



ANNUAL PROGRESS REPORT July 2006 to March 31, 2007

1) Project profile

Capacity Building for Civil Society in Water Resources Management

Lead Canadian partner	Lead developing country partner
<p>York University</p> <p>Canadian project director: Dr. Ellie Perkins, Faculty of Environmental Studies</p> <p>Phone number: (416) 736-2100 ext. 22632 E-mail address: esperk@yorku.ca</p>	<p>Ecoar Institute for Citizenship</p> <p>Developing country project director: Ms. Miriam Duailibi, Director</p> <p>Phone number: 011-3052-1362 E-mail address: Miriam@ecoar.org.br</p>

Other partners:

University of São Paulo, Main Campus

University of São Paulo, Piracicaba Campus

Link to Brazil's national development priorities

Currently, water resources management is one of the most important topics on the national and regional public policy agenda in Brazil. A national water resources management system is being implemented and the model chosen is based on river basin committees composed of representatives from senior government agencies, local government and civil society. The participation of civil society, which is fundamental for the success of this model, is the area most in need of support.

Project purpose

The project aims to strengthen the capacity of civil society in São Paulo, Brazil, to participate effectively in the management and protection of the state's water resources and to increase recognition by relevant government agencies of the role of civil society in water resources management. This is being done by strengthening the capacity of the University of São Paulo and the Ecoar Institute for Citizenship to develop partnerships with civil society and provide assistance through research, training and other activities.

Expected outcomes

The project will contribute to the ability of civil society in the pilot watersheds to be articulate and effective participants in the local river basin committees and will also improve the capacity of the partner institutions to develop and deliver ongoing training programs in the area of water resources, establish interdisciplinary activities and form innovative partnerships with other relevant groups.

Beneficiaries

Beneficiaries include staff from the Ecoar Institute and faculty and students from the University of São Paulo. Representatives from senior government agencies, local government and civil society in the pilot watersheds river basin committees as well as local residents of the pilot watersheds will also benefit.

Key activities

Capacity-building is being undertaken mainly through meetings, courses, workshops, communications networks, curriculum and material development, development of training techniques and educational exchanges. Project activities are based in two pilot watersheds in Brazil and one in Canada. It is planned that distance education will also be used to reach a broader audience.

Key results to date

Seven Canadian graduate exchange students have traveled to Brazil to conduct research and seven Brazilian graduate exchange students have come to Canada; data-gathering in the selected pilot watersheds has been completed including a survey of more than 700 residents of the Brazilian pilot watersheds, and this data has been analysed and prepared for presentation in the form of a visual atlas. Partnerships with community associations, environmental groups in the pilot watersheds and local schools are under way, including government, NGOs, university and civil society. More than 26 workshops on water and environmental education have been organized for almost 400 watershed community members (300 women, 100 men) including municipal and high school teachers, health agents, youth groups, community groups, waste pickers, students and the university community. The project's websites in Brazil and Canada have been created to disseminate current project activities, survey results, workshop

techniques, and curriculum materials. Project partners have presented more than a dozen papers related to the project at academic conferences and public events, and several articles are forthcoming in academic journals.

CIDA priorities addressed

Official development assistance area(s):

Civil society's policy role (primary)

Capacity development in environmental management (secondary)

Sector(s):

Water resources policy and administrative management (primary)

Strengthening civil society (secondary)

Policy priorities:

Health and nutrition (secondary)

Project value

Original CIDA commitment: \$750,000

Partners' commitments: \$471,000

Project duration

April 2003 – December 2008

2) Key team members

Canadian Team Members

Prof. Ellie Perkins, Faculty of Environmental Studies (FES), York University.

Canadian Project Director

Prof. Paul Zandbergen, University of South Florida. Project Co-Director

Andrea Moraes, FES - York University. Project Coordinator

Claudia de Simone, MES (Master's student in Environmental Studies) student -York University. Research assistant (Summer 2006) and exchange student (Winter 2007)

Johanna Reynolds, MES student -York U. Research assistant (Summer 2006)

Anne Sabourin, MES student -York U. Research assistant (Fall 2006 & Winter 2007)

Debora Santos Lima, York University. Undergraduate assistant/webmaster (2006/07)

Arlita MacNamee, MES student -York U. exchange student (2006)

Aneela Bisram, MES student -York U. exchange student (2006)

Fabiane Bastos, Master's student in Education, York U. Volunteer (2006)

Brazilian team members

From Ecoar Institute for Citizenship:

Miriam Duailibi, Brazilian Project Director

Amandha Pina, Manager (Administration and Website)
Debora Teixeira, Field Coordinator
Diego Agüero, Volunteer
Claudia Cruz Soares, Volunteer

From University of São Paulo/Main Campus – Agência USP de Inovação (USP Innovation Agency, formerly named CECAE):

Prof. Oswaldo Massambani, Project Director
Elisabeth Lima, Executive staff
Luiz Gustavo Maia, intern paid by USP
Pamela Yuri Morimoto, intern paid by USP

From University of São Paulo/Main Campus – Environmental Research Centre (PROCAM):

Prof. Pedro Jacobi, Academic Supervisor
Alexandre Rathsam, Field Coordinator
Barbara Carvalho, Research assistant (intern)
Bruno Cavalcante, Research assistant (intern)
Katia Canil, graduate exchange student from USP at York (Fall 2006)
Julia Leite, graduate exchange student from USP at York (Fall 2006)
Laura Antoniazzi, graduate exchange student from USP at York (Fall 2006)
Ignazio Giuntoli, graduate exchange student from USP at York (Fall 2006)

From University of São Paulo/Piracicaba Campus (ESALQ):

Prof. Dálcio Caron, Academic Supervisor
Clarissa Carvalho, Field Coordinator – until January 2007
Mariana Ferraz Duarte, Field Coordinator – from February 2007
Joyce Brandão, Research assistant (intern)
Cristiano Gomes Pastor, Research assistant (intern)

3) Status of results template

UPCD Tier 2 annual progress report

Status of results

Reporting period 01 ril 04 to 30 March 05	Canadian lead institution York University	Country Brazil
Project number UPCD Tier 2 Project S61268-373G	Project title Sister Watersheds – Brazil/Canada	
Intended results	Indicators	Cumulative outcomes and outputs achieved (using indicators)
<p>Outcome 1 Appropriate training programs for participants in watershed management in São Paulo State.</p> <p>Output 1.1 Well-developed and proven curricula for the training of civil society in water resources management, community participation, environmental education, multi-stakeholder processes and women and development.</p> <p>Output 1.2 Innovative training methods and materials in the area of water resources, including distance education; materials include manuals, brochures, videos, CD-ROMs, games, exercises, web-site, etc.</p>	<p>Outcome indicators 1 Number, gender, ethnicity, and degree of involvement of Brazilian participants within the pilot watersheds; Evaluation of project activities and curricula, including gender-appropriateness, by participants via evaluation forms; Number of visits to the project's curriculum website</p> <p>Output indicators 1.1 Number and nature of training workshops delivered in pilot watersheds, and number, gender, ethnicity and socio-economic composition of participants;</p> <p>Output indicators 1.2 Number and nature of innovative training methods and materials developed, and their utilization by project partners;</p>	<p>1. Website: the average daily access during the period of May 2006 to March 2007 was 155/day or 4,635 monthly.</p> <p>Evaluation by the teachers who participated in a Teachers Training Course on Environmental Education in the Pirajussara Watershed (April-June 2006).</p> <p>1.1. One Workshop was held with the youth group Roda Viva Jovem II and III in the Pirajussara Watershed: 16 women, 12 men.</p> <p>One training session on Bio-Mapping and Sustainable Housing was held in the Pirajussara Watershed: 7 women, 3 men.</p> <p>One training session on Bio-Mapping was held with members of the youth group Roda viva Jovem at the São Paulo Youth Meeting for the Environment.</p>

		<p>Three meetings were held with the education collective from the Piracicamirim Watershed. Mostly women.</p> <p>Two workshops were held for teachers from the Suely Maria Hipolito school, about environmental education and the Pirajussara creek. 70 women, 10 men.</p> <p>Four awareness-building workshops on the importance of water resources were held with youth in the Pirajussara Watershed at Campo Limpo. 4 women and 2 men in each workshop.</p> <p>Eight workshops were held with health agents in the Pirajussara watershed. Average 15 women in each.</p> <p>Five meetings were held with waste pickers from the Campo Limpo region. Average 20 people each.</p> <p>Two workshops were held with the community of the EE Alipio de Oliveira school. 52 women and 9 men.</p> <p>Three course modules and one field visit were led as part of the School Agenda 21 – Environmental Education in Areas of Source Protection course. 63 women and 27 men.</p> <p>Two awareness-building workshops were held for the communities of the schools EMEI Casa Branca and EMEI Sueli Hipolito.</p> <p>One diagnostic walk was held to the sources of the Pirajussara Creek at Vale Verde, with members of the community of EMEI Milton Suga Gallego school. 14 women, 11 men.</p> <p>1.2 One important and innovative training tool has been created by the Ecoar Institute with data collected by the University of São Paulo: a Socio-Environmental Atlas that summarizes and represents a range of important</p>
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		<p>information about the pilot watersheds in a readily usable digital and visual format for stakeholders.</p> <p>One video on Agenda 21 in schools has been produced.</p> <p>One publication about Agenda 21 in the Schools is being produced.</p> <p>One workshop has been developed for the School Agenda 21 course, partnering with the Ecological Society of Friends of Embu in the Pirajussara watershed.</p> <p>One publication about the Pirajussara Watershed is being produced.</p> <p>One video about the Pirajussara Watershed is being produced.</p>
<p>Outcome 2 Improved ability of civil society in the pilot watersheds to be articulate and effective participants in local water resources management, including the ability to develop proposals for and undertake new projects based on sustainability principles.</p> <p>Output 2.1 Structured hydro-social database on the pilot area watershed (social, economic, biophysical, legal).</p> <p>Output 2.2 2.2. Enhanced capacity of training program participants in the pilot watersheds.</p>	<p>Outcome indicators 2 Number and nature of activities of members of civil society within the pilot watershed;</p> <p>Output indicators 2.1 Amount and nature of information collected about the pilot watersheds, organized in a systematic manner and made widely available</p> <p>Output indicators 2.2 Number and nature of activities undertaken by training program participants as a direct result of the training program;</p>	<p>2. Three meetings have been held to present the socio-environmental diagnosis and perception survey to teachers from Campo Limpo schools in the Pirajussara watershed.</p> <p>One meeting has been held to develop partnerships with 3 community leaders (2 from Campo Limpo and 1 from Butantã).</p> <p>One meeting has been held with the school community of EE Alípio da Silveira school to develop the partnership and plan activities for 2007 in the Pirajussara Watershed. 34 women and 6 men.</p> <p>One presentation of the socio-environmental diagnosis and perception survey was held for representatives of the AMAR (Association of Residents and Friends of the Previdência Park) in the Pirajussara watershed.</p> <p>Two partnership development meetings were held with members of the Residents' Association of Jardim São Mateus, in the Pirajussara Watershed.</p>

		<p>One partnership development meeting was held with Djalma Kutxfara, President of the Association CEPP, which fights flooding in the Pirajussara Creek).</p> <p>Three diagnostic field visits were held with local leaders near the Pirajussara Creek (with CEPP).</p> <p>Six young people (from the youth group Roda Viva Jovem) participated in the review process for Agenda 21 in Piracicaba.</p> <p>Nine youth were assisted to participate in the First Youth for Environmental Education Meeting in the Piracicamirim watershed.</p> <p>Project staff helped to organize and conduct the public presentation of the Participatory Socio- Environmental Master Plan for the Luis de Queiroz (ESALQ) campus in the Piracicamirim Watershed.</p> <p>Project staff participated in 4 meetings of the Rural Technical Chamber of the PCJ Watershed Committee (Piracicamirim).</p> <p>2.1. Two pilot micro-watersheds were selected as the focus area for project activities: the Pirajussara and Piracicamirim (both tributaries of the Tiête within the Alto Tiête watershed.) Geographical, historical, socio-economic and institutional data was collected for the two selected watersheds. A list of watershed committee members for the pilot watersheds was drawn up and a list of civil society organizations identified. A summary of the information was published on the project's website. A perception survey on residents' knowledge and concerns regarding watershed issues was conducted in the two pilot watersheds, involving more than 700 residents.</p>
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		<p>The results of the survey were tabulated and prepared for presentation and use in local watershed education sessions.</p> <p>2.2 Certificates were given to participants in the course: “Training of Teachers: Environmental Education in the Pirajussara Watershed”.</p>
<p>Outcome 3 Improved ability of Ecoar, the University of São Paulo and York University to develop and deliver on-going training programs in the area of water resources (including the use of distance education approaches), to establish interdisciplinary activities, and to form innovative partnerships with other NGOs, universities, civil society groups, government agencies and private sector parties.</p> <p>Output 3.1 New learning modules and courses being offered by Ecoar, the University of São Paulo and York University in the area of integrated water resources management, environmental education and civil society.</p> <p>Output 3.2 Support for interdisciplinary program development and new partnerships between academic and non-academic institutions in Brazil and Canada.</p> <p>Output 3.3 Enhanced capacity of recent graduates of the University of São Paulo and at York University to play a leadership role in the area of civil society participation in water resources management.</p>	<p>Outcome indicators 3</p> <p>Number and nature of new partnerships established by Ecoar, USP and York;</p> <p>Development of new approaches in research techniques, teaching and extension activities by Ecoar, USP and York;</p> <p>Presentation of issues and themes connected to the Brazilian reality in activities and courses at York;</p> <p>Output indicators 3.1 Number and nature of new learning modules and courses at Ecoar, USP and York;</p> <p>Output indicators 3.2 Number, gender, ethnicity, and degree of involvement of faculty and staff members of project partners;</p> <p>Output indicators 3.3 Number of graduate student programs completed and the students’ ethnicity and gender;</p>	<p>3. New Partnerships</p> <p>2006-2007 – The following partnerships were developed in the Pirajussara watershed:</p> <ul style="list-style-type: none"> - with the Health Coordinator of Campo Limpo for the continuous training of health agents in water resources and environment - with the MEF Vera Fusco Borba school in Campo Limpo for the training of youth in Water Resources and Environment - with the EE Amador e Catarina Sorito school for the training of youth in Water Resources and Environment - with the EE Alipio da Silveira school for the training of teachers, involvement with the local community and implementation of the School Agenda 21 - with students in the Master’s Course of the Faculty of Architecture and Urbanism (FAU-USP), by presenting the project’s work in the Pirajussara watershed -with professor Euler Sandeville Jr., who teaches a USP course on “Paisagism and Urbanism” (Landscape and Urbanism) in relation to integrating his masters’ students with the Sister Watersheds project activities. - with professor Gislene Santos from USP’s East Campus, through a presentation by Claudia de Simone to her undergraduate class on Public Policy. - with AMAR (Previdencia Park) and FAU (USP’s Faculty of Architecture and Urbanism) for the creation of a Forum that will discuss Urban Issues at Vila Sonia. - with the Environmental. Education and Construction Secretary of Taboão da Serra, for the event “ World Water Day “ in Taboão.

		<p>2006-2007 -- The following partnerships were developed in the Piracicaba watershed:</p> <ul style="list-style-type: none"> - with the program Com-Vidas (With Life) in the School, for the capacity building of trainers in the watershed. - with the group responsible for the capacity building of civil society in water resources, sustainable energy, waste and food security and sustainable housing for the residents of the watershed. <p>2005-2006 -- The following partnerships were developed in the Pirajussara watershed:</p> <ul style="list-style-type: none"> - with the Sociedade Ecologica Amigos do Embu (Friends of Embu Ecological Society) for the development and coordination of the course "School Agenda 21 Embu" starting in 2005 - with elementary school teachers from the Pirajussara watershed and representatives of two other projects, Projeto Uma Fruta no Quintal (Fruit in the Yard) and Growing Up in Cities, to develop a course to be planned and taught in conjunction with ECOAR. <p>At USP- Piracicaba With the PISCA Project, joint planning and coordination was carried out for PISCA week, a series of public events, in June 2006</p> <p>At York A new partnership was developed with CERLAC (the Centre for Research on Latin America and the Caribbean), including: 2 joint seminars on Watershed management in Brazil (2004 and 2005), A weekly Brazilian Studies brownbag seminar was held in Fall 2004, Winter 2005, Fall 2005, Fall 2006, and Winter 2007, helping to build a Brazilian Studies network at York and connecting students and faculty from various departments at York including law, dance, history, and political science. Sister Watersheds project activities and results have provided a central focus for these seminars.</p>
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		<p>A new partnership with the Canada-Brazil Chair project started in Fall 2005.</p> <p>3.1</p> <p>Creation of the “Cycle of Open Seminars” of the Sister Watersheds Project at USP Piracicaba, with 4 seminars held by March 2007.</p> <p>Eight Individual Directed Study courses on water management in Brazil were offered for graduate students at York University (1 male, 7 female) between 2004 and 2006.</p> <p>3.2.</p> <p>2006-2007</p> <p>One meeting was held with the IPEN (USP Institute for Energy and Nuclear Research) towards establishing a partnership for monitoring the waters of the Piracicamirim creek, developing a manual for communities and health agents.</p> <p>One meeting was held with the ITCP (Technological Incubator of Popular Cooperatives) to promote a partnership with the course for local agents in Campo Limpo and Butantã in the Pirajussara watershed.</p> <p>One meeting was held with representatives of the Secretary of the Green to discuss a partnership to work with the waste pickers in Campo Limpo – Pirajussara.</p> <p>Two meetings were held with the TERAIA group from the Education Faculty at USP to discuss the publication of a magazine about environmental education.</p> <p>One meeting was held with representatives of the NGO “SOS Mata Atlântica” to discuss a partnership in Campo Limpo.</p> <p>Project staff attended two meetings of the Food Security Network in the Region of Butantã - Pirajussara.</p> <p>Project staff attended meetings of the Campo Limpo Network for a Solidarity Economy, in the Pirajussara</p>
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		<p>Watershed.</p> <p>One partnership was developed with the group PET Ecology for neighborhood activities related to Nosso Teto (Our Roof) in Rio das Pedras – Piracicamirim.</p> <p>Six meetings were held on the Participatory Socio-Environmental Master Plan of ESALQ -- Piracicamirim.</p> <p>Project staff participated in 11 meetings of the youth group Roda Viva Jovem, in Piracicamirim.</p> <p>In 2005-2006, several USP professors and students collaborated on the preparation, execution and analysis of the Pirajussara environmental survey.</p> <p>Up to March 2007, a total of 13 graduate students from FES / York participated in research activities in the Black Creek watershed.</p> <p>3.3 Exchange students</p> <p>A total of seven FES York graduate students from Canada went to Brazil to do field work for their Master’s Major Papers: 6 women and 1 man. Five have completed their programs and wrote Major Papers related to environmental education, public participation, and/or water management in Brazil. All made seminar presentations in Brazil about their work.</p> <p>A total of seven graduate students from USP came to Canada for the graduate educational exchange: 6 women, 1 men. 3 have finished their masters theses. Four developed a rainfall runoff study about Black Creek during their time in Canada; another made several presentations in Toronto on community organizing techniques, and all gave presentations on their work in the York Brazilian Studies seminar series.</p> <p>Research Assistants in Canada:</p> <p>Two research assistants did bibliographical research on water management and participation during Winter/Spring 2004 (Tracy Locke & Sylvie Tremblay - 2</p>
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		<p>females).</p> <p>Two Canadian graduate students did baseline research on water management in Ontario (Nicole Worsley and Lara Babbie) during the summer of 2004 (2 females).</p> <p>One Canadian research assistant systematized material on Ontario water management (Marcia Chandra) and one graduate student created an exchange manual for Brazilian students coming to Canada (Ramy Hanna) during Fall 2004 and Winter 2005 (1 male/1 female).</p> <p>Two Canadian graduate students did baseline research on the Black Creek watershed and public participation during Summer and Fall 2005 (Aneela Bisram and Arlita McNamee, 2 females).</p> <p>Two Canadian graduate students initiated contacts with community associations in the Black Creek watershed in Winter 2005 (Johanna Reynolds and Claudia De Simone, 2 females) and developed and led workshops on environmental education for children in the community (Summer 2006).</p> <p>One graduate student (Anne Sabourin), in cooperation with the 4 exchange students from Brazil, developed a study and presentation about the contribution of York University to rainfall runoff into Black Creek (Fall 2006).</p>
<p>Outcome 4 A strong international network of partner institutions to provide support for on-going training and education efforts in the area of water resources in Brazil and Canada</p> <p>Output 4.1 Collaboration and exchange of expertise among the researchers and their organizations, both within Brazil and Canada, as well as between Brazilians and Canadians.</p> <p>Output 4.2 Active network among project partners.</p>	<p>Outcome indicators 4 Degree of involvement and participation in the project activities by participants (following timetables and commitments, carrying out agreed upon workplans and tasks).</p> <p>Attention to the gender and socio-economic implications of all project activities;</p> <p>Maintenance of the principles of transparency, non-hierarchy, respect for diversity and conflict resolution between the partners involved and in the project activities.</p> <p>Output indicators 4.1</p>	<p>4. As planned, six project directors' meetings were held at least annually: January 2004 in Toronto; January 2005 in São Paulo; September 2005 in Toronto, March 2006 in São Paulo, a video conference in the Fall of 2006 and a meeting in São Paulo in February 2007. One project managers' workshop was held in São Paulo in June 2006. All directors and managers attended all the appropriate meetings. Principles of transparency, non-hierarchy, respect for diversity and conflict resolution were maintained as fundamental to the project.</p> <p>A partnership was developed with 2 other UPCD projects in Brazil -- "Building Capacity for Food Security" and "Participatory Sustainable Waste Management" -- to collaborate in addressing gender issues. Two meetings</p>

<p>Output 4.3 Awareness of the project and its results among a wide range of stakeholders</p>	<p>Amount and nature of project related information made available on project websites, and their utilization by project partners and others;</p> <p>Output indicators 4.2 Utilization of networking tools.</p> <p>Output indicators 4.3 Number and type of publications and presentations.</p>	<p>were held with directors of these other projects, one in Calgary in September 2006, and one in São Paulo in March, 2007. To expand the project's focus on race and equity issues in public participation and capacity-building, Prof. Gislene dos Santos, an expert in this area at USP Leste, was invited to join as a collaborator.</p> <p>A partnership was developed with York International which created a summer internship position at Ecoar for a York undergraduate exchange student, funded entirely by York International. In the summer of 2006, Alexis Glazer went to Ecoar for three months and Consuelo Sway was selected for the summer of 2007.</p> <p>Alex Arnall, a PhD student from Oxford University in England, spent two months in Brazil working at Ecoar in a trip facilitated by the project, and later gave a presentation in Toronto as part of the York Brazilian Studies seminar series. He learned about the project through its website.</p> <p>4.1. Three articles related to the experiences of Brazilian exchange students in Canada were published on the project website.</p> <p>Two articles by Ellie Perkins and Andrea Moraes about women and water management in Brazil were accepted for publication, in the International Feminist Journal of Politics and a Cambridge University Press book on ecofeminism. Another article by Ellie Perkins was published in the journal Capitalism Nature Socialism.</p> <p>Information about the Sister Watersheds project, Brazilian water policy, and the socio-environmental, geographical and historical characteristics of the pilot watersheds in Brazil was generated by Brazilian team members and published in both Portuguese and English on the project website, www.baciasirmas.org.br. An average number of 40,008 visits per month to the</p>
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		<p>website were recorded from April to June 2006.</p> <p>Information on watershed management and public participation in Ontario was produced by Canadian team members, as well as material on the Black Creek Watershed, environmental education, and public participation. A Canadian website for information mainly about the Black Creek watershed, with links to the Brazilian website, was also developed: www.yorku.ca/siswater</p> <p>Ellie Perkins, Andrea Moraes, and Pedro Jacobi made presentations about public participation and/or watershed management in Brazil at the following: International Society for Ecological Economics conference, Montreal, June 2004 International Society for Feminist Economics conference, Oxford, UK, August, 2004 York University Colloquium on the Global South, March, 2005 Capitalism Nature Socialism conference, Toronto, July 2005 International Society for Feminist Economics conference, Sydney, Australia, July, 2006 International Sociological Association Congress, Durban, South Africa, July 2006 Canadian Association for Latin American Studies conference, Calgary, September 2006</p> <p>4.2 Visiting Brazilian project team members were interviewed by David da Silva from York Community Radio, Toronto, January 2004.</p> <p>The Brazilian project website was developed by Ecoar, making available project results in Portuguese and English (1 male web designer, 1 female webmaster).</p> <p>The Canadian project website was developed by undergraduate assistant Maryanne Obwaka (1 female).</p>
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		<p>4.3</p> <p>Publications:</p> <p>Article about the project posted on the FES website, 2004.</p> <p>Article about the project posted on the Ecoar website, 2004.</p> <p>News about the project posted on the CECAE website, 2005</p> <p>Brazilian Report # 1 - From April 2004 to July 2004, with partial Brazilian research results, sent to York.</p> <p>Brazilian Report # 2 - From August 2004 to September 2004, with partial Brazilian research results, sent to York.</p> <p>Brazilian Report # 3 - From October 2004 to February 2005, with partial Brazilian research results, sent to York.</p> <p>Report on the institutional structure of water management in Ontario produced in the fall of 2004 and revised in May 2005, and provided to Brazilian team.</p> <p>Manual for graduate students and guidelines for research on Black Creek written in Fall 2004 and provided to Brazilian team.</p> <p>Paper: "The Black Creek Watershed" by Graduate Assistants in Toronto Arlita McNamee and Aneela Bisram. May 2005.</p> <p>Paper : "Public Participation in the Black Creek Watershed" by Arlita McNamee and Aneela Bisram. May 2005.</p> <p>Presentations in Brazil:</p>
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		<p>Graduate student Marcia Chandra did research on the Pirapora Watershed and presented her work in a seminar in São Paulo, Brazil in October, 2004 (20 participants, 8 males and 12 females).</p> <p>Brazilian team members from ESALQ participated in a seminar on Institutional Socio-Environmental Responsibility in Piracicaba, Brazil, September 2004 (96 participants, 61 males and 35 females).</p> <p>Brazilian team members from ESALQ, Piracicaba presented project research at the 4th Pisca Week (Piracicamirim River), November 2004 (500 participants, 200 males and 300 females, estimated).</p> <p>Brazilian academic directors and field work coordinators organized a workshop entitled “Building Capacity of Civil Society for Watershed Management” at the World Social Forum in Porto Alegre, Brazil in January 2005. (32 participants, 16 males and 16 females).</p> <p>At the second Sister Watersheds Exchange Seminar in Brazil in April 2005, York graduate students Nicole Worsley and Ramy Hanna presented their work.</p> <p>The Sister Watersheds Project was presented to the Family School program in March 2006 in São Paulo.</p> <p>An Open House for the Sister Watersheds Project was held in São Paulo in March 2006, with presentations by Miriam Duailibi, Ellie Perkins, and Pedro Jacoby.</p> <p>Presentations in Canada:</p> <p>Graduate student Erica Fuchs presented research on the education programs of the Landless Movement in Brazil at a CERLAC seminar in February 2004. (Estimated 30 participants, roughly ¾ female).</p> <p>Ellie Perkins presented a paper entitled “Participation and Water Management: Experiences from Brazil” at the</p>
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		<p>International Society for Ecological Economics conference, July 11-13, Montreal. (About 50 participants, around 25 female and 25 male).</p> <p>Ellie Perkins and Andrea Moraes presented papers on water management in Brazil at the Capitalism Nature Socialism conference at York University, July 2005, entitled respectively “Public participation and ecological valuation: Inclusive = radical” and “Meanings of Public Participation for the Brazilian Watershed Management Committees”.</p> <p>A seminar on Public Participation and Water Management in Brazil and North America was presented at the Faculty of Environmental Studies, York University in September 2005, with presentations by Miriam Duailibi, Pedro Jacoby, Paul Zandbergen, and FES professor Gene Desfor.</p> <p>Ellie Perkins presented a paper entitled “Women and participatory water management in Brazil” which was co-authored with Andrea Moraes, at the International Association for Feminist Economics conference, July 7-9, 2006 at the University of Sydney, Australia.</p>

4) Analysis of project results

4.1. Project context

The Brazilian federal government, through the Environmental Secretary and the Education Secretary, has created programs to promote the mobilization, participation, and commitment of civil society, youth, educators and public servants' organizations with the goal of joining forces to establish partnerships, methods and joint proposals for training civil society to advance social change, improvements in quality of life and sustainable development.

This context has contributed to Sister Watersheds initiatives, particularly via two federal government programs, the Coletivo Educador (Educators' Collective) and the Coletivo Jovem (Youth Collective). This represents a great opportunity to work with other civil society organizations to develop methodologies and courses that help build individual and collective capacity for water management and local sustainable development.

On the other hand, with the municipal government of São Paulo we have faced a few challenges, mainly related to the training of community health agents. The Green Secretary and the Health Secretary have organized a course for health agents in the metropolitan region of São Paulo. Some of the themes treated in this course and its dates are similar to the workshops we already started for the same group of people. Therefore we are currently in communication with the municipality (sub-prefeitura) to establish and clarify the relationship between the two courses.

On the community side, rainfall related flooding has occurred in Sao Paulo as it does every year, and the media has given a lot of attention not only to the natural disasters but also to awareness of the new water management system.

4.2. Annual results

This period was characterized by the intensification of our project's field work and community workshops. We made significant progress with respect to the formation of groups in the watersheds involved, making it possible to develop innovative tools for the capacity-building of civil society.

Over the year, many new connections, links and contacts were initiated to guarantee that a wide variety of people were reached by the project. As a result, it was possible to locate or create, and work with, groups of health agents, youth, professors, university students, waste pickers and other community members.

Some partnerships carried on from previous years have now resulted in products, workshop materials and networking tools. A significant example is the publication and the video documentary both entitled "Agenda 21: Environmental Education in Area of Source", which were produced in partnership between the Sister Watersheds project and the non-governmental organization Ecological Society Friends of Embu - SEAE.

Also in this period, we made significant advances involving the Perception Survey which was previously conducted in the local communities. The data collected was tabulated and cross-referenced, providing more detail about the information collected. In Piracicaba, for instance, graduate students are now using data from the survey as a basis for their master's thesis research.

We continued the exchange of students between Brazil and Canada, and four Brazilian graduate students from USP came to York, took courses and participated in project activities. One student from York University went to Brazil to participate in project activities in the Pirajussara watershed, and will write about it in her master's thesis this summer.

In Brazil the project benefited from the involvement of two other students (Alex Arnall and Alexis Glazer) who were fruits of international partnerships between Ecoar, York and Oxford University and who made significant contributions to the project. It is important also to note the visit of AUCC representative Nancy Ferlatte, which helped make possible the integration with other UPCD projects in Brazil for our joint gender workshop as well as other discussions. At the same time as Nancy Ferlatte's visit to the project in February/March 2007, we had a project directors' meeting in Brazil with the presence of Canadian directors Paul Zandbergen and Ellie Perkins, who gave presentations at both USP campuses.

Outcome 1.1 - Contribution to the capacity-building of civil society in the management of water resources

The project's community capacity-building workshops have included the following:

EMEF (Municipal School of Elementary Education) Vera Fusco Borba (Pirajussara)

This workshop group is made up of youth from a municipal school in the Campo Limpo region of the Pirajussara watershed. This school was recommended to us by Mr. Djalma Kutxfara, an environmental community leader in the watershed, for two reasons: first, because of the school's proximity to the Pirajussara creek, and second due to previous positive contacts he had had with the school administration.

Our project team first did a presentation about the Sister Watersheds project to the teachers and waited for their authorization to start working with the children. We chose to work with grade 7 and 8 students. Students from those grades were then invited, and after the parent's authorization 15 students demonstrated interest in participating in the environmental education workshops offered by us, every two weeks after school.

Although this group is still small, the students involved have been participating actively and are highly motivated and committed to bringing other colleagues into the group. The students have several ideas for activities inside and outside the school. Examples of activities developed in these workshops include: learning to make non-toxic soap from kitchen oil, enlisting families interested in selective waste collection, campaigning in the school to raise awareness of the importance of environmental preservation, and other activities. Water is the focus of the workshops, but water itself leads directly into the other environmental challenges in the daily life of these youth, enriching the debates and the young people's self-determination.

At the beginning of 2007 we had a meeting with the teachers at the school in order to expand the work, bringing subjects of their interest into the debate and involving them. We also want this year to extend this work to the community surrounding the school.

(See Appendices 15 and 18)

Health Agents from Campo Limpo (Pirajussara)

The partnership with this group was begun in November, 2006. There was a need for previous contact and consultation/approval by city council (Sub-prefeitura) members, as well as directors of some Community Health Stations (Postos de Saude). The Health Stations involved were selected due to their proximity to the Pirajussara creek, which meant they were also more likely to receive community complaints and to be seeking solutions to water related problems. Since each health agent reaches on average 100 families in the course of her regular work, there is high potential for multiplier effects from training this group on water issues.

We have conducted 8 workshops with this group so far, and have had the chance to discuss subjects such as the concept of urbanization, paving and impermeabilization of the ground and its implications for flooding, lack of urban planning, etc.

An advance involving this group was the possibility of having them interact with community leaders concerned with the struggle against flooding in the region, which we consider a small but important step to address the serious flooding problems in this region.

Despite the high motivation of this group we are now encountering some challenges in respect to our planning. As mentioned above under Project Context, the Green Secretary scheduled a new course for health agents at the same time as ours so we had to change our meeting day. However, we already hold meetings with the coordinators from the Green Secretary with the goal of integrating activities, since we have similar goals. We are sure that this initial obstacle will end up working in favor of the richness and sustainability of capacity building of health agents on water and environmental issues.

(See Appendices 13, 17 and 19)

Catadores (waste pickers) in Campo Limpo (Pirajussara)

The possibility of working with the *catadores* as a group arose in January of 2006, as a result of the partnership we have developed with another UPCD project in São Paulo, "*Participatory Sustainable Waste Management, Brazil-Canada*" involving the University of Victoria and the Centro Universitário Fundação Santo André. After contacting *catadores* from the region of Campo Limpo we discovered that an organized group or cooperative of *catadores* existed already and that they were meeting with staff from the City Hall (Sub-prefeitura) to advocate for the creation of a Solid Waste Central Selection Office in the region, which would facilitate their recycling work.

We chose to work with this group because the contribution of the *catadores* is essential for efficient environmental education outreach to the population bordering the river, since the watercourse is a major site of the *catadores'* waste-picking activities. By linking the health agents' group and the *catadores'* cooperative, an important network begins to form.

The role of the Sister Watersheds project with the *catadores* is as a partner, facilitator and funder of the actions and proposals for their cooperative. Our goal is to form a group of institutions that can assist the *catadores*. So far we already contacted and integrated the participation of the ITCP-USP (Technological Incubator of Popular Cooperatives from USP), the City Hall of Campo Limpo and the Secretary of Environment.

We are also working towards integration with another group of *catadores* from Santo André, working with the *Participatory Sustainable Waste Management project*, with the goal of assisting the formation of a network between groups of *catadores*.

The greatest achievements with this group so far have been the mapping of *catadores* involved and their areas of action; the approximation of the project with the group; and the connection with the ITCP-USP for the formation of a network of friends of the *catadores*.

The challenges have been innumerable. For the *catadores'* cooperative to obtain space at the city hall for its work, it is necessary for the cooperative to regularize its documentation, which is expensive and requires specific assistance. Many advances have been made in this direction, but the group is still attempting to obtain the documentation. The *catadores* often do not possess personal documents themselves, are unstable in their work habits or are only temporarily in the cooperative -- more due to lack of options than by choice. They also tend to have low self-esteem and many other problems that make it difficult to formalize a historically informal activity.

However, we have planned to show the group films on the National Movement of *Catadores* and another documentary on the *Life of Catadores* made by Alexandre Rathsam, from our Brazilian project team, and will continue to meet with this group.

(See Appendix 14)

E.E. (State School) Amador and Catarina Sorito (Pirajussara)

In the Campo Limpo region, we have faced the most setbacks with this group. The school was recommended by community leaders as a good place for us to work and it is located on the banks

of the Pirajussara creek and has suffered several floods. The school includes elementary but also junior and high school students, with the majority being teenagers.

The first contact with the school was made in September 2006, when meetings with the coordinator of the school and with the teachers were held. The school opted to start its involvement with the Sister Watersheds project in 2007. As another local NGO, *SOS Mata Atlantica*, had already initiated a water quality monitoring project at the school for the Pirajussara creek, we decided to join forces with them.

Meanwhile the administration of the school has changed and we have lost the positive connection we had before. We are currently trying to establish new links with the new administrators and start our workshops.

(See Appendix 22)

Jardim Santa Teresa Community

In August of 2006 we initiated activities in the community of *Jardim Santa Teresa* in *Embu das Artes*. This neighborhood is situated near the source of the Pirajussara creek and has significant urban development with high levels of ground impermeabilization.

Through our partnership with the Friends of Embu Ecological Society (SEAE), our project was presented to the EMEI Suely Maria Hipólito and Casa Branca schools. Both schools have been developing their local Agenda 21 since 2005, working with SEAE. Building on the existing activities developed by the school, our project's goal with this partnership was to provide continuity for the development and implementation of the local Agenda 21 of the school, with a focus on water resources.

During the first semester of 2006, emphasis was given to training and conscious-raising activities, first with teachers and then with parents and others in the school community. Among the activities developed were: diagnostic walks for recognition of local springs and streams; workshops about the proportion of fresh water on the planet; ecological homemade soap made by recycling kitchen oil; participatory lectures on several subjects, such as watersheds, aquifers, floods, water pollution, the water cycle, citizenship, deforestation, the greenhouse effect, reduction of the ozone layer, etc.

At the beginning of 2007 we carried out planning meetings with the administration of both schools. We realized we did not yet have a large enough representative group to undertake our workshop activities. So we decided to do a diagnostic mapping of the local actors who were potential members of the group. After the mapping was done, we went through the neighborhood visiting institutions, cultural centres, parents, etc. This activity was very fruitful; excellent contacts were made, and many people showed interest in water resources.

One organization that was discovered through the mapping and visiting process was the ZUMALUMA association, a cultural centre located in a slum (*favela*) called *Inferninho* (Little Hell), which has springs and a stream in its area. The ZUMALUMA (a word created from syllables of the names of world-wide exponents of black culture, ZUmbi (Brazilian), MALcom X, Martin LUTher King and Nelson MANDela) is seven years old and is managed by youth residents in the neighbourhood. In our first meeting they showed interest in participating in environmental workshops. From this first contact grew others, and the proposal to carry out a set of workshops. In this process other local residents joined the group, for example, a woman called Cremilda, president of the Association of Friends of Jardim Santa Teresa. Soon we saw that those who came to the meetings were largely community leaders, which as noted, due to their many community connections, have great potential as "multipliers" of the information in the municipality as a whole.

As result of these connections, a Socio-Environmental Agents Training Course was proposed, which will take place at the ZUMALUMA centre. We are currently doing participatory planning to develop the content and methods for this training. Among the themes of interest are: water tables and canalization of streams, sewage, recycling, the water cycle, watersheds, sewage treatment, flood-control retention pools, waste management, pollution, composting, community gardens,

rural tourism, the greenhouse effect, the ozone layer, animal and plant extinction, water's importance, natural resources geo-policies, urbanization, etc.

In a meeting at ZUMALUMA on Tuesday, April 3rd, we welcomed Mr. João Ramos, the City Secretary of Environment. During this meeting we confirmed the partnership between our activities and the Secretary of Environment, who will contribute by supplying an overhead projector, transport to activities, copies of materials, chairs and perhaps by financing a Hip Hop event organized for the youth. Thus, we believe that the prospects for continuing activities with this community are excellent.

(See Appendix 11 & 12)

Partnership between the Sister Watersheds Project, *The Semente* (Seeds) Project and Schools in Jardim Mimas, Embu das Artes.

At the beginning of March 2007, the Sister Watersheds project decided to join forces with the *Semente* Project to do environmental education work with these two schools in the Jardim Mimas neighbourhood, in the municipality of Embu das Artes: EE Rodolfo da Costa and EMEF Janaína Augustin.

The Secretary of the Environment of Embu, the Foundation SOS Mata Atlantica, and the Friends of Embu Ecological Society (SEAE) had jointly sponsored a "world-wide water week" in this area. The municipality was divided into 8 nuclei, each representing a neighborhood community, and the Sister Watersheds Project was invited to co-ordinate activities in the nucleus of Jardim Mimas.

As a result, we worked with the two schools and the community disseminating information about the event and carrying out the week's activities. The school's directors and team of teachers were consulted on the program and activities of the week and fully approved it.

During the water week we did a diagnostic walk with about 100 students from those schools -- two 8th grade groups and another from high school. We walked around the Rodolfo da Costa school, stopping at the sides of the rivers and raising questions with the students about pollution and water supply, garbage (production, collection, recycling and final destination), water source protection, housing, and land use, among others. We ended the activity in a large circle, joining the groups, singing music related to water, and the students planted four *aroeira branca* trees to assist the regrowth of vegetation on the margins of the local stream. At night, we twice showed the video "Voices of the Tietê" in the Janaína da Costa school, followed by a discussion with the students and with members of the wider community which had also been invited. The groups involved included Education of Youth and Adults (EJA), the Movement for the Literacy of Youth and Adults (MOVES), and Telecurso (a well known local literacy initiative involving media). Teachers, employees, the school pedagogical coordinator and the director also participated in this activity, which included a total of 120 people.

From these groups, 25 students were selected to participate in the World Water Day event (March 22, 2007) in Parque Rizo, presenting the experience of this nucleus to the broader community.

Our next step is to consolidate the partnership with these two schools. We have been participating in their pedagogical meetings and plan to continue to develop direct actions with the students. A meeting to present the Sister Watersheds project and workshops on water management for the community will be soon scheduled.

(See Appendices 11, 12 and 24)

Partnership with the Environment at the Source Project (*Ambiente na Fonte*).

In February of 2007 the Sister Watersheds Project initiated dialogue with representatives of the "Environment at the Source" project. This project, carried out by the Friends of Embu Ecological Society (SEAE), plans to develop consciousness-raising and environmental education activities in the Source of the Jesuits space in Embu. This place has excellent facilities for indoor and outdoor group activities including an outstanding property with a stream and vestiges of Atlantic Forest.

As a consequence of other activities developed in partnership with the SEAE, our project received an invitation to participate in the “Environment at the Source” project, contributing activities related to water resources and management. These activities are open to university students, schools, teachers, professors, associations, seniors, and anyone else interested in site visits or training.

We consider this invitation an excellent chance to reach a broader audience since the place attracts great numbers of different types of people.

As a first joint action, the SEAE, the Sister Watersheds project, and the *Sementes* (Seeds) Project jointly initiated the construction of LUARES (the Urban Laboratory for Agro-ecology and Research in Socio-Environmental Education), as part of the “Environment at the Source” project. This activity aims to construct a living laboratory to develop Environmental Education initiatives, inspired by practices derived from agro-ecology, permaculture, and urban agriculture. The intention is to make possible the training and the certification of local agents who will disseminate sustainable practices in their own communities.

Educators’ Collective of the Pisca Watershed – Network of Socio-environmental Initiatives in the Pisca Watershed.

The Sister Watersheds project in Piracicaba is part of the Educators’ Collective of the Piracicamirim Watershed. The Educators’ Collective is composed of groups active in ongoing training processes for the residents of the Piracicamirim watershed. It seeks to bring teachers together to exchange experiences and methodologies.

The creation of the Educators’ Collective of the Pisca Watershed (as well as other such collectives in Brazil) is due to initiatives of the National Environmental Education Program (ProNEA) and the National Educators and Environment Educators Training Program (ProFEA) of the federal Ministry of the Environment (MMA). In accordance with the MMA, Educators’ Collectives have a role in promoting institutional public policy development, critical reflection concerning socio-environmental problems, conceptual deepening, and the creation of conditions for ongoing development of training and action programs in environmental education with local populations, aiming at synergies in the learning processes that contribute to the construction of sustainable areas.

The participants in the Pisca Educators’ Collective are the Sister Watersheds Project, USP Recycles, the Network of Environmental Education Centers, the Nucleus for Culture and Extension Support in Education and Environmental Conservation (NACE-PTECA), the *Nós no Pisca* (We in the Pisca) Project, the Rio das Pedras Agricultural Technical school, graduate and undergraduate students, educators and civil servants, among others.

In 2007, the Collective is developing a political-pedagogical project plan to guide its activities and each participating institution is contributing a list of its own capacity-building courses in the socio-environmental area. This information will be widely disseminated.

For our project, participation in the Educators’ Collective is a way to contribute to the development and implementation of a broad educational methodology concerned with strengthening the participation of civil society in the management of water resources.

Roda Viva Jovem (Youth Wheel of Life) Collective in Piracicamirim (CJP)

The Youth Wheel of Life Collective for the Environment (CJP) was created in 2003, during a process of mobilization for environmental education at the time of the National Youth Conference for the Environment (CNIJMA), which was carried out by the Ministry of the Environment (MMA) and Ministry of Education (MEC).

In this process the youth were responsible for the organization of the state-level conferences, following the principle "youth educates youth" -- that is, youth contributing to the engagement of other youth.

Joyce Brandão and Cristiano Gomes Pastor, trainees of the Sister Watersheds Project, participate in the Youth Collective which brings together participants who live throughout the Piracicaba, Capivari and Jundiá watersheds.

This year, our project intends to create capacity building courses for the *Collective Roda Viva Jovem*. Our goal is to contribute to the individual and collective skills of youth in the watershed so they can become engaged protagonists in improving quality of life and sustainable local development.

Master Plan of the ESALQ/USP Campus in Piracicaba

The Sister Watersheds team, throughout 2006 and 2007, has participated actively in the process of building the Master Plan for the ESALQ/USP campus. This involves participatory joint development of a plan for the socio-environmental activities of ESALQ. The following stages have been established: (1) Inventory and diagnosis of socio-environmental data; (2) Definition of priorities, goals, time-line and criteria for the management plan; (3) Establishment of action strategies; (4) Creation of a management system.

In 2006 various groups including university extension staff, professors, students and employees of ESALQ contributed to the survey, development and monitoring of the socio-environmental plan for the campus. In February of 2007, the group finished a proposal for goals to guide the socio-environmental policy of the campus, for presentation to the community. The work is ongoing.

*Output 1.2 - Development of training methods, curricula,
and innovative materials on water resources*

School Agenda 21

During 2006 our project, in partnership with the Friends of Embu Ecological Society (SEAE) and with funds from FEHIDRO (the São Paulo State Fund for Water Resources) implemented a course entitled "Agenda 21: Environmental Education in Source Protection Areas."

The objective of this course was to help develop and implement School Agenda 21 programs in all schools in the Guarapiranga watershed (which includes Embu das Artes, Taboão da Serra, Embu-Guaçu, Cotia, São Lourenço da Serra, Itaperica of Serra and Juquitiba), focusing on the question of the water resources and the importance of their maintenance and restoration.

This course, divided into two semesters, took place in the city of Embu das Artes and had 200 participants (teachers and coordinators). Our project participated effectively in the coordination and delivery of teaching modules. As products of this course, a publication is under way (with an article by Prof. Pedro Jacobi) as well as a documentary video (directed by Alexandre Rathsam). These materials are distributed to the schools and Secretaries of Education and Environment of the participating cities and will be used in our future activities with schools in São Paulo, Embu and Taboão da Serra.

(See Appendix 1 - Video)

Sustainability Game

Among the other training materials which are being developed, the project plans to produce a board game for youth and adults on water issues, in partnership with the USP (*USP Recicla* project) and the Ecoar Institute. The first planning meetings have set up a schedule for the exchange of expertise, bibliographical research, a game creation workshop, a meeting with

specialist advisors, production of the game, testing of the game, and launching of the game as a playful-pedagogical tool.

(See Appendix 16)

Outcome 2/2.1-- Hydro-social survey

Analysis and interpretation of the data from the survey which was conducted in the Pirajussara watershed continued from September to December 2006. Thanks to the collaboration of PhD student Camila Giorgetti, we divided the data into 4 macro-subjects that guided the data tabulation: age, education, locality and gender of the survey respondents. The graphing of tabulated research data according to these categories allowed us to observe that two factors were highly significant in the survey analysis of local residents' environmental knowledge, perceptions and views: their locality within the watershed and their education, as measured by years of school attended.

The four localities used in the Pirajussara study analysis were: 1) Lower watershed area one: the districts of Butantã and Morumbi, grouped together due to the similar socio-economic conditions in these localities; 2) Lower watershed area two: the districts of Vila Sonia, Vila Andrade, and Raposo Tavares; 3) middle watershed: the district of Campo Limpo and the city of Taboão da Serra; 4) Upper watershed: the district of Capão Redondo and the city of Embu.

(See Appendix 21)

Outcome 3 - Improvement of the abilities of the partner institutions, and new partnerships between academic and non-academic institutions

Regarding the partnerships developed by the project this year, we accomplished several advances. One of them is between our project and other initiatives at USP. An example is the partnership of the Sister Watersheds project with the ITCP-USP (Technological Incubator for Popular Cooperatives) program. Our project was responsible for connecting the program with the *catadores* (waste pickers) cooperative in Campo Limpo. Moreover, the ITCP-USP program connected us with the Network of Economic Solidarity of Campo Limpo and the network of Food Security in Butantã.

Along similar lines, the Sister Watersheds project formed a partnership with IPEN (the USP Institute of Energy and Nuclear Research) as a means of bringing members of civil society to USP for scientific activities. This involves learning about the structure and functioning of the IPEN and following its monitoring of the water quality of the Pirajussara stream. The goal here is to bring community and university together in the exchange of knowledge, with the involvement of Masters' students in the community.

Open Seminars of the Pisca Watershed

In February of 2007, the first meeting of the *Open Seminars of the Pisca Watershed* was launched by our team in Piracicaba, for the purpose of providing a weekly meeting where members of civil society, the university community, technicians, researchers and representatives of the technical chambers of the Piracicaba, Civari and Jundiá (PCJ) Watershed Committee can present and learn about initiatives, research, extension programs and successful experiences contributing to the shared management and conservation of water resources.

The creation of the Open Seminars also aims to contribute to the expansion of the project beyond the individuals and institutions which have been directly involved. This was a suggestion made by Cláudia Marcondes in the mid-term evaluation she conducted in March 2006.

The initiative has become quite well-known, both within the campus of the University of São Paulo in Piracicaba and beyond. Proof of that is the presence of students from the University of Campinas at our seminars.

The presentations are followed by discussion between the speakers and the participants, and the process has been very well-received. Exchange students, such as Laura Antoniazzi, have significantly contributed to the organization of the meetings. This was another recommendation made by Cláudia Marcondes.

(See Appendix 2 to 6)

Outcome 4/4.1 - Exchange of expertise between Brazil and Canada

During the fall of 2006, four graduate students from USP Brazil came to Toronto and were registered as students at the Faculty of Environmental Studies at York, where they took classes and participated in project activities. Together with the York Graduate Assistant for the project, Anne Sabourin, the four Brazilians (Laura Antoniazzi, Ignacio Giuntoli, Julia Leite and Kátia Canil) produced a visual presentation analyzing the *Land Use Evolution and Rainfall Runoff at York University, Keele Campus*.

(See Appendix 26)

Each of them also made presentations at the York Brazilian Studies Seminar on their graduate work, as well as contributions to the Brazilian website blog about the project and water issues in Toronto and Canada (http://www.baciasirmas.org.br/noticias_det.asp?texto_id=120&tipo=1).

The visit of representatives from York University and AUCC to Brazil in February 2007 was extremely productive. It was possible to carry out planning meetings and field visits as well as seminars at both campuses of USP (Sao Paulo and Piracicaba).

During the same period, for the purpose of exchanging experiences between UPCD projects in Brazil, a meeting was held with participants from the following projects: Sister Watersheds, Sustainable Participatory Waste Collection, and Building Capacity in Food Security. During the same meeting a joint seminar on gender was planned for February 2008 in Brazil.

4.3. Results Variance

Based on preliminary analysis and comparison of the objectives which were planned and achieved for this period, the Pirajussara watershed seems to have reached its goals. For instance, the formation of 6 workshop groups was predicted, while in fact more than 6 were created. There was some variation in terms of the size of the target public.

On the other hand, in the Piracicamirim watershed we have had some difficulties. Of the 4 new groups planned for this year, only 1 was formed. We decided to hire a new field manager in Piracicaba since Clarissa Riccio left us in January 2007. Mariana Duarte joined the project as the Piracicaba field manager in February 2007. Mariana knows the project very well since she participated as a student (she was a graduate exchange student with the project in Toronto in 2005), she worked at Ecoar for many years, and she has studied and lived in Piracicaba. We believe Mariana's leadership will help us surpass our expected results in the coming year.

4.4 Implementation variance

As with all community work, unexpected situations arise and difficulties with some groups may lead to detours, as well as many unforeseen opportunities. These include opportunities to discuss and present the project to new prospective partners, develop events to exchange experiences, partner with schools, undertake joint work with other institutions, and participate in various activities in the watersheds. This report contains many stories of such opportunities which we have taken advantage of as they have arisen.

4.5. Spinoff activities and unexpected results

There have been a number of serendipitous spinoffs of our work which have led to expansion into new areas which were not envisaged in the original project design, but which we have been happy we were able to pursue.

Summer 2006 Environmental Workshops for Black Creek Youth

During the spring and summer of 2006, the two Sister Watersheds graduate assistants at York, Johanna Reynolds and Claudia de Simone, (who are both interested in anti-racist community development and education) developed proposals for environmental education workshops in summer camps at schools, community centres, and other cultural and education institutions working with children and youth from the Black Creek watershed. They made successful contacts with a number of organizations, planned the workshops, developed workshop methodologies based on Ecoar's Agenda 21 work with young people in Brazil, and successfully delivered workshops at:

- Tumpane School, for one group of 18 grade 3 children;
- Science Explorations Summer Camp at York University for one group of 19 children aged 8-11, and another group of 12 children aged 8-11;
- Northwoods Community Centre, for 14 children aged 6-7 years old, as well as 18 children aged 8-9 years and 14 children from 10-11 years old.

Landscape Forum

Our project was a connecting link between a group of local associations in Butantã, in the Pirajussara watershed, and the Landscape Forum of FAU/USP (the Faculty of Architecture and Urbanism). This forum's objective is to bring into the university the urban questions of the city. Through lectures, workshops and debates that bring students, professors and community members together, it is possible to air contradictory positions and to hear different points of view.

In this process, the gain for our project was to include and discuss the Pirajussara watershed in several meetings of the forum. One result was that the University opened a spot for special students, and a leader from the Pirajussara creek area was accepted into their Masters course. Moreover, the students from FAU also benefit from the closer connection with the local community.

Open Seminars in Piracicaba

These meetings have contributed to the exchange of experiences and dialogue between the university community, civil society and professionals interested in socio-environmental subjects that are integral to shared water resources management. Beginning in February of 2007, the initiative has received many compliments and the invitations to participate have been received with much pride and satisfaction by the speakers.

The lecture of Prof. Marcos Vinícius Folegatti in the Open Seminars, on *The Technical Chamber of Water Use and Water Conservation in Rural Agriculture (CT-Rural) in the PCJ Watershed Committee (CBH-PCJ)* inspired the publication of the article *Agregar pequeno agricultor é desafio para gestão das águas* ("Bringing together small farmers is a challenge for watershed management") by Alessandro Piolli in the magazine *COMCIÊNCIA* of the University of Campinas (UNICAMP), in March 2007. See the website: <http://www.comciencia.br/comciencia/?section=3¬icia=290>

These seminars so far have included the following:

February 25, 2007 - Ellie Perkins from York University presented a seminar on "Natural resource valuation and the Sister Watersheds Project."

March 5, 2007 - Paul Zandbergen of the University of South Florida, presented a lecture on "Geographic Information Systems and water Resources."

March 14, 2007 - Marcos Vinicius Folegatti of the Department of Agricultural Engineering, ESALQ/USP, presented a lecture on "The Technical Chamber of Agricultural Use and Water Conservation (CT-Agriculture) in the CBH-PCJ".

March 14, 2007 - Laura Antoniazzi, Masters student in the Department of Applied Economy, ESALQ/USP, presented a lecture on "Payments for environmental services provided by agriculture for watershed protection."

March 27, 2007 - Valeria M. Freixêdas presented a lecture on "Conservation or Degradation? Different conceptions of practical micro-watershed ways of managing the Campestre stream - Saltinho/SP."

March 27, 2007 - Cecília Haddad presented a lecture on "Environmental education: an instrument for legal and social effectiveness of environmental norms."

Brazilian Studies Group at York University

In partnership with the York University Centre for Research on Latin America and the Caribbean (CERLAC) and the Canada Brazil chair, and for the second year now, a series of brown bag seminars followed by discussion took place at York every other Wednesday, with different speakers presenting their research, experience or proposals related to Brazil. The group has been effective in creating a Brazilian Studies Network at York, and students from other universities who are interested in Brazil often participate as well. On average, there were about 15 people at each meeting in 2006/07.

These seminars have included the following:

FALL TERM 2006

September 20, 2006. Jeff Packman, "We work hard at entertainment: Popular music as profession" and Katia Canil, "Natural disasters in Brazil."

September 27, 2006. Laura Antoniazzi, "Public participation in water management in Piracicaba."

October 4, 2006. Aneela Bislam, "Exploring the possibilities for an emancipatory approach to formal environmental education in Taboão da Serra, Brazil" and Julia Leite, "Landscape ecology and planning in the Poá Creek watershed."

October 11, 2006 . Dr. Livio Sansone (University of Bahia, Anthropology), "Bahia, Brazil: Sugar, Oil & Atlantic Identities."

October 18, 2006. Arlita McNamee, "Participation + Corporate Social Responsibility in Local Agenda 21: A Case Study from São Paulo, Brazil."

October 25, 2006. Frank Luce, "Cacao Workers in Bahia."

November 8, 2006. Danielle Robinson, "Sambas, rodas and raizes."

November 15, 2006 Marcio Mendes, "Capoeira in Brazil."

November 22, 2006. Alex Arnall (Oxford University), "Community Participation in Brazil and Mozambique."

December 6, 2006. Carlos Liberato, "African Slaves in Northern Brazil, 1755-1777."

WINTER TERM 2007

January 24, 2007

Alexis Glazer, BES Student, York University and York International Intern: "Youth Activism in Environmental Issues in São Paulo."

February 7, 2007

Fred Yurichuck, MES Student, York University: "Between Food and Other Things." Video Documentary.

February 21, 2007

Katherine Brasch, PhD Student, Ontario Institute for Studies in Education / University of Toronto: The Toronto Brazilian "Community": Bringing Brazilian Class into Canadian Context."

March 7, 2007. Fabiane Bastos, Master's Student, Faculty of Education, York University: "Multicultural Education in North-South Context: Impacts of Official Multicultural Legislation in Canada and Brazil."

March 21, 2007. Jessica Franklin, Ph.D. candidate, Department of Political Science, McMaster University: "The Transnational Dimensions of Afro-Brazilian Women's Identities and Activism."

Events in Pirajussara

November 28, 2006 – A Landscape Forum entitled "How to learn Together" was held at FAU/USP.

March 1, 2007 - Paul Zandbergen of the University of South Florida, presented a lecture on: "Geographic Information Systems and Water Resources" at the main campus of USP.

March 13, 2007 – The Sister Watersheds project was presented and discussed in the Masters' Course on Architecture and Urbanism of the University of São Paulo, at the class of Professor Euler Sandeville Jr.

March 22, 2007 – The Sister Watersheds project participated in an event to commemorate "World-wide Water Day", held by the Directorate of Environment and Secretary of Education (Taboão da Serra), and Basic Sanitation Company of São Paulo (SABESP).

March 22, 2007 - World-wide Water Week events were sponsored by the Secretary of Environment of Embu, Foundation SOS Mata Atlantica, Friends of Embu Ecological Society and the Sister Watersheds Project.

Participation in the Canadian Association for Latin American Studies (CALACS) conference in Calgary, September 27-29, 2006

Ellie Perkins organized two conference panels on civil society, public engagement, and democratization in Brazil, and Ellie Perkins and Andrea Moraes presented papers related to watershed management at the CALACS conference. See the conference program in **Appendix 27** or at <http://www.larc.ucalgary.ca/index.php?option=content&task=view&id=72&Itemid=67>

5) Communication Products

The documentary video "Agenda 21: Environmental Education in Source Areas", was produced this year in partnership with the Non-Governmental Organization Friends of Embu Ecological Society (SEAE).

(See **Appendix 1**)

Also this year the following communication products were developed: a project banner, posters for the Open Seminars, mailing list for dissemination of information and T-shirts were printed for the project team.

(See Appendices 7 to 10, 23 and 24)

Weekly information about the Brazil Studies Group appeared in the York newspaper Excalibur during fall 2006 and winter 2007, also available at <http://www.excal.on.ca/>.

With resources from the Funds for Culture and Extension of USP, the Brazilian team initiated the production of a book and a video about the Pirajussara Creek. The book team includes exchange students Thea Standerski, Júlia Leite and Kátia Canil as well as managers and interns under the coordination of Professor Jacobi, from PROCAM at USP.

At the College of Education, USP, a group was formed called TEIA ("web") by students from diverse areas of USP and professionals in the environmental area (with representatives of the Green Secretary and the Secretary of the Environment - SVMA, and other NGOs), coordinated by Professor Jacobi. Plans for this year include the publication of a magazine on Environmental Education.

6) Other Information

Curious Anecdotes

Bruno Cavalcante, a USP geography student and trainee of the Sister Watersheds project, was in an undergraduate class on "Scientific Research Initiation" when the teacher chose a work topic: "The stream close to my house...". The students had to write on the blackboard the name of the closest stream to their house, and since USP is located in the Pirajussara watershed, many students chose it as the focus for their research development. At the following class a student, with great enthusiasm, commented: "I found a site on the Internet that has everything on the Pirajussara river -- it is www.baciasirmas.org.br, the site of the Sister Watersheds project, and they are developing lots of environmental education projects in the Pirajussara watershed!" Stories like this demonstrate that the project is being used as tool for research inside and outside of the USP campus.

Another curious fact occurred at the beginning of this year, during a meeting of the Solidarity Network to which the Sister Watersheds project belongs. Débora Teixeira, the Pirajussara project manager, knew a youth group called *Microlhar* ("Microlook"). These youth had finished a certification course at the Technological Incubator of Popular Cooperatives (ITCP) of the USP, in audiovisual work. The group already had planned to make a video on the Pirajussara watershed, in particular in the Campo Limpo region, directed at youth. The result of this meeting, a happy coincidence, was the possibility of joining efforts towards carrying out this video project.

In sum, this has been a very good year for the Sister Watersheds project, and we are rapidly expanding our outreach, dissemination, and community involvement activities.

7) Appendices

(Due to their length, these are being sent separately by mail in CD and video format).

Piracicaba

- AP 1 – Video : Agenda 21 and Mananciais (Wetlands) -- *coming by mail from Brazil*
- AP 2 – Seminário Abertos apresentação Prof. Folegatti (Open Seminar presentations)
- AP 3 – Seminários Abertos apresentação Cecília Haddad
- AP 4 – Seminários Abertos apresentação Valéria Freixedas
- AP 5 – Seminários Abertos apresentação Paul Zandbergen
- AP 6 – Seminários Abertos apresentação Laura Antoniazzi

- AP 7 – Convite Seminários Abertos Paul Zandbergen (Open Seminar invitations/posters)
- AP 8 – Convite Seminários Abertos Cecília Haddad
- AP 9 – Convite Seminários Abertos Laura Antoniazzi e Prof. Folegatti
- AP 10 – Convite Seminários Abertos Ellie Perkins

Pirajussara

- AP 11 – Fotos – Caminhada EMEF Rodolfina (Photos of site visits, workshops, and partner groups)
- AP 12 – Fotos – Semana da Água do Jardim Mimas
- AP 13 – Fotos – Registro fotográfico dos Agentes de Saúde
- AP 14 – Fotos – Registro fotográfico dos Catadores
- AP 15 – Fotos – Registro fotográfico dos jovens
- AP 16 – Cronograma do Jogo da Sustentabilidade (Sustainability Game work schedule)
- AP 17 – Oficinas com Agentes comunitários de saúde (Health Agents workshops)
- AP 18 – Oficinas com os Jovens – EMEF Vera Fusco Borba (Youth workshops)
- AP 19 - Promoção da Saúde – 14/11/07 (Health Promotion)
- AP 20 – Apresentação do Projeto na FAU 13/03/07 (FAU presentation on Sister Watersheds)
- AP 21 – Análise preliminar dos cruzamentos da pesquisa de percepção ambiental (Preliminary research tabulation and analysis of Pirajussara environmental perception survey)
- AP 22 – E.E. Amador e Catarina 2 (School workshops)
- AP 23 – Pirajussara Cartaz (Information posters)
- AP 24 – Info Dia da Água
- AP 25 – Listas de Presença das duas bacias (Attendance lists)

Toronto

- AP 26 – Land Use Evolution and Rainfall Runoff at York University
- AP 27 – CALACS program
- AP 28 – Summer 2006 – Black Creek Environmental workshops