

**Missisquoi Bay Watershed Council
Preliminary Draft Strategy Ideas for Council Discussion - 9/28/2006**

***** NOT PROPOSED STATE POLICY *** PRELIMINARY DRAFTS *** NOT IN PRIORITY ORDER**

Notes:

- * These preliminary draft strategies for water quality protection and improvement have been developed by staff from the VT Agencies of Natural Resources and Agriculture based on the ideas and concerns of local stakeholders in the Missisquoi Bay watershed.
- * The strategies are NOT PROPOSED STATE POLICY, but are designed to be a starting point for discussions by the members of Missisquoi Bay Watershed Council and broader public, beginning at its meeting on October 3, 2006 in Enosburg, Vermont.
- * Additional information about the strategies, related programs, and the substantial amount of ongoing water quality work will be provided at and following the watershed Council meeting.
- * The watershed council will select from among these and possibly other strategies and work out further details, including benchmarks and timelines.
- * The watershed plan will ultimately include only strategies that have the support of the watershed council AND the agencies and groups that are responsible for their implementation.
- * Information contact: Barry Gruessner, VT DEC, 527-6210 or Pamela Stefanek, VT AAFM, 388-6746.

Ref #	Strategies	Lead/ Partners	Funding Sources	Estimated Cost	Benchmark/ Timeline
Water Quality - Multiple Land Uses					
1	Prioritize areas where failing septic systems may contribute significant phosphorus and bacteria loads to surface waters, assess septic system performance in these areas, and provide financial and technical assistance to remedy all failing systems.				
2	Work with willing landowners to conduct detailed river geomorphic assessments on all priority subwatersheds and implement river corridor protection projects that will increase river stability, protecting water quality, land, and infrastructure.				
3	Establish vegetated buffers along rivers, streams, and lake shorelines.				
4	Provide information and training for all watershed towns in developing policies and ordinances governing septic systems, low-impact development, lawn care, erosion control for small construction projects, riparian and shoreline management, etc.				
5	Identify major gully erosion sites and work with landowners to stem further erosion.				
6	Work with willing landowners to identify opportunities to restore wetlands that will improve water quality.				
7	Protect against the loss of working landscape through conservation easements, local market development for farm and forest products, etc.				
Water Quality - Developed Land					
8	Actively ensure full compliance with State stormwater and erosion control rules for all construction projects in the watershed.				
9	Eliminate use of phosphorus in lawn fertilizers without prior soil testing.				
10	Provide technical and financial assistance to landowners to reduce stormwater flows (i.e., native plant conservation landscaping, rain garden construction, rain barrel installation, etc.).				

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11	Provide Better Back Roads training for all watershed towns, including development of capital road project inventories.				
12	Provide stormwater and erosion control training to officials from all watershed towns, as well as contractors and engineers working in the region.				
13	Identify potential stormwater controls for older developed areas (retrofits) and implement these where feasible.				
14	Seek to remove the Missisquoi Bridge causeway.				
15	Provide information and financial assistance to all shoreline landowners in developed areas regarding land management for improved water quality.				
Water Quality - Agricultural Land					
16	Reestablish buffers along Vermont waterways with state and federal programs and other mechanisms.	NRCDs, NRCS, VT AAFM, USFWS, UVM Extension, Farm Operators, Technical Service Providers	VT AAFM, FSA, Farm Operators, Local Partners		Ongoing
17	Reduce pathogens, sediments, and nutrient loading from grazing land and cropland to Vermont streams through implementation of Field Best Management Practices, Nutrient Management Plans, and Best Management Practices.	NRCDs, NRCS, VT AAFM, UVM Extension, Technical Service Providers, Farm Operators	EQIP, VT AAFM, Farm Operators.		2009
18	Eliminate discharges from the production area of farms.	NRCDs, NRCS, VT AAFM, UVM Extension, Technical Service Providers, Farm Operators	EQIP, VT AAFM, Farm Operators		Ongoing
19	Work toward the implementation of the revised Accepted Agricultural Practices on all farms in the watershed include an emphasis on education.	NRCDs, NRCS, VT AAFM, UVM Extension, Technical Service Providers, Farm Operators	EQIP, VT AAFM, Farm Operators.		Ongoing

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20	Implement requirements of the Medium Farm Operations regulations.	NRCDs, NRCS, VT AAFM, UVM Extension, Medium Farm Operators, Technical Service Providers	EQIP, VT AAFM, Farm Operators, Local Partners		2009
21	Support the expanded use of technology to achieve P reduction while maintaining and enhancing agricultural economic viability including methane digestion, nutrient separation and compost.	NRCDs, NRCS, VT AAFM, UVM Extension, Technical Service Providers, Farm Operators, LCBP	EQIP, VT AAFM, Farm Operators, Local Partners		Ongoing
22	More purposefully meet the conservation needs of Small Farm Operations with a focus on Farm Viability based on a business plan.	NRCDs, NRCS, VT AAFM, UVM Extension, NOFA, Intervale	VHCB, Conservation Security Program, EQIP		2009
23	Build conservation and funding mechanism for operations not served by USDA NRCS, i.e. farms which do not sell \$2500 in ag products, or produce food and fiber, i.e. owners of horses and stable operators.	NRCDs, NRCS, VT AAFM, UVM Extension, Small Farm Operators, Technical Service Providers	EQIP, VT AAFM, Farm Operators, Local Partners		2009
24	Educate farmers about funding sources, i.e. a revolving loan fund from public or private sources, specifically to enable farm operators to meet their portion of cost shared and designed conservation practices in a timely manner in those years that the milk prices do not fully support farm operations. Maintain a focus on access to capital.	NRCDs, VT AAFM, Farm Operators, Individuals	VT AAFM, Foundations, FSA, VACC		2007

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25	Maximize the potential of the Conservation Security Program for the Missisquoi River basin. Expected results are benefits in water quality, soil quality, and "green payments" for farm operators.	NRCDs, NRCS, VT VT AAFM, UVM Extension, Small Farm Operators, Technical Service Providers	Conservation Security Program		2008
General Outreach					
26	Target additional water quality education for homeowners and businesses in the watershed.				
27	Train key teachers in each school system in the watershed and provide resources for them to incorporate watershed issues into the school curriculum and share their experience with other teachers.				
28	Expand efforts to work with local media to deliver information on watershed issues to the general public.				
Information and Monitoring Needs					
29	Estimate phosphorus loads from subwatersheds in the Missisquoi Bay watershed to identify priority source areas.				
30	Conduct stream walks in all critical subwatersheds, beginning with State impaired watersheds, with local landowners and officials, identifying water quality issues and opportunities to address them.				
31	Investigate/demonstrate in-lake methods for reducing the formation or impact of algal blooms.				
32	Estimate phosphorus load reductions expected for each phosphorus-related strategy.				
Fish and Wildlife					
34	Improve the recreational fishery in Missisquoi Bay watershed through habitat restoration and elimination of barriers to fish passage.				
Management					
35	Coordinate implementation of strategies through the watershed council.				

Acronyms

NRCDs - Natural Resources Conservation Districts

NRCS - US Department of Agriculture, Natural Resources Conservation Service

VT AAFM - VT Agency of Agriculture, Food, and Markets

USFWS - US Fish and Wildlife Service

UVM - University of Vermont

FSA - US Department of Agriculture, Farm Services Agency

EQIP - Environmental Quality Incentives Program

NOFA - Northeast Organic Farming Association

VACC - Vermont Agricultural Credit Corporation