City of Ottawa Rural Clean Water Program

Ducks Unlimited Canada

Grenville Land Stewardship Council

Local Farmers

North Dundas Township

Ontario Federation of Agriculture

Ontario Ministry of Agriculture and Food

Ontario Ministry of Environment

Parmalat Canada

Soil & Crop Improvement Association

South Nation Conservation

Village of Casselman

AUGUST 2007

South Nation Conservation

CLEAN WATER PROGRAM

2006 Annual Report

Prepared for: Clean Water Committee
Prepared by: Ronda Boutz, Water Quality Coordinator

2006 Clean Water Program Annual Report

South Nation Conservation Watershed Municipalities:

Alfred-Plantagenet
Augusta
Casselman
City of Ottawa
Clarence Rockland
Edwardsburgh/Cardinal
Elizabethtown-Kitley
Nation
North Dundas
North Glengarry
North Grenville
North Stormont
Russell
South Dundas
South Stormont

Levy dollars from watershed municipalities have played a large role in sustaining the Clean Water Program since its establishment in 1993. Municipal dollars help secure matching funds from government grant programs that have resulted in the expansion the Clean Water Program over the years.

2006 Clean Water Program Funding Partners:

FROMAGE St-Albert CHEESE

TOMLINSON

parmalat

Eastern Ontario Water Resources Committee / Comité des ressources en eau de l'Est de l'Ontario

South Nation Conservation de la Nation Sud

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1. Clean Water Program Background

The Clean Water Program has provided a pro-active approach to protection of South Nation River water resources since 1993. The farming and rural communities benefit from improved water quality through this program. Many watershed residents rely on the South Nation River for drinking water, livestock watering, crop production, recreation, and fisheries habitat.

Since 1993, approximately $1.8 million has been granted to local farmers and landowners for 509 projects that address non-point source pollution and protect surface and ground water quality. Total value of these projects is estimated at $7,339,935.

In 2005, the South Nation Conservation (SNC) jurisdiction increased to include the portions of the Townships of South Dundas, Edwardsburgh-Cardinal, and Augusta along the St. Lawrence River that were formally not part of any Conservation Authority. Clean Water Program grants will now be available to landowners in South Dundas. SNC is working with the townships of Edwardsburgh-Cardinal and Augusta to offer grants in their extended area as well.

The Clean Water Program focuses on the following aspects:

a) Local surface and ground water quality improvement through improved rural, urban and agricultural land management techniques;
b) Extension, education and technology transfer;
c) Grants to landowners and community groups to complete projects and adopt practices which reduce nutrient, sediment and bacteria contributions to surface watercourses, and reduce the potential impact to ground water resources, and
d) Approval of project proposals by the Clean Water Committee based on the project's potential to improve water quality and cost effectiveness.

2. 2006 Clean Water Program Funding

The SNC Clean Water Committee thanks all partners and contributors to the Clean Water Program for helping to ensure the long-term success of the Program.

For specific details on Program funding, please refer to the budget in section 19.

a) <u>St. Albert Cheese</u>

In 2004, St. Albert Cheese committed to a 3-year, $21,000 contribution to the Clean Water Program. The third $7,000 instalment was presented at the July 31st, 2006 Clean Water Committee meeting.

2006 St. Albert Cheese cheque ($7,000) presentation to the Clean Water Committee

b) Parmalat Canada

2006 Parmalat cheque ($5,000) presentation to the Clean Water Program

Parmalat has a long history of contributing to SNC, providing $255,000 to the Clean Water Program between 1998-2005. These past donations have helped to fund over 80 landowner cost-share grants to implement best management practices.

In 2006, Parmalat donated $5,000 to the Clean Water Program.

c) Total Phosphorus Management

One municipality contributed $25,644 in funding to the Clean Water Program in 2006 as part of their Total Phosphorus Management (TPM) agreement with South Nation Conservation. For more information on the TPM program and municipal contributions please refer to section 10 Total Phosphorus Management.

d) South Nation Conservation

The South Nation Conservation Board of Directors approved a total contribution of $34,989 to the Clean Water Program in 2006. SNC's contribution to the Program comes from Municipal levy dollars. This cash contribution does not include senior staff time for support of Program implementation and reporting.

e) R.W. Tomlinson Ltd.

R.W. Tomlinson Ltd. made a 4-year, $25,000 commitment to SNC's water quality programs. In 2006, the 3rd instalment of $5,000 was provided to SNC. The funding was directed to monitoring initiatives, including support of the RiverWatch Program. A small portion of the funding was used communication initiatives for the Clean Water Program.

f) Eastern Ontario Water Resources Committee (EOWRC)

In 2006, EOWRC and the United Counties of Stormont, Dundas & Glengarry provided $20,000 in funding for Abandoned Well Decommissioning grants and project delivery in Eastern Ontario. Of this total funding, $8,759 was allocated to grants within the South Nation River watershed. Refer to section 16 for more information.

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3. 2006 CLEAN WATER COMMITTEE MEMBERSHIP

The Clean Water Program is directed and implemented by a Clean Water Committee. The Committee is responsible for all aspects of the Program, including; budget, Program funding priorities, Program grant rates and guidelines, landowner project approval, monitoring, education, promotion, and research initiatives.

The multi-stakeholder Committee, with a majority of agricultural-based representatives (as agriculture accounts for ~60% of the watershed land use), that has proven beneficial for networking with landowners within the South Nation River watershed. The ability of the Committee to work in harmony with the local landowners, agricultural groups, government, and other organizations has made it a model to be followed in other areas of the Province.

The Committee member's experience and expertise in best management practices enables them to deliver the Program in a fair and cost effective manner.

2006 Clean Water Committee membership:

- Denis Perrault, Committee Chair
- Erling Armson, Ducks Unlimited Canada
- John Brown, Parmalat
- Luc Brunet, Ontario Ministry of Agriculture, Food and Rural Affairs
- Archie Byers, South Nation Conservation
- Claude Cousineau, Vice Chair, South Nation Conservation (ex-officio)
- Conrad deBarros, Ministry of Environment
- Lise Guèvremont, City of Ottawa, Ottawa Rural Clean Water Program
- Chris Kinsley, Ottawa Rural Clean Water Program
- Alan Kruszel, Eastern Counties Representative, Ontario Federation of Agriculture
- René Lalonde, Beef Farmer
- Keith Matthie, Soil & Crop Improvement Association
- Gaston Patenaude, Chair, South Nation Conservation (ex-officio)
- Donald Patterson, Ottawa Rural Clean Water Program (alternate)
- Jackie Pemberton, Dairy Farmer
- Denis Pommainville, South Nation Conservation
- Estella Rose, North Dundas Township
- Arlene Ross, Ottawa Rural Clean Water Program
- Norm Tinkler, Dairy Farmer
- Adrian Wynands, Grenville Land Stewardship Council

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4. 2006 Clean Water Program Grant Structure

The Clean Water Program grant structure is presented in Table 1. Project costs are shared with the landowners, with a maximum grant applicable to all projects.

Table 1: 2006 Clean Water Program Grant Structure

Project Type	Grant Cost Share	Maximum Grant*
Septic system repair	Up to 50%	Up to $1,000
Livestock fencing restriction Completed by contractor OR Completed by landowner	Up to 75% OR Up to 100% for cost of materials	Up to $5,000
Milkhouse wastewater treatment	Up to 50%	Up to $5,000
Manure storage	Up to 50%	Up to $10,000
Barnyard runoff control/clean water diversion	Up to 50%	Up to $5,000
Constructed wetlands for wastewater treatment	Up to 50%	Up to $10,000
Nutrient management plans	Up to 50%	Up to $500
Buffer strips	Up to 50%	Up to $5,000
Fertilizer, chemical and fuel storage	Up to 50%	Up to $1,000
Educational initiatives	Up to 50%	Up to $5,000
Decommissioning abandoned wells**	Up to 100%	Up to $500

* **With the exception of the decommissioning of abandoned well grant, all other grants were reduced by half of the amount published above at the July 31st, 2007 meeting. This decision was made in an effort to provide funding to a greater number of projects.**

** Grant funding provided by the Eastern Ontario Water Resources Committee (EOWRC).

Other projects, not listed, may be considered for funding by the Clean Water Committee on a case-by-case basis. Projects must show the potential to improve local surface and/or ground water quality, must be located within the South Nation River watershed, and must be cost effective.

5. Clean Water Program Representatives

The Committee began to use members of the community as Clean Water Program Representatives (Reps) to complete site visits in 1999. Reps are hired on a part-time, casual basis and have experience in agricultural BMPs.

The use of Reps has resulted in increased exposure for the Program and enhanced networking with landowners. SNC retained 5 Reps (Robert Gratton,

René Lalonde, Jackie Pemberton, Norm Tinkler, and Adrian Wynands) to assist with Program delivery in 2006.

In 2006, the Reps completed approximately 55 site visits and attended 9 meetings, training sessions and promotional events to represent the Clean Water Program. The cost to use Reps in 2006 was $4,281; this has proven to be a cost effective delivery model and will be recommended for continued use in 2007.

6. BIOSECURITY

In 2001, as a response to growing concerns about Foot and Mouth disease and other contagious agents that can be spread from farm to farm; SNC implemented minimum biosecurity practices for all staff (including Program Reps) completing site visits on livestock operations. These biosecurity measures remained in effect for the protection of our farming community. Staff have the choice between two different biosecurity methods; plastic boot covers and/or disinfectant boot washes. Staff, whenever possible, limit their visits to one livestock operation per day. Unnecessary access to livestock barns, out buildings, and pasture areas during site visits are avoided when possible. Staff vehicles are also kept as far from the livestock areas as possible during site visits.

7. LANDOWNER CONFIDENTIALITY

SNC implemented a project coding system in 2000 in response to applicant concerns for “right to privacy”. The coding system provides confidence in the Clean Water Committee’s ability to make unbiased decisions, as they do not know the identity of the landowner applying for Program grants. The coding system also addressed concerns from the farming community that Total Phosphorus Management funds not be linked to specific landowners and projects. Similar systems for confidentiality are used in other incentive programs, such as the Environmental Farm Plan and the Ottawa Rural Clean Water Program.

All information collected through the Clean Water Program application process is used for the sole purpose of determining eligibility under the Clean Water Program. Information from deferred, denied or un-reviewed project applications is also treated as confidential. However, all information collected for the purposes of application for funds through the Clean Water Program is subject to the Municipal Freedom of Information and Protection of Privacy Act, c.M.56, as amended, and may be subject to disclosure under that Act.

SNC reserves the right to use information from approved projects for Program promotion and reporting; however, individual landowner names and specific project locations are not disclosed unless SNC has obtained permission from the landowner.

8. Phosphorus Reduction Calculations

An estimated phosphorus reduction is calculated for each individual project (for which we have a defensible calculation) completed through the Clean Water Program. These calculations are based on an extensive review of the most reliable science available. SNC, under the direction of an expert panel, completed a review of the phosphorus calculations in 2003. Calculations were revised as necessary to ensure the most up-to-date research was incorporated. Please refer to *Phosphorus Loading Algorithms for the South Nation River* (January 2003) for more information.

These calculations have been accepted by the Ministry of Environment as an accurate and defensible means to estimate phosphorus reduction for projects funded through the Total Phosphorus Management Program (see section 10 for more information of the Total Phosphorus Management Program).

Additional research is required to develop a practical, defensible calculation for shoreline erosion protection projects. Current calculations are too complex to be practically implemented at the field level. This project type will not be eligible for Total Phosphorus Management Program funding until a calculation is available.

9. Project Summary

9.1 2006 Completed Projects

In 2006, the Clean Water Program provided $47,007 in grants to 35 projects, reducing annual phosphorus contributions to watercourses by approximately 835 kilograms. The total cost of these 35 projects was $680,776; therefore, landowner contributions totalled $633,769.

Table 2 provides a summary of the projects (by project type) completed under the 2006 Clean Water Program. A total of 44 projects were approved; 35 projects were completed and 9 projects did not proceed.

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Table 2. Summary of Completed Projects in 2006

Type of Project	# of Projects Approved	# of Projects Completed	Phosphorus Reduced (kg/yr)	Total Project Cost	Landowner Share	Total CWP Grant
Barnyard Runoff/Clean Water Diversion	2	2	19	$19,845	$16,984	$2,861
Livestock Fencing	4	1	22	$7,156	$4,656	$2,500
Buffer Strip*	3	1	0.5	$0	$0	$270
Manure Storage	7	5	565	$509,525	$487,425	$22,100
Milkhouse Wastewater	4	4	197	$88,700	$79,933	$8,767
Nutrient Management Plans	2	1	25	$2,968	$2,718	$250
Septic System Repair	4	3	7	$30,692	$29,192	$1,500
Well Abandonment	18	18	n/a	$21,890	$13,131	$8,759
TOTALS	**44**	**35**	**835**	**$680,776**	**$633,769**	**$47,007**

* Completed Buffer strip project was for a performance incentive of $150/ac/year for a maximum of 3 years.

Manure storage "before" photo

Manure storage "after" photo

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Table 3 provides details of the projects completed in 2006. This information includes project code, municipality, project type, estimated phosphorus reduction, project costs, and grants paid out. Phosphorus reduction calculations are available upon request.

Table 3: Summary of 2006 Clean Water Program Completed Projects

Project Code	Municipality	Project Type	P Reduction	Project Cost	Grant Paid
2005-NST-CW-19B	North Stormont	Buffer Strip-2nd year payment	0.5		$270
2006-EDW-CW-22B	Edwardsburg/Cardinal	Clean Water Diversion	5	$18,400	$2,500
2006-NAT-CW-20A	Nation	Clean Water Diversion	14	$1,445	$361
2004-NST-CW-21C	North Stormont	Fencing	22	$7,156	$2,500
2006-APL-CW-26A	Alfred-Plantagenet	Manure Storage	101	$89,823	$5,000
2006-NAT-CW-01A	Nation	Manure Storage	18	$25,105	$2,100
2006-NDU-CW-32	North Dundas	Manure Storage	184	$94,361	$5,000
2005-NST-CW-23A	North Stormont	Manure Storage	94	$20,236	$5,000
2006-NST-CW-08A	North Stormont	Manure Storage	168	$280,000	$5,000
2006-APL-CW-26B	Alfred-Plantagenet	Milkhouse Washwater	38	$14,700	$2,500
2006-NAT-CW-01B	Nation	Milkhouse Washwater	28	$12,933	$2,500
2006-NAT-CW-20B	Nation	Milkhouse Washwater	21	$5,068	$1,267
2006-NST-CW-08B	North Stormont	Milkhouse Washwater	110	$56,000	$2,500
2006-NDU-CW-14B	North Dundas	Nutrient Management Plans	25	$2,968	$250
2005-NAT-CW-28	Nation	Septic	2	$15,942	$500
2006-NDU-CW-17	North Dundas	Septic	1	$8,000	$500
2006-NST-CW-28	North Stormont	Septic	4	$6,750	$500
2006-RUS-CW-32	Russell	Well Decommissioning	n/a	$476	$340
2006-RUS-CW-31	Russell	Well Decommissioning	n/a	$450	$450
2006-NST-CW-46	North Stormont	Well Decommissioning	n/a	$469	$469
2006-APL-CW-15	Alfred-Plantagenet	Well Decommissioning	n/a	$650	$500
2006-AUG-CW-21A	Augusta	Well Decommissioning	n/a	$5,462	$500
2006-AUG-CW-21B	Augusta	Well Decommissioning	n/a	$2,970	$500
2006-RUS-CW-29	Russell	Well Decommissioning	n/a	$800	$500
2006-NGR-CW-30	North Grenville	Well Decommissioning	n/a	$500	$500
2006-NST-CW-33	North Stormont	Well Decommissioning	n/a	$500	$500
2006-NAT-CW-34	Nation	Well Decommissioning	n/a	$550	$500
2006-EDW-CW-36	Edwardsburg Cardinal	Well Decommissioning	n/a	$1,300	$500
2006-NDU-CW35	North Dundas	Well Decommissioning	n/a	$1,700	$500
2006-NAT-CW-42	Nation	Well Decommissioning	n/a	$1,038	$500
2006-AUG-CW-41	Augusta	Well Decommissioning	n/a	$1,200	$500
2006-NDU-CW-45	North Dundas	Well Decommissioning	n/a	$950	$500
2006-AUG-CW-43	Augusta	Well Decommissioning	n/a	$1,500	$500
2006-CLR-CW-44	Clarence Rockland	Well Decommissioning	n/a	$875	$500
2006-NGL-CW-10	North Glengarry	Well Decommissioning	n/a	$500	$500
		Grand Total	**835**	**$680,776**	**$47,007**

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9.2 1993-2006 COMPLETED PROJECT SUMMARY

Table 4 provides a summary of the projects completed through the Program for 1993-2006. Since 1993, the Program has granted over $1.8 million to complete 509 projects. These projects have reduced the annual phosphorus contributions to the watershed's rivers by about 11,762 kilograms.

TABLE 4: Clean Water Program 1993-2006 Project Summary

Type of Project	Year	Number of Project	Phosphorus Reduced (kg/yr)	Total Cost of the Project	Total Landowner Share	Total Grant Paid
Septic System Repair	1994	26	26	$139,622	$88,579	$51,043
	1995	19	19	$111,014	$73,014	$38,000
	1996	7	7	$38,947	$31,947	$7,000
	1997	20	20	$121,831	$100,056	$21,775
	1998	19	103	$105,770	$87,285	$18,485
	1999	4	31	$22,128	$18,041	$4,087
	2000	2	15	$16,616	$14,616	$2,000
	2001	2	2	$17,613	$15,613	$2,000
	2002	8	48	$52,989	$44,689	$8,300
	2003	9	6	$58,211	$49,161	$9,050
	2004	12	26	$103,960	$91,960	$12,000
	2005	6	8	$60,690	$54,690	$6,000
	2006	3	7	$30,692	$29,192	$1,500
Erosion Protection	1997	6	n/a	$23,115	$13,415	$9,700
	1998	4	n/a	$63,041	$43,041	$20,000
	1999	8	n/a	$49,078	$30,123	$18,955
	2001	11	n/a	$105,151	$61,381	$43,770
	2002	2	n/a	$20,749	$10,185	$10,564
	2003	1	n/a	$4,975	$2,363	$2,612
Manure Storage	1994	5	75	$141,543	$82,175	$59,368
	1995	15	152	$519,485	$307,646	$211,839
	1996	6	78	$128,577	$91,577	$37,000
	1997	4	25	$116,831	$95,831	$21,000
	1998	4	54	$150,914	$118,578	$37,336
	1999	6	265	$131,741	$68,658	$63,083
	2000	5	213	$242,849	$190,849	$52,000
	2001	14	881	$770,380	$647,500	$122,880
	2002	15	784	$695,558	$541,119	$154,439
	2003	12	2,678	$721,428	$607,342	$114,086
	2004	6	396	$151,624	$115,048	$36,576
	2005	10	1,450	$745,964	$660,824	$85,140
	2006	5	565	$509,525	$487,425	$22,100

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TABLE 4: Clean Water Program 1993-2006 Project Summary (continued)

Type of Project	Year	Number of Project	Phosphorus Reduced (kg/yr)	Total Cost of the Project	Total Landowner Share	Total Grant Paid
Barnyard Runoff/Clean Water Diversion	1999	1	21	$14,536	$9,536	$5,000
	2001	1	16	$3,138	$1,569	$1,569
	2002	1	7	$590	$265	$325
	2003	5	81	$44,983	$28,525	$16,458
	2004	4	47	$28,732	$15,838	$12,894
	2006	2	19	$19,845	$16,983	$2,861
Fuel, Chemical, Pesticide Storage and Handling	2002	2	n/a	$8,634	$5,334	$3,300
	2003	1	n/a	$1,418	$818	$600
	2004	5	n/a	$10,384	$5,988	$4,396
	2005	2	n/a	$4,068	$2,500	$1,568
Milkhouse Wastewater	1994	1	70	$13,125	$8,125	$5,000
	1995	9	555	$89,199	$51,319	$37,880
	1996	4	235	$31,400	$13,801	$17,599
	1997	1	52	$1,810	$905	$905
	1998	2	81	$12,537	$6,602	$5,935
	1999	2	96	$25,785	$15,285	$10,500
	2001	7	530	$76,310	$51,549	$24,761
	2002	7	245	$66,624	$40,078	$26,546
	2003	4	204	$37,046	$26,288	$10,759
	2004	4	162	$71,081	$60,062	$11,019
	2005	6	317	$104,546	$78,087	$26,459
	2006	4	197	$88,700	$79,934	$8,767
Commercial Wastewater	1997	1	n/a	$14,396	$9,396	$5,000
	2001	1	n/a	$11,615	$6,115	$5,500
Livestock Access Restriction from Waterways	1993	1	4	$2,223	$1,223	$1,000
	1994	6	43	$11,076	$2,768	$8,308
	1995	18	158	$96,600	$30,204	$66,396
	1996	7	34	$28,353	$11,177	$17,176
	1997	2	11	$7,842	$3,921	$3,921
	1998	1	17	$6,164	$1,223	$4,941
	2000	1	7	$3,386	$1,693	$1,693
	2001	2	15	$5,309	$1,032	$4,277
	2002	11	71	$40,724	$8,730	$31,994
	2003	9	141	$21,759	$490	$21,269
	2004	7	63	$31,340	$6,665	$24,675
	2006	1	22	$7,156	$4,658	$2,500

TABLE 4: Clean Water Program 1993-2006 Project Summary (continued)

Type of Project	Year	Number of Project	Phosphorus Reduced (kg/yr)	Total Cost of the Project	Total Landowner Share	Total Grant Paid
Buffers	2003	1	16	$599	$285	$315
	2004	1	2	$1,705	$852	$853
	2005	1	0.7	$268	$134	$494
	2006	1	0.5	$0	$0	$270
Private Wellhead Protection/Repair	1999	1	n/a	$5,619	$4,619	$1,000
	2001	1	n/a	$1,018	$458	$560
	2002	2	n/a	$3,558	$1,871	$1,687
	2003	9	n/a	$14,340	$8,850	$5,490
Abandoned Well Decommissioning	1999	1	n/a	$3,450	$2,950	$500
	2001	2	n/a	$1,574	$812	$762
	2002	1	n/a	$800	$400	$400
	2004	18	n/a	$19,179	$10,179	$9,000
	2005	24	n/a	$20,545	$9,021	$11,524
	2006	18	n/a	$21,890	$13,131	$8,759
Nutrient Management Plans	2004	3	263	$5,905	$4,405	$1,500
	2006	1	25	$2,968	$2,718	$250
Other	2002	3	n/a	$13,911	$7,009	$6,902
	2003	1	n/a	$7,561	$5,061	$2,500
TOTALS		**509**	**11,762**	**$7,339,935**	**$5,555,364**	**$1,790,205**

10. TOTAL PHOSPHORUS MANAGEMENT (TPM) PROGRAM

10.1 TPM SUMMARY

According to Provincial policy, where water quality does not meet Provincial standards for a specific contaminant, no further degradation of water quality will be allowed for that contaminant. However, in the past the Ministry of Environment (MOE) gave dischargers a permit to discharge phosphorus from their facilities into the South Nation River and its tributaries, even though the watercourses did not meet Provincial water quality objectives. Beginning in 1998, the MOE stopped issuing these permits and required all dischargers to have zero discharge of phosphorus from their facilities. MOE imposed this standard on new construction only (this includes expansion of existing facilities). Existing facilities that continued to operate according to their current permits are not required to reduce their phosphorus loading to zero.

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The Total Phosphorus Management (TPM) Program is an innovative, MOE approved, pilot phosphorus management strategy for the new or expanding municipal or industrial wastewater discharge facilities that must meet the zero phosphorus discharge limit. TPM allows the option of removing the phosphorus loads by implementing non-point source projects elsewhere in the watershed. The offsetting of point source phosphorus by non-point sources is implemented at a 4:1 ratio. This ratio results in a net water quality and environmental benefit, with four times as much phosphorus removed from non-point sources as is contained in the discharge (point source). This offsetting approach also has the added benefit of removing other contaminants (e.g. nitrogen, bacteria, and sediment) in addition to phosphorus.

Participation by municipalities or industry is voluntary and in most cases, TPM is more cost-effective than conventional treatment technology. The SNC Clean Water Program provides funding assistance to landowners for water quality improvement projects; as such, it provides the delivery mechanism for the TPM Program.

TPM participants pay a cost per kilogram for the phosphorus credits. The total cost of each TPM agreement is calculated by determining the dischargers annual phosphorus loading and multiplying it by 4 (4:1 ratio) to establish the phosphorus reduction target. This target is then multiplied by the set cost per kilogram (determined based on the history of the Clean Water Program and adjusted annually for cost increases). Discharges can negotiate an annual payment plan for their TPM agreement.

In August 1999, a TPM working group was formed to develop the roles and responsibilities of the TPM stakeholders and to oversee its implementation. The group consisted of:

- Ministry of Environment
- Ontario Ministry of Agriculture, Food & Rural Affairs
- Ontario Federation of Agriculture
- Ontario Soil and Crop Improvement Association
- Municipalities/industries participating in the TPM Program (past and present)
- South Nation Conservation

Since 2000, SNC has signed TPM agreements for 6 municipal wastewater treatment plants (WTP) and 2 landfill sites. These agreements include:

- North Stormont Township for Village of Finch (WTP)
- North Dundas Township for Winchester Village (WTP)
- Nation Municipality for the Village of Limoges (WTP)
- Village of Casselman (WTP)
- Nation Municipality/Village of Casselman (joint landfill)
- Laflèche Environmental Inc. (landfill)

As of December 2006, these six TPM agreements, have resulted in approximately $792,172 (includes grants and delivery) implemented through the Clean Water Program. In 2006, 86 kg/year was credited to the one current TPM agreements. Since 2001, a total of 2,980 kg/yr phosphorus credits have been allocated to the six TPM agreements.

10.2 PHOSPHORUS REDUCTION ANALYSIS

The following analysis is based solely on the total grants paid-out, compared to the total phosphorus reduced. The analysis does not take into account above or below average phosphorus reductions for individual projects.

Milkhouse washwater treatment and manure storage projects account for 94% of the total phosphorus reduction between 2000-2006. The high percentage (76%) for manure storages is partly attributed to the number of projects completed over this period; 67 of the 176 phosphorus-reducing projects completed between 2000-2006.

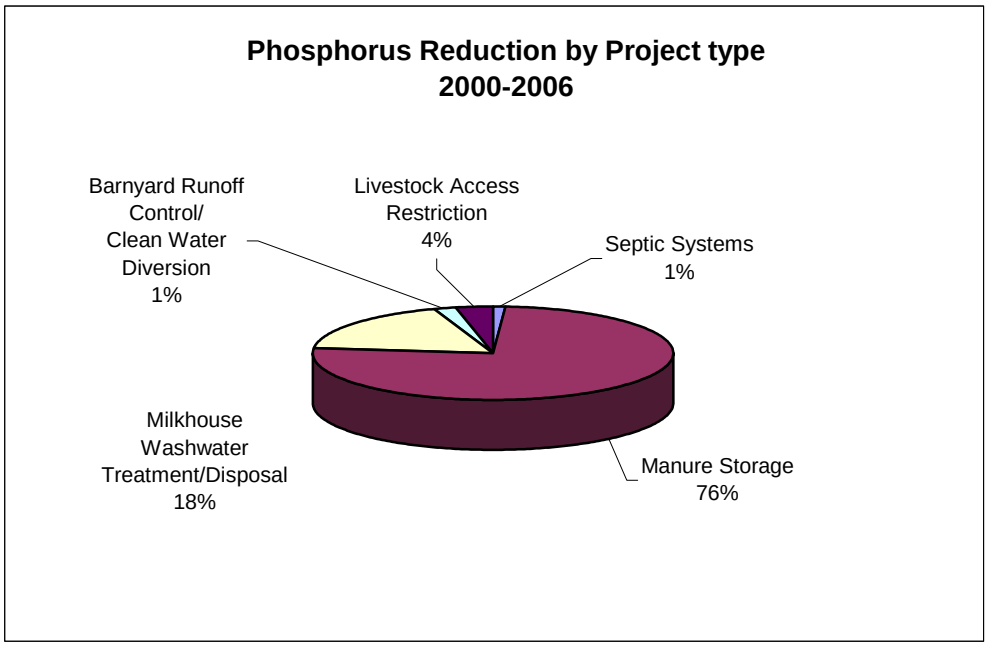

Figure 1: Phosphorus Reduction by Project Type, 2000-2006

Milkhouse washwater treatment projects account for only 32 of the 176 phosphorus-reducing projects; however, this project type has a very high average phosphorus reduction (52 kg/year) and amounts to the second largest reduction (18%) by project type.

Septic system repair/replacement projects account for 33 of the 176 phosphorus-reducing projects, yet only 1% of the total phosphorus reduction; this project type has an average phosphorus reduction of only 3 kg/yr.

Based on grant dollars per kilogram for phosphorus reduction, the cost per kilogram for each Total Phosphorus Management (see section 10) project type is illustrated in Figure 2.

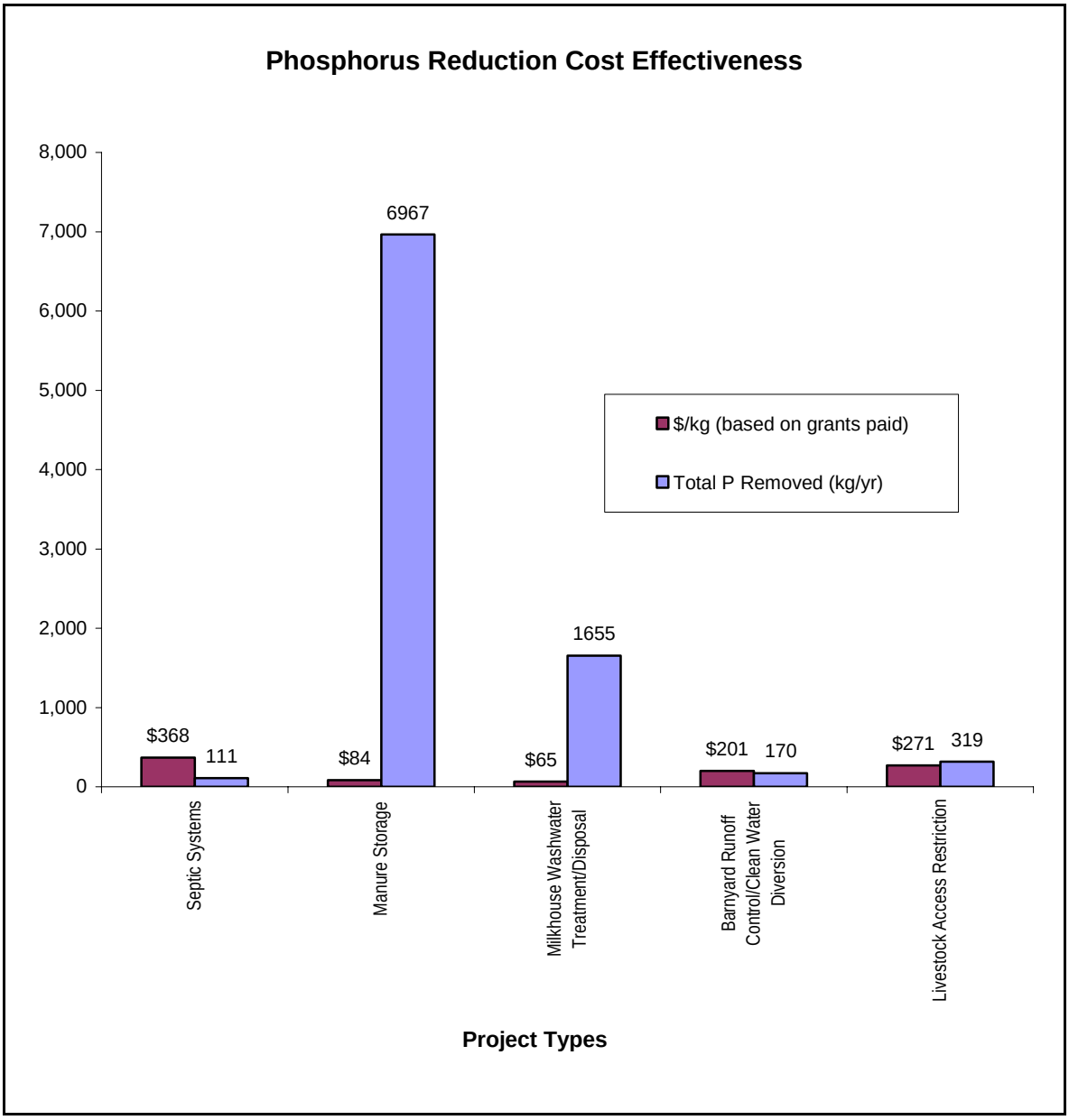

Figure 2: Phosphorus Reduction Cost Effectiveness, 2000-2006

10.3 TPM EVALUATION

As per the *Roles and Responsibilities* document, SNC and the Ministry of Environment (MOE) initiated an evaluation of the TPM Program after 5 years of implementation. This comprehensive evaluation will review all aspects of the TPM pilot program and will offer recommendations for future program delivery. SNC hired a consultant, Cullbridge Marketing and Communications, to assist with the evaluation and production of a final report. As part of the evaluation, Cullbridge conducted an extensive survey of TPM partners and landowners who completed phosphorus reducing projects through the Clean Water Program. Data collected included, knowledge of the TPM Program, satisfaction on Program delivery, and suggestions for improvement. The evaluation final report is being finalized.

11. SOUTH BRANCH SOUTH NATION RIVER EVALUATION

SNC in partnership with the Ontario Soil and Crop Improvement Association completed a "Managing Agricultural Drains to Accommodate Wildlife" project, under the Agriculture & Agri-Food Canada Wetlands/Woodlands/Wildlife Program, from 1994 to 1997. This project was covered four demonstration sites across the Ontario and had a total project value of approximately $600,000. The "South Branch of the South Nation River Project" was one of these demonstration sites. A wealth of baseline data was collected for the South Branch, including surveys of partridge, fish, invertebrates, wildlife and area farmers/landowners.

SNC staff electrofishing on the South Branch, South Nation River for fish sampling.

SNC was approved for funding (up to $70,000) under the Greencover Canada Demonstration Projects to conduct an evaluation of the project success after 10+ years of implementation. A comparative analysis of data from the mid 1990's with data to be collected in 2006-2007 will be used to evaluate the project.

The following components are included in evaluation:

- Landowners Survey – including landuse, wildlife, Hungarian Partridge, and fisheries within the study area
- Field Sampling – wildlife, Hungarian Partridge, fisheries, water quality, and invertebrates
- Evaluation of the fish mitigation structures that were installed as part of the channelization project (early 1990s)
- Evaluation of the buffer
- Replanting of the buffer where necessary – voluntary landowner participation
- Evaluation of the channelization project

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12. WATER QUALITY MONITORING

12.1 SURFACE WATER MONITORING

Provincial Water Quality Monitoring and Watershed Characterization Networks

SNC staff taking a reading from a multi-probe while surface water sampling.

SNC continues to collect surface water samples through the Provincial Water Quality Monitoring Network (PWQMN) and Watershed Characterization (WC) Network. These networks are coordinated through the Ontario Ministry of the Environment (MOE) with technical expertise and laboratory support provided by staff at the MOE.

SNC collects surface samples at thirteen sites throughout the watershed on a monthly basis when the watercourses are free of ice. These samples are tested at the Ministry laboratories in Etobicoke, Ontario for suspended solids, major ions, and nutrients, and metals.

While at the sample site, SNC staff also take readings of pH, conductivity, temperature, and dissolved oxygen.

The water quality information collected at these thirteen sites is incorporated into the Provincial Water Quality Monitoring Network database. SNC has available, upon request, the information collected while in the field, and the laboratory reports detailing the results of the water quality tests performed on the samples collected.

Algal Sampling

In 2006, SNC supported research at the University of Ottawa on the primary productivity and algal populations (measured as Chlorophyll A concentrations) in the South Nation River (SNR). At each of the 13 PWQMN and WC sampling sites, an additional water sample was taken to determine Chlorophyll A concentrations. Algal abundance is a better indicator (than phosphorus) of eutrophication and this information will be used to better assess the state of the SNR.

RiverWatch

SNC re-established the volunteer RiverWatch Program in 2004, after a year hiatus. With financial assistance from R.W. Tomlinson Ltd., SNC purchased 6 new and improved test kits for surface water sampling. These kits were distributed to returning and new volunteers to the RiverWatch Program.

Grenville Christian Academy RiverWatch training.

With training provided by SNC, volunteers sample their local site monthly, during ice-free conditions. Data gathered through this program is used to augment water quality data collected through the PWQMN and Watershed Characterization monitoring networks. The volunteers continued to sample throughout 2006 for this program.

Ontario Benthic Biomonitoring Network (OBBN)

Ephemeroptera (Mayfly), is an example of a benthic invertebrate that can be used as a biological indicator of water quality.

In 2006, SNC participated in the Ontario Benthic Biomonitoring Network (OBBN) in conjunction with the MOE. A total of 5 sampling sites were established for long-term monitoring. Sites were sampled in October and data will eventually be incorporated into the MOE's Provincial database.

SNC has initiated a new sampling regime using the OBBN to try and collect data in areas previously lacking. The regime is based on dividing the watershed into 5 sections and each year a section is sampled at 10 different sites. Over the course of 5 years the entire watershed will be covered, allowing for a complete watershed-wide water quality report to be produced, in conjunction with PWQMN and WC data.

12.2 GROUNDWATER MONITORING

In 2001 and 2002, the MOE hydrogeologists and SNC staff identified sensitive groundwater areas within the SNR watershed that would be incorporated into the Provincial Groundwater Monitoring Network (PGMN). SNC currently maintains 17 wells for the network.

The purpose of this network is to monitor groundwater quantity and quality in these sensitive aquifers. To achieve this goal, all wells have been equipped with dataloggers capable of recording the water levels in each well. In addition, where feasible, wells have also been equipped with telemetry units for remote access to download data. The dataloggers currently collect water level readings hourly.

SNC staff maintaining telemetry unit and datalogger on a PGMN well.

The MOE's main computer connects with each well in the PGMN at a scheduled time and downloads the information from the datalogger. Wells without telemetry units are manually downloaded by SNC staff. A message is sent to SNC to verify the data from the well to ensure that it is accurate. Once the data is confirmed to be reasonable, it is incorporated into a long-term PGMN database.

In conjunction with the water quantity component of the PGMN, a baseline analysis of the water quality of each well was performed in 2003. A comprehensive suite of water quality variables were tested for presence and concentration in the water collected from each well. These tests included nutrients, metals, volatile organic compounds, herbicides, and pesticides. This first round of sampling costs were covered by the Ministry of the Environment.

Due to the legal requirements of Regulation 903 (and Regulation 128: *amendments to Reg 903*), SNC staff are not licensed to sample the PGMN wells using current Program equipment. For this reason, no water quality sampling occurred since 1994. SNC staff continued to maintain the dataloggers and telemetry units on the wells. The MOE is working on installing dedicated pumps into as many PGMN wells as feasible; this will allow staff to legally sample water quality in the future.

13. AGRICULTURE AND AGRI-FOOD CANADA (AAFC) PARTNERED RESEARCH PROJECTS

13.1 MICROBIAL SOURCE TRACKING (MST)

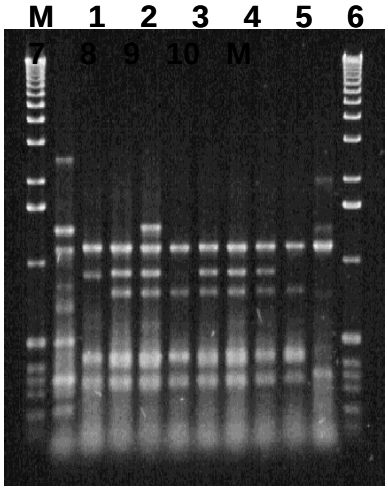
A major 4-year water quality study is currently underway in the Provinces of New Brunswick, Alberta, and Ontario. The South Nation River watershed has been selected as the study region representing the Province of Ontario. This research project is being coordinated by SNC's Clean Water Committee in partnership with Agriculture & Agri-Food Canada (AAFC), and Health Canada.

The project has two components; the focus of first research component is to:

- Implement a surface water monitoring program with sample sites located at municipal drinking water intakes and recreational areas upstream of the Village of Casselman.
- Identify *E. coli* and other bacteria affecting water quality.

The second component of the study is:

- The development and validation of microbial-based testing techniques used to identify sources of bacterial contamination.
- The identification of the bacterial composition of various sources of fecal contamination (e.g. livestock operation lagoons, municipal wastewater lagoons, septic systems, wildlife, and domestic pets.).
- The creation of a microbial reference library cataloguing the bacterial composition results obtained from DNA-based methods.



Example of a microbial DNA fingerprint

Agriculture and Agri-Food Canada (AAFC) approached SNC for a couple of reasons; firstly, because of the good-standing relationship with area farmers and rural landowners and secondly, because several municipalities draw their drinking water directly from the South Nation River (Village of Casselman was selected as the focus of the study area). SNC's role is to be the primary contact with local residents and to facilitate surface water sampling and fecal sample collection. Program Reps were utilized to make the first contact with residents in the study area and to collect fecal samples from voluntary participants. SNC produced a number of 1-page fact sheets with project information that was distributed to residents in the study area.

In an effort to reduce project costs in 2006, the surface water monitoring component was conducted by AAFC staff. However, SNC staff continued to facilitate stakeholder contacts, as required.

13.2 WATERSHED EVALUATION OF BENEFICIAL MANAGEMENT PRACTICES (WEBS)

The Watershed Evaluation of Beneficial Management Pracitices (WEBs) study is a $5.65-million project led by Agriculture and Agri-Food Canada (AAFC). It is largely funded throught AAFC's Greencover Canada program. Ducks Unlimited Canada, a key partner, is contributing. The study will occur from 2004 to 2008.

WEBs stop on the CA Watershed Stewardship Tour, June 2006.

The South Nation River watershed, specifically the Little Castor River sub-watershed, has been selected as one of seven watersheds across Canada for the WEBs study. This research project is being coordinated by SNC in parnership with AAFC.

The objectives of the study are to determine how effetive BMPs are in decreasing inputs of various nutrients and bacteria to the river. Unlike previous studies of this nature, the focus of WEBs is collecting scientific data using a paired watershed approach (one control watershed and one research watershed that can be alternated throughout the course of the study). This project overlaps with the MST study area and the same surface water quality monitoring stations (sampled by AAFC) are used for this project.

The following BMPs will be studied in the South Nation project:

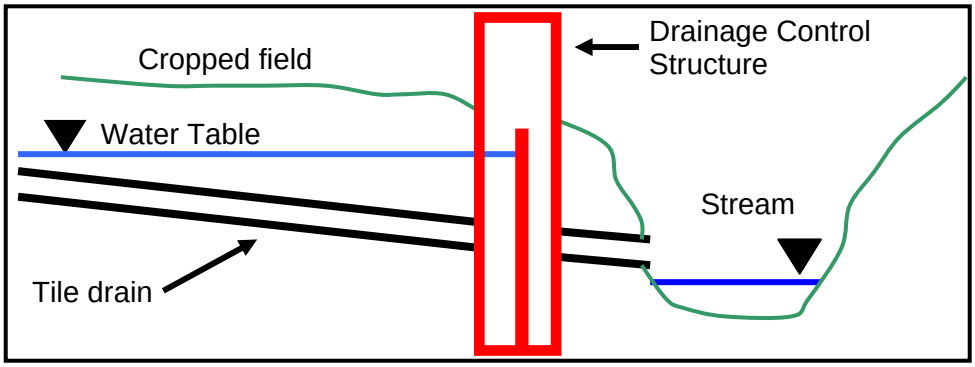
- Controlled Tile Drainage
- Cattle Restriction to Streams

The project will also include an economics component, to determine the cost/benefit for the two BMPs.

A WEBs Steering Committee was formed to provide input to the research study. The Committee is comprised of AAFC, SNC, Ducks Unlimited, University of Ottawa, and OMAFRA.

Controlled Tile Drainage

The effects of controlled tile drainage have been shown in other studies to increase water, nutrient and sediment retention on farmer's fields during periods when they are most needed (summer and draught conditions). These benefits are in addition to the regular benefits of traditional tile drains. The control is accomplished by the manual positioning of a sluice gate that can be adjusted to the desired height for optimal water retention without causing flooding. The drawing below shows the cross-sectional schematic for the control structures.



Schematic of tile drain control structure instalment for the WEBs – controlled tile drainage BMP.

AAFC and SNC had 36 drainage control structures (figure 1) installed in 18 fields in 2006. A significant monitoring effort is underway (figure 2) to capture any changes in water quality from the controlled and uncontrolled tile drains in the study area, in addition to regular monitoring of water quality in municipal drains and local rivers.

Figure 1: Tile drain control structure installed on a tile header for the WEBs – controlled drainage BMP.

Figure 2: Automated sampler set-up to sample flow from the tiles for the WEBs – controlled drainage BMP.

Cattle Restriction to Stream

Cattle fencing and alternate watering project site for WEBs project.

The second project component, restricted versus unrestricted access of cattle to a stream, was implemented in 2006.

Fencing, nose pumps, and stock tanks were installed in the spring of 2006. The following field activities are being carried out in both the restricted and unrestricted cattle pastures:

- Surface water quality sampling
- Hydrograph sampling
- *Cryptosporidium* genome tracking
- Stream discharge measurements

14. WATER RESPONSE TEAM

In 2000, the provincial government prepared a response plan to deal with low water conditions. This led to the creation of Water Response Teams (WRT) to monitor water levels and encourage voluntary water conservation practices in their area through education and publicity. Members of the Clean Water Committee sit on the WRT in times of low water conditions.

In 2006, Level 1 Low Water Response was declared in the upper portion of the South Nation watershed (Spencerville area) in August 2006. The Level 1 condition was in effect until November 2006; the WRT met several times (both in person and by phone/email) during this period.

"*Conserve Water, Drought Conditions in Effect*" signs posted with bilingual SNC boundary signs throughout the watershed, summer 2002.

15. DRINKING WATER SOURCE PROTECTION

DRINKING WATER SOURCE PROTECTION
ACT FOR CLEAN WATER

RAISIN REGION CONSERVATION AUTHORITY
OFFICE DE PROTECTION DE LA NATURE DE LA REGION RAISIN

SOUTH NATION CONSERVATION
DE LA NATION SUD

Everyone should be able to trust that the water they drink is safe. Local municipalities employ competent staff and invest in effective water treatment and servicing infrastructure. Protecting drinking water at its source is the first step in ensuring safe drinking water and an important part of protecting our natural

resources and the environment. Clean, high quality source water means lower treatment costs at our drinking water plants.

Preventing drinking water contamination problems from happening is better than trying to fix them. The Ministry of the Environment passed the Clean Water Act in October of 2006. This act requires communities to look at their drinking water sources, identify potential sources of contamination, and create and carry out a plan to protect both the quality and quantity of municipal drinking sources.

The Province of Ontario has embarked on a study of all watersheds in the province with the end goal of producing source protection plans which will outline a community approach to managing water quality and quantity risks for drinking water supplies. Source protection plans will be locally developed and delivered. Communities, with the support of competent technical staff will build plans to protect their water supplies. These plans will adopt local solution that works for local people.

Protecting drinking water is a shared responsibility, and everyone has an important role to play. The plans we complete today will ensure adequate, high quality drinking water for our communities in the future.

16. EASTERN ONTARIO WATER RESOURCES COMMITTEE

The Eastern Ontario Water Resources Committee (EOWRC) was established in 2001 to implement recommendation from the Eastern Ontario Water Resources Management Study (EOWRMS) completed March 2001. The EOWRMS outlined 35 recommendations for regional water resources management. The EOWRC's goal is "*to provide a solid regional representation for the assessment and management of water resource related studies and projects that improve our capacity to anticipate and prevent negative environmental impacts and to address health/environmental needs on a cost-effective basis*".

Current EOWRC membership includes:

- Municipalities (United Counties of Stormont, Dundas & Glengarry, United Counties of Prescott and Russell, and the City of Ottawa)
- Agriculture (Ontario Federation of Agriculture, L'Union des cultivateurs franco-ontariens, Ontario Cattlemen's Association, and Ontario Soil and Crop Improvement Association)
- Government (provincial Ministries of the Environment and Agriculture, Food and Rural Affairs, and the federal Agriculture and Agri-Food Canada)
- Conservation Authorities (South Nation and Raisin Region)
- Resource Stewardship Councils
- Eastern Ontario Health Unit
- University of Ottawa

The Clean Water Committee is kept up-to-date on EOWRC projects and provides input to further the implementation of these projects. The Clean Water Committee's work supports many of the recommendations of EOWRMS.

16.1 Abandoned Well Decommissioning Project

South Nation Conservation submitted and received funding from the EOWRC for decommissioning abandoned wells throughout Eastern Ontario in 2006.

SNC delivered grants to landowners within the EOWRMS study area to properly decommission abandoned wells. The grant rate was 100% of the total costs to a maximum of $500/well. The grants were delivered through the Clean Water Program in the SNR watershed and by SNC staff in the remainder of the EOWRMS area. The EOWRC funding was also utilized by the Ottawa Rural Clean Water Program to supplement grants in the City of Ottawa portion of the EOWRMS area.

An example of an abandoned well that is being decommissioned with the EOWRC funding.

In 2006, a total of 30 wells were decommissioned and $14,759 in grants was paid out to landowners in Eastern Ontario. Of these totals, 18 wells were within the South Nation watershed and received $8,759 in grants. EOWRC 2006 funding for this project, including delivery, was $20,000.

17. Ottawa Rural Clean Water Program

The City of Ottawa launched its Rural Clean Water Program in the spring of 2000. The South Nation River watershed overlaps with portions of the City of Ottawa. To avoid duplication of programs in the overlap area, South Nation Conservation withdrew the Clean Water Program from this portion of the South Nation River watershed.

The City of Ottawa has approved the funding for the Ottawa Rural Clean Water Program for 5 years (2005-2009) in the amount of $184,000/year as a special levy to the Ottawa Conservation Authorities (South Nation, Rideau Valley, and Mississippi). South Nation Conservation has been appointed by the Conservation Authorities to act as lead CA and banker for the Program.

The Conservation Authorities provide Program delivery of all aspects of the Program (program management, communications, project review, and reporting),

under the direction of the Ottawa Rural Clean Water Program Committee and the City of Ottawa. Each CA is responsible for the delivery of the Program for their watershed within the City of Ottawa.

In 2006, SNC reviewed 30 project applications with the South Nation River watershed and approved 29 projects. Of this total, 27 projects were completed and received $23,845 in grant funding; the remaining 2 did not proceed. The total value for the completed projects is estimated at $121,182.

The combined number of projects completed for the 3 CAs was 96 for a total of $160,472 in grants and an estimated total project value of $597,866.

Landowner Survey

The City of Ottawa contracted South Nation Conservation to conduct a landowner survey of applicants to the Ottawa Rural Clean Water Program from the period of 2002-2005. Survey packages were mailed out in late fall of 2006, SNC compiled survey data and drafted a final report in December. The survey report will be finalized and distributed to the Ottawa Rural Clean Water Committee and City of Ottawa in 2007.

18. EDUCATION AND PROMOTION ACTIVITIES

South Nation Conservation was involved in many different education and promotion events in 2006. These activities provide opportunities to inform people of how they can improve the natural environment on their properties. Appendix A provides examples of 2006 communications materials for the Clean Water Program.

The key elements of the 2006 Clean Water Program education and promotion campaign are outlined below:

a) The following events were attended to promote the grant programs and water quality in general:
   - Ottawa Valley Farm Show
   - Spencerville Fair
   - Eco Farm Day
   - Crysler Dam Fest
   - Maxville Fair
   - Russell Fair Education Day
   - Metcalfe Fair
   - Ottawa Eco-Stewardship Fair
   - Russell Chamber of Commerce Trade Show
   - Russell Pout Masters
   - Crysler Dam Fest
   - Vankleek Hill Eco Day
   - Navan Fair

- Riceville Fair
- Avonmore Fair
- South Mountain Fair
- Chesterville Fair

b) Presentations were made to the following groups:

- National Capital & Agricultural Landscapes Symposium, March 14th-16th, 2006: poster sent on the TPM Program
- Clean Water Workshop, Mariposa Farms, Plantagenet, June 2nd, 2006: Clean Water Program
- National Water Quality Trading Conference, Pittsburgh, PA, May 23rd-25th, 2006: TPM Program presentation
- Water Efficiency Team (W.E.T.) workshops: Abandoned Well Decommissioning grants

c) SNC hosted tours for the following groups:

South Branch South Nation River Evaluation, stop on the Fall Watershed Tour

- Manitoba Conservation Districts, March 19th-20th, 2006
- CAs Watershed Stewardship Group, June 21st-22nd, 2006
- Watershed Fall Tour, September 18th, 2006

d) 2006 Press Releases (related to Clean Water Program:

- "Parmalat Comes Through Once Again" – January 9th, 2006
- "Phosphorus Down, Nitrates Up in South Nation River" – March 21st, 2006
- "SNC Invites 2006 Clean Water Project Applications" – April 4th, 2006
- "Clean Water Workshop Coming Up at Mariposa Farms" – May 18th, 2006
- "Expertise-Sharing Tour Underway for SNC Manager" – June 2nd, 2006
- "Abandoned Well Decommissioning Grants Available" – July 19th, 2006
- "St. Albert Cheese Contributes Final Slice of Clean Water Funding" – August 1st, 2006

e) The Clean Water Program and other water quality initiatives were featured in the SNC Watershed Update in March, May, August, October, and December.

f) Clean Water Program information is included on South Nation Conservation's web page (www.nation.on.ca).

g) Newspaper advertisements for the Abandoned Well Decommissioning grants were placed in the following papers:
- Chesterville Record
- Cornwall Freeholder
- Seaway News
- Glengarry News
- Direct email to SD&G internet users by local service provider

h) Interviews for Abandoned Well Decommissioning grants:
- Radio: 1220 AM, Cornwall (2 interviews)
- Newspapers: Le Carrilon (French), Brockville Recorder & Times (English), and Glengarry News (English)

i) Clean Water Program brochure was updated for 2006 to reflect Program changes and acknowledge donators. The brochures were distributed to local farm organizations, municipal offices, Provincial Ministries, Environmental Farm Plan representatives, and at fairs and trade shows.

j) English and French fact sheets were developed specifically for the Abandoned Well Decommissioning grants. The fact sheets were distributed to local well contractors, local farm organizations, municipal offices, Provincial Ministries, Environmental Farm Plan representatives, and at fairs and trade shows.

k) An English and French fact sheet was developed for the South Branch South Nation River Evaluation project. The fact sheet was distributed to local landowners, Greencover Canada partners, Township of South Dundas, SNC website, and participants of the Fall Watershed Tour.

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19. BUDGET

19.1 2006 CLEAN WATER PROGRAM BUDGET

Table 6 outlines the revenue and expenses for the 2006 Clean Water Program. Budget notes are provided in 19.2.

Table 5: 2006 Clean Water Program Budget

Notes	Contributions	2006 Budget	2006 Year-End
a)	Parmalat Canada	$0	$5,000
b)	SNC	$59,324	$59,324
c)	TPM	$25,678	$25,678
d)	St. Albert Cheese	$7,000	$7,000
e)	Contingency Fund	$5,349	$5,349
f)	Fundraising	$5,000	$500
	Totals	**$102,351**	**$102,851**
	Expenses		
i)	Program Grants	$59,000	$38,248
j)	Communications	$3,500	$2,666
k)	Committee Expenses	$4,500	$5,702
l)	Program Reps	$6,500	$4,291
m)	Program Expenses	$1,500	$34
n)	Program Staff	$27,351	$27,351
	Totals	**$102,351**	**$78,293**

19.2 2006 CLEAN WATER PROGRAM BUDGET NOTES

Contributions

a) Parmalat
No funding was budgeted for Parmalat in 2006; however, Parmalat did provide a $5,000 donation to the 2006 Program. Due to the late date of the contribution, the $5,000 will be carried forward to the 2007 Program budget.

b) South Nation Conservation
SNC contributed $34,989 to the Clean Water Program Budget in 2006.

c) Total Phosphorus Management (TPM)
SNC has received $25,678 payment from North Dundas Township (Winchester) sewage works projects in 2006; all of this funding was allocated.

d) St. Albert Cheese
St. Albert Cheese has committed $21,000 over 3 years to the Clean Water

Program. The first instalment of $7,000 was received in 2004. The second instalment of $7,000 was received for 2005. The final instalment of $7,000 was received in 2006.

e) Contingency Fund

SNC contributed $13,500 to the Ottawa RCWP in 2000 to support projects in the North Castor watershed as part of the AGNPS computer model project. The AGNPS project concluded in 2003 and no projects were completed in the North Castor watershed through the Ottawa RCWP; therefore, the unallocated dollars were returned to SNC in late 2003. The unspent $13,500 was allocated to the Program budget as contingency funding; unspent dollars are carried forward to the next Program year

A total of $4,613 from the contingency fund was spent in 2004; an additional $3,538 was allocated in 2005. The remaining $5,349 was allocated to the 2006 Program.

f) Fundraising

SNC received $500 from fundraising efforts in 2006.

Expenses

g) Project Grants

The budget for grants in 2006 was $59,000. In 2006, the Clean Water Program funded 18 projects and allocated $38,248 in grants to landowners.

h) Parmalat Grant

Parmalat contributed $5,000 to the Clean Water Program in December 2006; due to the late date, the contribution was carried-over to the 2007 Program for allocation.

i) Education and Promotion

Education and promotion budget for 2006 was $3,500. Expenses for 2006 totalled $1,997 for brochures, press releases, Program tour, and fairs/events. Costs were lower than budgeted because activities were shared with the other partners/Programs.

j) Committee Expenses

Volunteer members on the Committee are paid a per diem and mileage in accordance with SNC regulations to compensate them for their contribution to the Program. Expenses also include lunch/refreshments. The budget for 2006 was $4,500 and the expenses for the year totalled $5,914.

k) Program Representatives

Program Representatives (Reps) are paid an hourly wage and mileage in accordance with SNC rates. Representatives complete site visits to assist

landowners with the application process. Representatives also provide delivery support for Program education and promotion.

The 2006 budget for Reps was $6,500 and expenses totalled $4,281.

l) Program Expenses

The budget for Program expenses in 2006 was $1,500 and included travel expenses, supplies, and staff training. Expenses for 2006 totalled $725.

m) Program Staff

The budget for Program staff in 2006 was $27,351. Program staff expenses in 2006 totalled $27,351.

20. RECOMMENDATIONS FOR 2007 CLEAN WATER PROGRAM

The following recommendations are based on 2006 Clean Water Program:

a) That the Clean Water Program continue to offer grants for water quality improvement projects to rural, urban and agricultural residents of the South Nation watershed for improving surface and ground water quality.

b) Based on the strategic planning session held during the November Clean Water Committee meeting, the following recommendations were made for the Program grants:
- Priority to project types that target reduction of sediment loading (e.g. erosion control, buffer strips, livestock fencing, etc.).
- Continue to fund manure storages and milkhouse washwater projects, but at a lower grant rate.
- Continue to target decommissioning of unused/abandoned wells.

c) That the Committee continues to investigate options in 2007 to reduce Program delivery expenses.

d) That the Committee membership be reviewed in 2007 to consider new members from the agricultural, urban and rural sectors.

e) That the Clean Water Committee review Program Grant Structure to ensure maximum water quality benefit for minimum cost.

f) That Program Representatives continue to be used to assist with Clean Water Program delivery and that staff review site visit requests to determine if additional Reps are required in 2007. Where applicable, Reps are used to conduct follow-up site visits.

g) That the Committee should continue to seek additional funds to support the work of the Clean Water Program; including delivery, promotion, education, monitoring, research and project grants.

h) That education and promotional activities continue to focus on water quality improvement benefits and best management practices for rural, urban and agricultural landowners. Where possible, SNC should partner with other organizations/programs to reduce costs.

i) That the Clean Water Committee continues to promote innovative technologies for water quality improvement. Current demonstration sites such as the Dignard Constructed Wetland will continue to be promoted.

j) That surface and ground water quality/quantity monitoring continue in the South Nation River watershed in cooperation with the Ontario Ministry of Environment.

k) That SNC continue to monitor established benthic (invertebrate) sampling sites to complement surface water quality monitoring.

l) That SNC continue to maintain the RiverWatch Program.

m) That the Clean Water Committee work with the Eastern Ontario Water Resources Committee to continue implementing recommendations from the 2001 Eastern Ontario Water Resources Management Study report, including promotion of BMPs in the study area outside of the South Nation River watershed.

n) That SNC continue to deliver the Ottawa Rural Clean Water Program, in partnership with the Conservation Authorities of Ottawa. Where possible, SNC and Ottawa should jointly promote Programs to residents.

21. APPENDICES

Appendix A – 2006 Education and Promotional Material

APPENDIX A

2006
EDUCATION
AND
PROMOTIONAL MATERIAL