

Citizens Advisory Board (CAB) Meeting Minutes
June 24, 2003
GF GoodRibs

CAB Members Present:

Lonnie Leake
Mary Loyland
Jerry Moran
George Sinner
Dale Stenerson
Don Vellenga

Energy & Environmental Research Center (EERC) Participants/Attendees:

Beth Bolles
Barry Botnen
Lynette de Silva
Kim Dickman
Sheila Hanson
Jim Johnson
Mark Kurz
Erin O=Leary
Wes Peck
Xixi Wang

Beth Bolles called the meeting to order.

Draft Landowners Survey:

Beth requested that the CAB look over the survey and provide comments, suggestions, or changes.

Data Project Updates and Progress Since January:

A significant component of the data collection process during the first year of the Waffle project focused on determining what data (e.g., culverts, bridges, hydrological) are readily available in a format that would allow for easy integration. While bridge and culvert data remain elusive, there is good progress on acquisition and understanding of available meteorological, hydrological, and elevation data. A database has been developed that will contain information or attributes of these data (not the data itself) such as their source, vintage, scale, and reliability. This database will act as a searchable catalog that will cross reference the information with its associated watershed, county, and state.

This year, the collection or surveying of new data will begin in the area in which a demonstration will be conducted. The data will include road elevations and culvert information (position and elevation) and soils information. The decision has yet to be made whether to have KLJ (Kadmas, Lee & Jackson, Inc.) do the surveying or invest in a survey-grade global positioning

system (GPS) unit to be used by EERC staff and/or students.

George Sinner stated that perhaps every township or water board would have record of elevation values for their road and culvert system. Beth replied that not many of them have good or complete records or readily available data of that type.

Mary asked if the data collection effort will be only to supply missing data and not re-collecting existing information; Beth said yes.

There was a discussion focusing on what standards should be used when collecting the elevation data.

Beth commented that it would be great to have LIDAR (light detection and ranging) data, which is very precise elevation data collected from aircraft outfitted with the proper instrumentation. However, this type of data acquisition is very expensive, with a typical cost of nearly \$700 to \$800 per square mile. To survey the basin at this price would cost tens of millions of dollars. There has been some LIDAR data collected in the basin, but this effort has been focused along major tributaries or in the Moorhead/Fargo area where there is concern about mapping out the 100-year floodplain.

George Sinner commented that the validity of newly collected road elevations in rural areas may be short-lived because the roads are often graded by the county and farmers, thus creating road surfaces higher or lower than when the data was collected.

Dale Stenerson commented that American Crystal Sugar may have a good digital database of elevation data, and other farmers have data too. Beth replied that no one had yet talked to American Crystal Sugar, but there are many entities and engineering firms out there that have collected data in the past but feel threatened by the project, especially with modeling, so they are not very willing to readily share. Beth added that anything collected through the course of this project will be publicly available.

Wes commented that any elevation data provided by landowners, agricultural industry, local government, or engineering firms needs to be of sufficient quality to be accurately utilized. Data of questionable quality should be flagged as such.

Lonnie Leake inquired about the accuracy of the older U.S. Geological Survey benchmarks. Wes commented that newly acquired GPS data is typically based on updated elevation control points. Lonnie then commented that it may be better to do a survey that is consistent with itself instead of trying to piece things together.

Beth stated that the project does not want to duplicate data collection efforts in the basin and continues to contact other entities for their data.

In terms of modeling, Xixi Wang has completed the preliminary basinwide modeling and determined the amount of water needed to be stored in various areas of the Red River Basin in order to keep the Red River below major flood stage during an event similar to 1997. The amount of water stored in this example would not only have prevented Grand Forks from flooding during 1997, but it would have kept key points along the Red from even reaching major flood stage. Preliminary results indicate that, in many areas, a couple of inches of water storage per square mile would be needed. Storage was as little as 0.3 inches per square mile in some areas and as much as 2.9 inches per square mile in others. Since there will not be water stored on every square mile of land within a watershed, there will need to be more storage on perhaps 1 out of every 12 sections of land.

Mary Loyland wondered if that means in the Grand Forks area 2.6 inches will be over the whole section of used farmland. Beth said yes, but that due to the slope of the land, it is unlikely that the water will be evenly distributed across the whole section. Mary then asked if the ditches will be full of water. Beth replied yes. Mary then inquired how deep a ditch would have to be so that the stored water would not encroach onto the field. Wes replied that not all the water could be contained in the ditch. The ditch volume is a very small percentage when considering the overall field surface. Water would fill the ditch and then move across the field.

George Sinner stated that timing of the storage and release is going to be very difficult. He speculated that culverts will have to be closed off for 10 days to 2 weeks.

Mary Loyland said she has talked to farmers in her area, and no one said anything good about the Waffle project. She talked with the Traill County water board and an attorney in Mayville, and they had some concerns, such as:

- Roads cannot be used as dams.
- Roads get soft and dangerous.
- Would there be money set aside to repair roads?
- Who has the authority to set aside money for this?
- Who would decide when gates are closed/opened?
- How accurate is the model?

There was a discussion as to the accuracy of scientific models, such as the one used by the National Weather Service in 1997 and the model being developed by the Waffle project. The discussion focused on how much credence should be given to the models and what level of risk should be accepted.

Erin O'Leary commented that it seemed as though the farmers Mary is talking to have a misunderstanding of what the objective of the Waffle project is. She wondered what the plan is to address and educate farmers on the Waffle project. Beth said one of the best ways is going to be in public/town meetings and that Jim Johnson has already been meeting with area landowners.

Mary responded that no one has been in her area and Beth assured her that they will get out there, but there are many landowners to meet. She reiterated the importance of town meetings, which are being set up. Beth asked for opinions on a survey to be sent to Wild Rice Watershed

District residents and asked for replies via phone or e-mail within 2 weeks. Don Vellenga said he would run it by his board members.

Beth commented that there may be modifications to the survey questions based on the Wild Rice Watershed results before it is sent out to the entire Red River Basin. She said they want to see what problems landowners are having with flooding, their opinions about water retention, and what their thoughts are about flooding. This will allow the project to gauge the perception of flooding and water retention in general.

Beth stated that the names and affiliations of the Agency Advisory Board (AAB) members will be posted on the Waffle web site. She then asked about having the names and towns of people on the CAB also being posted on the Web site as well. Beth added that there will be a disclaimer indicating that these individuals are not advocates of the Waffle project, but are on the CAB.

George Sinner asked if the survey will inquire about summer flooding, which has been a big problem in the recent past. Beth agreed a question regarding summertime flooding could be added. George added that there should be an explanation of spring flooding included in the survey.

Beth said springtime flooding was the original focus on this project, but as they talk to landowners and water boards and districts, they are realizing that summertime floods are big events. There are currently discussions on how to incorporate summer flooding into the model.

George Sinner stated more crisis reservoirs should be found for dry dam storage. These areas can be identified and prepared, ready to store excess summer precipitation. Then summer flooding can be dealt with. Many of the environmental interests are opposed to in-stream reservoirs even if they are used as crisis reservoirs.

Mary Loyland stated that last year their crops were damaged because they held summer rain water from people 15 miles west. She added that this is a huge concern. Mary commented that the water stood on her land because the ditch was graded wrong. The ditch was also full of cattails, so that whole ditch for the last 2–3 miles would not drain.

Don Vellenga commented that storage is needed at the upper reaches in Norman County, so it can be metered and let out slowly. He mentioned that dams are seen as bad things from the Department of Natural Resources (DNR) and the state of Minnesota. Don then commented that Ada should be growing, but businesses are suffering as a result of flood after flood. He wondered who would want to move to that area. The answer is not to just put a ring dike around every community, but to go to the source of the problem and address it there.

Beth suggested that a newsletter to be sent out should include some general Waffle information and some trivia of general interest. The Red River Water Management Consortium Newsletter was used as an example. Beth also thought it would be interesting to highlight either someone on

the AAB or CAB. She recognized that some are concerned that they might look like advocates for the Waffle, but inclusion would be up to them as individuals and as an agency.

The following suggestions and comments were made concerning the newsletter:

- Distribution via mail, web site, or e-mail.
- Print in black and white to save money; can get 5000 newspaper-sized copies for \$200.
- Send only to rural people, because they have to be won over.
- Targeting rural mail carriers like some of the small town businesses do.
- Format the newsletter like the Luncheon News.
- Target cash registers at coffee shops and checkout counters.
- Target grain elevators and local restaurants.
- Mail it and focus on important issues, do not make it cutesy and fun.
- Farmers do not have any time to read these things until the end of October.
- Sent to the implement dealers or part shops.
- Sent to Future Farmers of America teachers.
- Articles sent to the North Dakota Grains Magazine, Minnesota Wheat Growers, and Bean Growers.

Beth moved back to the topic of public meetings to get into the rural areas addressing the public and talking to land owners one on one. Some of the best locations to have these meetings may be at the local VFWs, American Legions, and community centers. A couple of landowners have offered to have meetings out in their quonsets. They are still trying to figure out the best format to use and how to ensure that landowners will attend the meetings.

Wes said winter meetings may work out better. For a recent Coal Creek meeting, they did direct mailings to every landowner and got 60–70 responses back, but only 10 people showed up.

Don Vellenga said they have 95 landowners/farmers or business people that have paid \$200 in Mahnomen and Norman Counties to be part of the Concerned Citizens group. It's structured like a school board. The board of directors meets 1– to 1 2 hours every Wednesday morning. They have accomplished a lot but needed to do a lot. He thinks the Waffle coordinators will have to go to the watershed district.

Mary Loyland wondered who is out talking to the farmers. Beth replied that Jim Johnson has been the one going out and doing one-on-one talks with the landowners/farmers and that the effort started right before planting.

Don Vellenga stressed the importance of county commissioners understanding the whole effort because, in Minnesota, watershed commissioners are basically employed by the county commissioners.

Mary Loyland asked how culverts will be opened when they are frozen. Beth commented that there is a design being looked at with KLG Engineering.

Mary Loyland asked whether or not it will be an option to participate in water retention or if the

landowners be pushed toward participation. Beth stressed that participation will be voluntary.