

**MFRC Guideline Implementation Monitoring Committee  
Meeting Minutes  
July 27, 2000**

**In attendance:** Dave Parent (chair), Bob Oswald, Shawn Perich, Rich Holm, and Mike Phillips (staff).

**Absent:** Greg Damlo, Roger Scherer, and Dick Rossman (staff).

**Guests:** Alan Ek, Erv Berglund, Terry Weber, Mike Houser, Bonnie DeLare, Steve Gallay, Pat Emerson, Rick Dahlman, Larry Jones, and Jim Rack.

The following documents were handed out prior to or at the GIMC meeting:

- GIMC meeting agenda
- Stepwise description of monitoring process titled “Monitoring Implementation of the Site-Level Forest Management Guidelines”
- Handout of slide presentation to GIMC
- List of GIMTC members
- Draft budget projection for implementation monitoring program
- Air photo interpretation worksheet
- On-site instructions for monitoring forms

The meeting was called to order by Chairman Dave Parent at 9:15 a.m. and introductions were made.

Mike Phillips provided an overview of the successes and problems for the site selection methods used for the first year of monitoring including several questions that he wanted answered as part of the outcomes for the meeting. He discussed how the field reviews were progressing and that the contractors were completing from 1.5 to 2 sites per day and that they would likely be finished with monitoring the sites before mid-August.

**Implementation monitoring time line**

Mike Phillips provided a time line for year 2 of the implementation monitoring program. The time line was discussed and agreed to with one suggested change which is incorporated in the table below. In presenting the time line, Mike reflected on the need to improve the efficiency and timing of finalizing site selection, landowner contacts, and aerial photo interpretation.

### **Monitoring Process Timeline**

<b><u>Activity</u></b>	<b><u>Dates</u></b>
aerial photography	9/00 - 11/00
photo interpretation	10/00 - 2/01
RFP for contract	1/01 - 3/01
Field monitoring	4/01 - 8/01
Data analysis	5/01 - 9/01
Report preparation	9/01 - 11/01

### **Site selection methodology**

The various imagery options for site selection were discussed. Much of the discussion revolved around the difficulty of identifying all harvest sites on the aerial photos. Alan Ek reviewed this difficulty in finding and identifying the age of harvest sites, especially selective harvests. Alan said we should continue to request public landowners and private industry to provide us with a list of their harvest operations within the specified primary sampling units (PSUs) for the appropriate time frame. This information will supplement the information we are able to obtain from the aerial photos. Alan suggested that, where feasible, public landowners and private industry should be encouraged to provide the monitoring process with NIPF sites that they are aware of. He also suggested that as part of the contract for monitoring, we could require that the contractor do the photo interpretation of the critical site resources (e.g., RMZ width, size of leave tree patches). Bonnie DeLare and Steve Gallay felt that this suggestion was workable. Alan requested that the current years PSUs be evaluated to determine the proportion of the half-townships in NIPF ownership. Mike Phillips said he would ask Chad Scally to provide this information to Alan.

Rick Dahlman was asked to discuss the use of sequenced photography. Sequenced photography is aerial photography of the same area two years in a row. This could provide a method that could improve our capabilities of identifying change on the aerial photos. However, it would increase the cost as we would have to photograph two years of the PSUs. Steve Gallay thinks that we could use the existing 9X9 photos for specific forested counties. Steve suggested that where the 9X9 photos existed, they could be used as the before to compare with the new photography. However, it takes eight years to cover the forested part of the state with the 9X9 coverage. But where the appropriate 9X9 photos are available, they can be used to supplement the photo interpretation. Mike Phillips asked if we could look at using outside contractors to obtain the 9X9 photography, but was told that this would be too expensive.

The possibility of using aspects of the Wisconsin monitoring program was also discussed. In the Wisconsin program, the appropriate counties are identified, flight lines are located, and where

disturbance on the ground is identified, flights are low to the ground and high resolution photography is used. The consensus of the group was that this approach would take too much time and require us to take many more photos. Steve suggested Wisconsin could do this because they use their own planes.

Another suggestion was that we use the same process as in this years monitoring, of flying specified townships, but use better camera equipment. Steve Gally and Alan Ek said this would be prohibitively expensive.

There was a broad discussion on the use of satellite imagery in the monitoring program. Jim Rack provided a description of the change detection system. Jim indicated that Dave Heinzen wants to purchase scenes so that we can obtain coverage of 2/3 of Minnesota every year. He is having discussions with many of the potential partners to see how much interest there is in cooperating in obtaining the imagery. The more partners, the cheaper the cost for each organization. Each scene covers about 10,000 square miles and Jim says that each scene can be evaluated for reflectance change in a week.

The satellite imagery was described as a coarse filter that would be used to evaluate each of the selected PSUs to determine if there is any recent disturbance related to forest management within the selected PSUs. When disturbance is detected within the PSU, aerial photos would then be taken with high resolution photography. Alan Ek says we would need to take the photos for all the PSUs, not just those where satellite imagery had detected change since there is uncertainty as to how sensitive the satellite imagery is in detecting change in vegetative cover. The photos would be followed by a rigorous ground evaluation to identify sites. Steve Gally and Jim Rack suggested that there would be no cost savings if we photograph all sites rather than just those where a change in reflectance was identified. The cost would actually increase because we would have to add in the cost of the satellite imagery in addition to the photography for all of the PSUs. There was also a general discussion about the degree of disturbance that can be detected with satellite imagery. The consensus is that, at this stage in the use of satellite imagery, there is uncertainty as to the degree of disturbance that can be detected. At this point, Dave Parent queried the GIMC members present as to their view on the use of aerial photography or a combination of aerial photography and satellite imagery. All GIMC members agreed that we should continue the use of aerial photography and also proceed with the use of satellite imagery to test how well it works. Although it may initially cost more for the monitoring program to photograph all of the PSUs and employ the satellite imagery, we need to test this methodology for future efficiencies for the monitoring program.

### **Identifying and obtaining cooperation of NIPF landowners**

Terry Weber suggested that we should increase our outreach to NIPF landowners to improve their knowledge of Council programs. The Council should seek their willing cooperation in volunteering sites for monitoring. Suggestions were offered for improving identification of NIPF sites and increasing the cooperation of NIPF landowners.

- Alan Ek suggested improved communications with the logging community. He also reiterated his view that we need to put people on the ground looking for cuts to put in the pool of potential sites.
- Terry Weber suggested contacting the SWCDs and provide them with information on the Council programs. He says we can get a complete list of NIPF landowners within the PSUs and obtain their mailing addresses to send them information on Council programs, especially the monitoring program. Terry also thinks we should use the local newspapers that encompass the PSUs to provide this same information. Terry suggested we need to promote sustainable forestry with landowners and promote this program as an approach for keeping forestry practices voluntary in Minnesota.
- Rick Dahlman suggested using the DNR's detection aircraft to identify sites.
- Pat Emerson suggested we work through not only the SWCDs, but also the stewardship foresters and consulting foresters.
- Larry Jones and Rich Holm were asked if there would be any benefit to contacting loggers and logger organizations to seek their cooperation in identifying NIPF sites. Rich feels it likely that if we solicited loggers, we would get only a small percentage that would respond. Larry suggested we approach the mills to provide a list of NIPF landowners and tie this request to implementation of industries' SFI program. Larry suggested that Mike Phillips approach the state SFI committee and the American Forest Products Association and seek assistance in producing some of the materials to provide to private landowners that describe the Council's programs.
- Mike Houser recommends that a brochure be produced that explains the monitoring program and would be provided to landowners by loggers or the companies. The brochure would both explain the program and request their participation in the monitoring by providing harvesting sites. Mike also indicated that this would have to be a totally voluntary effort on the part of the landowners as the companies will not disclose the name of landowners without the landowners permission. It was suggested that the brochure include the names of NIPF landowners who have participated in the program previously.

Following discussion on NIPF landowners, the GIMC requested that Mike Phillips work with Terry Weber and MFA on further identifying strategies for improving involvement with NIPF landowners and in developing the materials that will be provided to the companies and loggers for distribution to the NIPF landowners.

### **Revisions to monitoring program**

Mike Phillips discussed the need for changes to the monitoring program that would need to be implemented before the next field season. Mike suggested that the full GIMTC be provided an opportunity to be involved in those discussions and decisions. The GIMC agreed and requested that Mike Phillips send a letter to the organizations involved asking if they still wanted to maintain their involvement in the process. Mike said that GIMTC would need to meet and begin those discussions by early September. Dave Parent indicated that he would raise the issue of full organizational involvement in the GIMTC in his committee report at the next Council meeting.

Dave Parent also requested that Mike Phillips check on the possibility of writing a multi-year monitoring contract or a contract that would have the option of extending the contract for an additional year. Mike said he would check on this with the budget staff in the Division of Forestry. Dave feels that a multi-year contract could improve the efficiency of monitoring sites.

### **Proposed implementation monitoring budget for FY'02 and FY'03**

Mike Phillips reviewed the draft implementation monitoring budget for the next biennium that was submitted by Mike to Mike Kilgore. The GIMC proposed changes to the budget (see attachment). The GIMC increased the budget for the field evaluations by \$30,000 which would then cover the range of costs for some of the other monitoring proposals that were well received, but too expensive. An additional \$15,000 was added to budget for satellite imagery, aerial photography and photo interpretation work. The original estimate was based on the assumption that using satellite imagery would reduce the need for aerial photography for those PSUs where no change detection was found attributable to forestry. In total, the budget request was increased by \$45,000 over what was submitted to Mike Kilgore.

### **Other issues**

Mike Phillips reviewed the strengths and weaknesses of using contractors versus in-house monitoring teams. After some discussion and review, the GIMC recommended staying with the use of contractors to evaluate implementation monitoring sites. Mike Phillips also reminded the GIMC that we have not expanded implementation monitoring to evaluate the application of the timber harvesting and forest management guidelines for the other forest management activities identified in the guidebook. Mike indicated that to monitor these additional guidelines would commit additional resources to identify the measurable guidelines for these activities as well as to computerize the guideline measures. The GIMC recommended that we continue to focus on the timber harvest, general, and forest road guidelines at this time.

Interpretation of monitoring results was to be discussed. However, Mike Phillips did not have the time to prepare examples of possible outputs from the data. Terry Weber commented that the outputs should include evaluation of data that demonstrates meaningful relationships that helps address future management. He also suggested evaluating guideline uses versus landowner objectives.

### **Summary of GIMC decisions to questions posed by GIMC staff**

1. What type of imaging will be used to identify sites?

*GIMC recommends that the same process of using aerial photography for the PSUs be used. At the same time, GIMC recommends working with Resource Assessment to test the*

*feasibility of using satellite imagery as part of the process of implementation monitoring.*

**2. What are the criteria for selecting PSUs?**

*GIMC recommends selecting only half-townships with at least six sections of timberland which was the final criteria established for the first year of monitoring.*

**3. How timely will the imaging information for the sites be made available?**

*The GIMC agreed to the time line discussed above.*

**4. What methods will be used to identify NIPF sites?**

*The GIMC discussed a number of options for both identifying NIPF landowners and encouraging them to participate in the implementation monitoring program. Mike Phillips was instructed to work directly with Terry Weber to implement the recommendations.*

**5. What should be the technical team (GIMTC) makeup for modifying the on-site implementation monitoring program?**

*The GIMC recommended that the organizations with representatives on the GIMTC be queried as to their interest in continuing their involvement in the GIMTC.*

**6. Should contractors continue to be used for the implementation monitoring field reviews?**

*The GIMC supports the continued use of contractors to conduct the field evaluations for implementation monitoring. They also have requested that Mike Phillips enquire about the feasibility of using either multi-year contracts or else contracts that have the option for being extended for one year.*

**7. Is the proposed budget adequate to meet the needs of the implementation monitoring program?**

*The GIMC approved the draft budget for implementation monitoring after recommending increases for monitoring field evaluations and for satellite imagery, aerial photography and photo interpretation.*

**8. Is the intent to continue monitoring timber harvesting, the general guidelines and forest roads, or should the monitoring be expanded to evaluate the other forest management activities (e.g., TSI, mechanical site preparation, pesticide use)?**

*The GIMC recommends that monitoring continue to focus on timber harvesting, the general*

*guidelines, and forest roads.*

The meeting was adjourned at 3:15 p.m.