

SERA-IEG-17
Minimizing Agricultural Phosphorus for Protection of the Water Resource
1999 Annual Meeting Minutes
August 8-10, 1999
St. Foy, Quebec CA

The 1999 meeting of SERA-IEG 17 was held in the Chateau Bonne Entente Hotel, Sainte-Foy, Quebec, Canada. Regis Simard from Agriculture Canada was the local host for the meeting and Steve Hodges from North Carolina State University chaired the sessions.

August 8, 1999

Field Trip Tour of the Boyer Watershed including a tour of the provincial research stations and a dinner cruise along the St. Lawrence.

August 9, 1999 (Morning Session)

Chairman, Steve Hodges convened the 1999 meeting at 8:10 a.m.. Regis Simard welcomed the group to Quebec, Canada. No administrative advisor report was presented as neither Dr. Ouart or Jones could attend the meeting.

Maury Horton (CSREES):

Dr. Horton informed the group that this meeting is his top priority. He also stated that Berlie Schmidt retired July 31 and would likely be replaced by Ray Knighton. Dr. Horton also informed the group that NRI received 113 Water and Environmental Systems proposals, with 10-12 proposals likely to receive funding. In the future, at least 25% of the water and environmental funding will be multi-state in nature. Dr. Horton also congratulated the group on its outstanding efforts to date and challenged SERA-17 to increase its affiliation with livestock committees with similar interests and to work closely with the regional soil testing committees.

Roberta Parry (EPA)

Roberta Parry reviewed the CAFO AFO strategy and stated that a guidance document would be released for comment shortly. She stated that EPA was interested in receiving comments from the scientific community regarding this document. She also encouraged SERA-17 members to work with NRCS as they develop and implement comprehensive nutrient management plans (CNMPs). Roberta Parry also discussed EPA's Nutrient Criteria program and encouraged SERA-17 members to contact their regional EPA office and become involved in the process of developing guidance surface water nutrient content.

Steve Hodges

Dr. Hodges briefly discussed a letter from SERA-6 addressing the need for cooperation among SERA-17 and the regional soil testing committees as SERA-17 finishes the "Methods Manual" being developed by Gary Pierzynski.

The following are brief highlights of the presentations given at the meeting.

Leon Parent (Laval University, Sainte Foy, Quebec)

Dr. Parent discussed his research involving the use of Mehlich 3 soil test information to determine soil P saturation using Mehlich 3 P/Mehlich 3 Al, where Mehlich 3 Al is used as a substitute for soil P sorption maxima. They found that this ratio is more stable than measuring just soil P to determine soil P saturation.

Tony Edwards and Karen Daly (McCauley Institute, Aberdeen Scotland)

Dr. Edwards showed that soil sampling, subsampling, and storage can all significantly influence extractable soil P values.

Karen Daly (Teagasc, Johnstown Castle, Wexford Ireland)

Ms. Daly found that soil test P, soil P saturation factors, and land use were the factors most related to molybdate reactive P in river systems in Ireland. She also stated that regulations may require water quality improvements as early as 2002.

Chuck Lander and Jerry Lemunyon (NRCS Washington DC and Fort Worth Texas)

Chuck and Jerry discussed how NRCS views the P-Index in the context of developing comprehensive nutrient management plans (CNMPs). They stated that Obie Ashford is a key player and will finalize initial strategy for implementing NRCS nutrient management policy that will go out for comments in approximately one month.

August 9, 1999 (Afternoon Session)

P-Index Implementation

Susan Conner (University of Maryland), Tom Sims (University of Delaware), Bill Jokela (University of Vermont), and Steve Hodges (North Carolina State University) provided brief overviews of P-Index implementation in their respective states.

Regis Simard (Agriculture and Agri-Food Canada, Ste. Foy Quebec)

Dr. Simard discussed the progress of P index implementation in Quebec.

Tommy Daniel (University of Arkansas) presented data relating soil test P to runoff. They are finding that most soil test P methods work well if they are used properly, but that the relationships may be soil specific.

John Lory suggested that using soil test P as a sole basis for siting manure applications to reduce potential P loss will not work if the increase in soil test P (and water soluble P) with P additions is a linear relationship.

Miguel Cabrera (University of Georgia) and Philip A. Moore, Jr. (USDA-ARS, Fayetteville, AR) showed that there was no relationship between soil test P and runoff P from surface applied poultry litter in pasture situations. Philip Moore then talked about some of his current research.

Jerry Lemunyon reviewed potential P index and transport factors that should be considered when developing state-specific P-Indexes.

Chuck Lander stated that \$5 million is potentially available for manure management from NRCS. He also discussed a general process for incorporating best management practices (BMPs) into the P-index.

August 10, 1999

Subcommittee Reports:

Wes Jarrell reviewed the NRCS Nitrogen and Phosphorus Loading to Water document which is available for review on the web at:

www.ysi.com (getting started with TMDLs)

He also provided an overview of the importance of relating water body type, P source, timing of P loss (season), location (stream order), when assessing potential impacts of P losses to water resources.

Gary Pierzynski: reported that the Soil and Manure Testing Methods document is nearly done.

Peter Kleinman provided a status report of the National P Runoff Project Protocol.

Other Announcements:

Chuck Lander is trying to arrange a meeting in Washington D.C. to discuss P issue with NRCS, CSREES, leadership.

Roberta Parry stated that SERA-17 should respond to the National AFO-CAFO strategy document when it is published and provide input on what should be included in a model permit for large livestock operations.

Business Meeting:

Miguel Cabrera (University of Georgia) was elected Incoming Chair for 2000-2001. Wisconsin volunteered to host the SERA-17 meetings in Madison, WI in 2000.

Respectfully Submitted By Brad C. Joern, Incoming Chair 1999-2000.