



**UPCD Tier 2  
End-of-Project Narrative Report  
May 2008**

**1) Project profile**

**Capacity Building for Civil Society in Water Resources Management**

<b>Lead Canadian partner</b>	<b>Lead developing country partner</b>
<b>York University</b>	
<b>Canadian project director:</b> Dr. Ellie Perkins, Faculty of Environmental Studies	<b>Ecoar Institute for Citizenship</b> <b>Developing country project director:</b>

Phone number: (416) 736-2100 ext. 22632  
E-mail address: [esperk@yorku.ca](mailto:esperk@yorku.ca)

Ms. Miriam Duailibi, Director

Phone number: 011-3052-1362  
E-mail address: [miriam@ecoar.org.br](mailto:miriam@ecoar.org.br)

### **Other partners:**

University of São Paulo, Main Campus

University of São Paulo, Piracicaba Campus

### **Link to Brazil's national development priorities**

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, based on river basin committees composed of representatives from senior government agencies, local government, and civil society. The equitable participation of civil society, which is fundamental for the success of this model, is the area most in need of support.

### **Project purpose**

This project's goal was 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 was 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.

### **Outcomes**

The project has contributed to the ability of civil society in the pilot watersheds to be articulate and effective participants in the local river basin committees, and also improved 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 included staff from the Ecoar Institute for Citizenship and faculty and students from the University of São Paulo, representatives of government agencies, local government and civil society organizations in the pilot watersheds, as well as a large number of local residents of the pilot watersheds. The great majority of this project's beneficiaries were women, and social equity was an important focus.

### **Key activities**

Capacity-building was undertaken mainly through meetings, courses, workshops, communications networks, curriculum and educational materials development, development of training techniques, and international student exchanges. Project activities were based in two pilot watersheds in Brazil and one in Canada. Presentations and publications on project activities and research, and the project's websites, also reached a broader audience.

### **Key results**

The project accomplished its goals of developing innovative and transferable methods for supporting the broader involvement of civil society in water management. Fifteen graduate exchange students (7 Canadian, 8 Brazilian) wrote masters papers, theses, or dissertations on topics related to the project. Data-gathering in pilot watersheds included a survey of more than 700 residents, and this data was analyzed, presented, and made publicly available in the form of articles and a visual atlas. Partnerships with dozens of community associations, schools, youth groups, health agents and other organizations in the pilot watersheds and local schools were established and more than 225 training workshops were held, directly benefitting more than 1460 people, including elementary and high school teachers, municipal health agents, waste pickers, low income youth, and members of youth, community, and environmental groups. The project's websites in Brazil and Canada continue to disseminate information on project activities, survey results, workshop techniques, curriculum materials, and project-related research. Partners have presented more than a dozen related papers at conferences and public events, and published in academic journals. Proposals to continue and expand the project's work in local communities resulted in additional funding to carry on many of the partnerships established by the project.

### **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 – April 2008

<b>2) Key team members</b>
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***2.1. Canadian Team Members***

Prof. Ellie Perkins, Faculty of Environmental Studies (FES), York University and Canadian Project Director

Prof. Paul Zandbergen, University of New Mexico, Project Co-Director

Andrea Moraes, York University Project Coordinator, FES

Sara Trotta, FES student, Graduate Assistant (2007/08)  
Sami Abdelmalik, FES student, Graduate Assistant (2007/08)  
Michael Yam, FES student, Volunteer (2007/08)  
Onyinye Ofoma, Undergraduate Assistant (2008)  
Maryanne Obwaka, Webmaster (2004, 2005 and 2008)  
Claudia de Simone, FES student, Graduate Assistant (Summer 2006) and Exchange Student (Winter 2007)  
Consuelo MacAlister, York International Intern at Ecoar (Summer 2007)  
Johanna Reynolds, FES student, Graduate Assistant (Summer 2006)  
Anne Sabourin, FES student, Graduate Assistant (2006/07)  
Debora Santos Lima, Undergraduate Assistant (2006/07)  
Arlita MacNamee, FES student, Graduate Assistant and Exchange Student (2005/06)  
Aneela Bislam, FES student, Graduate Assistant and Exchange Student (2005/06)  
Fabiane Bastos, Master's student in Education, Volunteer (2005/06)  
Alexis Glazer, York International Intern at Ecoar (Summer 2006)  
Rami Hanna, FES student, Graduate Assistant and Exchange student (2004/05)  
Nicole Worsley, FES student, Graduate Assistant and Exchange student (2004/05)  
Bonnie Wiltshire, Financial Consultant (2004/06)  
Lara Babbie, FES student, Graduate Assistant (Winter 2004)  
Marcia Chandra, FES student, Graduate Assistant and Exchange student (2004/05)  
Erika Fuchs, FES student, Exchange student (2003)  
Patricia Dias, York graduate student, Graduate Assistant (2003)  
Sylvie Tremblay, FES student, Graduate Assistant (2003)  
Tracy Locke, FES student, Graduate Assistant (2003)

### **Financial and Administrative Support at York University**

Sophia Mitchell-Hutson, Accounts Administrator, Research Accounting  
Angela Zeno, Manager, Research Accounting  
Rhoda Reyes, Research Officer, FES  
Peggy McGrath, Graduate Student Program Advisor, FES  
Benjamin Yankson, IT Support, FES

Tricia Fuller, Administrative Assistant, FES  
Adrian Shubert, York International Director  
Beth Alaksa, Coordinator, International Mobility Programs, York International  
Craig Wright, Coordinator, International Student Programs, York International  
Larissa Strong, Project Manager, Strategic International Initiatives, Office of the Associate Vice President International  
Shana Yael Shubs, Coordinator, CERLAC  
Eduardo Canel, Director, CERLAC  
Viviana Patroni, Director, RedLEIDH / CERLAC

## ***2.2. Brazilian team members***

### ***2.2.1. From Ecoar Institute for Citizenship:***

Miriam Duailibi, Brazilian Project Director  
Amanndha Pina, Administrative Manager  
Debora Teixeira, Field Manager and Supervisor in Sao Paulo  
Mariana F. Duarte, Field Manager in Piracicaba (2007-08) and Exchange Student (2005)  
Diego Aguero, Volunteer  
Claudia Cruz Soares, Volunteer  
Gabriela Prioli, Volunteer (Technical team)  
Christiane Godoy, Volunteer (Technical team)  
Reginaldo Forte, Atlas Developer  
Marco Artigas Forti, Assistant for Atlas  
Joao Carlos Seike Nagamura, Volunteer (Technical team)

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

Prof. Oswaldo Massambani, Project Director and Director, USP Innovation Agency

Elisabeth Lima, USP Coordinator and Technical Director for Innovations for Sustainability at the USP Innovation Agency  
Luiz Gustavo Maia, intern paid by USP

**Administrative Support/ USP Innovation Agency**

Andrea Aparecida Meira Revoredo, Administrative and Financial Office, USP Innovation Agency  
Julio César Sgarbi, Administrative and Financial Office, USP Innovation Agency  
Maria Eunice Esmerino Bernardo, Administrative and Financial Office, USP Innovation Agency  
Pedro Gonçalves, Administrative and Financial Office, USP Innovation Agency

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

Prof. Pedro Jacobi, Academic Supervisor  
Liviam Cordeiro Beduschi, PROCAM Field Manager (2007/08)  
Alexandre Rathsam, PROCAM Field Manager (2005/07)  
Barbara Carvalho Goncalves, Intern (2004/08)  
Bruno Cavalcante, Intern (2005/08)  
Paulo Marco Goncalves, Graduate exchange student from USP at York (Fall 2007)  
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)  
Fabiana Barbi, Graduate exchange student from USP at York (Fall 2005)  
Thea Standerski, Graduate exchange student from USP at York (Fall 2005)  
Mariana Ferraz Duarte, Graduate exchange student from USP at York (Fall 2005)  
Fabiola Marono Zerbini, PROCAM Field Manager (2004/05)  
Flavio de Paiva Oliveira, Intern ( 2004/05)

***2.2.4. From University of São Paulo/Piracicaba Campus – Luis de Queiroz School of Agriculture (ESALQ):***

Prof. Dálcio Caron, Academic Supervisor

Marcos Sorrentino, Consultant (Volunteer)  
Clarissa Carvalho, Field Coordinator (2004/06)  
Mariana Ferraz Duarte, Field Coordinator (2007/08)  
Joyce Brandão, Intern (2005/08)  
Cristiano Gomes Pastor, Intern (2005/08)  
Karine Silva Faleiros, Intern (2004/05)  
Roberto A.S. Oliveira, Intern (2004/05)

#### **2.2.5. Other Collaborators from USP**

Prof. Claudia Pacheco, Institute of Mathematics and Statistics (IME), USP  
Prof. Euler Sandeville, Faculty of Architecture and Urbanism (FAU), USP  
Prof. Rosa Maria Godoy, Social Assistance Coordinator (COSEAS), USP  
Carla Cucolo, Social Assistance Coordinator (COSEAS), USP  
Deisemara N. da Silva, International Agreements Assistance, International Cooperation Commission (CCInt), USP  
Ilza Aparecida de Oliveira, Exchanges and Agreements, International Cooperation Commission (CCInt), USP  
Denise Cristina M. Cristovam, International Cooperation Commission (CCInt), USP  
Ângela Pires, International Activities Office, Piracicaba campus, USP  
Solange Calabresi, Social Promotion Service (DVATCOM), Piracicaba campus, USP  
Language Centre of the Faculty of Philosophy, Letters and Sciences (FFLCH), USP



### ***3) Status of results template***

## UPCD Tier 2 End-of-Project Report Results Achieved

<b>Reporting period</b> April 2007- June 2008	<b>Canadian lead institution</b> York University	<b>Country</b> Brazil
<b>Project number</b> UPCD Tier 2 Project S61268-373G	<b>Project title</b> Sister Watersheds – Brazil/ Canada	
<b>Intended results</b>	<b>Indicators</b>	<b>Cumulative outcomes and outputs achieved (using indicators)</b>
<b>Outcome 1</b> Appropriate training programs for participants in watershed management in São Paulo State.	<b>Outcome indicator 1</b> 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><b>1.</b> This project developed a wide range of innovative training programs and workshop techniques for engaging civil society in water management. They are publicly available on the project's website and in other project publications, as listed below. The workshop techniques and materials developed by the project were used, tested, and improved in more than 225 training sessions, workshops, and meetings conducted by Brazilian project staff, involving more than 1,460 people (at least 942 women and 536 men). Due to social norms and diversity in Brazil and Canada, it was not possible to track the ethnicity of all participants, although nearly all were low-income community residents in project watersheds -- potential civil society participants in water management committees. Project results were also presented to watershed management committees / working groups and government officials. Many of the groups and individuals who participated in project workshops continue to be involved in environmental and water activism in the local watersheds.</p> <p>An evaluation by participants in a teacher training course on Environmental Education in the Pirajussara watershed (April-June 2006) and another evaluation following a training course in the Butantã area (April 2009) indicated that the curriculum materials were appropriate, useful and relevant. The materials and techniques produced through this project continue to be used and developed by the Ecoar Institute for Citizenship, the Brazilian Ministry of Environment's Environmental Education office, and the Environmental Research Centre at the University of São Paulo.</p> <p>The average daily access to the project's Brazilian website has been around 200 hits per day or 6,000 monthly.</p>
<b>Output 1.1</b> Well-developed and proven	<b>Output indicator 1.1</b> Number and nature of	<b>1.1.</b> More than 220 training workshops carried out by the project, with more than 1,460

<p>curricula for the training of civil society in water resources management, community participation, environmental education, multi-stakeholder processes and women and development.</p> <p><b>Output 1.2</b> 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>training workshops delivered in pilot watersheds, and number, gender, ethnicity and socio-economic composition of participants;</p> <p><b>Output indicator 1.2</b> Number and nature of innovative training methods and materials developed, and their utilization by project partners;</p>	<p>participants (approximately two-thirds women), are detailed in the appendix to this report.</p> <p><b>1.2</b> The training materials produced in Portuguese, which continue to be utilized by the Ecoar Institute for Citizenship in its ongoing work, include the following: 108-page Manual on Participatory Methodologies for Community Development, with colour illustrations 47-page Magazine on Urban Agroecology and Sustainable Practices, with colour illustrations 40-page Balance of the Project Magazine (illustrated project summary, with photos) 20-minute Video about the Pirajussara watershed Book about the Pirajussara watershed, including the project's baseline survey results and analysis Full-colour Socio-Environmental Atlas showing data gathered by the project on the Pirajussara watershed Booklet on Agenda 21 education in schools 2 Websites with information about the project (in Brazil and in Canada) 2 online community blogs (on the Pirajussara and Piracicamirim watersheds) 16 Articles on sustainable water management (posted on the website) and many articles published in academic journals and books</p> <p>14 Master's papers / theses / dissertations by graduate exchange students on their project-related research (8 in Portuguese, 6 in English)</p> <p>Materials produced in English include: 40-page Balance of the Project Magazine (English translation of illustrated project summary, with photos) 2 Articles on sustainable water management (posted on the website) and various published articles in academic journals and books</p>
<p><b>Outcome 2</b> Improved ability of civil society in the pilot watersheds to be articulate</p>	<p><b>Outcome indicator 2</b> Number and nature of activities of members of civil society within the pilot</p>	<p><b>2.</b> The project participated in more than 45 activities with civil society organizations on topics related to watershed management and environmental education. The Appendix contains a complete list. These included meetings on local water circumstances and needs with technical councils of the Alto Tiête and Piracicaba-Capivari-Jundiaí watershed</p>

<p>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><b>Output 2.1</b> Structured hydro-social database on the pilot area watershed (social, economic, biophysical, and legal).</p> <p><b>Output 2.2</b> Enhanced capacity of training program participants in the pilot watersheds.</p>	<p>watershed;</p> <p><b>Output indicator 2.1</b> Amount and nature of information collected about the pilot watersheds, organized in a systematic manner and made widely available</p> <p><b>Output indicator 2.2</b> Number and nature of activities undertaken by training program participants as a direct result of the training program;</p>	<p>committees in São Paulo State, diagnostic visits to watershed areas with community members, and organizational meetings with local communities on water issues.</p> <p><b>2.1.</b> Two pilot micro-watersheds in Brazil 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 about these watersheds, in collaboration with local community members. 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, and a full-colour Socio-Environmental Atlas was published, depicting social, community, hydrological and ecological information about the Pirajussara watershed on a series of maps with transparent overlays. A survey of local residents' knowledge and concerns regarding watershed issues was conducted in the two pilot watersheds, involving more than 700 residents. The results of the survey were tabulated and prepared for presentation and use in local watershed education sessions. Articles were written summarizing the socio-economic and biophysical conditions in the Pirajussara watershed. The information collected by the project continues to serve as a basis for further community organizing and research activities by project partners.</p> <p><b>2.2</b> Training program participants have built on their enhanced knowledge and understanding of water issues in a number of ways (see Appendix): for example, youth workshop participants who are members of the Zumaluma hip-hop collective wrote a rap song about the value of water in local communities, which they perform widely in the community; workshop participants organized local tree-planting and community garden development; local residents organized exhibits at World Water Day and other water festivals. Graduate exchange students have built on their experience with the project in their subsequent careers: one is working on water issues with a World Bank funded project in Egypt; one works for a private environmental education foundation in Brazil; one for an international environmental internship organization; one spent two years with IDRC and, like several others, is now continuing her graduate education; one has written a handbook on popular education; several work for municipal governments in Brazil on water and environmental education issues; several have become community organizers or environmental educators.</p>
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<p><b>Outcome 3</b></p> <p>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><b>Output 3.1</b> 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><b>Outcome indicator 3</b></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><b>Output indicator 3.1</b> Number and nature of new learning modules and courses at Ecoar, USP and York;</p> <p><b>Output indicator 3.2</b></p>	<p><b>3. New Partnerships</b></p> <p>Over the five years of the project, more than 41 new partnerships were developed with other community, environmental, and educational organizations in the partner watersheds. The Appendix contains a detailed list of these new partnerships, most of which are ongoing.</p> <p>These new partnerships and collaboration opportunities with local organizations have enriched the university courses and research of the project's academic partners, particularly Prof. Pedro Jacobi and Prof. Dálcio Caron of USP and Prof. Ellie Perkins of York, and their graduate students. Information about the project's methodologies, research and outcomes have been integrated into graduate and undergraduate courses, such as ENVS 6127 Community Organizing and Development (taught by Prof. Ellie Perkins, York U.) Besides the exchange students' research with partner communities and organizations, several York students have done field experiences for academic credit with local community organizations and/or conducted research for their Major Papers in the local community, as a result of the project's linkage relationships and of Knowledge Mobilization (extension) activities which began with project-initiated connections. Project partners have proposed new distance education courses, international exchange programs, and joint diploma programs between USP and York.</p> <p>The Brazilian Studies seminar series at York, started by project participants, has presented more than 33 seminars on the Brazilian reality to Canadian audiences since 2004. Seminar topics are listed in the Appendix.</p> <p><b>3.1.</b> The Ecoar Institute for Citizenship developed three new courses for community members, which it continues to offer periodically: "A Fruit in the Garden", the "Cycle of Open Seminars on the Pirajussara Watershed", and the "Cycle of Open Seminars on the Piracicamirim Watershed." In addition, Ecoar has developed a range of presentations and learning modules based on project methodologies and results, which are used in community workshops (see list in the Appendix). At York, besides incorporating project methodologies and results into learning modules for regular courses, Ellie Perkins supervised more than 10 Individual Directed Study courses on water management in Brazil for graduate students at York University (2 male, 8 female) between 2004 and 2008. A proposal for a new course in the Faculty of Environmental Studies on public participation and economic development has been submitted to the Dean. At the University of Sao Paulo, the project has also contributed to the development of learning modules and course material on watershed management and public participation.</p> <p><b>3.2.</b></p>
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<p><b>Output 3.2</b> Support for interdisciplinary program development and new partnerships between academic and non-academic institutions in Brazil and Canada.</p> <p><b>Output 3.3</b> 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>Number, gender, ethnicity, and degree of involvement of faculty and staff members of project partners;</p> <p><b>Output indicator 3.3</b> Number of graduate student programs completed and the students' ethnicity and gender;</p>	<p>More than 20 Ecoar staff members participated in or contributed to project activities (approximately 15 women, 5 men).</p> <p>More than twenty USP professors and students collaborated with Ecoar and other community organizations on the preparation, execution and analysis of environmental surveys in the Pirajussara and Piracicamirim watersheds (approximately 10 women, 10 men).</p> <p>Besides the 7 exchange students, a total of 16 graduate and undergraduate students from York participated in research and environmental education activities in the Black Creek watershed, along with several faculty members (18 women, 3 men).</p> <p><b>3.3 Exchange students</b> (7 Canadian, 8 Brazilian; 12 women, 3 men; 4 people of colour)</p> <p>Seven York FES graduate students from Canada went to Brazil to do field work for their Master's Major Papers. Six have completed their programs and written 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>Eight graduate students from USP came to Canada for the graduate educational exchange. All finished their theses and completed their programs. 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 and Interns in Canada: (13 women, 3 men; 9 people of colour) conducted a variety of research and networking activities (see Appendix).</p> <p>As noted in section 2.2 above, these students are building on their project experience in their subsequent work.</p>
<p><b>Outcome 4</b> 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><b>Outcome indicator 4</b> Degree of involvement and participation in the project activities by participants (following timetables and commitments, carrying out agreed upon work plans and tasks).</p> <p>Attention to the gender and socio-economic implications of all project activities;</p> <p>Maintenance of the principles of transparency,</p>	<p><b>4.</b> As planned, seven project directors' meetings were held: 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, a meeting in São Paulo in February 2007, and April 2008 in So Paulo. One project managers' workshop was held in São Paulo in June 2006. All directors and managers attended all the appropriate meetings, which followed agreed timetables and commitments. Principles of transparency, non-hierarchy, respect for diversity and conflict resolution were maintained as fundamental in meeting the project's goals.</p> <p>A partnership was developed with two other Canadian UPCD projects in Brazil -- "Building Capacity for Food Security" and "Participatory Sustainable Waste Management" -- to collaborate on ways of addressing gender issues in development projects. Three meetings were held with directors of these other projects, one in Calgary in September 2006, one in São Paulo in March 2007, and a special gender seminar in São Paulo in April 2008.</p>

<p><b>Output 4.1</b> 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><b>Output 4.2</b> Active network among project partners.</p>	<p>non-hierarchy, respect for diversity and conflict resolution between the partners involved and in the project activities.</p> <p><b>Output indicator 4.1</b> Amount and nature of project related information made available on project websites, and their utilization by project partners and others;</p> <p><b>Output indicator 4.2</b> Utilization of networking tools.</p>	<p>To expand the project's focus on race/ethnicity 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 on the project, and she is continuing to collaborate with project participants on new research and teaching initiatives.</p> <p>The project partners have developed several new research proposals for which they are actively seeking funding in order to continue their collaboration.</p> <p><b>4.1.</b> Articles and blogs related to the experiences of Brazilian exchange students in Canada were published on the project websites.</p> <p>Pedro Jacobi published more than 40 books, articles and book chapters related to the project. Three articles by Ellie Perkins and Andrea Moraes about women and water management in Brazil were published, in the <u>International Feminist Journal of Politics</u> and a Cambridge University Press book on ecofeminism. Another article by Ellie Perkins was published in the journal <u>Capitalism Nature Socialism</u>. Paul Zandbergen published a book chapter related to the project.</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, <a href="http://www.baciasirmas.org.br">www.baciasirmas.org.br</a>. An average number of 40,008 visits per month to the 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: <a href="http://www.yorku.ca/siswater">www.yorku.ca/siswater</a></p> <p>Ellie Perkins, Andrea Moraes, Paul Zandbergen, and Pedro Jacobi made more than 20 conference presentations about public participation and/or watershed management in Brazil at academic conferences, as listed in the Appendix.</p> <p><b>4.2</b> 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><b>Output 4.3</b> Awareness of the project and its results among a wide range of stakeholders</p>	<p><b>Output indicator 4.3</b> Number and type of publications and presentations.</p>	<p>The project utilized video conferencing, telephone conferencing, Skype, and other networking technologies, increasing project participants' familiarity with the potential of these techniques.</p> <p><b>4.3</b> The project developed publications of many types: blogs, community development manuals and magazines, reports on project activities, project and research reports, dissertations, theses, Major Papers, and peer-reviewed academic publications. More than 80 such publicly-available publications are listed in the Appendix. Project participants made dozens of public presentations on project-related work, which are also listed in the Appendix. The audiences for these presentations totaled thousands of people in Brazil, Canada, and internationally.</p>
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#### ***4) Analysis of project results***

As outlined in the “Results Achieved” table, this project was successful in accomplishing its objectives, and indeed went far beyond its original goals in some areas.

The following sections discuss the results of the project more fully. In addition, the illustrated project publication, “Bacias Irmãs: Balanço do Projeto” (also published in English as “Sister Watersheds Project Final Report”), available on the project’s websites, contains much more detail on all of the project’s partnerships, activities and results.

#### ***4.1. Project context***

Soon after funding for this project was approved, one of its original designers (Prof. Marcos Sorrentino of the University of São Paulo) was invited to join the Brazilian federal government as director of environmental education in the Ministry of the Environment in Brasilia. His departure from an active role in the project caused readjustments in the team in Piracicaba, while also bringing awareness of and support for the project’s goals at the national level. Another management-level change early on was the restructuring of the USP office on international affairs and extension (CECAE) into the university’s Innovation Agency. This brought Prof. Oswaldo Massambani, director of the Innovation Agency, into a leading project role as a member of the management team and the lead USP project director.

During the six years of this project, the Brazilian government of president Luis Inacio Lula da Silva assumed an increasingly important leadership role, both within Latin America and globally, on environmental and poverty-reduction issues. Participatory democracy and attention to social equity are central pillars of Brazil’s contributions to global discussions on development. This context shaped and assisted our project’s work; in its timing and goals, this project was part of a much larger Brazilian and international impetus towards greater public involvement in water management, environmental education and community development.

#### ***4.2. Assessment of Outcomes and Impact***

***Outcome 1.*** *Appropriate training programs for participants in watershed management in São Paulo State.*

The project developed and tested training programs with more than 1450 participants (roughly two-thirds of them women), partnering with 12 different community organizations to present modules of from two to several dozen individual workshops for each organization, on topics related to environmental education and watershed management. The various training programs were shaped and modified to be specifically appropriate for children, youth, health agents, school groups, teachers, film/culture/music/arts organizations, and Agenda 21/environmental education groups. The methodologies, techniques, and materials developed for these workshops and training programs were made available to other organizations, as well as contributing to the capacity of project partner organizations and

individual staff members and students to continue their related work into the future.

***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.***

The curriculum materials and techniques developed by the project were tested and fine-tuned in more than 220 workshops designed and led by project staff and exchange students in the three watersheds. All of the workshop participants were potential participants in Brazil's watershed committees, as civil society representatives/organizers. The workshops focused on water management, environmental education, community development, and democratic participation with emphasis on gender and socio-economic equity.

One policy outcome of the project was that a gap in the effective democratic coverage of the Alto Tiete watershed committee was identified and recognized by authorities: through the project's socio-environmental survey, it was found that occupants of the Pirajussara watershed were not represented on any water sub-committee, and at the project's end, steps were being taken to remedy this. Also during the project, USP Professor Pedro Jacobi (Academic Supervisor for this project) was elected chair of one of the Technical Committees of the Alto Tiete watershed committee, thus strengthening the links between university and civil society representatives in the watershed management structures.

***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.***

The curriculum materials developed by the project (in Portuguese) include a 110-page illustrated Manual on Participatory Methodologies for Community Development containing a set of workshop activities and background materials for participatory community environmental education programs and training sessions; a 47-page illustrated guide with practical exercises focusing on urban agroecology; a full-colour socio-environmental atlas which brings together ecological, hydrological and social information about the Pirajussara watershed in a series of interactive maps; a video about the history and environment of the Pirajussara watershed; a publication outlining Agenda 21 activities in schools; and several blogs and websites with materials and discussion-starters on watershed topics, as well as a book and many journal articles, masters' papers, and other academic publications contributing to the literature on participatory watershed education in Brazil. Many of these publications have been translated into English, and related English-language materials have also been produced.

***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.***

Project participants from the University of São Paulo and the Ecoar Institute for Sustainability – both continuing staff members and students, and those who have moved on after working on the project – benefitted from the opportunity to develop skills related to project proposal development, project implementation, financial management, environmental education and training, community development, communications, website development, mapping, video-making, public engagement and liaison with government officials, along with many other project-related skills. Both USP and Ecoar continue to make use of these experiences in their ongoing development of new projects, as well as their assistance to other organizations which, through the Sister Watersheds project, have come to see them as experts and leaders on watershed management issues.

***Output 2.1 Structured hydro-social database on the pilot area watershed (social, economic, biophysical, legal).***

The community environmental perception surveys conducted by the project in each of the Brazilian watersheds established a database of information on public priorities and views on watershed issues. The socio-environmental atlas on the Pirajussara watershed gathered and made available in one place a wide range of information on ecological, hydrological, social and political circumstances in the watershed as a whole – information which proved very useful to public officials and watershed committee members in understanding the watershed as a whole.

***Output 2.2 Enhanced capacity of training program participants in the pilot watersheds.***

The nearly 1,500 participants in workshops conducted by the project gained familiarity and experience with water-related issues and their own ability to influence water management and policy through watershed committee structures, community organizing, community arts, and other means. Detailed examples and comments from a number of workshop participants are cited in the document entitled “Balanço do Projecto” (translated as “Sister Watersheds Project Final Report”).

***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.***

This project helped both its university and NGO participants to bridge the gap between academic and community-based methods of environmental education. Graduate exchange students studied and contributed to local training programs; faculty members wrote about the theoretical and practical benefits of public participation in watershed management; NGOs supervised students who received academic credit for their community-organizing work; professors led local watershed governance structures; innovative methods for environmental education were shared internationally; this collaboration allowed new perspectives on water management to evolve, with benefits for all participants’ training/education programs. USP, York and Ecoar developed at least 38 new partnerships with other community organizations as a result of this project.

***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.*

Project results have been shared and discussed in more than 25 public seminars at USP (Open Seminars of the Pirajussara and Piracicaba Watersheds) and York (in the Brazilian Studies Seminar Series and the York University Colloquium on the Global South). Ecoar developed the community training course One Fruit in the Garden, focusing in part on watershed issues. USP and York professors have incorporated project research results in their ongoing courses and conference papers/presentations, as well as more than 10 individual directed study courses for graduate students. A new course on public participation and democratization in the South is being developed at York. An ongoing undergraduate summer internship program at Ecoar for York University students was initiated. USP has begun a new study group linking government, civil society and university professionals in the area of environmental education.

***Output 3.2*** *Support for interdisciplinary program development and new partnerships between academic and non-academic institutions in Brazil and Canada.*

Students, both in Brazil and in Canada, have been crucial in developing the linkages between academic institutions and community-based NGOs. Both locally and internationally, students have sought out community organizations for their research and field experiences, and shared the results of their work with both academic and non-academic audiences. The student exchanges of this project have thus fuelled its interdisciplinary and educational bridging contributions.

***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.*

All of this project's exchange students have continued to work, after completing their graduate programs, in the areas of environmental education, international development, and/or watershed management. Two of the Canadian exchange students have moved to Brazil, and one of the Brazilians has moved to Canada. One of the Canadians now lives in Egypt, working in watershed management. Many continue to bridge academic and community-based organizations in their professional and/or volunteer work.

***Outcome 4*** *A strong international network of partner institutions to provide support for ongoing training and education efforts in the area of water resources in Brazil and Canada.*

The ties between York, USP and Ecoar have been strengthened through this project. York and USP researchers are developing several new research proposals, and York and Ecoar are collaborating on ongoing student internships as well as new conference and community development exchange proposals. Through Ecoar's participation in the Centre

for Knowledge and Care of the La Plata Basin, York was invited to become involved in that initiative. York's work in the Black Creek West watershed is ongoing, and Ecoar continues to provide ideas and inspiration.

***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.***

The 15 graduate exchange students were supervised by the project's faculty partners in the other country, and participated in research collaboration during and after their exchange visits. There was a high degree of research collaboration among the USP students, and between the York and Ecoar participants in the project. Each graduate exchange student made a public seminar presentation in the other country about his or her work. Several of the presentations in Canada were attended by officials from the Brazilian Consulate.

***Output 4.2 Active network among project partners.***

Good and frequent communication among all project partners was facilitated by having a Brazilian project coordinator at York; bilingual project directors at USP, Ecoar and York; frequent student exchanges; and through electronic communications (Skype and video conferencing) as well as regular meetings of the project management team.

***Output 4.3 Awareness of the project and its results among a wide range of stakeholders***

Besides the dozens of staff and students involved in the project directly through its partner organizations, and the nearly 1500 participants in workshops run by the project, and the audiences at the many public seminars organized by the project and the conferences where its results were presented, the project's outreach includes those using its websites (more than 10,000 hits were recorded on the [baciasirmas.org.br](http://baciasirmas.org.br) website in one month in 2006) and the curriculum materials and publications it has generated. These audiences include people from academia, government, NGOs, and local communities / civil society.

#### ***4.3. Results Variance***

The original design of the project envisaged somewhat more direct contact between project participants and the representatives of civil society on watershed committees in Brazil. In practice, given both the relative lack of organized civil society constituencies for improved water management and our desire to emphasize gender and socio-economic equity, the project ended up focusing more broadly on the practical questions of how to conduct watershed education programs with marginalized social groups, building on project participants' experience with environmental education in partnership with community-based organizations. This resulted in a project with more generalizeable and perhaps longer-term social benefits.

The incorporation of activities in the Black Creek watershed in Canada, as both a comparator and an additional focus of student work and community education activities, was another beneficial evolutionary addition over the course of the project.

#### ***4.4 Implementation variance***

The socio-economic surveys undertaken at the beginning of the project absorbed more time and resources than originally planned, which we feared would necessitate some scoping down of the workshop programs and materials we would be able to develop. Much of this anticipated shortfall was made up before the end of the project, however, by the valuable contributions of the exchange students which exceeded all expectations, and especially through the extraordinary ability of Ecoar staff to leverage other resources and produce outstanding results through the community workshops. The development of the Manual on Participatory Methodologies for Community Development, in particular, was a triumph.

We adopted the very useful recommendations of the midterm evaluation, and in particular took steps to increase the role and responsibilities of the Canadian project coordinator, in order to facilitate the integration of the research/academic and intervention/community-based elements of the project.

#### ***4.5. Spinoff activities and unexpected results***

We did not fully envision the degree to which parallel challenges and opportunities for environmental organizing would be present in marginalized communities in Brazil and in Canada. The community development and environmental education skills which Canadians learned in Brazil, and which Brazilians shared in Canada, were a constant source of dynamism and basis of collaboration for project participants.

A major spinoff activity was our communication with the leaders of two other UPCD projects in Brazil regarding gender and development issues, which allowed us to hold a joint planning meeting in 2007 and then conduct a 3-project gender workshop in April, 2008. In this workshop, Brazilian and Canadian staff members of all three UPCD projects shared and discussed gender-related challenges and issues which had emerged in our work, and we invited a Brazilian gender and development expert to share insights regarding ways of meeting these challenges and understanding the potential of our projects in gender terms. This successful workshop was a great way of reflecting together and consolidating our learning from our experiences with the project.

#### ***4.6. Sustainability of Project Results***

All of the project participants and partner organizations are continuing their work on various aspects of public involvement with watershed management, and will thus be able to build on the project's results in their ongoing and future work. Ecoar has plans to use the Manual and other project publications in its environmental education workshops in watershed communities. Prof. Pedro Jacobi will continue to be involved with the Alto Tiete watershed committee and to conduct social learning research and supervise students in the

area. Prof. Ellie Perkins will continue her research, teaching and student supervision on water issues in Brazil, gender and public participation, and environmental education and community development in Canada. The students and NGO staff members most closely involved with the project are all building on their experiences in their current careers. The project's results, therefore, are well-integrated with other ongoing initiatives and have made a significant contribution to those initiatives.

### **5) Challenges and Lessons Learned**

This project faced significant challenges as it set out to integrate research with community action and student exchanges with workshop materials development, and to bridge the diverse cultures and abilities of NGOs and academic institutions. We learned that this is not easy, but it can be done. We learned that personal commitment on the part of project participants is crucial. We learned that institutional flexibility is a valued asset. We relied on good communications skills and bilingual language abilities on the part of most participants in the project. Time and money and other resource constraints limited what we could accomplish, but we accomplished a great deal by integrating the project's goals with other ongoing work we all were doing, which also contributed to the project's sustainability.

### **6) Promotion of Project Results**

Besides the many articles about the project in academic journals, and the atlas, video, book and other project publications which have been distributed in hard copies and online, the Sister Watersheds project was publicized in several articles in the York University journal YFile, the CERLAC newsletter, the AUCC publication Uniworld, and in several USP publications. A list of the project's publications is found in the Appendix to the Final Results Achieved table.

### **7) Success Stories**

This project contributed to a wide range of successful connections, partnerships, and new linkages between community groups, academic institutions, and government agencies. Some examples:

- Through a new partnership developed with the Healthy Green Environments program, all 7,000 community health agents in São Paulo State will soon have access to the programming and environmental education workshop materials developed by the Sister Watersheds project.
- The Ministry of Social Development funded a new project which was jointly proposed by Sister Watersheds project staff and an environmental organization, the Friends of the Embu Ecological Society, for community gardens and local leadership capacity-building.
- Sister Watersheds staff and a Piracicaba youth group, the Environment in Focus Institute, together submitted a successful proposal to the university organization USP Recicla (USP Recycles) for youth training workshops on recycling and solid waste, using Sister Watersheds materials and methodologies.



- Sister Watersheds staff worked with the Piracicamirim Educators' Collective to develop a funding proposal sent to the Ministry of the Environment for ongoing financial support for the collective.

All of these successes, and many others, were not specifically planned, but resulted from the project's collaborative and inclusive way of working.

## 8) Project Equipment

Equip. type	Value In BRAZILIAN REAIS	Location BRAZIL	Quantity	Year	Where purchased
Digital projector	1.740,00	Ecoar	01	23/12/ 2003	Angel Imagem e Som Ltda
Notebook computers	14.940,00	Pirajuçara-Piracicaba-Ecoar	03	27/4/ 2004	Sander Express Com Imp Exp Ltda
Projectors	9.800,92	Piracicaba-Ecoar	02	17/5/ 2004	Multi- Imagem Arte e Tecnologia em Projeção
Micro-computers	9.190,60	Pirajuçara-Piracicaba-Ecoar	03	17/5/ 2004	Fif-Comercial Ltda
Video camera	2.990,00	Pirajuçara	01	8/9/ 2005	Fulltech Informática Ltda
Digital projector	1.112,14	Piracicaba	01	11/7/ 2005	Fulltech Informática Ltda
Micro-computer	1.730,28	Ecoar	01	5/9/ 2005	Fulltech Informática Ltda
Headphones	74,97	Pirajuçara-Piracicaba-Ecoar	03	26/5/ 2006	Kalunga Com Ind.
Webcams	239,7	Pirajuçara-Piracicaba-Ecoar	03	24/5/ 2006	Lojas Americanas
TOTAL Braz. Reais \$					
Equip. type	Value In CANADIAN DOLLARS	Location CANADA	Quantity	Year	Where purchased
Lap top	\$1,900	Project office	01	2004	Future Shop
Printer	\$132.94	Project office	01	2004	Staples

## 9) Other Information

The Sister Watersheds project's closing ceremony at the University of São Paulo in April, 2008 included speeches by Canadian and Brazilian academics and university administrators, the screening of a video about the Pirajussara River made by project interns, an impromptu performance of a song about the Pirajussara by a local health agent who was inspired to write it during project workshops, a performance by youth group members of a rap song they wrote about the significance of water, and powerpoint presentations on the project's forthcoming book and the illustrated community development manual developed by the project's NGO partner for local environmental educators. This vibrant multi-media event demonstrated, in a nutshell, what is exciting about combining academic and community-based work on current public policy challenges. The creative and fun aspects of community organizing make theorizing about public involvement both more inspired and more realistic. This project has taught all its participants a great deal about the value and potential of such collaboration.

## Appendices

### **I -- Comments from Brazilian and Canadian exchange students about the project's significance to them:**

*Do ponto de vista acadêmico, o intercâmbio contribuiu para eu trocar e vivenciar experiências com a equipe do Projeto no Canadá, com a comunidade acadêmica da York University e diversos atores sociais que executavam projetos na área de gestão dos recursos hídricos, educação ambiental, planejamento urbano e desenvolvimento comunitário. A chance de usufruir dos serviços públicos de qualidade (ex: transporte, parques, bibliotecas e centros comunitários), a vida em comunidade, as políticas públicas voltadas para o bem-estar da população, contribuiu para que eu adquirisse uma nova visão da gestão e do planejamento urbano. Profissionalmente, a experiência foi tão valiosa que acabou contribuindo para minha qualificação e ocupação do cargo de coordenação e facilitação de processos participativos como o de construção da Agenda 21 do município de Pilar do Sul/SP e posteriormente, o de gerente executiva do projeto Bacias Irmãs na sub-bacia do Piracicamirim. De origem indígena a palavra Toronto significa lugar de encontro. Nada mais apropriado para uma cidade onde podemos encontrar e interagir com pessoas de diferentes raças, culturas e países. Toronto foi o lugar onde pude me encontrar com o mundo e que reforçou a minha consciência de cidadã planetária. Serei eternamente grata a essa oportunidade que me foi concedida pelo Projeto Bacias Irmãs.*

*(Por Mariana Ferraz Duarte - Eng<sup>a</sup> Agrônoma - Mestre em Saúde Pública FSP/USP)*

*A experiência em Toronto pelo projeto Bacias Irmãs foi uma ocasião única e muito enriquecedora. Poder conciliar o lado social e técnico nas questões ligadas aos recursos hídricos foi algo raro. Toronto ofereceu um terreno muito fértil para conhecer a cultura canadense, ter acesso à iniciativas e informações de um país muito moderno e dinâmico, do qual tem muito a se aprender. As disciplinas cursadas foram de ótimo nível e muito interessantes. A disciplina "web-mapping for public engagement" foi particularmente interessante por ter me introduzido a internet como meio de participação social e produção de dados. Isto me levou a adotar uma nova metodologia na minha pesquisa de mestrado, desenvolvendo um portal de web-mapping onde a população participa no mapeamento do risco de inundação percebido. A combinação de ótimos serviços oferecidos tanto pela cidade como pela universidade, o espírito acolhedor e a curiosidade dos canadenses, fizeram com que os meses de intercâmbio voassem, literalmente. As atividades que conseguimos realizar com o projeto, segundo os compromissos e horários dos membros, foram também muito importantes para*

*abordar assuntos de gestão de recursos hídricos em grupo, em que cada um disponibilizava seu talento e competência para o trabalho comum.*

*O estudo da evolução das áreas impermeáveis do campus da York University ao longo dos anos, desde a sua construção, foi realizado para avaliar o aumento de drenagem que afetou a hidrografia das áreas adjacentes foi ocasião para quantificar um fenômeno cada vez mais comum nas áreas urbanas do mundo todo. Me senti muito privilegiado por ter tido a oportunidade de participar deste intercâmbio. Iniciativas deste tipo são difíceis de se organizar e manter no tempo, e os obstáculos burocráticos numerosos, mas o ganho pessoal e profissional de quem participa é tão alto que se sobrepõe à fadiga.*

*(Por Ignazio Giuntoli - Mestrando Eng. Hidráulica e Saneamento - Escola de Engenharia de São Carlos – USP)*

*Participei no segundo semestre do ano de 2006, no período de Agosto a Dezembro, de um intercâmbio acadêmico na Faculdade de Estudos Ambientais (FES) da Universidade de York (Canadá/Toronto) através do Projeto Bacias Irmãs. Foi uma experiência muito proveitosa tanto para complementar a minha já concluída pesquisa de Mestrado, como para minha vida acadêmica e desenvolvimento pessoal. Com relação aos procedimentos de viagem e ao atendimento e receptividade das instituições envolvidas tudo aconteceu de modo tranqüilo e adequado, apenas por um pequeno atraso inicial no recebimento, em Toronto, da primeira parte do pagamento da bolsa, o que gerou uma tensão no momento de fazer o contrato e acordo para a moradia, eu tive uma boa relação com a equipe do projeto canadense e da Universidade de York. Eu já sabia antes de viajar que teria que ir atrás dos meus interesses e objetivos. E isso foi comprovado durante a minha permanência, já que o projeto no Canadá não dispunha de uma estrutura e atividades previamente estabelecidas em que eu iria apenas me inserir e participar. Isso foi um grande desafio, porque barreiras tiveram que ser atravessadas na busca de atividades e informações, como: diferenças culturais, de língua, encontrar um lugar para morar, por não estar familiarizada com a cidade e região, e com o sistema em que as organizações estão estruturadas. Levando em conta tudo isso, o tempo que tive para desenvolver as atividades foi curto, porque a fase de adaptação é fundamental e é longa, para mim foi de aproximadamente 3 meses. Penso que para poder ter uma vivência ainda mais produtiva tanto na universidade, no projeto como na sociedade, na busca de contatos, repertório de trabalhos e temas, o tempo de permanência deveria ser de pelo menos 1 ano. Mas mesmo assim os ganhos foram muitos e os aprendizados inúmeros. O Canadá possui uma realidade completamente distinta da brasileira. Planos, projetos e ações que puder ter contato puderam servir como exemplos e repertório, mas que precisam ser bastante contextualizados. Os recursos financeiros canadenses que são dispostos para as melhorias ambientais, preservação de recursos naturais, saneamento básico, moradia, educação básica dentre tantas outras, fazem uma grande diferença no delineamento das ações por eles praticadas. Para destacar algumas atividades, pude cursar como aluna regular um curso da grade curricular da Pós Graduação na FES, “Landscape Ecology and Planning” – Ecologia da Paisagem e Planejamento, curso pautado em abordagens teórico-práticas para ilustrar e discutir princípios de ecologia da paisagem e suas aplicações para o planejamento ambiental. Esse curso me auxiliou no complemento teórico para minha pesquisa e permitiu que eu analisasse alguns dados e apresentasse para a turma de alunos através de um projeto final para o curso. O estudo sobre as condições da bacia hidrográfica canadense do Black Creek, bem como a análise que fiz junto à equipe dos alunos brasileiros sobre o planejamento ambiental do campus da York University e o escoamento superficial de águas pluviais; o acompanhamento de alguns seminários e visitas junto à comunidade do Projeto de Renaturalização da Foz do Rio Don (TRCA); a Conferência Anual da Canadian Association for Latin American and Caribbean Studies – CALACS (Calgary, Alberta), Seminário de Estudos Brasileiros na York” (York Brazilian Studies Seminar); do workshop “Espaços Públicos nos Subúrbios” (“Public Space in the Suburbs”), foram algumas atividades das quais participei e que me trouxeram uma maior compreensão de aspectos sociais, ambientais e de manejo dos recursos hídricos do Canadá*

*(Por Julia Leite – Bióloga e Mestre pela faculdade de Arquitetura e Urbanismo/USP)*

*O intercâmbio foi uma experiência sem igual na minha vida acadêmica/profissional e consequentemente, pessoal também. Os procedimentos de seleção, acesso a informação e procedimentos de viagem aqui no Brasil foram ótimos, a equipe do projeto (Pedro e Beth) me auxiliou o tempo todo. Tive ótima receptividade também no Canadá (Andrea e Ellie), que me ajudaram com todas as burocracias da Universidade e da vida no Canadá. Participar do projeto foi de grande importância para o desenvolvimento da minha pesquisa de mestrado. Também, fiz o curso de Popular Education for Social Change, na Faculdade de Estudos Ambientais da York. Na volta, continuei participando do projeto através das oficinas de Educação Ambiental. Tudo isso está me ajudando muito agora na minha vida profissional, pois estou lecionando Educação Ambiental e aproveitando muitas das coisas que aprendi durante o intercâmbio e o projeto."*

*(Por Fabiana Barbi – Socióloga – Mestre em Ciência Ambiental/USP)*

*A participação no Projeto Bacias Irmãs por meio do Intercâmbio Internacional realizado na Universidade de York, Canadá consistiu em grande oportunidade para incrementar a participação em pesquisa interdisciplinar, além de contribuir para o desenvolvimento e finalização da tese de doutorado (Canil, K., 2006 "Indicadores para monitoramento de processos morfodinâmicos: Aplicação na bacia hidrográfica do ribeirão Pirajuçara, RMSP, SP"). A convivência com os profissionais da universidade e outras instituições de ensino e pesquisa do Canadá proporcionaram a troca de experiências com professores e pesquisadores, a partir do conhecimento de estudos de caso em bacias hidrográficas inseridas nos diversos contextos geográficos e particularmente pela possibilidade do contato com alternativas de solução propostas e implementadas em nível de gestão compartilhada e participativa de recursos hídricos, incluindo instâncias governamentais, instituições de ensino e pesquisa, sociedade civil, e comunidades locais. Durante o período do intercâmbio foram desenvolvidas várias atividades, desde participação em cursos, palestras, eventos técnicos científicos não só na Universidade de York, mas também em outras instituições. Como por exemplo, a participação no 3rd Annual Canadian Risk and Hazards Network Symposium, realizado em Montreal.*

*Participar desse simpósio, foi uma das importantes atividades durante o intercâmbio. O Seminário tratou de temas como: parcerias no gerenciamento de riscos; exemplos das melhores práticas que auxiliam no gerenciamento de riscos, principalmente aquelas relativas às medidas de prevenção; formação de redes do conhecimento entre pesquisadores, técnicos e gestores públicos; apresentação de novos métodos e técnicas na gestão de riscos; e como trabalhar em parcerias para reduzir os riscos em comunidades e garantir sua segurança. Esta última questão foi bastante pertinente aos objetivos do Projeto Bacias Irmãs, que busca a construção de parcerias com a sociedade de civil e o desenvolvimento de metodologias inovadoras para estimular a participação pública nos processos de tomada de decisão da política de recursos hídricos.*

*Durante o seminário estabeleci contatos com vários profissionais, explicando sobre a experiência brasileira no gerenciamento de riscos e o meu projeto de pesquisa de doutorado desenvolvido na bacia do ribeirão Pirajuçara.*

*Um dos frutos de participação neste seminário foi o convite para o 4rd Annual Canadian Risk and Hazards Network Symposium, que ocorreu em novembro de 2007 na cidade de Vancouver. Enviei um dos trabalhos que desenvolvo no Instituto de Pesquisas Tecnológicas, e recebi um convite para apresentação do trabalho com todas as despesas de viagem e estadia patrocinadas pela CIDA.*

*Processo Seletivo: O processo seletivo foi bem formulado e organizado. Visou avaliar os candidatos de uma forma global, desde a relação das pesquisas individuais com o Projeto Bacias Irmãs, a experiência profissional e a fluência na língua inglesa.*

*Procedimentos para a Viagem: Toda orientação para viagem referente à documentação necessária e aos recursos financeiros, patrocinados pela CIDA foram tratados com Andréa Moraes -*

*coordenadora administrativa do projeto. Houve morosidade nos trâmites para receber o valor da bolsa integral, conforme o edital do processo seletivo. Este recurso apenas foi depositado cerca de 20 dias após a chegada dos intercambiantes; no meu caso dificultou a logística de pagamento inicial de aluguel de moradia.*

*Atendimento e receptividade pelas instituições envolvidas: Na Universidade de York fomos recebidos pela professora Ellie Perkins, que nos acompanhou durante o período do intercâmbio. A partir da iniciativa dos intercambiantes de desenvolver algum trabalho específico na bacia do Black Creek, foram realizadas reuniões periódicas com a professora Ellie, que nos acompanhou durante o trabalho.*

*Ganhos Pessoais e Profissionais:*

*Como o intercâmbio não tinha uma proposta de trabalho definida, meu tempo foi bem administrado. Entre aulas, pesquisas, trabalhos, participação em congressos, reuniões e redação final da tese de doutorado, aproveitei também para conhecer a cidade (Toronto) e seus atrativos turísticos. Fiz algumas viagens para conhecer as principais e belas paisagens do Canadá em cidades, da costa leste, Montreal, Quebec, Niagara Falls, e costa oeste, Calgary, Banff, Lake Louise, Vancouver, Whistler e até Victoria Island.*

*Profissionalmente, conheci professores de outras faculdades que me receberam muito bem e se interessaram pelo meu trabalho. Entrei em contato com técnicos e pesquisadores de instituições governamentais onde pude apresentar o projeto Bacias Irmãs, meu projeto de pesquisa de doutorado e as atividades de minha área de atuação no IPT.*

*(Por Kátia Canil – Geógrafa, Dra, USP.)*

*“O rio córrego como protagonista é a pauta principalmente em área urbana, portanto, toda a discussão em torno disso é necessária e muito importante. A maneira como está sendo apresentada no curso me parece bastante satisfatória. Tem funcionado, na verdade como condutor de reflexão e discussão enriquecendo conhecimentos”.*

*(Por um participante num oficina do projeto, 2009).*

*The Sister Watersheds Project has given me insight about the role of the civil society for citizenship engagement, especially as it relates to the management of natural resources, and the active engagement of the local communities through environmental education. In fact the experience I gained from my research and field work with the Sister Watersheds projects has given me a first hand experience to examine the challenges and opportunities of the civil society organizations in implementing active programs with local citizens, as well as the power relations which exist between the government, the private sector and the civil society entities.*

*Regarding the the area of water resources management, following my masters I worked in Egypt as a consultant with the African Development Bank and other consultancy firms on a variety of water management issues from the government/donor perspective. After this rich exposure, I have directed my work to focus more on civil society organizations, albeit not only limited to water management but including the broader scope of programming areas of socio-economic and sustainable development taregting marginalised communities all over Egypt especially youth, women and children. Accordingly, for the last 2 years I have been working with the CIDA program country in Egypt, with a focus on civil society organizations all over the country, not only for programs managing natural resources, but also including human rights, social and economic priority areas.*

*Currently, I manage the Canada Fund for Local Initiatives (The Ambassador of Canada Fund in Egypt) thus supporting NGO's and CBO's through small grants to implement projects covering different development areas all over the country. Amongst these*



*are gender equality, child protection, institutional capacity building, micro-finance (and incorporating financial and non-financial services), provision of water supply and sanitation, education and finally, human rights and democratic development. Through my current job I am getting to learn more about the vital role civil society can play to advance the development of the local communities on several fronts through the mobilisation of local knowledge and resources.*

*A final comment in that respect would be that while challenges and community problems may vary from one geographic context to the other (North Africa-Latin America), the role of the civil society always remains central to solving these problems, yet full of challenges in terms of maintaining the sustainability of the implemented initiatives.*

*(by Ramy Hanna, MES, York University)*

*Overall, my experience in Brazil was amazing: I was excited about my research; I had the opportunity to interact with other academics doing similar and progressive work; and I was able to learn and appreciate the Brazilian language and culture.*

*I completed my research with an oral Powerpoint presentation relating a preliminary analysis of my results and conclusions. In addition to those involved with Projeto Bacias Irmãs, there were several students interested in environmental education and water management and, more importantly, four members of the SCBH-PP – not all of whom I interviewed. A lively one-hour discussion followed the presentation where my research subjects had the opportunity to provide feedback and perspective on my analysis. This exchange was invaluable for answering some of my own questions and also for providing an added dimension to the research.*

*Although it took longer than it might have as I was working quite independently, the field research was an incredibly satisfying learning experience both for understanding how to apply field methodologies and for learning to navigate through different organizational environments. The benefit of working in an academic department focused on water-related studies provided the opportunity for academic exchange with other students, and facilitated adjustment to a new research environment.*

*Since finishing my MES I have visited Brazil again and have spent several years working for IDRC in Ottawa and in Southeast Asia. I have recently decided to pursue another Masters degree in media and communications at Ryerson University.*

*(by Marcia Chandra, MES, York University)*

*I am doing well in Vancouver, but with part of my heart and one foot in Mexico. I am doing different kinds of work--some paid and unpaid. After the MST experience in Brazil, I returned to Canada to try to create a movement--a slightly ambitious project! I am having to re-evaluate and feel that I need to go back to Freire for some guidance. This is such a different context than Brazil!! Which was really one of the main statements I made in my Major Paper. Popular Education has a lot to do with context!*

*I have continued to do work with Mexican migrant farm workers. We have had some great successes, but it is also very challenging work due in great part to their massive exploitation and control by bosses, and also due to their temporary nature. I have also tried to see how to start alternative projects in Mexico. And began just that--on a small scale--with one woman who is a widow of a former migrant farm worker to Canada. She is making reusable grocery bags with the Justicia for Migrant Workers logo (for BC--a blueberry in shape of a fist; for Ontario--a tomato in shape of a fist).*

*I am also supporting indigenous women from the Zapatista movement in Chiapas,*

*Mexico, and Totonaca women from Puebla, by selling their blouses, shawls, cushion covers and other products, as well as selling coffee from them.*

*My paid work involves immigrant women--capacity building and community development around food security--community kitchen and community garden work. So, there is a lot I am involved in, but I am feeling that I need some guidance, some mentor, as my employers and many around me seem to lack vision. I crave other people's vision right now, so I can join mine with others to create more beautiful and necessary things!*

*(by Erika del Carmen Fuchs, MES, York University)*

*My experience with the Sister Watersheds project in São Paulo was one of the most memorable and fulfilling experiences of my life. I went as an exchange student and researcher and engaged in all aspects of the project's environmental education activities – learning and working with the educators – in communities located in the Pirajussara sub-watershed in Campo Limpo, SP, and Santa Tereza, Embu das Artes. It was a great pleasure to work closely with and get to know my colleagues in São Paulo, as it was a pleasure to work with workshop participants. I became very familiar with the social-environmental reality in São Paulo and in Brazil and, because I spoke Portuguese fairly well, I could communicate with participants and participate in meetings with local government or community groups. Overall, I felt like I was very much engaged in the atividades do campo developed by the enthusiastic, talented and down-to-earth educators of Sister Watersheds in São Paulo. I enjoyed every minute of my time with them!*

*The groups with whom I worked were the following: women community health workers in Campo Limpo, a group of mostly young men from the community organization Zumaluma in Embu das Artes, and finally, youth from the Campo Limpo public school, Vera Fusca Borba. I participated in the activities with the community health workers during my entire stay in São Paulo. Débora Teixeira, Luiz Gustavo and I met with the women at the CEU (Centro de Educacional Unificado) Campo Limpo for two and a half hours, every other week. The women were very enthusiastic! They enjoyed telling stories about their lives and their experiences with living and working near the Pirajussara River. We dedicated the first 10-15 minutes of the workshops to have breakfast – this was a time to chat, but also to try homemade goodies made with healthy ingredients such as entire fruits or vegetables, thus producing little or no waste. The workshops always began with an icebreaker activity, followed by one or two participatory activities to develop and deepen a discussion about the theme of the day. I participated in each of the planning meetings, in which we collectively planned and discussed workshops for the following week. I was present for each of the sessions and facilitated or co-facilitated at least one activity each day. As part of my research interest, we dedicated two and a half workshops to the theme: The role of Afro-Brazilian history in favela formation, which involved an attempt to take a historical-holistic approach to environmental issues in the women's communities. In collaboration with Leon Santos Padial, a friend and student of public policy at the University of São Paulo, as well as with Débora Teixeira and Luiz Gustavo, we planned activities in which we discussed the formation of favelas in São Paulo (and Brazil in general) since the abolition of slavery in 1888. The objective was to question and critically think about the historical power relations that influence social-environmental inequalities in Brazil today, and to begin to think about possibilities for change. The theme was relevant to our particular group because the women had raised various concerns and questions about urbanization in São Paulo, during our*

workshops on urbanization in which they asked: Why is the Pirajussara River is hidden (canalized) in wealthy neighbourhoods and starkly polluted and present in low-income communities? In the urbanization workshop, we also discussed the question: To canalize or not to canalize the Pirajussara River? Bruno Calvacante and Luiz Gustavo led the weekly two-hour workshops at the Afro-centric community organization, Zumaluma, in the favela of Inferninho (Little Hell), Embu das Artes. I visited this group for the last two months of my field experience. The meetings were informal and basically involved reading and discussing a chapter of a book about Agenda 21 – an environmental plan of action decided at the 1992 Earth Summit in Rio de Janeiro – in Embu das Artes. The group was very participatory and inquisitive and the educators could explain and clarify concepts along the way, with an air of openness, appreciation and respect for the experiences lived by the meeting participants. The participants took initiative to write down their environmental goals and the actions necessary to realize them. A group of young men were also inspired to compose and perform hip-hop songs to express their outrage over the environment in their community. They call themselves Diagnóstico and through their music, have set out to raise awareness about and diagnose the state of the Pirajussara River. The youth (aged 12-15) at Vera Fusca Borba were also very inquisitive while participating in the workshops. Although they were a small group, we worked well together and we always managed to learn something while having fun. Débora Teixeira and Bárbara Carvalho Gonçalves led these workshops and were quite inventive with planning games and activities that would be educational and enjoyable. At the end of every workshop, the participants recorded their thoughts about the workshop and drew pictures in the journals we made together at the beginning of the semester. It was a way for the youth to revisit the sections that were meaningful to them, to ask questions and also to share feedback with educators and fellow participants. Another aspect of the *atividades do campo* involved meeting with a group of catadores (recycling collectors) from a cooperative in Campo Limpo. It was very interesting to get to know catadores, their work and working conditions and to participate in meetings with members of the cooperative. We also came to know a cooperative for community economic solidarity whose members were extremely talented creators (most of whom were women) of artisan goods. They held events as a way of selling their artwork and promoted fair-trade and bartering within communities.

Besides the *atividades do campo*, I met often with Prof. Gislene Santos, of the department of public policy at the University of São Paulo, to discuss my research. Prof. Gislene was a great mentor during my time in São Paulo. Not only is she a brilliant intellectual dedicated to pursuing racial justice in Brazil, she is also down-to-earth and was always willing to discuss any questions or concerns I had in person or via email.

I am very grateful to have been chosen to participate in the Sister Watersheds activities in São Paulo. It was my third time visiting Brazil and definitely my favourite! Knowing the language greatly helped me navigate São Paulo and be more engaged in conversation, but what I loved most was that I was learning, studying and working with amazing people who became dear friends and mentors. My thanks to Prof. Ellie Perkins and Andrea Moraes for their tremendous support and effort with sending me to São Paulo, for being open to including a discussion of race and gender in the project, and for their continuous support throughout my experience with Sister Watersheds at York University, when I worked as a graduate assistant.

(by Claudia de Simone, MES, York University)



## **II – Appendix to the Results Achieved Table: Detailed lists of project workshops, meetings and group events, partnerships, seminars, and publications**

### **Workshops organized and led by Sister Watersheds Project staff (summarized under Outcome 1 in Results Achieved table):**

27 workshops on environmental education were held with the Zumaluma youth Hip Hop group and leaders from the Santa Tereza neighborhood. (Pirajussara) -- 7 men , 3 women

4 meetings with the community of Jardim Santa Tereza to discuss environment and quality of life -- 28 men, 48 women.

13 workshops on environmental education with youth from the Vera Lucia Fusco Borba EMEF (Municipal School of Fundamental Learning) in Campo Limpo (Pirajussara) -- 9 men, 9 women

1 “CANTEIRO SUSPENSO” workshop at the Cultural Fair event of the Vera Lucia Fusco Borba EMEF -- 3 men, 20 women

10 classes in the teacher training course on “A Fruit in the Garden” (Pirajussara) -- 1 man, 16 women.

7 meetings of the TEIA/USP study group in environmental education -- 3 men, 12 women

1 class in the Youth Multipliers course from the Arrastao Project, Campo Limpo -- 3 men, 6 women

1 workshop on urban agriculture at the “Green Day” at the Rodolfo da Costa school in Jardim Mimas (Pirajussara) -- 40 men, 30 women

24 workshops with health agents in Campo Limpo (Pirajussara) -- 2 men, 20 women

2 meetings with health agents from Taboão da Serra -- 3 men, 16 women

1 workshop for residents of Taboão da Serra , the FAU and Mayor to discuss parks -- 12 men, 6 women

3 field trips with health agents (Eco walk, Ipen , and Ipen talk) -- 3 men, 19 women

1 meeting with teachers at the Vera Fusco de Borba EMEF (Municipal School of Fundamental Learning) in Pirajussara -- 3 men, 8 women

8 meetings for planning, preparation, and evaluation of workshops offered at the Sueli Hipolito School (Pirajussara) -- 4 men, 12 women

11 thematic workshops and implementation of small Agenda 21 projects at the Sueli Hipolito school -- 31 men, 54 women

9 workshops on environmental education with the first year, class 1 Youth Guards (Piracicamirim) -- 17 men, 14 women

9 workshops on environmental education with the first year, class 2 Youth Guards (Piracicamirim) -- 19 men, 14 women

10 workshops on environmental education and participatory methodologies for the Heath Agents (Piracicamirim) -- 4 men, 26 women

1 workshop with Youth Guards (Piracicamirim) -- 38 men, 24 women

1 workshop about waste with youth from Jardim Oriente -- 9 men, 10 women

6 workshops on sustainable living at ESALQ (Piracicaba) -- 8 men, 25 women

8 meetings with members of the Joao Gado school

6 workshops on environmental education with the Dialogues group – second year Youth Guards (Piracicamirim) -- 11 men, 11 women

4 meetings of the educators' collective from Piracicamirim -- 7 men, 17 women

10 meetings at the Joao Guidotti school (Piracicamirim) -- 57 men, 94 women

15 thematic workshops on environmental education at the Joao Guidotti State School (Piracicamirim) -- 36 men, 57 women

1 workshop on solar oven at the meeting of the Roda Viva Jovem Youth Collective (Piracicamirim)

2 Open Dialogues meetings (Piracicamirim) -- 4 men, 24 women

3 field trips with Youth Guards (Piracicamirim) -- 37 men, 32 women

1 workshop with Roda Viva Jovem II and III youth groups (Pirajussara) -- 12 men, 16 women

2 training sessions on Bio-Mapping (Pirajussara) -- 13 men, 17 women

2 workshops for teachers from the Suely Maria Hipolito School on environmental education and the Pirajussara creek -- 70 women, 10 men

4 weekly meetings at the Suely Maria Hipolito School on Agenda 21, including planning and evaluation.

4 water awareness-building workshops with youth in Campo Limpo (Pirajussara) -- 2 men, 4 women each

6 meetings with waste pickers from Campo Limpo (Pirajussara) -- 15 men, 22 women

2 workshops with the Alipio de Oliveira school community -- 9 men, 52 women

3 course modules and one field visit as part of the Agenda 21 schools program, Environmental Education in Source Protection Areas course -- 27 men, 63 women

2 awareness-building workshops for the communities of the EMEI Casa Branca and EMEI Suely Hipolito schools -- 20 men, 30 women

One diagnostic walk to the sources of the Pirajussara Creek at Vale Verde, with members of the community of EMEI Milton Suga Gallego school -- 11 men, 14 women

**Meetings and events led by Sister Watersheds Project staff (summarized under Outcome 2 in the Results Achieved table):**

9 meetings between SEAE (Friends of Embu Ecological Society) and EPARREH (Estudos e Práticas em Agricultura e o Reencantamento Humano) for the elaboration of the LUARES (Urban Laboratory of Agroecology and Reference in Socioenvironmental Education) project, financed by the Ministry of Social Development (Pirajussara, 2007/08) -- 6 men and 6 women

1 project presentation to the Network of Social Entities of the Butantã Region (Pirajussara, 2007/08)

1 diagnostic walk at Roque Valente forest with leaders from Embu (Pirajussara, 2007/08)

Joint organization of the “Embu Environmental Week” event and 2 workshops open to the public (Pirajussara, 2007/08)

Production of the Communications Plan for the Management Council of the Piracicamirim-Pisca Watershed for awareness-building and mobilization of local residents, government and civil society associations (Piracicamirim, 2007/08)

Participatory methodologies meeting for the “Instituto Ambiente em Foco” (Institute for Environment in Focus) team (Piracicamirim, 2007/08)

Information session for the Piracicamirim Educators' Collective (Piracicamirim, 2007/08)

Children's workshop at the "Usina Costa Pinto" Cosan Environmental Week (Piracicamirim, 2007/08) -- 9 men, 13 women

Participation with the PISCA project in the Management Meeting of the "Jardim Oriente" and "Bem-te-Vi" neighborhoods (Piracicamirim, 2007/08)

5 meetings of the Educators' Collective (Piracicamirim, 2007/08) -- 2 men, 9 women

2 meetings with Joao Guidotti State School about Agenda 21 (Piracicamirim, 2007/08) -- 4 men, 12 women

1 field visit with Family Health team (Piracicamirim, 2007/08) -- 5 women

Participation in Environmental Study with the PISCA Project, Gepura group and Prof. Plinio Camargo (Piracicamirim, 2007/08)

Participation in consultants' meetings about the State Environmental Education Policy in Sao Paulo, at USP Piracicaba Campus (Piracicamirim, 2007/08)

Participation in two meetings of the Technical Chamber of Environmental Education of the Piracicaba Watershed Committee (Piracicamirim, 2007/08)

Participation in one meeting of the Rural Chamber of the Piracicaba Watershed Committee (Piracicamirim, 2007/08)

3 meetings to present the local socio-environmental diagnosis and perception survey to teachers from Campo Limpo schools (Pirajussara, 2006/07)

1 meeting to develop partnerships with 3 community leaders, 2 from Campo Limpo and 1 from Butantã (Pirajussara, 2006/07)

1 meeting with the community of EE Alipio da Silveira school to develop the partnership and plan activities for 2007 in the Pirajussara Watershed (Pirajussara, 2006/07) -- 34 women and 6 men.

One presentation on the socio-environmental diagnosis and perception survey for representatives of the AMAR (Association of Residents and Friends of the Previdencia Park), (Pirajussara, 2006/07)

2 partnership development meetings were held with members of the Residents' Association of Jardim São Mateus (Pirajussara, 2006/07)

1 partnership development meeting with Djalma Kutxfara, President of the CEPP Association, which fights flooding in the Pirajussara Creek (Pirajussara, 2006/07)

3 diagnostic field visits with local leaders near the Pirajussara Creek (with CEPP) (Pirajussara, 2006/07)

6 young people (from the youth group Roda Viva Jovem) participated in the review process for Agenda 21 (Piracicaba, 2006/07)

9 youth were assisted to participate in the First Youth for Environmental Education Meeting in the Piracicamirim watershed (Piracicaba, 2006/07)

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 21 (Piracicaba, 2006/07)

Project staff participated in 4 meetings of the Rural Technical Chamber of the PCJ Watershed Committee (Piracicamirim 2006/07).

4 meetings with MADRES group for elaboration of questionnaire (Pirajussara, 2007/08)

1 article about socio-economic and bio-physical characteristics of the Pirajussara Watershed (Pirajussara, 2007/08)

1 workshop about reusing kitchen oil and pet bottles by Health Agents from Campo Limpo. (Pirajussara, 2007/08) -- 1 man, 17 women

8 musical presentations of the Zumaluma hip-hop group, focusing on local water resources (Pirajussara, 2007/08)

Participation by training program participants: At Agenda 21- Sustainability course (20 men, 80 women); at the Tree Day at “Fonte dos Jesuítas” (15 men, 25 women); at Workshop at Zumaluma Library (5 men, 8 women); at Suely Maria Hipolito public school (10 men, 45 women); at “Abraco Guarapiranga” (120 men, 180 women); at World Water Day (60 men, 90 women); at Environmental Week (20 men, 30 women); at Jardim Santa Teresa Association (15 men, 45 women).

1 exposition of Educators’ Collective and Sister Watersheds accomplishments at the third EEEA (State Meeting of Environmental Education) (Piracicamirim, 2007/08)

1 exposition of Educators’ Collective work at the “Forum de Aquecimento Global”( Forum on Global Warming) run by the City Hall of Piracicaba (Pirajussara, 2007/08)

1 presentation by the Educators’ Collective to the SEDEMA (Secretary for the Defense of the Environment) and Education Secretary of Piracicaba (Pirajussara, 2007/08)

1 exposition of Educators’ Collective at the First PISCA Forum of Pisca (Pirajussara, 2007/08)

1 meeting of the training group of representatives of the technical chambers of the Piracicaba Watershed Committee (Pirajussara, 2007/08)

Certificates were given to participants in the “Training of Teachers: Environmental Education in the Pirajussara Watershed” course (Piracicaba, 2006/07)

4 4-hour workshops to share the results of the Sister Watersheds project – films, maps, published materials, etc. -- were held with government officials, community educators and NGO representatives in the Butantã area of the Pirajussara watershed (February – March, 2009) under the auspices of the Butantã Social Organizations Network – participants included 12 men, 15 women.

### **New Project Partnerships (summarized under Outcome 3 in the Results Achieved Table):**

#### *2007-2008*

##### *New partnerships in the Pirajussara watershed*

with Camila Giorgetti for the elaboration of Project MADRES (Environment, Inequalities and Social Representations)  
with PAVS (Program Healthy Green Environments) and Secretary of Health of Campo Limpo.  
with ITCP (Technological Incubator of Popular Cooperatives). Joint workshop on sustainable development at the course “Community Agents of Solidary Economy”.  
with FAU (Faculty of Architecture and Urbanism) and City Hall of Taboão da Serra for participatory planning of Park at the Pirajussara margins.  
with SEAE and EPARREH for the elaboration of the LUARES project.  
with NACE-PTECA and Project “Nós do Pisca” ( We from Pisca).  
with Hospital Albert Einstein for continuity of activities with health agents in Campo Limpo.  
with Project “Chico Mendes” for capacitating teachers.  
with Public Health Faculty at USP to discuss with school parents the integral use of food.  
with the Butantã Social Organizations Network (2008-2009) for workshops to share project results.

##### *New partnerships in the Piracicamirim watershed*

with SESC Piracicaba for the realization of The meeting “Juventude Realizando o Futuro” (Youth Realizing the Future)  
with Solaris Group for workshop on solar energy  
with the Technical Rural School from Rio das Pedras, for the realization of workshops on sustainable practices.  
with the Institute for environment in Focus for workshops on Urban Forest  
with the Municipal Association of Youth Guards for the formation and capacitating of youth in environmental education.  
with the Coordination of the Program “Saúde da Família”( Family Health)  
with the team of “Vigilância Sanitária”(Sanitary Surveillance) for capacitating their technical team.  
with the director of the Project “Moradia Sustentável”( Sustainable Living)

#### *2006-2007*

*New partnerships in the Pirajussara watershed:*

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.

*New partnerships in the Piracicaba watershed:*

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.

*2005-2006*

*New partnerships in the Pirajussara watershed:*

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 (A Fruit in the Yard) and Growing Up in Cities, to develop a course to be planned and taught in conjunction with ECOAR.

*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

*At York University*

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 held in Fall 2004, Winter 2005, Fall 2005, Winter 2006, Fall 2006, Winter 2007, Fall 2007, Winter 2008, and ongoing at least through Fall 2008, 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.

A new partnership with the Canada Visiting Research Chair in Brazilian Studies began in Fall 2005.

A new and ongoing partnership between York International and Ecoar allows one or more undergraduate students to undertake field experiences at Ecoar for several months each summer.

Partnerships were established for FES student field experience placement and academic collaboration with the Black Creek West Capacity-Building Project (which links Toronto municipal officials, local organizations and residents, and York University), and with Doorsteps Neighbourhood Services (a community services organization located at Jane and Wilson), and with the Toronto and Region Conservation Authority.

Two research assistants did bibliographical research on water management and participation during Winter/Spring 2004 (Tracy Locke & Sylvie Tremblay).

Two Canadian graduate students did baseline research on water management in Ontario (Nicole Worsley and Lara Babbie) during the summer of 2004.

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.

Two Canadian graduate students did baseline research on the Black Creek watershed and public participation, including work with the Toronto and Region Conservation Authority, during Summer and Fall 2005 (Aneela Bisram and Arlita McNamee).

One Canadian undergraduate intern developed the project's Canadian website (Maryanne Obwaka).

Two Canadian graduate students initiated contacts with community associations in the Black Creek watershed, including the Black Creek West Capacity-Building Project and the Doorsteps Neighbourhood Services, in Winter 2005 (Johanna Reynolds and Claudia De Simone) and developed and led workshops on environmental education for children in the community (Summer 2006).

One graduate student (Anne Sabourin), in cooperation with the 4 exchange students from Brazil, developed a study and presentation about York University's contribution to rainfall runoff into Black Creek (Fall 2006).

Four undergraduate and graduate students (Sara Trotta, Sami Abdelmalik, Onyinye Ofoma and Michael Yam) helped to plan and conduct environmental workshops for youth in partnership with Doorsteps Neighbourhood Services in the Black Creek West community (Fall 2007/Winter 2008) and further developed the Canadian website.

A partnership was developed with York International which created a summer internship position at Ecoar for York undergraduate exchange students, funded entirely by York International. In the summer of 2006, York undergraduate student Alexis Glazer went to Ecoar for three months, and Consuelo McAlister was selected for the summer of 2007. This program is ongoing.

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.

**Seminars and public information events in Canada organized by Sister Watersheds project staff (summarized under Outcome 3 in the Results Achieved Table):**

**BRAZILIAN STUDIES SEMINARS AT YORK**

**FALL TERM 2006**

Sept. 20 – Jeff Packman, “We work hard at entertainment: Popular music as profession” and Katia Canil, “Natural disasters in Brazil”

Sept. 27 – Laura Antoniazzi, “Public participation in water management in Piracicaba”

Oct. 4 – Aneela Bisram, “Exploring the possibilities for an emancipatory approach to formal environmental education in Taboão da Serra, Brazil”

Oct. 11 – Livio Sansone (University of Bahia, Anthropology), “Uses and abuses of Africa in Brazilian popular and elite culture over the last century”

Oct. 18 -- Arlita McNamee, “Participation + Corporate Social Responsibility in Local Agenda 21: A Case Study from São Paulo, Brazil”

Oct. 25 – Frank Luce, “Cacao workers in Bahia”

Nov. 8 – Danielle Robinson, “Sambas, rodas and raizes”

Nov. 15 – Marcio Mendes, “Capoeira in Brazil”

Nov. 22 – Carlos Liberato, “African slaves in northern Brazil, 1755-1777” and Julia Leite, “Analysis of a Brazilian urban landscape: the Poá Creek watershed”

Nov. 29 – Simone Bohn, "Gender, representation and elections: the female presence in the Brazilian Senate"

Dec. 6 – Alex Arnall (Oxford University), “Community participation in Brazil and Mozambique”

#### WINTER TERM 2007

January 24 – Alexis Glazer, BES Student, York University and York International Intern: “Youth Activism in Environmental Issues in São Paulo”

February 7 – Fred Yurichuck, MES student, York University: “Between Food and Other Things.” Video documentary.

February 21 – 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 – Fabiane Bastos, Master’s Student, Faculty of Education, York University: "Multicultural Education in North-South Context: The Comparative Impacts of Official Multicultural Legislation in Canada and Brazil."

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

#### FALL TERM 2007

Sept. 19 -- Andrea Pacheco Pacifico: “Refugee integration and social capital -- São Paulo and Toronto”

Oct. 3 -- Gislene Aparecida dos Santos: "Black identity and race quota policies in Brazil"

Oct. 17 – Gena Chang-Campbell: “Mestiza Consciousness of a Brazilian Present and Possible Futures”

Oct. 31 -- Frank Luce: "Gabriela's sisters: women working in cacao"

Nov. 14 – Claudia de Simone: “Toward Popular Environmental Education in Marginalized Watershed Communities: The Case Study of São Paulo”

Nov. 21 – Denise Paiva, Universidade Federal de Goiás: "The Workers' Party and President Lula: Then & Now"

Nov. 28 -- Paulo Marco Gonçalves: “Environmental education with youth -- Brazil and Toronto”

#### WINTER TERM 2008

January 16 – Talia Wooldridge: “Rap activism and gender in Brazil”

January 30 – Consuelo McAlister: “The Ecoar Institute and environmental education in Brazil”

February 27 – Gabriela da Costa Silva: “Social-environmental landscape planning in the Jacarepaguá Lowlands Watershed, Brazil”

March 12 – Katherine Brasch: "Brazilian migration to Toronto"

March 20 – Prof. Roberto Schaeffer (Energy Planning Program, COPPE, Federal University of Rio de Janeiro): “Alternative energy policy and biofuels in Brazil”

March 26 – Debora Teixeira and Mariana Ferraz Duarte: “The Sister Watersheds project and community-based work in São Paulo”

April 2 – Brigitte Cairus: “Rom (Gypsy) migration, identity and religion in Brazil”

April 9 – Emelie Chhangur, Assistant Curator, Art Gallery of York University: "Brazilian artists in residence at York and contemporary art practices in Brazil"

#### BRAZIL CHAIR AND OTHER SEMINARS AT YORK:

Prof. Germano de Paula (Federal University of Uberlandia), "Competitiveness in the Canadian and Brazilian Steel Industries," May 27, 2004.

York University Colloquium on the Global South panel discussion on "Participatory Processes for Watershed Management in Brazil: Models and Challenges," March 9, 2005, chaired by Ellie Perkins (York U., Faculty of Environmental Studies) with panelists Marcia Chandra (MES student, Environmental Studies); Erika de Castro (School of Community and Regional Planning, University of British Columbia); Ellie Perkins (York U., Environmental Studies); Paul Zandbergen (Department of Geography, University of South Florida, Tampa).

Claudia de Simone and Johanna Reynolds, "Popular Education Approaches to Environmental Education Workshops: a case study," presented on Nov. 13, 2006 as a Faculty of Environmental Studies special student seminar.

Prof. Rafael Duarte Villa (Department of Political Science, University of São Paulo), "Brazilian Foreign Policy: New and Old Paths," presented on May 2, 2007 at York's main campus and in an informal seminar at Glendon College on May 3, 2007.

Prof. Roberto Schaeffer (Energy Planning Program, COPPE, Federal University of Rio de Janeiro): "Alternative energy policy and biofuels in Brazil," presented on March 20, 2008 at York's main campus.

#### *Public presentations in Brazil:*

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).

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).

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).

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).

At the second Sister Watersheds Exchange Seminar in Brazil in April 2005, York graduate students Nicole Worsley and Ramy Hanna presented their work.

The Sister Watersheds Project was presented to the Family School program in March 2006 in São Paulo.

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 Jacobi.

Ellie Perkins made an invited presentation on "Economia Ecológica, Processos de Participação, e Sustentabilidade" at "Diálogos sobre Economia Ecológica y Ecología Política," Centro de Saberes y Cuidados Socioambientales de la Cuenca del Plata, Foz do Iguaçu, Brazil, March 2-7, 2008.

10 presentations were made by project participants at the Open Cycles of Sister Watersheds series.

#### *Public presentations in Canada and elsewhere:*



Visiting Brazilian project team members were interviewed by York student David da Silva from York Community Radio, Toronto, January 2004.

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).

Ellie Perkins presented a paper entitled “Participation and Water Management: Experiences from Brazil” at the International Society for Ecological Economics conference, July 11-13, 2004, Montreal. (About 50 participants, approximately 25 female and 25 male).

Ellie Perkins presented a paper entitled “Women, public participation, and environmental valuation” at the International Association for Feminist Economics conference, August 5-7, 2004, St. Hilda’s College, Oxford, UK.

Ellie Perkins, Paul Zandbergen, Marcia Chandra and Erika de Castro made presentations as part of a panel discussion on “Participatory Processes for Watershed Management in Brazil: Models and Challenges” as part of the Colloquium on the Global South at York University, March 9, 2005.

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”.

A seminar on Public Participation and Water Management in Brazil and North America was hosted at the Faculty of Environmental Studies, York University in September 2005, with presentations by Miriam Duailibi, Pedro Jacobi, Paul Zandbergen, and FES professor Gene Desfor.

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.

Pedro Jacobi presented a paper entitled “Social Capital and Institutional Performance: Methodological and Theoretical Discussion on the Water Basin Committees in Metropolitan São Paulo, Brazil” at the International Sociological Association Congress, July 23-29, 2006, Durban, South Africa.

Ellie Perkins presented a paper entitled, “Gender and Equity in Public Participation Processes for Environmental Decision-Making” at the International Sociological Association Congress, July 23-29, 2006, Durban, South Africa.

Ellie Perkins presented a paper entitled “Democracy and governance for sustainable development: watershed management in São Paulo” at the conference of the Canadian Association for Latin American and Caribbean Studies, University of Calgary, Alberta, Sept. 28-30, 2006.

Andrea Moraes presented a paper entitled “Challenges and contradictions in the participation of low-income women in Brazil’s watershed management system” at the conference of the Canadian Association for Latin American and Caribbean Studies, University of Calgary, Alberta, Sept. 28-30, 2006.

Ellie Perkins presented a paper entitled “Equity, participatory environmental management, and ecological economics” at the conference of the Canadian Society for Ecological Economics, Halifax, Nova Scotia, July 26-28, 2007.

Ellie Perkins presented a paper written with Andrea Moraes entitled “Ecofeminism and Participatory Water Management in Brazil” at the United States Society for Ecological Economics conference, Pace University, New York City, June 23-25, 2007.

Ellie Perkins made an invited presentation on “North-South Research Cooperation: Academic Partnerships” at the Association of Universities and Colleges of Canada session on North-South Research Partnerships, Canadian Association for Studies in International Development (CASID) Congress, University of

Saskatchewan, Saskatoon, June 1-3, 2007.

15 presentations were made by project participants in sessions of the Brazilian Studies Seminar at York University.

**New courses, presentations and modules developed by the Sister Watersheds project (summarized under Outcome 3 in the Results Achieved Table):**

2 presentations at the Cycle of Open Seminars of the Pirajussara Watershed. with Katia Canil from IPT (Pirajussara, 2007/08) -- 9 men, 11 women

With Prof. Euler Sandeville from FAU/USP (Pirajussara, 2007/08) -- 5 men, 21 women

Organization and implementation, in partnership with the Secretary of Environment and Education of Taboao da Serra, of the course 'A Fruit in the Garden' (Pirajussara, 2007/08) -- 1 man, 16 women

8 presentations at the Cycle of Open Seminars of the Piracicamirim Watershed (Piracicaba, 2007/08) -- 44 men, 44 women

1 presentation about "Participatory Methodologies towards local development" to environmental education class at ESALQ. (Piracicaba, 2007/08)

1 meeting 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 (Piracicaba, 2006/07)

1 meeting with the ITCP (Technological Incubator of Popular Cooperatives) to promote a partnership with the course for local agents in Campo Limpo and Butantã (Pirajussara, 2006/07)

1 meeting with representatives of the Green Secretariat to discuss a partnership to work with the waste pickers in Campo Limpo (Pirajussara, 2006/07)

2 meetings with the TERAIA group from the Education Faculty at USP to discuss the publication of a magazine about environmental education (Pirajussara, 2006/07)

1 meeting was held with representatives of the NGO "SOS Mata Atlântica" to discuss a partnership in Campo Limpo (Pirajussara, 2006/07)

Project staff attended 2 meetings of the Food Security Network in the Region of Butantã (Pirajussara, 2006/07)

Project staff attended meetings of the Campo Limpo Network for a Solidarity Economy (Pirajussara, 2006/07)

1 partnership was developed with the group PET Ecology for neighborhood activities related to Nosso Teto (Our Roof) in Rio das Pedras (Piracicamirim, 2006/07)

6 meetings were held on the Participatory Socio- Environmental Master Plan of ESALQ (Piracicamirim, 2006/07)

Project staff participated in 11 meetings of the youth group Roda Viva Jovem (Piracicamirim, 2006/07)

15 seminars by Sister Watersheds participants in the York University Brazilian Studies seminar series and the Colloquium on the Global South at York University.

More than 10 Individual Directed Study courses were taken at York by students working on watershed management and environmental education in Brazil, 2004-2008.

New graduate course on public participation and development is being proposed at York, Faculty of Environmental Studies.

**Publications of the Sister Watersheds Project (summarized under Outcome 4 in the Results Achieved Table):**

2 blogs were produced (Pirajussara and Piracicamirim) -- Portuguese

1 Manual on Participatory Methodologies – Portuguese, 108 pages

1 Magazine about Urban Agroecology – Portuguese, 47 pages

1 Balance Magazine – Portuguese, 39 pages

1 Balance Magazine – English, 39 pages

1 Video about the Pirajussara Watershed

1 book about the Pirajussara Watershed

1 Socio-Environmental Atlas

1 magazine on Agenda 21 in schools

2 Websites

14 master papers / theses by graduate students

Article about the project posted on the FES website, 2004.

Article about the project posted on the Ecoar website, 2004.  
News about the project posted on the CECAE website, 2005

Brazilian Report # 1 - From April 2004 to July 2004, with partial Brazilian research results, sent to York.  
Brazilian Report # 2 - From August 2004 to September 2004, with partial Brazilian research results, sent to York.  
Brazilian Report # 3 - From October 2004 to February 2005, with partial Brazilian research results, sent to York.

Manual for graduate students and guidelines for research on Black Creek written in Fall 2004 and provided to Brazilian team.

Paper: "[Institutional Infrastructure of Watershed Management in Ontario](#)" by Nicole Worsley and Lara Babbie (2005)

Paper: "The Black Creek Watershed" by Graduate Assistants in Toronto Arlita McNamee and Aneela Bisram. May 2005.

Paper: "Public Participation in the Black Creek Watershed" by Arlita McNamee and Aneela Bisram. May 2005.

*Masters Papers researched and written by York MES students:*

[Creating revolutionary educational environments: The political education of the Brazilian Landless Rural Workers Movement \(MST\)](#) by Erika Del Carmen Fuchs (2004)

[Downstream Pollution, Upstream Power: Rescaling Water Management in Metropolitan São Paulo](#) by Marcia Chandra (2005)

[Democracy, Citizenship and civil society participation in Watershed Management](#) by Ramy Hanna (2005)

[Participation + Corporate Social Responsibility in Local Agenda 21: A Case Study from São Paulo, Brazil](#) by Arlita McNamee (2006)

[Exploring the Possibilities for an Emancipatory Approach to Formal Environmental Education in Taboão da Serra, Brazil](#) by Aneela Bisram (2006)

[Toward Popular Environmental Education in Marginalized Watershed Communities: The Case Study of São Paulo](#) by Claudia de Simone (2007).

*Masters Theses and Dissertations researched and written by USP students:*

"De quem é essa água? Desafios na gerência participativa de águas no Brasil – o caso da Cantareira" por Fabiana Barbi (PROCAM, USP, dissertação de mestrado, 2005).

"Indicadores para monitoramento de processos morfodinâmicos: aplicação na bacia do Riberão Pirajussara (SP)" por Kátia Canil (Faculdade de Filosofia, Letras e Ciências, USP, tese de doutorado, 2006).

"As agenda sociais brasileiras de desenvolvimento local: Possibilidades de diálogo, articulação e de convergência" por Mariana Ferraz Duarte (FSP, USP, dissertação de mestrado, 2006).

"Ventos jovens na paisagem" por Thea Standerski (FAU, USP, dissertação de mestrado, 2006).

"Oferta de serviços ambientais na agricultura" por Laura Barcellos Antoniazzi (ESALQ, USP, dissertação de mestrado, 2007).

"Sistemas de alerta comunitários na gestão compartilhada de risco de inundações" por Ignazio Giuntoli (EESC, USP, dissertação de mestrado, 2007).

"Investigação da paisagem na bacia hidrográfica do correjo Bananal sob a ótica do planejamento ecológico da paisagem São Paulo/ SP" por Júlia Rodrigues Leite (FAU, USP, dissertação de mestrado, 2007).

"Juventude, meio ambiente e educação: da investigação das trajetórias de vida a discussão de políticas públicas -- Brasil e Canadá em foco" por Paulo Marco de Campos Gonçalves (Faculdade de Educacao, USP, tese de doutorado, 2008).

*Journal articles:*

"Espaços públicos e práticas participativas na gestão do meio ambiente no Brasil" por Pedro R. Jacobi. [Revista Sociedade e Estado](#), Brasília, v. 18, n. 1/2, p. 315-338, 2003.

"Educação ambiental, cidadania e sustentabilidade" por Pedro R. Jacobi. [Cadernos de Pesquisa da Fundação Carlos Chagas](#), São Paulo, v. 118, p. 189-205, 2003.

"Educação e meio ambiente- transformando as práticas" por Pedro R. Jacobi. [Revista Brasileira de Educação Ambiental](#), Brasília, v. 0, p. 28-35, 2004.

"The Challenges of Multi-Stakeholder Management in the Watersheds of São Paulo" by Pedro Jacobi, [Environment and Urbanization](#), London, vol. 16 no. 2, October 2004.

"Comitês de bacias hidrográficas no Brasil: desafios de fortalecimento da gestão compartilhada e participativa" por Pedro R. Jacobi e A.P. Fracalanza. [Desenvolvimento e Meio Ambiente](#) (UFPR), v. 11-12, p. 41-49, 2005.

“Impactos socio-ambientales urbanos del riesgo de la búsqueda de la sustentabilidad: el caso de la región Metropolitana de São Paulo” por Pedro R. Jacobi. Ciudad y Territorio, Madrid, v. XXXVII, n. 145-146, p. 671-682, 2005.

“Governança institucional de problemas ambientais” por Pedro R. Jacobi. Política e Sociedade, Florianópolis, v. 4, n. 7, p. 119-137, 2005.

“Educação ambiental: o desafio da construção de um pensamento crítico, complexo e reflexivo” por Pedro R. Jacobi. Educação e Pesquisa, São Paulo, v. 31, n. 2, p. 234-250, 2005.

“Aprendizagem social: práticas educativas e participação da sociedade civil como estratégias de aprimoramento para a gestão compartilhada em bacias hidrográficas” por Pedro R. Jacobi, S.I. Granja, e I. Franco. São Paulo em Perspectiva, v. 20, p. 5-18, 2006.

“Social capital and institutional performance: methodological and theoretical discussion on the Water Basin Committees in Metropolitan São Paulo – Brazil” por Pedro R. Jacobi and F.M. Monteiro. Ambiente e Sociedade (Campinas), v. IX-2, p. 35-54, 2006.

“Educação Ambiental e o Desafio da Sustentabilidade Socioambiental” por Pedro R. Jacobi. O Mundo da Saúde, v. 30, p. 524-531, 2006.

“Dilemas Socioambientais na gestão metropolitana: do risco à busca da sustentabilidade urbana” por Pedro R. Jacobi. Política & Trabalho, v. 25, p. 115-134, 2006.

“Women and Participatory Water Management” by Ellie Perkins and Andrea Moraes, International Feminist Journal of Politics, special issue on Women and Water, issue 4, Fall 2007.

“Educar na sociedade de risco: o desafio de construir alternativas” por Pedro R. Jacobi. Pesquisa em Educação Ambiental (UFSCar), v. 2, p. 49-65, 2007.

“Democracia e participação na gestão dos recursos hídricos no Brasil” por Pedro R. Jacobi e F. Barbi. Revista Katalysis, v. 10, p. 237-244, 2007.

“Role-playing games for capacity building in water and land management: Some Brazilian experiences” by M.R. Camargo, R. Ducrot, and P.R. Jacobi. Simulation & Gaming, v. 38, p. 472-493, 2007.

In Preparation:

Paper by Ellie Perkins on the Sister Watersheds project for Canadian Woman Studies, special issue on Women in Latin America, Fall 2008.

Special issue of the Canadian Journal of Latin American and Caribbean Studies on “Democracy and Public Participation in Brazil.” Papers from two sessions at the Canadian Association for Latin American and Caribbean Studies conference, Regina, Saskatchewan, September, 2006 (Ellie Perkins, organizer and editor).

#### *Articles in published conference proceedings:*

“Governança e Política Nacional de Recursos Hídricos: qual a posição da gestão das águas no Brasil?” por S.I. Soares, H.D. Teodoro, e P.R. Jacobi. In: IV Encontro Nacional da Anppas, 2008, Brasília. CD Do IV Encontro, 2008.

“Licenciamento ambiental e o novo ambiente político e cultural do pós-ditadura: o caso da UHE Tijuco Alto” por A.N. Souza e P.R. Jacobi. In: IV Encontro Nacional da Anppas, 2008, Brasília. d - IV Encontro Nacional da Anppas, 2008.

“Agenda 21, Educação Ambiental, Aprendizagem Social e Teoria Sociocultural na Construção de Práticas Educativas Transformadoras” por I. Franco e P. R. Jacobi. In: IV EPEA - Encontro de Pesquisa em Educação Ambiental, 2007, Rio CLaro. IV EPEA, 2007.

“Governança dos recursos hídricos e participação da sociedade civil” por P.R. Jacobi e F. Barbi. In: II Seminário Nacional - Movimentos Sociais, Participação e Democracia, 2007, Florianópolis. II Seminário Nacional - Movimentos Sociais, Participação e Democracia, 2007.

“Social Capital and Institutional Performance - Methodological and Theoretical Discussion on the Water Basin Committees in Metropolitan São Paulo, Brazil” por P.R. Jacobi. In: ISA 2006 Congress, 2006, Durban. XVI World Congress of Sociology Abstracts. Bethesda : Sociological Abstracts. p. 116-117.

“Construção de consensos gradativos e aprendizagem social como estratégias institucionais em bacias hidrográficas” por P.R. Jacobi e S.I. Granja. In: III Encontro da ANPPAS, 2006, Brasília. III Encontro da ANPPAS, 2006.

“Governança dos Recursos Hídricos no Brasil” por P.R. Jacobi. In: I Seminário Nacional sobre Governança Ambiental no Brasil, 2006, Olinda. I Seminário Nacional sobre Governança Ambiental no Brasil, 2006.

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“A gestão participativa de bacias hidrográficas no Brasil e os desafios do fortalecimento de espaços públicos colegiados” por P.R. Jacobi. In: Vera Schattan P. Coelho; Marcos Nobre. (Org.). Participação e Deliberação - Teoria Democrática e Experiências Institucionais no Brasil Contemporâneo. São Paulo: Editora 34, 2004, p. 270-289.

“Impactos socioambientais urbanos- do risco à busca de sustentabilidade” por P.R. Jacobi. In: Francisco Mendonça. (Org.). Impactos socioambientais urbanos. Curitiba: Editora UFPR, 2004, p. 169-184.

“Watershed Management Education and Training CD-ROMs” by Paul Zandbergen, S. Brown and H. Schreier. In R.L. France (ed.) Facilitating Watershed Management: Fostering Awareness and Stewardship. Lanham, MD: Rowman & Littlefield, 2004.

“Política e Gestão Ambiental: a audiência pública, uma nova fronteira no espaço cidadão: 1998-2001” por J.T. Ferrer e P.R. Jacobi. In: Waldir Mantovani. (Org.). Caminhos de uma ciência ambiental. São Paulo: Annablume, 2005, p. 41-72.

“Participação” por P.R. Jacobi. In: Luiz Antonio Ferraro. (Org.). Encontros e Caminhos - Formação de Educadoras(es) Ambientais e Coletivos Educadores. Brasília: MMA- Diretoria de Educação Ambiental, 2005, p. 229-236.

“Capital social e desempenho institucional - reflexões teórico metodológicas sobre estudos no comitê da bacia hidrográfica do Alto Tietê –SP” por P.R. Jacobi, F.M. Cunha, M.E. Pereira, M. Catellano, R. De Mello, e R. Novaes. In: Pedro Jacobi, Lúcia da Costa Ferreira. (Org.). Diálogos em ambiente e sociedade no Brasil. São Paulo: Annablume, 2006, p. 303-327.

“Participação na Gestão ambiental no Brasil: os comitês de bacias hidrográficas e o desafio de fortalecimento de espaços públicos colegiados” por P.R. Jacobi. In: Hector Alimonda. (Org.). Los Tormentos de la Materia - aportes para una ecologia política latinoamericana. Buenos Aires: CLACSO LIBROS, 2006, p. 169-194.

“Educação Ambiental, Cidadania e Sustentabilidade” por P.R. Jacobi. In: Glezer, Raquel ; Mantovani, Marta Silvia. (Org.). Parques Urbanos e Meio Ambiente: Desafios de Uso. São Paulo: Parque Cientec/USP, 2006, p. 309-316.

“Two cities in one: diverse images of Sao Paulo” by P.R. Jacobi. In: Klaus Segbers. (Org.). The Making of Global City Regions- Johannesburg, Mumbai/Bombay, Sao Paulo and Shanghai. Baltimore: Johns Hopkins University Press, 2007, p. 279-294.

“Consumo e sustentabilidade- como pensar a aprendizagem social?” por P.R. Jacobi. In: Dowbor, L.; Antas, R.; Silva, H.. (Org.). Desafios do Consumo. Petrópolis: Vozes, 2007, p. 273-281.

“Sociedade de risco, crise ambiental e diálogo de saberes” por P.R. Jacobi. In: Red de Formación Ambiental para America Latina y Caribe. (Org.). Perspectivas de la Educación Ambiental en Iberoamerica. México: PNUMA, 2007.

“Meio Ambiente, Educação e Cidadania: diálogo de saberes e transformação das práticas educativas uma reflexão sobre histórias de aprender e ensinar” por P.R. Jacobi. In: Kleber Maia Marinho. (Org.). Histórias de aprender e ensinar para mudar o mundo. Paulínia: Instituto Bioma, 2007.

“Building capacities to tackle the infrastructural and environmental crisis in São Paulo: Role-playing games for participatory modelling” by R. Ducrot, Y. Carvalho, V. Barban. P.R. Jacobi, and W. Gunther. In: Butterworth, J.; Ducrot, R.; Faysee, N.; Janakarajan, S.. (Org.). Peri-Urban Water Conflicts- supporting dialogue and negotiation. Delft: IRC- International Water and Sanitation Centre, 2007, p. 1-128.

“Socioambientalismo” por P.R. Jacobi. In: ISA. (Org.). Almanaque Brasil Socioambiental. São Paulo: ISA, 2007, v. , p. 01-551.

“Educação, meio ambiente e cultura- transformando as práticas” por Freitas, M. ; Leenhardt, J. ; Carvalho, J.C. de ; Pasquarelli, V. ; Rossini, R. E. ; Calió, S.A. ; Moraes, M.C. ; Valente, J.A. ; Parente, T.G. ; Jacobi, Pedro Roberto ; Magalhães, H.G.D. ; Montysuma, M. ; Salustiano, S.F.M. ; Silveira de Senna, S.. In: Temis Gomes Parente; Hilda Gomes Dutra Magalhães. (Org.). Linguagens Plurais. Bauru: EDUSC, 2008, v. , p. 1-192.

“Participation and Watershed Management: Experiences from Brazil,” by Ellie Perkins. In Natural Resource Management: A Participatory Approach. Kolkata: ICFAI (Institute of Chartered Financial Analysts of India) University Press, 2007.

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"Ética, Gênero e Classe Social na Política Participativa de Água," by Ellie Perkins and Andrea Moraes. In Gislene Aparecida dos Santos, Ética, Pesquisa e Políticas Públicas. São Paulo: Editora USP.

“Women and Deliberative Water Management in Brazil.” With Andrea Moraes. In A. Salleh (ed.), Ecofeminism Today. Oxford/New York: Oxford University Press.

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Cidade e meio ambiente- percepções e práticas em São Paulo. 2a. ed. Por Pedro R. Jacobi. São Paulo: Annablume, 2006.

*Media articles about the Sister Watersheds project:*

AUCC Uniworld, March 2007, pp. 10-11, “Managing rivers and improving food access in Brazil.” [http://www.aucc.ca/publications/auccpubs/magazines/uniworld\\_mar07\\_e.html](http://www.aucc.ca/publications/auccpubs/magazines/uniworld_mar07_e.html)

York University daily bulletin, YFile, March 8, 2005, “Watershed management in Brazil,” February 10, 2004, “Watershed project links York and Brazil.” <http://www.yorku.ca/yfile/archive/search.asp>

CERLAC Review, No. 29, 2004, “Brazil Sister Watersheds / Bacias Irmãs Project.” <http://www.yorku.ca/cerlac/news02-04/fellows.htm#brazil>

Alternatives, January 2008, “Hip Hopping Mad: Members of Diagnóstico, rap musicians’ music.” [http://goliath.ecnext.com/coms2/gi\\_0199-7401417/Hip-hopping-mad-Members-of.html](http://goliath.ecnext.com/coms2/gi_0199-7401417/Hip-hopping-mad-Members-of.html)

Youtube: “Bacias Irmãs no III Encontro Estadual de Educação Ambiental.” [http://goliath.ecnext.com/coms2/gi\\_0199-7401417/Hip-hopping-mad-Members-of.html](http://goliath.ecnext.com/coms2/gi_0199-7401417/Hip-hopping-mad-Members-of.html)

USP Innovation Agency newsletter: “Bacias Irmãs.” <http://www.inovacao.usp.br/Conteudo.aspx?nome=susbaciasirmas>

USP/ESALQ newsletter, “Projeto Bacias Irmãs estuda sub-bacias de três rios distintos.” <http://www.esalq.usp.br/destaques.php?id=265&ano=2008>