres. Vast majority of crop land acres are in Midwest land that grows grain. Then you can look at prime farmland. Generally losing at least same percentage- it's located in best areas for development.

Beorkrem: High traffic scenario and ethanol: the high traffic level held constant US corn-based ethanol demand at 5 billion gallons. I assume high traffic scenario held constant means ethanol produced from other crops. Wouldn't appear US area any allowance made for other crops taking land away to produce 25-30 billion gal of ethanol that would come from cellulose. That crop land would come from same area of crop land.

Whitney: Not necessary- one of greatest sources for cellulose is biomass left in field.

Walker: When you take that off the ground you decrease yields- more fertilizers needed.

Barr: What Mark said is we keep corn-based ethanol at 5 billion gallons- and there is nothing happening that would take corn area and turn to switchgrass. Crop area is not being expanded within study area.

Manguno: It's not saying anything about ethanol that's not corn based. It's produced or isn't. If it is produced, than it isn't being produced as an expense of acres devoted to grain.

Beorkrem: Some kind of allowance needs to be made for land use for ethanol production (other than corn based). If we are using field fodder, that is model-able also.

Spitzack: For high scenario, 5 billion gal ethanol production and not assuming increases from other sources.

Beorkrem: On face of it model is false.

Worthington: We are not necessary limiting replacement of corn ethanol to cellulose ethanol. There are other possibilities: policy shifts, food vs fuel debate, reducing tariffs on foreign sources of ethanol, and sugar cane ethanol, variety of possibilities that are not all in cellulose ethanol replacement category.

Beorkrem: That's a possibly Rich, but it goes a long distance away from past practice of Corps of Engineer's in not trying to anticipate policy shifts. We can guest-imate large amounts of cotton acres shifting but we need to work with some realities. Taking current production level of corn based ethanol and not allowing for any decrease in acreage because of shift in crops- you leave yourself open. That implies we will be exporting corn and importing ethanol.

Beorkrem: Rest of world shifting from soybeans to corn also. World reacts and that will have an impact on acreage worldwide. When you set yourself up to develop model like this and have scenarios that are little strange. That is why I want to see peer review comments from experts.

Carr: If you'd like to submit additional written comments that we can include in this report they need to be in by 7 SEPT for inclusion in letter report.

Barr: Workshops and dialogue have been for benefit of everyone understanding what we are doing.

Beorkrem: So at this point scenarios are fixed?

Spitzack: Yes, we had to proceed with analysis using scenarios as developed to date based on input from contractors and workshops.

At this point Beorkrem left the conference call.

Spitzack: The report coming out 15 Aug 07 is for internal review. Stakeholders, NECC/ECC, and EPR will be receiving this document for formal review at the same time.

2. Progress on Economic Products (Carr)

- Products that have been sent to ECC: Global Grain Model, Demand curves for Ag commodities and Non-Ag, Non-grain Traffic Forecast from Louis Berger, Rail Capacity and Water Compelled rates by Mark Burton.
- Remaining products for external peer review group are scenario report with summary of today's discussion, and draft interim report.

Barr: Sharryn Jackson has been looking at prime farmland data, will let us know about other sources, Brad?

Walker: Suggest you contact American Farmland Trust Office in DC. Check their website. USDA, NRCS, & NASS (they are an agency of Department of AG). Last US Agriculture census done in 2002. Latest one will be done this year. Won't have data for a year or two. Trend lines show an increasing rate of farmland loss since the 1980's.

Carr: We will research and make EPR aware.

McGrath: Are there any land use experts on that panel? Darryl Ray from University of Tennessee -Ag Economics. Steve Fuller has a background in modeling of transportation of Ag commodities. He's familiar with producing and consuming regions.

Walker: I would suggest getting a geographer.

Carr: Our contact from USDA is Nick Marathon. He would be our starting point.

Lambert: That's a good point Brad made: decrease in farmland- how does that impact our exports of grain?

Walker: There's really no supply side analysis in model. It's demand and distribution. If you are going to model AG in US you need to model all of it. A lot of considerations that need to be made that aren't.

Carr: The model does have producing regions (supply-side). Appreciate your well stated comments.

2. What's Next: (Soileau)

- Stakeholder and EPR meeting in Aug or Sept 2007 on Draft report.
- Meeting will be similar to last meeting where we had presentations and you get a chance to ask questions. This meeting will focus on draft report. Tentative: St. Paul Tues and Wed, Aug 29-30 noon to noon. It may be in Bloomington. Not finalized yet. Rebecca Soileau will get logistics out next week.

Lambert: On Aug 28-29 the St. Paul District has a River Resources Forum. Could they shift it so we don't have conflicts? There are others in WI and IA that want to attend both.

Barr: NECC/ECC Meeting August 22, 2007 LaCrosse, Wisconsin

Radisson Hotel
200 Harborview Plaza
LaCrosse, WI
608-784-6680

- Proposed agenda: combined environmental and economics meeting and go through results from interim report. If you have comments or additional items we need to address let Jack and Ken know.
- UMRBA August 21, NECC/ECC August 22, EMPCC August 23.

Around-table closing comments:

Jeff McGrath: Question- regarding concerns from stakeholders- is there any value in making additional model runs to address their questions on input variables? Directed to Spitzack or Manguno.

Spitzack: That needs to be part of formal comments to recommend additional runs and see if it's important. These comments will be considered in recommendations for the final report in December.

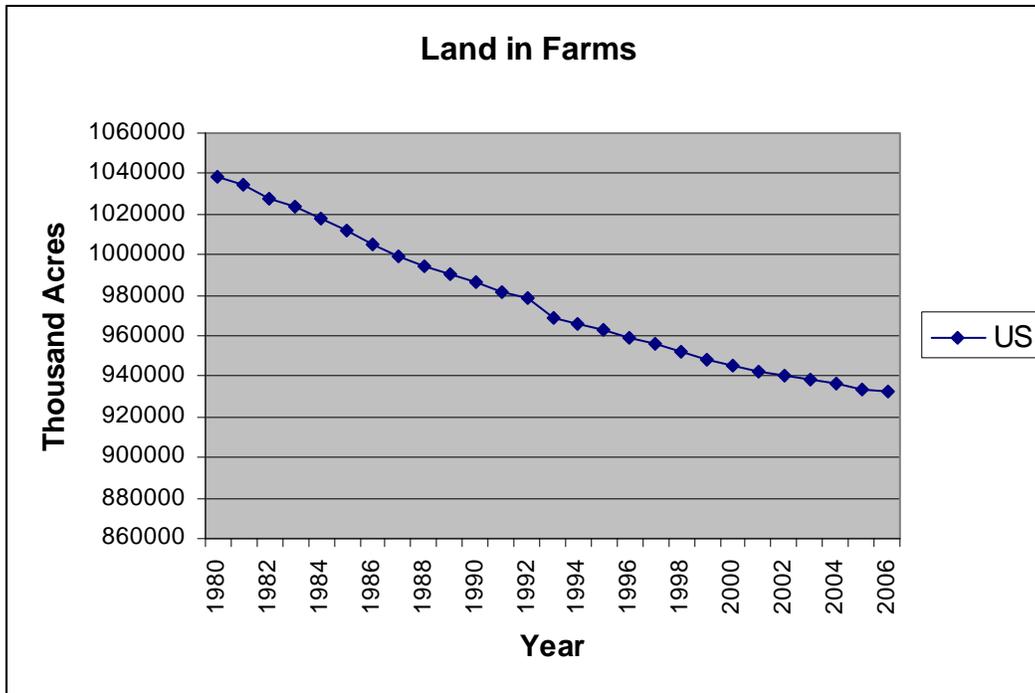
Manguno: At this point we are challenged to wrap up what he have done so far. There is no chance to re-run new scenarios and include them in ASA report.

No other comments.

9:30 end conference call.

Addendum:

As a follow-up to the discussion on farmland loss due to conversion to other uses, the American Farmland Trust (www.farmlandinfo.org) and US Department of Agriculture (www.nass.usda.gov) websites were searched for additional information. Historical data (1980-2006) for land in farms for the United States and for the states of Illinois and Iowa was obtained from the USDA site. Similar information was found on the American Farmland Trust site. Data shows an 11.4% decline in acres for the US, and 5.5 % and 7.3 % for Illinois and Iowa, respectively, as shown in the graphs below.



Land in Farms

