

**Minutes of the National Sign Advisory Work Group Meeting  
Tom Bevell Center, Huntsville, Alabama  
Monday, 28 February 2005**

**Attendees:**

Kevin Baumgard, National Sign Standards MCX, St. Paul District  
Tim Grundhoffer, National Sign Standards MCX, St. Paul District  
David Johnson, Pittsburgh District, Great Lakes and Ohio River Division  
Duane Johnson, Sacramento District, South Pacific Division  
Michael Kidby, Navigation and Operations CoP, HQUSACE  
Stephen Logan, Mobile District, South Atlantic Division  
Jeffrey Mangum, New England District, North Atlantic Division  
Michael Owen, Fort Worth District, Southwestern Division  
Rand Pixa, Office of the Chief Counsel, HQUSACE  
Kimberly Rea, St. Louis District, Mississippi Valley Division  
Debra Stokes, Natural Resources Management CoP, HQUSACE  
Henrik Strandkov, National Sign Program Manager, St. Paul District  
Tom Sully, National Sign Standards MCX, St. Paul District  
Dennis Wallace, Kansas City District, Northwestern Division

**Introduction.** We introduced ourselves, giving special recognition to Rand Pixa, Office of the Chief Counsel, and Kimberly Rea, St. Louis District.

Although Mr. Pixa has been an active member of the Work Group for more than a year, this was his first opportunity to attend a meeting and meet the other members in person. We welcomed Mr. Pixa and acknowledged the importance of the contributions he has already made to the Work Group. We reaffirmed the great value to the Work Group, and the sign program in general, of having the regular participation of a representative from the Office of the Chief Counsel.

Our newest member, Kimberly Rea, met the other Work Group members for the first time. Ms. Rea has replaced Scott Strotman as the Mississippi Valley Division representative. Ms. Rea is a Park Ranger at the St. Louis District's Rivers Project Office with responsibility for recreation, visitor assistance, and facilities management. She has a bachelor's degree in Recreation and Park Administration and is currently pursuing a master's degree in Public Policy Administration. Ms. Rea, who has been with the Corps for more than six years, is a Certified Park and Recreation Professional and belongs to the National Recreation and Park Association and the National Society for Park Resources. She stated her eagerness to contribute her skills and experience to the Work Group.

**National Sign Program Workshop.** This regular meeting of the Work Group preceded the three-day National Sign Program Workshop, which was also held in the Bevell Center. The workshop was conducted primarily by members of the Group.

Steve Logan had led the Project Delivery Team (PDT) that planned the workshop. The other members of the PDT were Dennis Wallace and Henrik Strandkov. Mr. Logan and Mr. Wallace gave a final status report on workshop plans, and discussed the agenda and logistics. Other members of the group discussed aspects of their planned presentations and took recommendations for last-minute adjustments to the agenda.

A representative of the Bevill Center made a short presentation on the audio-visual systems available for the workshop and other logistical details.

**Corps SignPro software.** Mr. Strandskov reported on the progress of the software upgrade, Corps SignPro. All functions are essentially operable except for the transfer of data from the old Sign Manager software. The software vendor, Peter Reedijk, expects that function to be complete in the near future.

The ability of the software to incorporate GIS/GPS data was discussed. It was pointed out that other elements of the Corps are responsible for coordinating GIS systems. Currently SignPro can accept the x,y coordinates for each sign as determined by the use of GPS equipment.

Mr. Strandskov, working with Frank Star of the St. Paul District, is continuing to discuss the hosting of the SignPro software on a Corps server. The servers being considered are both operated by offices of the Corps' Engineer Research and Development Center (ERDC); one office is in Portland, Oregon, and the other is in Hanover, New Hampshire.

Ways of backing up the sign inventory database were discussed and will be pursued with the software vendor.

It was noted that an automatic pricing function has been taken out of the contract. It was removed because the prices of sign materials fluctuate so much and it is difficult to obtain comprehensive price lists.

It was noted that the software still needs more flexibility in creating signs that are not specifically shown in the manual.

**Electronic version of the sign manual.** Mr. Strandskov discussed the status of the digitization of the sign manual. The final editing is being done to the .pdf files that have been prepared by the ERDC Visual Information team in Vicksburg. It is expected that the manual will be ready for publication on the Corps publications website sometime during the summer. Debra Stokes will have the responsibility of coordinating the publication at HQUSACE.

Mr. Strandskov noted that Section 15 (use of Coast Guard Aids to Navigation) had been simplified somewhat from the draft prepared by Tim Grundhoffer. After discussion, it was agreed that Mr. Strandskov would add back to Section 15 the circular regulatory symbol and a discussion of the use of informational wording.

The manual also needs introductory material, including a statement from the Chief of Engineers. The MCX will prepare a Table of Contents. Also included will be the official memorandum announcing the upgrade of the manual. This memorandum must emphasize that the National Sign Standards Program is applicable to the entire agency.

Mr. Strandskov reported that Volume II of the sign manual, which includes specifications for sign materials and construction, has been scanned, and its chapters (Appendixes A through E) are available as .pdf files. Appendix F, which primarily consists of artwork for symbol signs, is not included. It is generally agreed that this artwork is no longer useful for sign makers. David Johnson noted that these images should be converted to vector format and could be made available on the NRM Gateway. Mr. Johnson and Jeff Mangum will discuss this file conversion further with the MCX. Mr. Strandskov will inform sign users of the availability of Volume II in electronic format and place the files on the NRM Gateway website.

There was a discussion of the need to update Volume II. Mr. Grundhoffer pointed out that there are some real problems with the engineering specifications in Volume II. Therefore,

we must advise those accessing Volume II that it has yet to be updated, and the current electronic version is simply a copy of the original publication. Mr. Wallace noted that the basic specifications for hardware and mounting in Volume II were still very sound. His project has recently had experience ordering UNICOR signs with the mounting materials specified in Volume II, and found these materials to be superior to what would have been used if the project staff had supplied them. Mr. Wallace will include this in his presentation on good sign planning at the workshop.

It was suggested that the MCX request FY06 funds for updating and revising Volume II. Mr. Grundhoffer estimated that this would cost between \$50,000 and \$100,000 for the engineering work and preparation of the necessary drawings and would take 6 months to a year to complete.

Mr. Strandskov raised a final question about whether Volume II was still needed. There was general agreement among all Work Group members that an updated Volume II would be a useful and necessary component of the sign program.

**Corps Brown and the search for a standard federal brown.** Mr. Strandskov reported that there has been no progress on the standardization of a new recreational brown color among the federal land-management agencies. This is an issue he intends to pursue in the coming months. The need for something other than Corps brown was emphasized by David Johnson, who reported that the Federal Highway Administration has announced that they will no longer support engineer-grade retroreflective sheeting as a suitable material for highway signs. Currently, this is the only grade available for Corps brown sheeting. In other words, if our approach directional signs are to meet state roadway standards, which follow the federal Manual on Uniform Traffic Control Devices (MUTCD), we will have to find alternatives to the current material.

The MCX will seek additional information from the other agencies about their intentions with regard to adopting a standard recreational brown.

**Noncompliant signs on property owned by others.** Mr. Mangum reported on instances of noncompliant signs at Corps facilities located on property not owned by the Corps. These included traffic signs near the New England District Office and an identification sign for a Corps office in Iraq. He illustrated his point with photos of the signs in question. Several of the traffic signs did not comply with the federal highway department's MUTCD.

Mike Owen emphasized that it was the district Sign Program Manager's responsibility to write a formal memorandum explaining to the property manager the safety and liability dangers associated with noncompliant signs – especially noncompliant traffic signs. Mr. Pixa said that, as a long-term lessee of a facility, the Corps might share liability for mishaps associated with a property owner's noncompliant signs.

The group discussed the general questions of how to explain to others in the Corps when the sign manual is applicable and how to enforce the sign standards. The answer is education and communication. Ms. Stokes said that one educational tool would be the imminent HQUSACE memorandum announcing the revised sign manual. This document must have language reaffirming that the sign program is for all elements of the Corps.

**Special Sign Requests.** The Work Group discussed the merits of four nonstandard signs that have been requested from various Corps districts. During the discussion, Mr. Wallace pointed

out that we can assume the project and/or district has already debated the need for the proposed sign. Therefore, our deliberations within the Work Group can perhaps devote less time to the need for the sign.

*Symbol sign for ring buoy or life ring.* A district has requested a symbol sign to mark the location of a ring buoy (also called a life ring). It was noted that the life ring itself is enough to announce its presence. In this case, however, the life ring is hidden from general view by a wall at a dam. The sign would be primarily a guide to Corps employees.

There was general agreement that a life ring symbol should be approved. It was suggested that we determine whether the National Park Service has such a symbol. If they do not, then we should create one.

*Pay station signs.* Duane Johnson discussed the ever-growing use of unstaffed electronic pay stations at recreational areas. A symbol sign would perhaps be useful to point the way to the machines, which are often in a protective shelter or otherwise partially hidden. After some discussion, it was decided that a simple sign with the word “Pay” and an arrow might be the best solution. Duane Johnson will report our discussion to the project Sign Program Manager who suggested the need for such a sign and tell her that we are still considering the matter.

*Waterway trail marking signs.* Walla Walla District has suggested the need for a flat, flexible fiberglass post (like those used for marking boundaries) to mark designated waterway trails. These would contain the logos of the various agencies sponsoring the trail – including the Corps – as well as directional information. They would be placed along the shoreline of rivers and streams so that boaters and canoers could easily see them, but their small size would minimize their intrusiveness on the scenery. Most would be placed on shoreline not owned by the Corps.

It was decided that there was not enough information to discuss waterway trail markers at this time. The MCX will seek more information from Walla Walla District.

*Signs alerting boaters to chevrons and other Corps-placed obstructions.* Omaha District has requested permission for signs to alert boaters to new, man-made rock obstructions in the Missouri River. Many of these obstructions are V-shaped and are therefore called chevrons. The obstructions have been placed for environmental enhancement and are located outside the marked channel, but in areas where boaters with smaller craft are very likely to navigate.

Mock-ups of proposed signs had been prepared by Omaha District and were distributed for the Work Group to examine. They were generally in the format of interpretive signs, but with large headline words. Mock-ups had been prepared with both “Notice” and “Danger” as the headlines. The signs would be placed by boat ramps.

The Work Group agreed that it was the responsibility of the Coast Guard to warn boaters of these obstructions, not the Corps. However, as a courtesy to boaters, the Omaha District may place interpretive signs at appropriate boat launching locations. The headline word “Danger” should never be used on an interpretive sign.

The MCX will send Omaha District a formal response to the request, citing the determinations outlined above.

*Marking swimming areas when the water does not meet state health standards.* Some states ask or demand that the Corps post signs with mandatory language to forbid swimming when water quality tests show that the water may be unsafe for swimming or other human contact. This is usually a temporary condition. In the past we have recommended using a Notice sign that contains the state-specified wording. However, some states specify that the sign have a “Warning” headline, thus creating problems with compliance with our safety sign standards.

After some discussion, it was agreed that the following generic Warning sign should be approved for Corps use nationwide:

Warning  
Water Quality  
Does Not Meet  
Safe Health Standards

As an option, the line “Beach Closed” could be inserted at the bottom. Instructions for use of the sign must note that it’s a temporary sign. Mr. Strandkov will formally document the discussion and agreement and then prepare a memorandum authorizing this as a nonstandard safety sign. The MCX will not approve the sign until coordination has taken place with the Office of Safety and Occupational Health. (Karl Anderson, the Safety Office’s Work Group representative, was not able to attend this meeting, and thus has not yet had a chance to participate in this decision.)

*A drop-off symbol sign and the role of district Offices of Counsel.* An example was shown and discussed of a noncompliant safety sign with a symbol. The sign is in use at a Corps recreation area. The sign, which is intended to warn of a drop-off hazard for swimmers, had apparently been approved by the district Office of Counsel. The sign did not have a safety sign heading (Danger, Warning, or Caution), but it did use the yellow and black color scheme for Warning and Caution signs. The symbol used and general pictorial format of the sign diverged substantially from Corps sign standards.

Mr. Pixa discussed the liability protections afforded to the Corps under the concept of the discretionary function exemption, provided we maintain our national policy, and districts and projects abide by it. We should therefore aspire to national uniformity, and we must make changes to existing policy only at the national level. The National Sign Standards Program can operate well at the district level without input from the Office of Counsel. District counsel should not, for example, make aesthetic decisions among signs, if those decisions result in departures from national sign standards. Mr. Wallace said that improper decisions about safety signs are often made with the best intentions; Corps employees are just trying to make things safer for visitors, often in the aftermath of an injury-causing mishap. Mike Kidby added that many of the approved waterway safety signs in Section 14 of the manual were developed in response to specific judicial decisions in liability trials. In summary, this all demonstrates the importance of having approved sign plans based on the National Sign Standards to ensure a successful liability defense if the Corps is sued.

It was also explained that the existence of some of the noncompliant signs under discussion could be traced to a temporary vacancy in the position of district Sign Program Manager. This is an example of the importance of the district Sign Program Manager to an effective sign program.

In light of all of the above, it should therefore be emphasized in the upcoming workshop that the National Sign Standards Program is important, it applies to all activities of the Corps civil works program, it includes adequate sign plans, and it depends on the presence of an effective Sign Program Manager in each district.

The MCX will draft a memo reminding district Offices of Counsel that decisions to deviate from the National Sign Standards Program cannot be made at the district level. This MFR will be coordinated through the Office of the Chief Counsel at HQUSACE.

**Waterway signs and Section 15 of the sign manual.** Mr. Grundhoffer explained the implementation of the United States Coast Guard Aids to Navigation (ATON) system in St. Paul District. This was an abbreviated version of the presentation Mr. Grundhoffer would make the following day at the sign workshop.

Mr. Grundhoffer explained that the use of ATON at Corps locks and dams can save a great deal of money as opposed to relying solely on Corps signs from Section 14 of the manual. These savings result from the use of smaller sign panels for ATON dayboards versus verbal signs, as well as the purchase of materials directly from the Coast Guard, which has developed very efficient acquisition and manufacturing capabilities. St. Paul District estimates that it saved \$8.5 million dollars by implementing the ATON system (rather than relying solely on verbal signs) at its 13 locks and dams.

**Service on the National Sign Advisory Work Group.** Mr. Strandskov thanked those members of the Work Group who had helped so ably and enthusiastically with the sign program while he was serving in Iraq. He cited especially Mr. Mangum's leadership of the sign manual PDT, which did a great deal of work to include the approved nonstandard safety signs and other newly-added signs to the manual. The team members also included David Johnson, Duane Johnson, Mr. Wallace, and Mr. Owen. Mr. Strandskov also noted the hard work of Mr. Logan and Mr. Wallace in planning the upcoming workshop. Mr. Strandskov also recognized Mr. Grundhoffer for his efforts in managing the Corps SignPro contract, Kevin Baumgard for his budget management and other work in support of the MCX, and Frank Star for handling the day-to-day MCX responsibilities. Finally, Mr. Strandskov noted the untiring work, far-reaching expertise, and remarkable technical creativity displayed by David Johnson over the years. Mr. Johnson's general support to the Sign Advisory Work Group has been of great benefit to the Corps sign program nationwide. Moreover, Mr. Johnson's particular efforts in preparing the sign manual graphics for electronic publication have been absolutely vital to the MCX's work to digitize the manual.

It was announced that Mike Owen is stepping down as the Work Group representative from Southwestern Division. Mr. Owen's long association with the National Sign Standards Program, going back to its earliest days, and his important contributions during his tenure on the Work Group, were gratefully acknowledged. The MCX will work with HQUSACE to coordinate the nomination of a new Southwestern Division representative.

*Important Note:* Later in the week, during the Sign Program Workshop that followed the Work Group meeting, both David Johnson and Michael Owen were presented certificates of recognition from HQUSACE in honor of their service to the National Sign Standards Program. Ms. Stokes made the presentations.

Tom Sully announced that, because of his reassignment to other duties in the St. Paul District, he will no longer be able to serve as a member of the MCX team. He will therefore also

be leaving the Sign Advisory Work Group. Group members expressed their gratitude to Mr. Sully for his hard work and many contributions over the years, especially in the area of waterway sign engineering.

An issue that has been discussed before is whether a term limit is needed on Work Group membership. Mr. Mangum said that North Atlantic Division has set up its own rotational system whereby a representative only serves for a given number of years. The group affirmed that the imposition of a general term limit for members is not necessary. The natural turnover in group membership (because of retirement, assignment changes, etc.) has always resulted in a productive combination of ample institutional wisdom and fresh ideas.

There was general discussion about the importance of serving on the Sign Advisory Work Group. Mr. Wallace noted that he has been fortunate in having a supervisor who has supported his sign program activities. However, it is sometimes difficult for districts and divisions to provide the resources required to support an employee's membership on the group. Ms. Stokes emphasized that HQUSACE does not have funds to support membership.

The MCX will draft correspondence, as necessary, to encourage individual districts and divisions to support continued sponsorship of their representatives. The correspondence will include a reminder that having a capable representative benefits not only the Sign Standards Program in general, but also the district supplying the member. Two members gave examples of how knowledge gained through their participation in the Work Group had been put to use back in their districts.

It was announced that Mr. Wallace would be stepping down as chair of the Work Group. The Work Group members expressed their gratitude and praise for Mr. Wallace's support to the MCX during his tenure. Mr. Wallace has consistently combined a dedication to the principles of the Sign Standards Program with a sincere understanding of the challenges involved in implementing the program at Corps projects.

Mr. Mangum was unanimously approved as the new chair of the Sign Advisory Work Group.

Respectfully submitted,

Henrik C. Strandskov  
National Sign Program Manager