

**St. Joseph River Watershed 319 Project
Road-Stream Crossing Subcommittee
October 27, 2003 Meeting Summary
DRAFT**

Attendees

Chris Bauer, MDEQ

Fred Edinger, FOTSJR

Mark Kieser, Kieser & Associates

Sandra Nordmark, FOTSJR

Nicole Ott, Kieser & Associates

Robin Ryan, Hog Creek Watershed

Sarah VanDelfzijl, Rocky River Watershed

Mark Kieser led the meeting. The summary of the last meeting was reviewed and approved with no changes. The summary has been posted on the project website.

The most recent version of the erosion quantification form and instructions was distributed for discussion. An edit was suggested on the profile view schematic. The lines indicating the height of the eroding stream bank should not extend below the water line. That edit will be made to the schematic. The form was used to quantify sediment loading at ten sites in both the Hog Creek and Rocky River Watersheds. The features of the form and the form's utility in the field were discussed. Robin Ryan expressed concern with the use of the form to characterize the entire site, when erosion could be coming from both the road-stream crossing and the stream bank. It was suggested that a separate form be filled out for each stretch of erosion noted. Conversely, the form would not be filled out for a crossing that has no erosion.

Sarah Vandelfzijl suggested that the forms be printed on note cards. She stated that it would be easy to carry the note cards into the field during required surveys or surveys for other purposes. A card could be completed when a site of erosion is noted, whether it's at a road-stream crossing or along a stream bank.

It was asked how far from a crossing the scoring should extend and if multiple MDEQ forms should be completed for 319 grantees noting multiple sites of erosion at a single crossing. Chris Bauer indicated that only one MDEQ form should be completed for each crossing, as it has fields for both upstream and downstream observations, and that the observations should be recorded as far as the field of vision of the observer from the vantage point of the bridge/culvert. However, multiple erosion quantification forms could be completed for a single site, if multiple areas of erosion are observed.

Sarah Vandelfzijl also suggested that check boxes be added to the quantification form to indicate whether the site was at a crossing or along a streambank; on the left bank or right bank; and upstream or downstream of the road crossing. She also suggested the one complete set of the form with drawings and instructions be available, and possibly laminated or bound in a booklet, to field personnel for training purposes. A stack of note cards with fields for the necessary parameters could accompany the booklet to be used in the field for recording data.

Conversely field personnel may prefer to have 8½" x 11" sheets of paper with repetitions of the quantification form on each sheet. It was suggested that the audience at the Watershed-Wide Meeting be asked what method they would prefer or that both be made available. It was also discussed whether a training manual with photographs of various types of erosion scenarios be developed and/or a CD be made available with a training manual, forms and Excel spreadsheets for quantifying erosion. Again, it was

suggested that the audience be asked what would suit them best. A CD should not be developed yet, as the Subcommittee products are still a work in progress. However, the products could be placed on the project website, where they can be easily updated.

During the discussion of the quantification form, a culvert inspection form adapted to include the quantification information was shown to the group, as an example of a preexisting form. A graph displaying the lack of a relationship between the MDEQ site score and the estimated annual sediment loading for the twenty revisited sites was also shared with the group. This was as expected, as the MDEQ form records various aspects of road-stream crossings and is not meant to only focus on erosion. Chris Bauer indicated that it would be useful to add the quantification parameters to the MDEQ form and to the existing database. However, it is a slow process to adopt these proposed institutional changes.

Sandra Nordmark gave an update on the planning of the Watershed-Wide Meeting. She indicated that a press release was sent to electronic media. Invitation letters and reminder cards were sent to invitees. However, only nineteen confirmations of attendance had been received to date. Twenty to thirty attendees are expected. Sarah VanDelfzijl asked for clarification on her presentation topic. It was suggested that she discuss her work with the required MDEQ form and segue into Kieser & Associates presentation on the new method being institutionalized.

Mark Kieser presented his draft slides for the Watershed-Wide Meeting to the Subcommittee. Feedback regarding specific edits to the slides was provided by the Subcommittee. Sarah VanDelfzijl indicated that the time needed to record the additional parameters was one to two minutes, if the field personnel is already on-site for other reasons. The addition of the parameters to other survey work does not really increase the workload but provides valuable quantification information. Sandra Nordmark indicated that she had a photograph of severe erosion around a culvert that was repeatedly corrected by the placement of additional gravel. She will try to locate the photograph for use in the presentation. Additional information on the critical watersheds will be added to the slides. For instance, the Hog Creek Watershed had 130 road-stream crossing sites. Seventeen of those sites were considered high priority. Ten random sites were revisited and scored for sediment loading. Information regarding the number of sites ranked as "poor" and the number having erosion concerns for the Rocky River Watershed will be added to the slides.

It was suggested that the long term savings of scoring and correcting sites of erosion be presented by comparing the cost of an implementation project to the cost of continually adding gravel to an eroding site. Fred Edinger indicated that he has seen many erosion sites in the St. Joseph River Watershed that are not in close proximity to road crossings. Surveys that only focus on road crossings do not provide an accurate representation of the health of the watershed. Therefore, it's important to use the quantification form to score stream bank erosion as well as road crossings. It was also suggested that the presentation include the benefits of conducting surveys using the quantification form. The benefits should be geared toward the user of the form (i.e., how will using this form benefit me?).

The next meeting was not scheduled. Many members of the Subcommittee will be present at the November 5, 2003 Watershed-Wide Meeting.

Prepared by Nicole Ott, Kieser & Associates