ACTION PLANS FOR CONSERVING WISCONSIN'S BIOLOGICAL DIVERSITY

The following charts are action plans developed in breakout sessions at the Governors' Conference on Forestry, Biological Diversity session. They are organized by Desired States, listing the highest priority actions (based on number of participant votes) to achieve that desired state. A draft plan to achieve the highest priority actions follows.

Desired State #1 - Reliable science-based information about biological diversity is available and includes components of inventory, monitoring, analysis, and assessment. This information drives conservation practices and decisions.

ACTION PLAN #1 (Top Vote Getter) - Establish an inventory and monitoring program, integrated with forest certification requirements, but not limited to certified lands. Inventory and monitoring efforts should include obscure but important groups of organisms, and consider genetic diversity.							
SUBACTIONS (ACTIVITIES OR STEPS)	WHO (PARTNERS)	WHEN	EXISTING RESOURCES and/or WORK ALREADY ACCOMPLISHED	NEEDS	BARRIERS Mixture of practical operational and scientific issues – Idealism vs. reality.		
Determine "goals" & strategy of monitoring & inventory (agree on standards of data collection – may differ for different land??) (What to study, frequency, methods) General – big questions. Public / private lands. Triggers – thresholds / stratifying land base	Academia Government biologists (Federal, State, Tribal, local officials.) Private landowners TNC – other non-profit organizations	Begin 2005	Inventories have been completed for some lands NHI program FIA – USFS program Some monitoring plans Skeleton plans	This sub action needs to be further subdivided and scoped in detail by a team			
Literature review and search existing databases for inventory and monitoring	Academia Government biologists (Federal, State, Tribal) Other interested individuals	2005 (should take 6 months)	DNR has started to compile an inventory for state studies. National level? US Biological survey. US Forest Service – focal species	Funding for someone's time	Determining how comprehensive a review should be conducted		
Routine monitoring Establish deer enclosures in all types across the state for monitoring	DNR / UW	Ongoing					
Keep literature review updated as new inventories are completed and monitored projects implemented		Ongoing					
Information sharing		Ongoing					

Desired State #1 (Cont) - Reliable science-based information about biological diversity is available and includes components of inventory, monitoring, analysis, and assessment. This information drives conservation practices and decisions.

ACTION PLAN #2 (Second Vote Getter) - Develop a representative system of reference areas to function as baselines for monitoring changes in biological diversity.

SUBACTIONS (ACTIVITIES OR STEPS)	WHO (PARTNERS)	WHEN	EXISTING RESOURCES and/or WORK ALREADY ACCOMPLISHED	NEEDS	BARRIERS
Define Reference Areas for Bio Div. Where are they? What, if any management on these areas?	Develop an "assessment team" UW NHI FS SNA TNC DATCP	Now – 6 months / 12 months	Natural Areas are "controls" (both State natural areas and research natural areas) John Curtis data Utilize NHEU Land legacy DNR Biodiversity Report Grassland Bird Plan (DNR)	Develop assessment team	Vegetation Classification is inconsistent
Inventory – Compilation of WI Bio Div Things that can be measured and are practical and meaningful	DNR programs Universities	Ongoing	MA, OR, CA – other states have produced such documents – Natural Heritage Inventory		Deciding what is important to monitor. Determining "how big" these areas need to be to mitigate edge effects.
Develop a Representative System Increased communication / flow between groups that own reference areas (DNR, TNC)	Develop an "assessment team" UW NHI FS SNA TNC DATCP		Data sharing agreements between agencies. SNA program network w/ Universities to coordinate research. National Hierarchy		

Note gaps then fill gaps. Designate on existing public land; Assess suitability of those existing SNA's & RNA's Buy conservation easements. Acquire outright Opportunities on county land	Public agencies Land trusts Wildlife lands, parks. Landowners Conservation groups Consider regional efforts. Better representations of some ecological systems may be in adjacent states.	Now – 5 years		Fill gaps: Barriers lack of data, lack of funds. Private landowners' rights. Landowners & managers must allow long term access. \$\$
Design methodology & conduct baseline data gathering	Research community ATRI		\$	\$\$\$
Long term monitoring program Use these sites for education and outreach				

<u>Links</u>

Need a commonly used definition of sustainability. Use these areas (reference areas) as training grounds for managing private landowners Privately owned lands should be included in the system of reference areas Monitoring and Inventory / Definitions of baseline go hand in hand.

Desired State #1(cont) - Reliable science-based information about biological diversity is available and includes components of inventory, monitoring, analysis, and assessment. This information drives conservation practices and decisions.

ACTION PLAN #3 (Third Vote Getter) - Build upon existing plans, such as TNC's Ecoregional Planning, DNR's Land Legacy, Comprehensive Wildlife Conservation Plans, and State Natural Areas, and develop conservation strategies for areas of conservation importance (moving from science to action).

SUBACTIONS (ACTIVITIES OR STEPS)	WHO (PARTNERS)	WHEN	EXISTING RESOURCES and/or WORK ALREADY ACCOMPLISHED	NEEDS	BARRIERS
Gather the plans and people (involved in those pans) to consolidate the info provided in those plans and to create criteria by which to measure the comprehensiveness of those plans. Consider National Range of Variation Models, restoration targets. Identify the actions currently being pursued from those plans	TNC, DNR, external voice. Forest Service		Written plans Infrastructure within each group	Short term funding	Funds Lack of data
Identify gaps in those actions and determine whether those gaps can be filled by potential actions in the written plans or whether they can be filled by external organizations. Identify external experts that are or could fill identified gaps					

Desired State #2 - Public Policies, plans, and actions support conservation of biological diversity as an integral part of long-term ecological and economic health.

ACTION PLAN #1 (Top vote getter) - Provide incentives to landowners and managers to conserve biological diversity								
SUBACTIONS (ACTIVITIES OR STEPS) to be done in the next 5 years:	WHO (PARTNERS)	WHEN	EXISTING RESOURCES and /or WORK ALREADY ACCOMPLISHED	NEEDS	BARRIERS			
1) Conduct statewide landscape evaluation and assessment which identifies restoration targets and priority areas for biodiversity conservation. Use results of this evaluation to establish incentive programs and prioritize funding.	DNR, USFWS, USDA – NRCS, TNC		DNR master planning, ecoregional planning, WFLGP, SIP, EQUIP	Funding, Mill tax, Farm Bill, Forest Legacy				
 2) Inventory all incentive programs that exist identify compliment / conflict. Reverse agricultural use value penalty for wetlands, forests, etc. Also longer term part of inventory. Survey landowners to see what will motivate them. 								
3) Develop economic justification Non- Industrial Private Forests.								
 4) Strategy for large block owners (need to also target developers) land acquisition legacy management incentives Form state level working group to coordinate efforts to maintain large industrial forest blocks. 								
5) Biological conservation law (comparable to MFL) for NIPF. Note: possibly scale the tax break with different levels of \$ benefit depending on values agreed to by landowners. Note: Highest priority for significant ecological value lands.								

 6) Train – increase technical assistance, esp. for professionals in consulting work force / and with government, DNR workforce development plans. - Also private landowner champions 			
7) Align governmental programs to focus on biodiversity across all levels. (In DNR this would be across divisional standing team)			
8) Develop conservation easement programs aimed at minimizing parcelization.			

Other ideas discussed:

define measurable levels of biodiversity – a baseline – done?
restrict access to sensitive, high value lands

Desired State #2 (cont)– Public Policies, plans, and actions support conservation of biological diversity as an integral part of long-term ecological and economic health.

ACTION PLAN #2 (2 nd Vote getter) - Develop a representative system of reference areas, including but not limited to State Natural Areas, that								
provide refuge for the most disturbance-sensitive elements of biological diversity.								
SUBACTIONS	WHO	WHEN	EXISTING RESOURCES	NEEDS	BARRIERS			
(ACTIVITIES OR STEPS)	(PARTNERS)		and/or WORK ALREADY					
State Boliov Bolated to Eurodina:	Idoptify or "groate"		ACCOMPLISHED					
<u>State Folicy Related to Funding.</u>								
•Encourage a higher % or Stewardship								
acquisition of Natural Areas	legislators							
A Destore the state side component of the								
Land and Water Conservation Fund								
Change MEL so that private landowners								
receive a property tax incentive for								
protecting high guality natural areas and								
high conservation value forests.								
 Include invasive monitoring and control 								
at county level and receive state funding.								
Policy – State or Federal Funding:								
 Develop dedicated funding (or better 								
funding) for the management of Natural								
Areas and Conservation Programs in								
general.								
State Policy - not related to funding:			BCPL Biotic Inventory of	Identify legal	J. Gard task			
 Develop old growth policy for state lands. 			its properties in No. WI.	constraints	force.			
 Designate state natural areas on state 				/opportunities				
forests through the master planning								
nrocess								
 Establish a process to protect BCPI 								
lands and establish a mechanism to								
dedicate BCPL lands of NA-1 states such								
as State Natural Areas.								
♦ Integrate ecological planning with smart								
growth processes.								
♦ Recognize invasive species as a threat								
to biological diversity – encourage /								

support state legislation such as an "invasive species act"					
 Other: Establish a detailed process to identify representative reference areas (such as possibly 10% of area). Make protection of "high value conservation forests" part of forest certification. Change name from "reference area". Incorporate biological diversity as "priority in land acquisition programs (local, state, federal) look at what is currently protected (public and private) and identify potential. Coordinate between ownerships (state, local, federal) the designation of State Natural Areas. Sort out the various other "special" land designations such as wilderness areas, research areas, etc. that may meet reference area quality and need. Develop strategy to overcome negative property rights concerns 	 Federal agencies. All state agencies Champion legislators Private effective advocates / NCOs and counties USFS TNC and land trusts Counties Agencies that own land. 	ASAP	 Land Trust / NCO properties Government properties 	 Possibly consider natural rang of variation models. Inventory 	

Desired State #3 - Wisconsin's citizens value the conservation of biological diversity and recognize it as an essential part of sustainable forest management and productivity, as well as tourism and recreation.

ACTION PLAN #1 and #2 (Two top vote getters combined) –								
#1: Work to make private landowners and the general public stakeholders regarding biological diversity.								
#2: Change the perception that biological diversity is antithical to forest management and economic sustainability.								
SUBACTIONS	WHO	WHEN	EXISTING RESOURCE	NEEDS	BARRIERS			
(ACTIVITIES OR STEPS)	(PARTNERS)		and/or WORK ALREADY ACCOMPLISHED					
Develop communication / marketing plan to identify target audiences and key messages and action plan and strategies for each key audience. Possible strategies: public service announcements tailored to region, town hall meetings, conferences, awards and recognition, field trips, ads, print media, media tours.	TNC, Media, WI DNR, Biodiversity Project, IPAW, NGOs, UW-Ext, professional marketing & communications, WWOA, Govs Council, Staff/Consultants		Biodiversity Project Support effective efforts underway such as Woodland School, WWOA	Link with state marketing plans: DNR Tourism				
Conduct strategic public opinion survey to key target audiences to identify messages that resonate, to identify incentives that motivate good land management.	Polling Company UW/DNR		Consider using DNR Forestry's 6 target messages plus biodiversity message. DNR perception survey done in 2001 but did not include biodiversity.					
Commission study / white paper about economic benefits of biological diversity; include success stories and inspiration.	DNR TNC UW Extension Governor's Council Forestry Consultants	Next 1-2 years						
Define biological diversity - for the general public - for forestry- related audiences and integrate into outreach, marketing and education efforts.	DNR TNC USFS Private Industry							

Educate public / legislature about seriousness of invasives and deer.			
Other ideas: Endorse concept of the "landscape triad" including preserves, extensive ecologically managed forests, and intensive managed forests. Ask Fred Clark.			

Desired State #4: The State of Wisconsin has a long-term vision (for timeframes of more than 50 years into the future) that anticipates challenges to biological diversity, even though these challenges may be beyond our direct control, and initiates actions that will minimize damage.

ACTION PLAN #1 (Top Vote Getter) - USE LANDSCAPE SCALE PLANNING METHODS, Action Plan developed by – Cheryl Adams, Sharon								
Gaskill, Dave Mladenoff, Mike T. Miller, C. E. Zinsmaster, Jake Vander Zanden								
SUBACTIONS (ACTIVITIES OR STEPS)	WHO (PARTNERS)	WHEN	EXISTING RESOURCE and/or WORK ALREADY ACCOMPLISHED	NEEDS	BARRIERS			
 Use TNC ecoregional plans or National Hierarchal Ecological Classification as framework (a map). Share data / GIS capabilities 	All landowners DNR Private Industry TNC	Long term Ongoing	MN Landscape Planning, through MN Forest Resources Council. Many other databases exist.	Entity to coordinate efforts, but not necessarily DNR (representatives from many groups & private individuals) Willingness to share.	Education Data Acquisition. Egos. Fear of economic loss or competition.			
2) Ecoregion mapping, assessment. Historical and present.	DNR, UW		Historical baseline.	High resolution forest mapping	Cost.			
Use historical data as a "snapshot" in time for comparison to present day conditions.	All landowners	Long term Ongoing	Habitat typing. Wisconsin plan	Willingness to share	Education. Data acquisition Lack of \$\$, people.			
A concise definition of the landscapes	DNR Private Industry TNC USFS, DNR,		Some SAT images, some landscapes define. Habitat types. '99 air photos, some	Current SAT. 2005 air photos. More large	\$\$ Interpretation Coordination			
involved.	counties, tribes		ĞİS	forests on GIS	Colloquialism			
 3) Develop desired future conditions. Incorporate scenarios – future changes / threats (invasive species, land ownership trondo, etc.) 	All landowners	2007	Simulation models already developed.	Consistent data input.	Cost			
lienus, elc.)	Academic /				1			

	1			1	
Develop a vision for landscape conditions & general design across the state that optimizes conservation of biodiversity.	scientific / government land management entities.		Look at Minnesota's	Vision Vision backed	
Legislature creates a Forestry Council that institutionalizes a long term (50 years) statewide forestry vision.	Legislature	2010	Governors Forestry Council	up by law	
Identify areas of current minimal fragmentation and seek to enlarge by use of easements.					
Identify lakes and streams with minimal development and encourage local / state zoning policies that protect buffer areas.					
4) Develop Information and Incentives for cross-ownership planning and management.	DNR / UW Extension				
5) Develop Statewide Forest Management Plan.	Governors Forestry Council	2005 – 06	Forest inventory data. State & County Forestry Plans MFL database	Big picture clearinghouse. Consistency	Data sharing. Communications
Ecoregion by ecoregion plans for managements.	State, other agencies, TNC, private interests	ongoing	Efforts in progress, biological inventory, and statewide forest management plan.	Funding to implement & support expertise.	Different agendas. Lack of coordination.
6) Decide who best can focus on which areas.			Existing protected areas.		Egos. Competition.
Work with a consortium of landowners within WI (over long term) to figure out individual lands niche within the "vision".	Academic / scientific / government land management			Implementation must be voluntary.	
Apportion management needs / actions to owners, by ecoregion, with desired future.	entities and private interests				
Landowners decide how they "fit" into the vision and use landscape scale adaptive management to implement actions.		2020		Education of ecoregion vision to all	\$\$, politics, colloquialism, steep-long,

Develop actions most urgent / critical to move the vision forward, or to protect it against near-time threats.			landowners "Soft" agreements and continuing long time collaboration.	learning curve.
7) Coordination between landowners to accomplish goals	All landowners	Long Term	Social and Economic data	
 8) Monitor progress toward the vision and changes. "Institutionalize" ongoing monitoring & evaluation of the vision, partners, movement toward the vision, and adapt if necessary. Promote management systems that are flexible enough to respond to threats. Adaptive management to accomplish goals; use adaptive management as a central tool for identifying threats, thresholds, responses to change. 		5 years Now	Establish long- term commitment to work together. State legislation to fund existence of such a consortium of landowners / managers	
 9) Integrated "big picture" planning for WI or the Midwest. Plan linkages between large areas under single ownership – prioritize – e.g. protect areas between State Forests & National Forests or other large ownerships. Plan across borders with MN, MI, and Ontario. 	State, other agencies, TNC, private interests.	Long-term ongoing		