

# Report of the GEIS Implementation Strategy Roundtable



*Submitted to the Commissioner,  
Minnesota Department of Natural Resources*

November 16, 1994

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**Transmittal Letter to the Commissioner**

November 16, 1994

Rodney Sando, Commissioner  
MN Department of Natural Resources  
500 Lafayette Road  
St. Paul, MN 55155

Dear Commissioner Sando:

We are pleased to present you with the recommendations of the GEIS Implementation Strategy Roundtable. The Report culminates the work of the Roundtable which began on May 11, 1994 and, after 19 days of meetings, concluded on November 16, 1994. The consensus-based recommendations are rooted in the thoughts and concerns of the interests represented by the 25 persons that served as Roundtable members.

The Roundtable's report recommends a variety of policies and programs that will enhance the ability of Minnesota's forests to sustainably contribute to the economic, social and environmental fabric of the state. Embodied within the recommendations is a focus on the establishment of various institutional structures that will be required to ensure this sustainability, and a focus on the commitments, both financial and political, that will be necessary to successfully accomplish the goals and objectives that have been identified by the Roundtable. Although the Roundtable recommends a number of actions, it considers each recommendation to be an integral part of a package that must be implemented in its entirety. Only then can there be any assurance that the site- and landscape levels goals specified in the Report will be fully accomplished.

The Roundtable is proud of its accomplishments. When fully implemented, the recommendations will further solidify Minnesota's position among states that have an abundance of innovative and progressive forest resource policies and programs. The members of the Roundtable are committed to ensuring that such a condition becomes a reality.

Speaking on behalf of Roundtable members, it has been a pleasure and an honor to serve the state in this important capacity.

Sincerely,

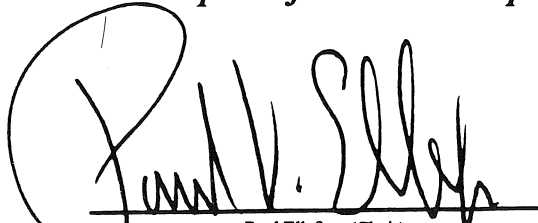


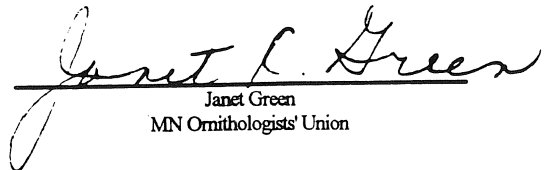
Paul V. Ellefson, Chair  
GEIS Implementation Strategy Roundtable

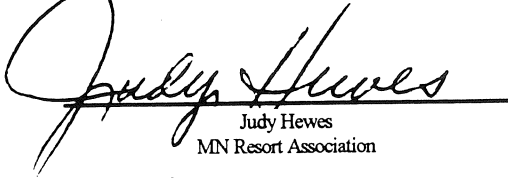


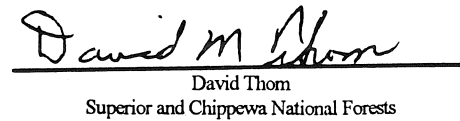


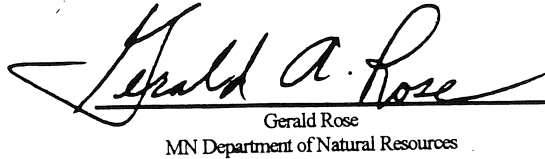
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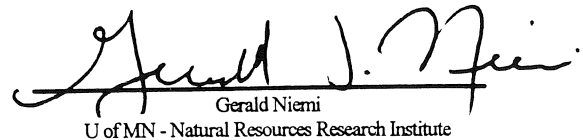
  
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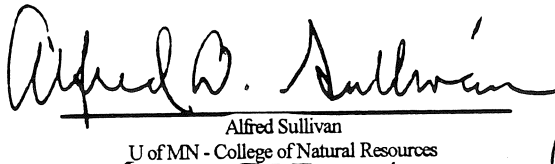
  
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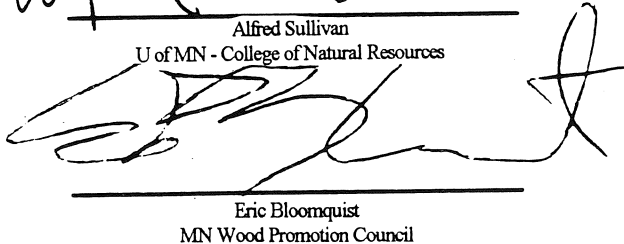
  
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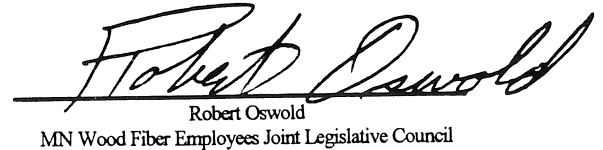
  
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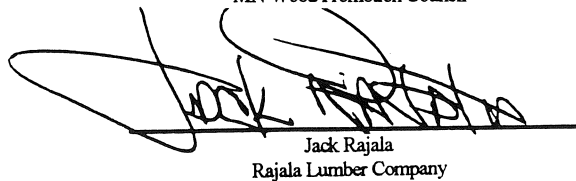
  
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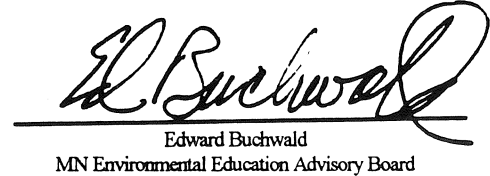
  
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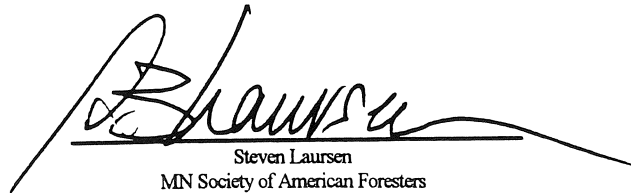
  
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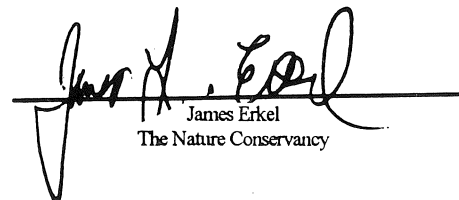
  
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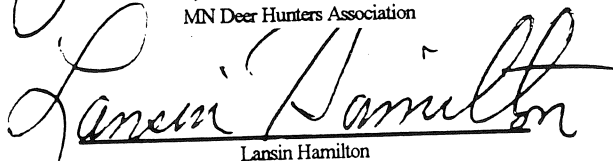
  
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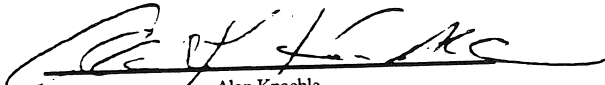
  
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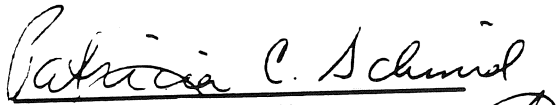
  
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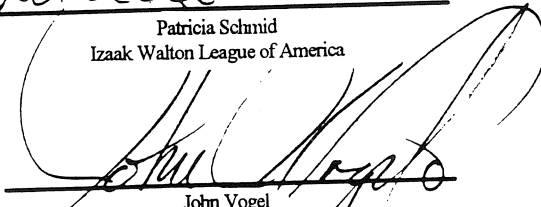
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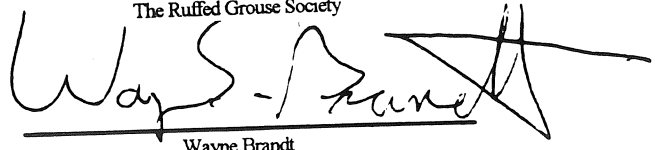
  
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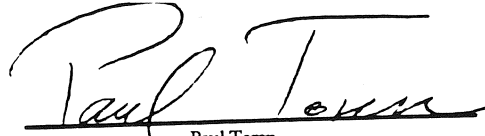
  
Patricia Schmid  
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Paul Toren  
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Donald Christian  
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## Summary

The GEIS Roundtable was a 25-member group representing diverse interests with respect to the use, management and protection of Minnesota's forest resources. Appointed by the Commissioner, Minnesota Department of Natural Resources and Chair, Environmental Quality Board, the Roundtable was charged with advising the DNR commissioner on the development of a consensus-based plan to implement the strategic program recommendations contained in the Timber Harvesting Generic Environmental Impact Statement. The Roundtable met on 19 days to develop the plan, which was agreed to by 24 of the 25 Roundtable members.

The charge to the Roundtable was "to develop a comprehensive implementation strategy" by reviewing major GEIS recommendations. Given this charge, however, the Roundtable was unable to address all the specific changes recommended in the GEIS. The Roundtable report represents those items around which consensus could be reached. Furthermore, the report does not represent the full array of changes in policy and practices that may be necessary to make Minnesota's forests economically and ecologically sound and productive for future generations.

The Roundtable identified five major implementation themes. Using these themes as a focus for its discussions, the Roundtable developed recommendations with respect to: 1) administrative mechanisms to seek and obtain stakeholder input in the discussion and resolution of state forest resource issues and securing long-term implementation commitment; 2) processes for establishing comprehensive landscape- and site-level forest resources programs in Minnesota; and 3) activities to support successful implementation of landscape- and site-level forest resources programs. The Roundtable considers its recommendations as a package of actions that collectively must be addressed in order to assure the long-term sustainability of Minnesota's forest resources. The following summarizes the Roundtable's recommendations.

### **Theme: Providing Mechanisms and Resources to Accomplish Goals and Successful Outcomes**

*Minnesota Forest Resources Council.* The Roundtable recommends a forest resources council be established by legislation. This council, consisting of a

broad cross-section of forest resources interests, would provide a public forum for the discussion and resolution of major state forest resource issues. The council, which is recommended to be small in size (8-12 members), would advise the governor and forest resources partnership on the resolution of major state forest resource issues. It would also provide strategic direction and advice in the development of comprehensive timber harvesting and forest management guidelines; a landscape forest resources planning and coordination program; and monitoring programs.

*Forest Resources Partnership.* The Roundtable recommends a forest resources partnership be established. The partnership, a private entity, will encourage forest landowners, managers and loggers to implement those policies and programs that are developed and recommended by the forest resources council, as well as other related forestry activities. The partnership will also provide a forum by which implementation actions can be coordinated across ownerships. Joint powers agreements and memoranda of understanding would be used to secure a commitment from forest landowners and managers to be responsive to the forest resource council's recommendations.

*Implementation Funding.* The Roundtable recommends that stable, reliable and sustained funding be provided for GEIS implementation. Other important funding principles endorsed by the Roundtable include: linking funding sources to beneficiaries; taking into account the ability to pay; ensuring sufficient funding; and developing clear links between funding and outcomes. Redirecting existing resources and the use of dedicated funding are recommended considerations when identifying appropriate sources to fund GEIS implementation needs as determined by the Roundtable.

## **Theme: Improving Practices**

*Site-Level Forest Resources Program.* The development and use of a set of timber harvesting and forest management guidelines is recommended to be the centerpiece of a site-level forest resources program. These guidelines would address the various timber harvesting and forest management activities typically found in Minnesota. The guidelines would be an integrated set of practices that is based on the best available scientific information, yet easy to understand and implement. The Roundtable recommends these guidelines be adopted on state lands, encouraged on federal, county and other public lands, and voluntarily-applied on private lands. A variety of tools (e.g., technical and financial assistance, education) are recommended to encourage voluntary application of the guidelines.



Monitoring is recommended to periodically assess the degree to which the guidelines are used as well as their effectiveness.

## **Theme: Planning To Sustain All Forest Benefits**

*Landscape-Level Forest Resources Program.* The Roundtable recommends a landscape-level forest resources program be established to foster coordination and strategic planning across ownerships in order to protect the forest land base and maintain healthy, resilient and functioning ecosystems. Regional forest resource committees, composed of representative stakeholders, would be established to carry out landscape-based planning and coordination activities in particular regions of the state. Landscape planning is recommended to be an open and public process that is based on broadly defined ecological units, while recognizing existing political and administrative boundaries as well as the economic, social and environmental goals and conditions unique to each landscape. The focus of landscape planning would include identifying the desired future direction for that landscape, as well as specific actions that would move the region's forests towards that desired future direction. Roundtable recommendations include providing mechanisms and incentives to encourage participation in landscape-level planning by private forest landowners.

*Economic Viability.* Within the context of developing and implementing landscape- and site-level forest resources programs, the Roundtable recommends economic viability be an important component of GEIS implementation. Policies and programs should foster the long-term viability of those economic sectors dependent on the state's forest resources.

*The Roundtable developed recommendations for the following activities that would support the implementation of landscape- and site-level forest resources programs.*

## **Theme: Providing Information and Understanding to Result in Implementation**

*Monitoring.* The Roundtable recommends three types of monitoring programs be developed: 1) resource monitoring – to assess broad trends and conditions in the state's forest resources; 2) compliance monitoring – to assess

the extent to which certain forest management and timber harvesting practices are actually applied; and 3) effectiveness monitoring – assessing the extent to which certain timber harvesting and forest management practices are actually accomplishing their intended goals.

*Research.* The Roundtable recommends forest resources research activities in Minnesota be better coordinated. To do so, the Roundtable recommends a periodic assessment of forest resources research activities; an identification of strategic directions in future research; and an identification and promotion of those priority forest resources research initiatives identified. The Roundtable also recommends mechanisms to increase collaboration between public and private organizations on matters related to forest resources research.

*Information.* To coordinate the development and use of forest-based data in Minnesota, an interagency information cooperative is recommended by the Roundtable. The cooperative would consist of those organizations with major responsibilities for forest resource information and information system development and use. The function of the cooperative would be to expand the availability and usability of information in forest resource planning and management. The Roundtable also recommends data coordinators be regionally located in Minnesota to provide technical assistance and a regional presence for improving data acquisition, access, transfer and use among public and private organizations.

## **Theme: Increasing Public and Practitioner Knowledge and Understanding**

*Timber Harvester Education.* The Roundtable recommends a voluntary certification program be developed for loggers. Such a program would certify a logger's competency with respect to applying the timber harvesting and forest management guidelines. It would provide opportunities to maintain certification by participating in continuing education activities. An annual report that evaluates the use and effectiveness of a timber harvester certification program is recommended. The Roundtable recommends a private, non-profit entity could be responsible for developing and administering such a certification program.

*Forest Resource Professional Education.* The Roundtable recommends continuing education and certification programs be established for forest resource professionals. The continuing education program would identify

priority education needs and develop programs to meet those needs. The continuing education program would make use of existing programs and course offerings where possible. The forest resource professional certification program would be voluntary, and certify the ability to conduct various forest management activities. Like the timber harvester certification program, the Roundtable recommends the forest resource professional certification program could be developed and administered by a private entity.

*General Public Education.* The Roundtable recommends the Minnesota Environmental Education Advisory Board, in conjunction with other education providers, coordinate educational efforts about Minnesota's forests to the public and segments of the public. Curricula materials about the ecological, physical, social and economic importance of forests are recommended to be developed, and their use by schools encouraged. The media and state fair are recommended mediums for transferring information about Minnesota's forests to the general public.

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## Introduction

The Generic Environmental Impact Statement (GEIS) on timber harvesting and forest management in Minnesota was commissioned by the Minnesota Environmental Quality Board (EQB) to examine the cumulative impacts resulting from individual logging operations occurring across the state, and to assess what impacts might occur if timber harvesting was increased. The GEIS evaluated how timber harvesting affects a wide range of forest resource values and uses such as wildlife habitat, biological diversity, water quality and recreational opportunities. Where significantly adverse environmental impacts were projected to occur, the statement recommended actions that should be taken in order to minimize their severity. In addition to recommending a variety of mitigation measures, the GEIS called for the establishment of major forest resources programs to address: 1) site-level impacts identified in the GEIS; and 2) landscape-level impacts identified in the GEIS. The final Timber Harvesting GEIS was approved by the EQB on April 21, 1994.

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## **GEIS Implementation Strategy Roundtable**

Upon the completion of the GEIS, the Minnesota Department of Natural Resources (DNR) and EQB jointly convened a 25-member group representing various forest resource interests. Termed the GEIS Implementation Strategy Roundtable, this group was charged with identifying a consensus-based strategy for implementing the GEIS recommendations. Specifically, the Roundtable was asked to advise the DNR Commissioner on how the impact statement's strategic recommendations to develop comprehensive site- and landscape-level forest resources programs might be carried out.

The GEIS Implementation Strategy Roundtable reflects a wide cross-section of interests associated with or affected by the management, use and protection of Minnesota's forest resources. These interests include forest land managers and owners, forest users, environmental, tourism and sporting interests, professional resource management organizations, and institutions with a primary focus on natural resource and environmental education and outreach programming. Nominations for participation on the Roundtable were provided by these interests.

Several criteria were used to identify potential members of the Roundtable. Among these were that roundtable participants were to be: highly respected, not only within the organizations they represent, but also among a broader community of interests; willing to listen to diverse points of view regarding the management and use of Minnesota's forest resources; and willing to consider a wide variety of policy and program options. Furthermore, they were to acknowledge and respect the Roundtable's role in the broader GEIS Implementation Process, and be interested in reaching consensus regarding how best to implement the GEIS recommendations.

The names and affiliations of individuals invited to serve on the Timber Harvesting GEIS Implementation Strategy Roundtable are shown in figure 1.

Paul Ellefson was the chair of the Roundtable, and Steven Laursen served as vice-chair. Mirja Hanson, a private consultant, was retained to facilitate the Roundtable's discussion towards reaching consensus in its advice to the DNR commissioner. Michael Kilgore, Division of Forestry, Minnesota Department of Natural Resources, was the administrator of the Roundtable process. Donald MacKay, Research Associate, Department of Forest Resources, University of Minnesota, provided technical support and analysis to the Roundtable.



<u>INDIVIDUAL</u>	<u>ALTERNATE</u>	<u>AFFILIATION</u>
Donald Arnosti	Garth Hickle	National Audubon Society
Eric Bloomquist	Jeanne Germain	MN Wood Promotion Council
Wayne Brandt	Tim O'Hara	MN Forest Industries, Inc.
Edward Buchwald		MN Environmental Education Advisory Board
Donald Christian	Mary Shedd	The Wildlife Society
Daniel Dessecker	Mark Johnson	The Ruffed Grouse Society
Paul Ellefson, Chair	Richard Skok	U of MN - Forest Resources Department
James Erkel	Greta Hesse-Gauthier	The Nature Conservancy
Janet Green	Robert Janssen	MN Ornithologists' Union
Lansin Hamilton	Darrell Lauber	MN Forestry Association
Judy Hewes	Thomas Day	MN Resort Association
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Gerald Rose	Bruce Zumbahlen	MN Department of Natural Resources
Patricia Schmid		Izaak Walton League of America
Alfred Sullivan	Alan Ek	U of MN - College of Natural Resources
David Thom	Fred Pick	Superior and Chippewa National Forests
Paul Toren	Carolyn Engebretson	MN Environmental Quality Board
John Vogel	Roger Howard	MN Association of County Land Commissioners

Figure 1. Membership of the GEIS Implementation Strategy Roundtable.

## **Roundtable Activities**

The Roundtable was convened to develop consensus on how to implement the strategic program recommendations identified in the GEIS. The Roundtable was informed that such an implementation plan needed to be finalized in the fall of 1994 so that any implementation legislation could be developed prior to the 1995 Legislative Session. Given this charge and timeline, the Roundtable met on 19 days between May and November 1994. Initial Roundtable meetings provided overview presentations on: 1) the GEIS Implementation Process; 2) Minnesota's forest resources; and 3) the strategic program recommendations identified in the GEIS. The purpose of providing this information was to give Roundtable members a common understanding of the subject matter they would be discussing, as well as a context within which these discussions would occur. The Roundtable also established a set of groundrules that, among other things, identified protocols for guiding its deliberations and developing agreement.

*Report of the GEIS Implementation Strategy Roundtable*

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## Site- and Landscape-Level Program Goals: Preamble

The GEIS identified site- and landscape-level programs as the centerpiece of major actions needed to mitigate adverse impacts resulting from timber harvesting. Consequently, these two programs were a major focus of the Roundtable's deliberations. As a precursor to defining the elements of landscape- and site-level forest resources programs, the Roundtable identified major goals of such programs. The Roundtable considered these goals to be useful benchmarks by which the success of the two programs could be evaluated over time. In identifying these goals, the overarching theme of "sustainability" repeatedly emerged in Roundtable discussions. Although different aspects of this theme are reflected in various landscape- and site-level goals, the Roundtable felt the underlying concepts of sustainability should be articulated. One underlying concept is that sustainability broadly refers to achieving ecological, economic and societal goals resulting from the management and use of Minnesota's forest resources. It was emphasized that balance be given to long-term ecological, economic and social considerations in forest resource planning and management processes, and failure to do so will ultimately create an unsustainable condition.

Another aspect of forest resource sustainability discussed by the Roundtable was that today's actions should not compromise the ability of Minnesota's forests to provide for the needs of future generations. The Roundtable recognized decisions regarding management and use of the state's forests have to take into account existing demands and resource limitations. *However, the underlying criteria in all decisions should be that the results of present actions do not jeopardize the ability of the resource to provide future benefits and services.* Finally, the Roundtable agreed that forest resource sustainability reflects the level of diversity of forest benefits and resources. These forest resources and benefits include not only fully functioning ecological systems and processes, but also a diversity of economic and social values they provide. Additionally, it was recognized that forest resource management must acknowledge the interactions of complex forest ecosystems, multiple ownership patterns, and local to international economic forces.



## **Successful Site-Level Forest Resources Program: Major Goals**

The following seven major goals of a successful site-level forest resources program were identified by the Roundtable.

Informed Decisions by Stakeholders and the Public. A site-level forest practices program should be based on widespread understanding of the use and management of forests. Owners, users and managers of the state's forest resources should be well-informed about site-level forest practices and their implications. Information about the social, economic and ecological basis for the use and management of forests should be communicated to the general public. The recommendations of professional managers should be based on the latest available information and technology.

Forest Sustainability. A site-level forest practices program should ensure the sustainability of Minnesota's forest resources. This sustainability should be expressed in the context of ecological, economic, and social processes and outcomes. The program should enhance diversity of the state's forests, ensuring that site activities compliment forest diversity at the landscape level.

Appropriate Forest Management Practices. Timber harvesting and forest management guidelines should be the center-piece of a site-level forest resources practices program. The appropriate guidelines identified in such a program should: 1) reflect consideration of a variety of values, uses and outputs provided by forests; 2) be implementable across ownerships; 3) be flexible enough to reflect local conditions and evolving knowledge; 4) experience a high degree of compliance across ownerships; and 5) in the aggregate provide for sustainability at the landscape-level or broader scales.

Adaptive and Applied Knowledge Base and Basic Research. A site-level forest resources practices program should be based on the best information available, and be readily able to adapt to new information or changing resource conditions. Monitoring and evaluation (within a consistent framework) should be used to determine the effectiveness and application of existing practice standards.

Human (Social and Economic) Sustainability. A site-level forest resources practices program needs to acknowledge the role and contribution Minnesota's forests make to the state's economic and social well-being. To



that end, such a program should support the long-term sustainability and growth (within the limits of that sustainability) of the many sectors dependent on this resource.

Effective and Efficient Implementation. A site-level forest practices program should be implemented in a manner that maximizes the program's effectiveness while minimizing the costs of administration. To do so, the practice standards developed should be practical and easily understood by those who will be using them, and their rationale clearly stated. Additionally, the various interests involved in their implementation should work cooperatively to minimize duplication of effort and ensure consistent application where possible and appropriate.

Public and Private Rights and Responsibilities. In using a site-level forest resources program to achieve certain public benefits, the inherent rights, responsibilities, interests and financial limitations of forest landowners need to be recognized and respected.

## **Successful Landscape-Level Forest Resources Program: Major Goals**

The following eight major goals of a successful landscape-level forest resources program were identified by the Roundtable.

Enlarged and Protected Forest Land Base. There is no net loss of forest land in Minnesota. Some previously forested areas have been returned to forest cover, recognizing the ecological significance of certain nonforested lands. The forest land base is protected from decreases and fragmentation caused by land use changes.

Healthy, Resilient and Functioning Ecosystems. An appropriate mix of forest cover types and age classes in a landscape context maintains biological diversity and wildlife populations. Site-level management is done within a landscape context. Ecosystem integrity is ensured at a variety of scales through management actions, and by restoring those forested ecosystems (e.g., riparian areas) adversely impacted as a result of prior land-use practices.

Forest-Based Economic and Recreational Opportunities. Economic opportunities for forest-based industries, including tourism and wood-based industries, are large, sustainable and diverse. Employers, employees and consumers have a sense of stability and security because desired landscape-level goals are being achieved. Visual quality and recreational opportunities are included at appropriate levels. More quality employment opportunities are available. The wood-based industry uses raw material from various sources.

Effective and Supportable Policy Development. Goals, policies and programs are developed and supported by processes that collaboratively move forward to resolve issues and accommodate a wide range of constituencies. Economic, social and environmental interests are well represented. Policy development occurs on a continuing basis with opportunities for public involvement.

Coordinated and Collaborative Planning. Forest resource planning is based on ecological landscapes. The uses and management directions of forested landscapes are developed and implemented by planning processes that involve collaboration between many landowners, users, stakeholders and the

general public. Landscape-level plans make management directions predictable, minimize adverse cumulative impacts, and foster creative management by accommodating diverse resource interests. Plans are results-oriented and encourage collaboration between different owners of forest land.

Compatible and Comprehensive Multi-Resource Information Systems.

Landowners, managers and stakeholders have access to information systems that are capable of providing comprehensive landscape-level information. These systems are capable of incorporating and displaying multiple data sets for use by resource planners and managers to determine landscape-level conditions. Program outcomes and resource conditions are monitored and evaluated, and results communicated, using appropriate environmental indicators to determine consistency with landscape-level goals.

Adaptive Basic and Applied Research Programs. Landscape-level information is being produced by effective and coordinated basic and applied research programs. The information provides new insights about landscape-level ecological processes, resource management practices (use and effectiveness), and accomplishment of landscape-level goals. Landscape-level information and knowledge is discovered, shared and applied by researchers, landowners, managers and stakeholders.

Committed and Sustained Program Funding. Stable, adequate and long-term funding is available to accomplish desired landscape-level goals. Financial incentives are being used to encourage the application of management practices that enable achievement of these goals. Appropriate investments are being made in research, education and policy making.

## **Implementation Themes**

To provide a framework for its discussion of landscape- and site-level forest resources program as well as other activities (e.g., research) and administrative mechanisms that would support these two programs, the Roundtable identified five major implementation themes. These themes, and the priority directions associated with each, outline the major elements of the Roundtable's recommended GEIS implementation plan. These themes and priority directions are:

1. **Providing Mechanisms and Resources to Accomplish Goals and Successful Outcomes**
  - a) coordination and administration
  - b) implementation funding
2. **Improving Practices**
  - a) forest practice guideline implementation
3. **Planning to Sustain All Forest Benefits**
  - a) ecosystem integrity
  - b) economic viability
4. **Providing Information and Understanding to Result in Implementation**
  - a) monitoring
  - b) research and information transfer
  - c) information
5. **Increasing Public Knowledge and Understanding**
  - a) practitioner education
  - b) professional education
  - c) public education



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## **Roundtable Recommendations**

The charge to the Roundtable was "to develop a comprehensive implementation strategy" by reviewing major GEIS recommendations. Given this charge, however, the Roundtable was unable to address all the specific changes recommended in the GEIS. The Roundtable report represents those items around which consensus could be reached. Furthermore, the report does not represent the full array of changes in policy and practices that may be necessary to make Minnesota's forests economically and ecologically sound and productive for future generations.

The following identifies the Roundtable's recommendations to address the five implementation themes. It should be emphasized the Roundtable views their recommendations as a package of actions that collectively must be addressed in order to ensure the long-term sustainability of Minnesota's forest resources.

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## **Providing Mechanisms and Resources to Accomplish Goals and Successful Outcomes**

The Roundtable identified two overarching concerns with respect to the environment in which Minnesota's forest resource policies are developed and programs implemented. The first is the need to seek and obtain broad stakeholder input and involvement in the discussion and resolution of state forest resource issues. The second is the need to secure commitment from the owners and managers of Minnesota's forests to, in fact, implement forest resource policies and programs. To address these two concerns, the Roundtable recommends the establishment of a Minnesota Forest Resources Council and Forest Resources Partnership (figure 2).

### **Minnesota Forest Resources Council**

The Roundtable recommends a Minnesota Forest Resources Council be established through legislation as the forum in which forest resource issues and policies will be raised, discussed and resolved. To do so, the Roundtable recommends the following with respect to how the council should be structured, as well as its functions:

#### **Structure**

1. The council should be small in number (preferably between 8-12 members) and composed of a balanced representation of major interests associated with the use, management and protection of Minnesota's forest resources. Key interests that could be represented on the council include: federal, state and county land management agencies; nonindustrial private forest landowners; forest products industry; environmental organizations; conservation and wildlife groups; loggers; resort and tourism industry; research and education institutions; and agricultural woodlot interests.
2. Council appointments should be made by the governor and confirmed by the legislature, considering the nominations submitted by those interests represented on the council. A list of council appointment nominees should be made available to the public.

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3. Council member terms should be four years. Terms should be staggered such that council turnover does not exceed one-fourth of the total membership in a given year.

### Functions

The specific functions of a Minnesota forest resource council are recommended to be as follows:

1. Provide a public forum for the discussion and resolution of major state forest resource issues.
2. Advise the governor on the resolution of major forest resource issues.
3. Advise the forest resources partnership (see below) on needed changes in forest resource policies and operational practices.
4. Develop recommendations to federal, state, county and local governments with respect to their forest resource policies, programs and practices as they relate to the resolution of major state forest resource issues.
5. Biennially report to the governor and legislature on the status of Minnesota's forest resources, and strategic directions to provide for their use, management and protection. This report should also identify the activities and accomplishments of programs (e.g., research, education) that affect Minnesota's forest resources.
6. Develop the strategic direction for a landscape forest resources planning and coordination program in Minnesota.
7. Develop comprehensive timber harvesting and forest management practice guidelines.
8. Develop forest resource, compliance and effectiveness monitoring programs.
9. Monitor implementation of formal studies and initiatives, including the GEIS recommendations.

10. Advise other organizations (e.g., interagency information cooperative, center for continuing education) that are responsible for supporting programs and activities associated with the implementation of the GEIS recommendations.
11. Monitor the activities and accomplishments of other programs (e.g., research, education) affecting Minnesota's forest resources.

### Staffing

The council should be provided with the staff, technical and administrative support, and other resources necessary to carry out its mission. The staff should be exclusively for council functions. These resources should be of sufficient quantity and quality to enable the council to be effectively administered and supported, both professionally and technically. Technical expertise will be provided by the partnership and outside sources as deemed appropriate by the council. Existing resources should be used where possible.

### Funding

Upon the council's establishment, the forest resources partnership should be looked to as an important source of funding for council activities and functions.

## Forest Resources Partnership

The Roundtable recommends a forest resources partnership be established. The partnership will encourage forest landowners, managers and loggers to implement those policies and programs that are developed and recommended by the forest resources council, as well as other related forestry activities. The partnership will also provide a forum by which implementation actions can be coordinated across ownerships. The structure and specific functions of such a partnership are recommended to be as follows:

### Structure

1. The partnership should consist of organizations that have direct forest resource management responsibility, risk or accountability.

2. The partnership should be a private organization. Partnership meetings will be open to the public.
3. Joint powers agreements and memorandums of understanding should be used to establish the structure of the partnership, and secure commitment to the partnership from its members.
4. Implementation activities of the partnership should occur through the collective actions of partnership members, recognizing their mandates and management objectives.

#### Functions

1. The forest resources partnership should function to secure long-term commitments to implementing policies, programs and practices recommended by the forest resources council, as well as other related forestry activities.
2. The partnership should provide a forum for discussing operational implementation issues and problem solving.
3. The partnership should provide input into council deliberations.
4. The partnership should provide the council with the financial and technical resources that will enable its mission to be carried out.

#### Staffing

1. Partnership members should provide the resources required for administration of the partnership, as well as professional and technical support of partnership activities.
2. Partnership staff should provide technical assistance and information to the council.

#### Funding

1. Funding for operation of the partnership should come from assessments to its members.

## **Implementation Funding**

Successful implementation of the GEIS Implementation Strategy Roundtable recommendations requires adequate resources be provided. In order to obtain these resources, the Roundtable articulated several funding principles and recommendations related to funding sources.

### **Funding Principles**

The Roundtable identified five principles to consider in selecting appropriate funding sources for GEIS implementation. These five principles are:

1. Ensure stable, reliable, and sustained funding. Expenditures for GEIS implementation should recognize and reflect the long-term nature of forest investments. Funding levels should be predictable over time, yet come from diverse sources to reduce reliance on a single source.
2. Link funding sources to beneficiaries. Beneficiaries of programs resulting from GEIS implementation should be considered as primary sources for funds.
3. Link funding to ability to pay. The ability of individuals and organizations to pay for program costs should be weighed in funding decisions.
4. Ensure sufficient funding. Funding should be sufficient to ensure effective program delivery and the achievement of desired outcomes.
5. Develop clear links between funding and outcomes. Funding and investment initiatives should be clearly defined to provide a clear rationale for each program, clear incentives for landowners, and reduced duplication of activities.

### **Funding Recommendations**

Giving consideration to the above principles, the Roundtable recommends the following with respect to funding GEIS implementation needs:

1. Opportunities for funding GEIS implementation from existing resources should be examined prior to any requests for additional resources.

2. Dedicated funds should be considered as a priority mechanism for establishing a long-term and stable source of revenue to fund GEIS implementation needs.
3. Opportunities for using the lottery proceeds previously allocated to the Greater Minnesota Corporation to fund GEIS implementation needs should be examined.





## **Improving Practices**

### **Site-Level Forest Resources Program**

The Roundtable recommends a site-level forest resources program be developed in Minnesota to address those impacts commonly associated with applying site-level forestry practices. The Roundtable's recommendations with respect to a site-level forest resources program are as follows:

#### **Substance of Practices**

1. A set of timber harvesting and forest management guidelines should be developed and applied in Minnesota. These guidelines should:
  - a) reflect processes that occur naturally in forest ecosystems, including forest change, and should reflect conditions that occur within the economic and social environment of forestry.
  - b) reflect, as appropriate, the diversity of biophysical, social, and economic conditions that occur at regional levels.
  - c) be sufficiently flexible to accommodate varying resource and management conditions, yet sufficiently focused to enable achievement of outcome-based objectives.
  - d) give consideration to the severity, irreversibility, and duration of impacts.
  - e) reflect sensitive and localized conditions, as appropriate.
  - f) consider existing public and private forest ownership patterns, programs and activities, as well as the forestry objectives of landowners and managers.
  - g) protect the safety and workplace security of loggers.

2. The guidelines should address the following:

- water
- soils
- air
- biota (flora and fauna)
- recreation
- aesthetics

The above categories should serve as the context for creating a prioritized list of specific timber harvesting and forest management activities that will appear in the guidelines. Among the specific activities that should be addressed are those that impact or involve the following. *This list is not meant to indicate any priority order.*

- biomass retention
- dispersed forest recreation
- fisheries habitat
- harvest and management practices
- pest management
- regeneration activities
- riparian corridors
- road construction
- site compaction
- slash and woody biomass disposal and redistribution
- unique historical/cultural resources
- visual quality
- water quality
- wildlife habitat

Process of Practice Development

1. The forest resources council should facilitate and administer a process for developing the timber harvesting and forest management guidelines.
2. Public and private organizations having an interest in the use and management of forests should be involved in the development of the guidelines, especially development of the goals and objectives toward which the guidelines are to be directed, and development of ways to resolve competing and conflicting guidelines. The public should be

given an opportunity to review and comment before the guidelines are finalized.

3. Guidelines should be based on the best available scientific (technical) information. They should reflect a range of practical and scientifically sound practices, and should incorporate current levels of understanding regarding management and resource interactions and relationships.
4. Guidelines for specific resources and conditions should be integrated so as to minimize conflicting recommendations.
5. The guidelines made available to practitioners should be easy to understand and implement.
6. Guidelines should be periodically reviewed and, where necessary, revised.

#### Delivery of Practices

1. Guidelines for timber harvesting and forest management activities should be voluntarily applied on private forest lands.
2. Monitoring protocols should be developed which will measure the attainment of specific goals and objectives toward which the guidelines are directed.
3. Where specific implementation goals and objectives are not met and where significant adverse impacts are occurring, additional measures may be required to address those specific activities that are found to be in non-compliance.
4. State land management agencies should adopt and implement the guidelines for specified management objectives, and should be provided the resources to do so.
5. Federal, county, municipal and other public land management agencies should be encouraged to adopt and implement the guidelines for specified management objectives, consistent with the resources available to them.

Application of Practices

1. Technical assistance and educational programs should be the preferred way of securing the application of the harvesting and management guidelines. Such programs should be targeted at landowners, timber harvesters and natural resource professionals.
2. Financial and tax incentives should, where appropriate, be made available to:
  - a) secure the application of the guidelines by landowners and timber harvesters.
  - b) promote the use of environmentally-sensitive equipment.
  - c) landowners and timber harvesters who work together to coordinate application of the guidelines to achieve landscape objectives.
3. Financial and tax incentive use by landowners and timber harvesters should not imply commitments beyond their targeted purposes.
4. Forest landowners should be encouraged to use timber harvesting contracts that incorporate the harvesting and management guidelines when selling timber. They should also be strongly encouraged to use the services of natural resource professionals when selling timber.
5. Timber harvesting and forest industry trade organizations should foster implementation of the guidelines by their members.
6. Forest landowners, timber harvesters, and appropriate public and private organizations should be publicly acknowledged when they consistently and correctly apply the guidelines.
7. Wood-using companies should be encouraged to adopt and to monitor the use of a code of forestry practices that is consistent with the guidelines.
8. The Tree Growth Tax Law should be revised to provide incentives for keeping privately- owned forest land productive and providing forest benefits.

## **Planning to Sustain All Forest Benefits**

### **Landscape-Level Forest Resources Program**

The Roundtable identified planning and coordination activities as major elements associated with implementing a landscape-level forest resources program. To establish a framework within which landscape planning and coordination can occur, the Roundtable recommends the following:

#### **Structure**

1. The Minnesota forest resources council provides the strategic direction that will enable long-range strategic planning and landscape coordination to occur within the various forested areas of the state.
2. Regional forest resource committees should be established to foster landscape strategic planning and coordination within various forested areas of the state. Each regional committee should include representative stakeholders in a particular region that are committed to and involved in landscape planning and coordination. Each regional committee should be provided adequate staff.
3. Regional forest resource committees should serve as conveners, acknowledging the existing planning and coordinating activities of various land managers and organizations and the unique characteristics of each landscape.
4. While responsibility for statewide, strategic landscape planning and coordination should be formally recognized, regional landscape planning initiatives should be given considerable latitude to design planning processes to fit their individual needs. Informal means such as memoranda of understanding between various agencies are possible mechanisms to foster landscape coordination and strategic planning processes.
5. Landscape strategic planning and coordination efforts should be guided by the strategic landscape principles and the goals identified by the GEIS Implementation Strategy Roundtable. Progress towards achieving these landscape goals needs to be periodically assessed.

Duties/Responsibilities

1. *Landscape-Level Coordination*

- a) The forest resource council and regional forest resource committees should serve as conveners, facilitators, and educators on matters concerning forests at the landscape-level, recognizing other existing landscape planning activities. They should also serve as a forum for landowners, managers, and stakeholders to review landscape issues.
- b) The information cooperative (see the section: "Information") should serve as data clearinghouses for landowners and managers, providing them with information on achieving goals, forest composition, technical capabilities, and on the types of forest management plans and practices occurring within a particular forested landscape. They should help identify data sources and information needs, and should serve as an interface between various regional-level landscape planning efforts.

2. *Landscape Strategic Planning*

- a) Landscape strategic planning should: 1) be an open and public participation process; 2) be based on broadly defined ecological units and existing classification systems; 3) recognize existing political and administrative boundaries and planning processes; and 4) recognize economic, social and environmental goals and conditions of that landscape.
- b) Landscape strategic planning should occur, to the extent practical, across all forested regions and all ownerships in Minnesota.
- c) The landscape plans should reflect balanced consideration of the economic, environmental and social sustainability of the state's forested ecosystems.
- d) Local planning and management initiatives should be incorporated into landscape strategic planning. Statewide responsibility should occur in the form of facilitating local

landscape strategic planning efforts and coordinating plans involving multiple landscapes.

- e) Landscape strategic planning activities and resulting information should be made readily available to affected stakeholders and the public.

### Implementation Tools

1. Incentives and related mechanisms should be provided to encourage the expanded involvement of private landowners, use of natural resource professionals (both public and private), and natural resource disciplines in landscape-level planning and management activities.
2. Private forest landowners should be involved in the strategic landscape-level planning activities, and be provided incentives to participate.
3. Public forest land managers should incorporate activities that further landscape-level forest resource goals.
4. Incentives should be provided to private forest landowners to encourage planning on private land that is consistent with achieving the landscape-level goals and issues identified.
5. A variety of technical assistance and financial incentives should be made available to encourage planning and resource management that will protect the integrity of forests at the landscape level.
6. Public policies should minimize the conversion of public forest land to non-forest uses.
7. Incentives should be provided to encourage the restoration of forests in riparian areas.

### Economic Viability

Within the context of developing and implementing a landscape- and site-level forest resources program, the Roundtable recommends that policies and programs foster the long-term economic viability of the many sectors that



rely on the state's forest resources. To do so, the Roundtable recommends the following:

1. Public forest resource agencies should acknowledge sustainable economic vitality as an important social goal, and should embrace such a goal when developing and implementing landscape- and site-level policies and programs. These policies and programs should give full consideration to economic and social issues.
2. Public resource management and economic development agencies should recognize the full spectrum of forest resource values in the development of their policies and programs.
3. Within the context of sustainable forest resources management, landscape- and site-level policies and programs should complement public agency efforts to identify opportunities for expanding Minnesota's forest-based industries, including tourism and wood-based industries. The intent is to encourage local and regional employment as well as local and regional economic vitality.
4. The costs of new landscape-level programs and site-level practices should be analyzed prior to their implementation. When evaluations conclude that new landscape-level programs and site-level practices will result in adverse economic effects (including decreased timber supply and negative effects on tourism), opportunities to offset such consequences should be explored.
5. Forest and timberland acreages that will no longer be available for harvest should be identified and quantified as part of the planning process prior to the implementation of new landscape and site-level policies and programs.
6. Landscape- and site-level programs should encourage appropriate private and public sectors to identify opportunities that encourage expansion of value-added enterprises.
7. Consistent with their multiple mandates and diverse management objectives, public resource agencies should be encouraged to provide sustainable, predictable supplies of high-quality forest resource benefits including timber supplies; and should provide these benefits in proportion to their forest land's capability to do so.

8. Public policy should encourage the use of incentives (e.g., tax policy) for keeping privately-owned forest land productively providing forest benefits. Information that enhances the understanding of and ability to manage forest resources (e.g., biological surveys) should also be encouraged.



## **Providing Information and Understanding to Result in Implementation**

### **Monitoring**

#### ***Resource Monitoring***

1. A program that monitors broad forest resource conditions and trends at statewide, regional and unit levels should be established, and its administrative responsibility assigned to the Department of Natural Resources with oversight and broad program direction provided by the forest resources council.
2. This program should be statistically and scientifically valid and provide for analysis of statewide, regional, and unit-based forest resource conditions and trends, recognizing various levels of information needs and availability. Compatible formats should be established to ensure data compatibility at different reporting levels.
3. A forest resources monitoring program should incorporate data generated by existing resource monitoring programs (e.g., Cooperative Stand Assessment, County Biological Survey, remote sensing programs).
4. A forest resource monitoring program should collect information on the use of Minnesota's forest resources.
5. Periodic reports on the activities and findings of a resource monitoring program should be prepared and made available to land managers and the public in a user-friendly and easily-readable format.
6. Mechanisms should be developed to ensure monitoring program results are communicated to forest resource managers and are available to the public in a timely manner, and managers have opportunities to provide input on the design and subsequent modification of the resource monitoring program.

7. Minnesota's Forest Inventory and Analysis (FIA) should:
  - a) be conducted at intervals shorter than the current ten-year cycle.
  - b) use a more intense sampling process.
  - c) broaden the collection of biological and physical information.
8. Increased funding for completion of county-level biological surveys should be encouraged.

### *Compliance Monitoring*

1. A program should be established to monitor the use of certain timber harvesting and forest management practices, and its administrative responsibility assigned to the Department of Natural Resources with oversight and broad program direction provided by the forest resources council.
2. This program should use statistically-valid samples to produce meaningful information on the use of certain timber harvesting and forest management practices at statewide, regional and unit levels. Such sampling should recognize and respect landowner rights.
3. Monitoring results should further the understanding of the extent to which certain practices are actually applied, as well as the most appropriate mechanism(s) to achieve compliance with the practices.
4. Mechanisms should be developed to ensure monitoring program results are communicated to forest resource managers in a timely manner, and managers have opportunities to provide input on the design and subsequent modification of the compliance monitoring program.
5. Periodic reports on the activities and findings of a compliance monitoring program should be prepared and made available to the public in a user-friendly and easily-readable format.
6. Individuals witnessing negligent timber harvesting or forest management practices should be provided an opportunity to file a

complaint. A process for responding to those complaints should be established, and the complaint information should be forwarded to the organization administering the certification program.

### *Effectiveness Monitoring*

1. A program should be established to monitor the effectiveness of certain timber harvesting and forest management practices, and its administrative responsibility assigned to the Department of Natural Resources with oversight and broad program direction provided by the forest resources council.
2. This program should use statistically-valid samples to produce meaningful information on the effectiveness of certain timber harvesting and forest management practices. Such sampling should recognize and respect landowner rights.
3. Mechanisms should be developed to ensure monitoring program results are communicated to forest resource managers in a timely manner, and managers have opportunities to provide input on the design and subsequent modification of the effectiveness monitoring program.
4. Periodic reports on the activities and findings of an effectiveness monitoring program should be prepared and made available to the public in a user-friendly and easily-readable format.

### Research

1. The Roundtable recommends a committee be established to coordinate forest resources research activities in Minnesota, and report to the forest resources council on a biennial basis. This committee should consist of administrators of the major institutions and organizations conducting forest resources research in Minnesota.
2. Making use of existing public and private organizations where possible, the forest resources research advisory committee should assume responsibility for fostering:

- a) the identification of strategic directions for forest resources research undertaken in Minnesota.
  - b) the collaboration of forest resources research should be undertaken by various research organizations in Minnesota, using broadly-based input from practitioners and other interested parties.
  - c) the communication of forest resources research results to various users and the public.
  - d) the funding of forest resources research programs in Minnesota.
3. To fulfill these responsibilities, the forest resources research advisory committee should undertake the following activities:
- a) identify strategic directions for forest resources research in Minnesota. Such directions should be based on information gathered from various sources, including research forums, special studies, and consultation with forestry research users. The purposes of such information gathering being to:
    - i) identify important forest resource issues in need of research;
    - ii) identify possible priority research to be focused on important forest resource problems; and
    - iii) provide opportunity for the sharing of information among forest managers, forest researchers, and interested members of the public.
  - b) based on the strategic directions developed for forest resources research in Minnesota, define and promote the implementation of a program, including potential funding levels, of priority forestry research needs.
  - c) periodically assess the status of forest resources research in Minnesota, including progress toward accomplishing the program of priority forestry research needs. As necessary, update the program of priority research needs. Research

assessments should be communicated to the forestry research community, managers and users of forest resources, and the public.

- d) foster the collaboration between public and private organizations that conduct forest resources research and between public research organizations and private users of forest resources research.
- e) facilitate communication (e.g., workshops, research congress, written reports) between those conducting forestry research and the users of forestry research, especially practicing forest land managers and the public.
- f) foster linkages between researchers in different disciplines and promote both basic and applied forestry research.

### **Information**

1. The Roundtable recommends an interagency forest resources information cooperative be established to coordinate the development and use of forest-based data in Minnesota. Cooperative membership should consist of those organizations with major responsibilities for forest resource information and information system development and use. The cooperative's functions should be integrated with those of the forest resources partnership.
2. The specific activities of this cooperative should be to:
  - a) promote the development of statewide guidelines and common language to enhance the ability of public and private organizations and institutions to share forest-based data.
  - b) promote the development of information systems (e.g., GIS) that support access to important forest-based data.
  - c) promote improvement in the accuracy, reliability and statistical soundness of fundamental forest-based data.



- d) use existing mechanisms (e.g., LMIC, Governor's Councils on GIS and Data Access) that address information and information systems development and use.
  - e) promote linkages and integration of forest-based data to other natural resource information.
  - f) develop a needs assessment for improving the quality and quantity of information systems.
  - g) promote access and use of forest-based data and information systems in decision making by a variety of public and private organizations.
  - h) promote expanding the capacity and reliability of forest growth, succession and other types of ecological models.
3. Forest Resource data coordinators should be regionally located in Minnesota. The purpose of these coordinators should be to provide a regional presence to improve data acquisition, access, transfer and use among public and private organizations. The specific services provided by these coordinators should be to:
- a) promote and facilitate data access and sharing among public and private forest resource organizations.
  - b) promote the use of information systems with public, non-profit and private forest resource organizations.
  - c) facilitate communication among forest resource organizations to minimize duplication in data collection and analysis.
  - d) serve as a focal point for identifying and prioritizing data needs.
  - e) provide technical assistance to organizations working with data and information systems.
  - f) convene meetings of organizations involved in data acquisition, recording and analysis.

## **Increasing Public Knowledge and Understanding**

The Roundtable identified a number of education-related activities that would also support the successful development and implementation of landscape- and site-level forest resources programs. The Roundtable recommends the following with respect to the educational needs of timber harvesters, forest resource professionals, and the general public.

### **Timber Harvester Education**

#### **Structure**

1. A voluntary certification program for timber harvesters should be established.
2. A private entity could be recognized as the focal point for developing and administering the timber harvester certification program. The program should be designed to work effectively and incorporate public accountability and credibility.

#### **Responsibilities**

1. The entity responsible for the timber harvester certification program should:
  - a) establish minimum standards for certifying timber harvesters. Such standards can include appropriate levels of education and experience.
  - b) deliver or facilitate the delivery of forestry and related natural resource educational programs that will enable timber harvesters to become certified and maintain certification.
  - c) certify the ability of timber harvesters to apply the forestry guidelines, including periodically recertifying this ability and developing processes for decertification.
  - d) allow all timber harvesters to participate in the program, including timber harvesters from other states.

- e) acknowledge and widely publicize, especially to forest landowners, those timber harvesters that have become certified.
  - f) promote the program within forest industry and encourage individual firms to purchase timber from certified timber harvesters.
2. An evaluation of the timber harvester certification program should be conducted annually, and its results made readily available to the public. This evaluation should include:
- a) levels of participation.
  - b) a description of the program's content and educational requirements.
  - c) an assessment of the program's overall effectiveness.

## **Forest Resource Professionals**

### ***Continuing Education***

#### **Structure**

1. A center for continuing education should be established with responsibility for developing, coordinating and administering a continuing education program for forest resource professionals.

#### **Responsibilities**

1. The center's responsibilities should be to:
  - a) identify strategic directions and prioritize the educational needs of forest resource professionals, recognizing the importance of education about the forest practice guidelines.
  - b) communicate priority educational needs to providers of continuing education opportunities.

- c) facilitate and coordinate the offering of continuing education opportunities that address priority educational needs.
- d) make use of continuing education programs offered by existing organizations, agencies, and institutions.
- e) promote the active participation of practicing field foresters and other forest resource professionals in continuing education opportunities, and encourage employers of such professionals to encourage their employees to seek out these opportunities.
- f) involve professional field foresters in the design, implementation and evaluation of continuing education programs.
- g) periodically evaluate the effectiveness of the continuing education program and, as necessary, modify the program's direction and/or delivery mechanisms.

### *Certification*

#### Structure

1. A voluntary certification program for forest resource professionals should be established that recognizes the multi-disciplinary and multi-tiered functional aspects of forest resource management.
2. A private non-profit organization could be recognized as the focal point for developing and administering the certification program for forest resource professionals. The program should be designed to work effectively and incorporate public accountability and credibility.

#### Responsibilities

1. The entity responsible for the forest resource professional certification program should:
  - a) establish minimum standards for certifying forest resource professionals. Such standards can include appropriate levels of education and experience.

- b) certify the ability of forest resource professionals to conduct various forest management activities, including periodically recertifying this ability and developing processes for decertification.
  - c) allow all forest resource professionals to participate in the program, including forest resource professionals from other states.
  - d) acknowledge and widely publicize, especially to forest landowners, those forest resource professionals that have become certified.
  - e) promoting the employment of certified forest resource professionals by public and private resource management agencies.
2. An evaluation of the certification program for forest resource professionals should be conducted annually, and its results made readily available to the public. This evaluation should include:
- a) levels of participation.
  - b) a description of the program's content and educational requirements.
  - c) an assessment of the program's overall effectiveness.

### **General Public Forest Resource Education**

#### **Structure**

1. The Minnesota Environmental Education Advisory Board, in cooperation with other education providers, should be responsible for coordinating educational efforts about Minnesota's forests to the public and segments of the public. Local communities, private forest landowners, forest recreationists, tourists, and students are important segments of the public to which education about forest resources should be imparted.

2. The Board should build on existing programs and utilize existing educational programs and delivery systems.

Responsibilities

1. The Board should promote forestry and related natural resource interpretive efforts of public and private organizations and encourage linkages between these interpretive efforts.
2. The Board should promote the involvement of interested parties in the strategic planning of forestry and related natural resource activities in educational institutions.
3. The Board should promote the use of various outlets (for example, media, state fair, and museums) as a means of transferring information about Minnesota's forests to the general public.
4. The Board should facilitate the development of curricula materials that transfer important information about the ecological, physical, social, and economic importance of forests to students, and encourage the adoption of the materials by schools.



## Glossary of Key Terms

<i>biological diversity</i>	the variety and abundance of species, their genetic composition, and the communities, ecosystems, and landscapes in which they occur. It also refers to ecological structures, functions, and processes at all of these levels. Biological diversity occurs at spatial scales that range from the regional to global
<i>biomass</i>	living matter in the form of one or more kinds of organisms present in a particular habitat
<i>biota</i>	animal and plant life
<i>compliance monitoring</i>	measurement and evaluation of the consistency of forestry operations with forest practice guidelines
<i>ecosystem</i>	an ecosystem is a system of physical, chemical, and biological components interacting within a defined space and time
<i>effectiveness monitoring</i>	measurement and evaluation of the ability of forest practice guidelines to protect or enhance forest conditions
<i>forest land</i>	land at least ten percent stocked by trees of any size and capable of producing timber, or of exerting an influence on the climate or on the water regime; land from which the trees described above have been removed to less than ten percent stocking and which has not been developed for other uses; and afforested areas



<i>forest resources</i>	natural assets of forest lands, including timber, recreation, fish, and wildlife habitat, wilderness, rare and distinctive flora and fauna, air, soil, water, and educational, aesthetic and historical values [MN Stat. 89.001] [Note: The Roundtable recommends that this definition be reviewed and updated by the council.]
<i>GEIS</i>	generic environmental impact statement
<i>landscape-level programs</i>	typically long-term or broad-based responses that may require extensive analysis and/or planning over a large area; they may involve or require coordination across land ownerships
<i>landscapes</i>	typically large geographic areas that are bounded by ecologically or socially defined attributes
<i>nonindustrial private forest land</i>	forest land owned primarily by individuals (not companies) that are often interested in providing a variety of forest benefits. The typical nonindustrial forest is small (less than 500 acres)
<i>resource monitoring</i>	measurement and evaluation of the status of forest resource attributes, including area, composition, and diversity
<i>riparian corridors</i>	land and associated plant communities located adjacent to waterbodies
<i>site-level programs</i>	strategies intended to modify operational procedures used in the planning and execution of timber harvesting and forest management activities on an individual site or local scale
<i>slash</i>	the woody debris (e.g. tree limbs) remaining on a site after a harvesting operation

<i>sustainability</i>	the achievement of economic and social well-being without damaging the planet's resource base (e.g. soils, water, vegetation, and wildlife)
<i>sustainable development</i>	development that meets the needs of the present without compromising the ability of future generations to meet their own needs
<i>timber</i>	trees that will produce forest products of value, whether standing or down, and including but not limited to logs, bolts, pulpwood, posts, poles, cordwood, lumber, and decorative material
<i>timberland</i>	forest land that is producing or capable of producing crops of industrial wood, and that is not withdrawn from timber utilization by statute or administrative regulation. Areas qualifying as timberland are capable of producing more than 20 cubic feet per acre per year of industrial wood in natural stands. Currently inaccessible and inoperable areas are included [USDA Forest Service]



## **Minority Opinion**

### **GEIS Implementation Roundtable Dissent**

The GEIS Implementation Roundtable Report, while it recommends many worthwhile initiatives in the areas of forest resource monitoring and cross-ownership landscape policy coordination, is on the whole an insufficient response to the recommendations of the Forestry Generic Environmental Impact Statement. I therefore cannot endorse this report.

I was disappointed that the Roundtable early on decided to defer discussion of specific recommendations for changes in forest practices contained in the GEIS to a "future entity." Despite repeated strong interest expressed by some members of the Roundtable in discussing GEIS recommendations concerning such issues as riparian corridor management, old growth forests, rare and endangered plant communities, and long rotation forest management, the Roundtable as a whole consistently decided to defer such discussions to a later date.

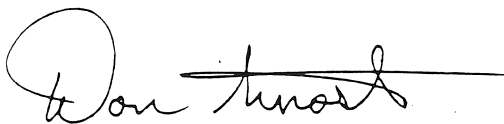
Hence, the primary work the Roundtable assumed was to determine how forest issues should be discussed and resolved in the future. In this, the Roundtable Report is recommending a structure that I do not believe has sufficient internal incentives to discuss and decide important issues in a timely manner, much less commit to timely implementation of any resulting policies.

The Forestry Council is proposed to have no authority beyond "recommendation." The Roundtable declined to provide incentives, deadlines, goals or any other mechanism to assure that the Governor-appointed Council would address important resource issues in a timely manner.

The Roundtable declined to recommend implementation authority for the Council, turning down the suggestion of rulemaking authority by one Roundtable participant. Instead, an innovative "Partnership" was proposed to include all stakeholders with the ability to implement, or prevent the implementation of critical forest policies. With further discussion, however, the "Partnership" idea devolved to be little more than a voluntary association of existing forest land managers who decide what, when, how much and where they may or may not do what is requested of them by the Council.

People of good will can do all of this, today, without waiting for the creation of these new entities. I fear that the time necessary to establish these entities will only create an opportunity for further delay for those who are not interested in moving forward with improved forest practices.

I am disappointed that the Roundtable has failed to address these concerns that I and others have repeatedly raised in numerous meetings in a way that is sufficient to retain my confidence in this report.



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