South Branch Root River Watershed 319 Fecal Coliform Bacteria Reduction Project and CWP Loan Program 7/19/2005

WORK PLAN AND BUDGET	**319 Grant**	**CWP Loan Funds**	**Cash Match**	**In-kind****	**Total**
Project Element					
A. Best Management Practices					
1. Low-interest loans for ISTS upgrades (40-60 systems @$5-10,000) and milkhouse waste system upgrades (20-25 systems @ approximately $2000/system) will be paid back by the landowners.		300,000			316,080
Mower Co. Environ. Services: 4-6 systems x 10 hrs/system x $30 Fillmore Co. Zoning: 40-50 systems X 10 hrs/system x $30/hr systems + 20 milkhouse waste systems x 10 hr/system x $30/hr				16,080	
2. Cost-share for low-cost feedlot fixes of 50% of the cost up to $1000 for non-engineered feedlot pollution abatement practices (gutters, buffers, etc.) on feedlots identified to be in sensitive areas (riparian, sinkholes, etc.) 10/year x 3 years	30,000				76,800
Landowners share			30,000		
Mower Co.Feedlot Officer: 72 hrs/feedlot fix x 5 fixes x $30 Fillmore Co. Feedlot Office: 40 hr/feedlot fix x 25 fixes x $30				16,800	
3. Buffer Bonus initiative: Increase by 10-20% the number of acres on which conservation tillage (or cover crops) and nutrient management plans are implemented by offering bonus payments for conservation tillage or cover crops ($7/A) and nutrient mgmt practices ($4.00/A) on fields adjacent to conservation buffers (BALMM Initiative). A maximum of 500 acres will be enrolled at $11.00/acre for 3 years, plus 125 - 150 acres may have both cover crops and conservation tillage (137 acres x $7/acre x 3 yrs)	19,375				23,935
Mower SWCD staff: 36 hr x $30/hr Fillmore SWCD staff: 116 hr x $30/hr				4,560	
4. A hay set-aside program that will allow limited hay harvest during specified times will increase perennial vegetation in riparian areas, headlands, and around sinkholes, springs and wetlands which will be targeted for the program. Acreage will be limited to 20 acres per cooperator with an estimated 10 cooperators for a total of 200 acres at $50/acre for 3 years.	30,000				32,640

**In-kind based on amounts committed in letters of support

Mower SWCD 8 hrs x $30/hr Fillmore SWCD 80 hrs x $30/hr				2,640	
5. A riparian wetland restoration in JD # 1 will be used to demonstrate a practice for temporary water storage that can reduce peak flows downstream. The demonstration will be in a visible area in the upper watershed area of JD#1 (SWCD cost estimate for 14-acre site = $27,000 + $3,000 for conservation drainage demonstration)	30,000				34,200
Mower SWCD staff -JD#1 Project: 140 hrs x $30/hr				4,200	
6. Forest and natural areas management incentives will include assistance to landowners for establishing up to four voluntarily donated permanent easements with the MN Land Trust (estimated @ $1900 each for contracted fees, materials and supplies) and for developing Forest Stewardship Plans with MN DNR (20-25 plans x $175/plan).	11,625				23,810
MN Land Trust staff time for education and landowner assistance				12,185	
7. The New Look at Livestock Initiative, a BALMM initiative, will be piloted by establishing a steering committee within the watershed to develop ways to promote and encourage livestock production that will help to establish more hay and pasture as perennial vegetation in the watershed. (8 members x 3 mtgs/yr x 3 yr x 2 hr/mtg = 144 hr x $30/hr)				4,320	5,520
Mower and Fillmore County feedlot staff (20 hrs x 2 staff x $30/hr)				1,200	
8. Economic analyses will be done by Riverland Technical College Farm Management on the MDA grazing management demonstration/research farms and with additional non-MDA cooperators. 24 hr/farm x 2 cooperators/yr x 3 yr x $30/hr x 3 non-MDA	12,960				12,960
Develop educational materials on benefits of livestock	500				500

**In-kind based on amounts committed in letters of support

B. Administration/coordination and Education/information					
1. Administration and education/information will be coordinated by a part-time watershed coordinator who will administer new programs established as part of this project, help with coordinating related projects and programs (such as the MDA managed drainage demonstration), and promote new and existing programs administered by other agencies that will help to achieve the goals of the project, such as the USDA Conservation Security Program, Continuous CRP, Environmental Quality Incentives Program, state cost-share programs, MDA grazing study, as well as education about water issues one-on-one with watershed landowners and with various groups and organizations. (Staff time 1040 hrs x $16.50/hr + benefits x 3 yrs = $58,510; Mileage 2000 mi/yr x 3 yr x $0.375/mi = $2,250; Other admin: $3,000 CWP General Obligation Note, etc.$3,400)	64,160				72,980
Fillmore SWCD: office space and overhead (telephone & postage)				2,700	
Volunteers and state and local staff on the watershed committee Citizen volunteers 5 x 4 mtgs/yr x 3 hrs/mtg x 3 yrs x $15/hr + County, state staff 3 x 2 mtgs/yr x 3 hrs/mtg x 3 yrs x $30/hr				6,120	
2. MDA will be coordinating workshops and meetings for farmers and the ag industry on TMDLs and pollutant reduction practices and setting up field demonstrations of BMPs that are tailored to the landscape. (600 hr x $25/hr)				15,000	15,000
3. At least two grazing workshops will be conducted in the watershed in cooperation with MDA staff to encourage adoption of managed grazing systems. Include presentation of economic analyses of existing grazing systems.	500				2,340
MDA staff (16 hr x $25/hr)				400	
Fillmore Co. (40 hr) + Mower Co. (8 hr) staff x $30/hr				1,440	
4. Conduct at least two homeowners' ISTS operation and maintenance workshops for watershed residents.	500				500
5. Conduct field days and other educational activities for landowners on forest management with DNR Forestry	500				500

**In-kind based on amounts committed in letters of support

6. Education and information for watershed residents will include the watershed Newsletter published 2x/year, open houses, informational meetings, and other education events as opportunities arise.	5,000				5,000
7. Water tests for bacteria and atrazine in about 50% of the private wells will be subsidized. There will be follow up on the results with well owners. Free nitrate testing will also be offered using MDA equipment.	5,800				8,800
Well owners' share of testing = $15/test x approximately 200 tests				3,000	
C. Measuring Results					
1. The stream monitoring station at the Historic Forestville bridge will be maintained. Grab samples for nutrients, turbidity, total suspended solids, and bacteria will be collected on a regular schedule, as well as during runoff events (2 samples/mo x 10 mo x $100/sample x 3 yr). Biological monitoring that follows up on work done during Phase I of the project will be conducted at selected sites. Citizen Stream Monitoring Program volunteers will continue to monitor several sites. Cooperation with MDA with collecting pesticide samples at the Historic Forestville site twice a year will continue. Submit to MPCA all water monitoring data collected over the past year	6,000				12,300
CSMP volunteers 7 x 20 hrs/ yr x 3 yrs x $15/hr				6,300	
2. Dye tracing will fill data gaps to help in understanding surface water and ground water interconnections and ground water pathways that carry pollutants. 1 triple trace/yr x $5000/triple trace x 3 yr	15,000				15,000
3. Crop residue transect surveys will track changes in land use practices, and GIS will be utilized to map these changes, as well as other data relevant to understanding land use, water quality, and landscape characteristics. (Due to uncertainties with county staffing configurations, funding for staff time for GIS may be shifted to other evaluation and monitoring efforts depending on staff availability. (0.125 FTE x 2080 hr x $18/hr + benefits x 3 yr)	17,500				20,045

**In-kind based on amounts committed in letters of support

Crop Residue Transect Survey Mower SWCD(8 hr) + Fillmore SWCD (32 hr) x $30/hr				1,200	
Mower SWCD: GIS support (8 hr/yr x 3 yr x $30/hr)				720	
Fillmore SWCD: GIS office space and overhead (computer equip.)				625	
4. MDA on-farm interviews will follow up on those done in the spring of 2004 (60 interviews x $500/interview). Computer models will aid in gauging current practices and the effectiveness of new practices ($20,000). Although not part of this project, there will be cooperation on a complementary MDA grazing study that will monitor runoff to compare the nutrient and bacteria concentrations from rotational and conventional grazing sites and a manured crop field.	50,000				50,000
TOTALS	**$ 299,420**	**300,000**	**30,000**	**99,490**	**728,910**

**In-kind based on amounts committed in letters of support