Sister Watersheds – Brazil/Canada

ANNUAL PROGRESS REPORT 2005

1) Project profile

Capacity Building of Civil Society in Water Resources Management

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

Other partners:

Project co-director : Prof. Paul Zandbergen
University of South Florida
E-mail: zandberg@cas.ufs.edu

Ecoar Institute for Citizenship, Brazil
Amanndha Pina, Manager
E-mail:

University of São Paulo, Brazil :

CECAE (University Cooperation and Special Activities Coordinator)
Prof. Marcos Sorrentino – Academic director
Elisabeth Lima - Manager

E-mail: bethteix@usp.br

São Paulo Campus:
Prof. Pedro Jacobi – Academic director – PROCAM (Environmental Science Graduate Program)
E-mail:prjacobi@usp.br

Piracicaba Campus:
Prof. Dalcio Caron – Academic director – OCA / ESALQ (Environmental Education and Policy Laboratory, Luis de Queiroz Agricultural College)
E-mail:dalcaron@esalq.usp.br

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

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

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

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

Key activities
Capacity-building will be mainly undertaken through meetings, courses, workshops, communications networks, curriculum and material development, development of training techniques and educational exchanges. Project activities will be based on two pilot watersheds in Brazil. Distance education will also be used to reach a broader

audience.

Key results to date
Four Canadian graduate exchange students have traveled to Brazil to conduct research; initial data-gathering in the selected pilot watersheds, project meetings and research are underway. The project's websites in Brazil and Canada have been created. Project reports and research results are beginning to be disseminated.

CIDA priorities addressed

Official development assistance area(s):
Civil society's policy role (primary)
Capacity development in environmental management (secondary)

Sector(s):
Water resources policy and administrative management (primary)
Strengthening civil society (secondary)

Policy priorities:
Health and nutrition (secondary)

Project value
Original CIDA commitment: $750,000
Partners' commitments: $471,000

Project duration
April 2003 – December 2008

2) Key team members

Canadiam Team Members

Prof. Ellie Perkins, FES (Faculty of Environmental Studies)York University. Project Director
Prof. Paul Zandbergen, University of South Florida. Project Co-Director
Andrea Moraes, FES -York University. Project Coordinator
Marcia Chandra, FES -York University. Research assistant and exchange student
Rami Hanna, FES -York University. Research assistant and exchange student
Nicole Worsley, FES -York University. Research assistant and exchange student
Maryanne Obaka, York University. Undergraduate assistant/webmaster
Lara Babbie, FES -York University. Research assistant
Bonnie Wiltshire, BM Works. Financial Consultant

Brazilian team members

From Ecoar Institute for Citizenship:

Miriam Duailibi, Brazilian Director
Amanndha Pina, Manager
Gabriela Prioli, Volunteer
Mariana Duarte, Volunteer
Christiane Godoy, Volunteer

From University of Sao Paulo/Campus SP – CECAE:

Prof. Marcos Sorrentino, Academic Director
Elisabeth Teixeira, Executive Manager

From University of Sao Paulo/Campus SP - PROCAM:

Prof. Pedro Jacobi, Academic Director
Fabiola Zerbini, Field Coordinator
Barbara Carvalho , Research assistant (intern)
Flavio Paiva, Research assistant (intern)
Renata Crivoi, Volunteer
Claudia Jardin,Volunteer

From University of Sao Paulo/Campus Piracicaba –ESALQ:

Prof. Dalcio Caron, Academic Director
Clarissa Carvalho, Field Coordinator
Fernanda Moraes, Research assistant (intern)
Joyce Brandao, Research assistant (intern)
Roberto Oliveira, Research assistant (intern)
Karine Faleiros , Research assistant (intern)
Valeria Freixedas, Volunteer (PISCA coordinator)

3) Status of results template

UPCD Tier 2 annual progress report

Status of results

Reporting period	***Canadian lead institution***	***Country***
01 April 04 to 30 March 05	York University	Brazil
Project number	***Project title***	
UPCD Tier 2 Project S61268-373G	Sister Watersheds – Brazil/Canada	

Intended results	**Indicators**	**Cumulative outcome and outputs achieved (use indicators)**
Outcome 1 Appropriate training programs for participants in watershed management in São Paulo State. 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. 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.	**Outcome indicators 1** Number, gender, ethnicity, and degree of involvement of Brazilian participants within the pilot watersheds; Evaluation of project activities and curricula, including gender-appropriateness, by participants via evaluation forms; Number of visits to the project's curriculum website Output indicators 1.1 Number and nature of training workshops delivered in pilot watersheds, and number, gender, ethnicity and socio-economic composition of participants; Output indicators 1.2 Number and nature of innovative training methods and materials developed, and their utilization by project partners;	1. During the period of April 2004 to March 2005, the Brazilian team was composed of 14 people directly involved (9 females, 5 males) and 6 volunteers (6 females). Mid-term project evaluation is scheduled for January 2006. The number of visits to the project's Brazilian website from January to March 2005 was 1,872. 1.1 Not yet 1.2 Project reports, research papers, and other materials are available on project websites.

Outcome 2 Improved ability of civil society in the pilot watersheds to be articulate and effective participants in the local water resources management, including the ability to develop proposals for and undertake new projects based on sustainability principles. Output 2.1 Structured hydro-social database on the pilot area watershed (social, economic, biophysical, legal). Output 2.2 2.2. Enhanced capacity of training program participants in the pilot watersheds.	**Outcome indicators 2** Number and nature of activities of members of civil society within the pilot watershed; Output indicators 2.1 Amount and nature of information collected about the pilot watersheds, organized in a systematic manner and made widely available Output indicators 2.2 Number and nature of activities undertaken by training program participants as a direct result of the training program;	2. Dozens of visits were made by team members to the watershed communities: Pirapora (11), Pirajussara ( ) , Piracicaba ( ). Many meetings were held with watershed communities: Pirapora (1), Pirajussara(), Piracicaba( ). 2.1. Two pilot micro-watersheds were selected: Pirajussara and Piracicamirim. Field work coordinators were selected for each of them as well as a manager at ECOAR. Geographical, historical, socio-economic and institutional data was collected for the two selected watersheds. A list of committee members for pilot watersheds was organized and a list of civil society organizations identified. Three reports were produced and a summary of the information was published on the projects website. 2.2 Not yet
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. 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. Output 3.2	**Outcome indicators 3** Number and nature of new partnerships established by Ecoar, USP and York; Development of new approaches in research techniques, teaching and extension activities by Ecoar, USP and York; Presentation of issues and themes connected to the Brazilian reality in activities and courses at York; Output indicators 3.1 Number and nature of new learning modules and courses at Ecoar, USP and York; Output indicators 3.2	3. As of March 2005, the cooperation agreement between York and USP is in the final phase of official validation. This will facilitate student exchanges as well as ongoing cooperation between the two universities. During 2004, a Research Action plan for activities in the two watersheds in Brazil was developed and revised and a research plan for Canada was also developed. A Seminar on Watershed management in Brazil was held at York University in cooperation with CERLAC (the Centre for Research on Latin America and the Caribbean), on March 9, 2005. The Seminar was attended by about 20 people, roughly ¾ females. The Seminar was videotaped. 3.1 Eight Individual Directed Study courses on water

Support for interdisciplinary program development and new partnerships between academic and non-academic institutions in Brazil and Canada. 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.	Number, gender, ethnicity, and degree of involvement of faculty and staff members of project partners; Output indicators 3.3 Number of graduate student programs completed and the students' ethnicity and gender;	management in Brazil were offered for graduate students at York University (1 male, 7 female). During 2004 Ellie Perkins initiated phone and e-mail exchanges with Dr. Margaret Keck, from the related Marca d'Agua project (1 female). 3.3 Exchange students from Canada to Brazil: FES graduate student Erika Fuchs (German-Mexican-Canadian) went to Brazil from August 2003 to February 2004 and made a presentation of her research at CERLAC after her return to Canada. Major paper on Brazil completed (1 female). FES graduate student Marcia Chandra (Spanish-Indian-Canadian) went to Brazil from May to October 2004 and made presentations at USP and CERLAC. Major paper on Brazil completed and a Report on Exchange was produced (1 female). FES graduate students Nicole Worsley (Canadian) and Ramy Hanna (Egyptian-Canadian) went to Brazil in January 2005 and made presentations at USP (1 female/1 male). Research Assistants in Canada: Two research assistants did bibliographical research on water management and participation during Winter/Spring 2004 (Tracy Locke & Sylvie Tremblay - 2 females). Two Canadian graduate students did baseline research on Ontario Water Management (Nicole Worsley and Lara Babbie) during the summer of 2004 (2 females). One Canadian research assistant systematized material on Ontario Water Management (Marcia) and one graduate student created guidelines for Brazilian students (Ramy) during fall 2004 and winter 2005 (1 male/1 female).
Outcome 4 A strong international network of partner institutions to provide support for on-going training and education	**Outcome indicators 4** Degree of involvement and participation in the project activities by participants (following time tables and	4. Three Brazilian team members, five Canadian members, six staff/students/professors from FES/York and one

efforts in the area of water resources in Brazil and Canada 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. Output 4.2 Active network among project partners. Output 4.3 Awareness of the project and its results among a wide range of stakeholders	commitments, carrying out agreed upon workplans and tasks). Attention to the gender and socio-economic implications of all project activities; Maintenance of the principles of transparency, non-hierarchy, respect for diversity and conflict resolution between the partners involved and in the project activities. Output indicators 4.1 Amount and nature of project related information made available on project websites, and their utilization by project partners and others; Output indicators 4.2 Utilization of networking tools. Output indicators 4.3 Number and type of publications and presentations.	AUCC project officer participated in project meeting in Canada in January, 2004 (15 participants, 4 males, 11 females). All Brazilian team members were involved in the diagnostic and planning phases of the research and action in Brazil in several meetings (20 team members, 5 males, 15 females). Thirteen Brazilian team members and five Canadian members participated in project meeting in Brazil in January, 2005 (18 team members, 5 males, 13 females). Active email communication has facilitated easy discussions among participants with no conflicts noted. 4.1. During 2004, information about the Sister Watershed 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 on the website. During 2004 and 2005, comparative information on Ontario Watershed Management and public participation was produced by Canadian team members and published on the website. 4.2 Visiting Brazilian team members were interviewed by David da Silva from York Community Radio, Toronto, Jan., 2004. The Brazilian project website was developed by ECOAR, making available project results in Portuguese and English (1 male web designer, 1 female webmaster). The Canadian project website is being developed by undergraduate assistant Maryanne Obaka (1 female). 4.3

		Publications: 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. Report on the institutional structure of water management in Ontario was produced in the fall of 2004 and revised in May 2005, and provided to Brazilian team. Manual for graduate students and guidelines for research on Black Creek was written in Fall 2004 and provided to Brazilian team. **Presentations in Brazil:** Graduate student Marcia Chandra did research on the Pirapora Watershed and presented in an Exchange Seminar in Sao Paulo, Brazil - October, 2004 (20 participants, 8 males and 12 females). Brazilian team members from ESALQ participated in a Seminar on Institutional Socio-Enviromental Responsibility in Piracicaba, Brazil, September 2004. (96 participants, 61 males and 35 females).

		Brazilian team members from ESALQ, Piracicaba presented our research at the IV Week of PISCA (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, January, 2005. (32 participants, 16 males and 16 females). **Presentations in Canada**: Graduate student Erica Fuchs presented research on the Landless Movement in Brazil at CERLAC seminar in February 2004. (Estimated 30 participants, roughly ¾ female). Prof. Ellie Perkins presented a paper entitled “Participation and Water Management: Experiences from Brazil” at the International Society for Ecological Economics conference, July 11-13, Montreal. (About 50 participants, around 25 female and 25 male).

4) Analysis of project results

Project context

In Brazil, due to the large size of some watersheds, it is often the case that the watersheds are divided into sub-watersheds represented in sub-committees which are supposed to deal with more specific, local, micro issues. The watershed committees themselves generally deal with broader, general and macro issues related to the entire watershed. The logic behind the creation of sub-committees is that actions to change and conserve water resources are best taken up at the level of the sub-watershed or micro-watershed. The Sister Watersheds project chose to focus its work in Brazil on two sub-watersheds which drain two campuses of the University of São Paulo, in downtown São Paulo (the Pirajussara) and in Piracicaba (the Piracicamirim).

However, in the case of the Pirajussara River, the Brazilian team soon discovered – partly through the work of a Canadian exchange student -- that despite the fact that administratively the watershed has been divided into sub-watersheds with corresponding management sub-committees, the Pirajussara micro-watershed was apparently left out of these divisions. Therefore it is neither administratively recognized as belonging to any sub-watershed of the greater Alto Tiête Watershed Committee (CBH-AT), nor does it have any representation on the committee.

One of the beneficial results of project research in the region is that the Pirajussara may finally become recognized and represented in a sub-committee, and therefore in the committee itself.

Moreover, project researchers have found that a similar situation also exists in relation to the Piracicamirim River. The Pisca (Piracicamirim) sub-watershed falls within the boundaries of the PCJ watershed (Piracicaba, Capivari and Jundiaí Rivers) and hence within the jurisdiction of the PCJ watershed management committee, since it is one of the affluents of the Piracicaba River. However, the Pisca micro-watershed is not represented per se on the committee since there are lots of micro-watersheds. The Pisca sub-watershed or any other sub-watershed is only represented through NGOs or other organizations which hold seats on the PCJ river basin committee.

The significance of these findings is that the neat hierarchical correspondence which exists in theory between bioregional watersheds and political / managerial committees is actually, in practice, much more complicated and nuanced. Supporting the democratization of bioregionally-based institutions implies developing ways to take these complexities into account. In the São Paulo case, much of the actual work of the watershed management committees takes place within their “technical chambers” or working groups, where the University of São Paulo is well-represented, especially in the environmental education working group.

These new understandings have raised the need for a slight revision of our intended results – namely outcomes 1 and 2. Instead of focusing specifically on strengthening

the ability of civil society to participate in the watershed committees, we decided to refocus our attention to increase participation in watershed management in more general terms. This has happened also because our Brazilian team realized and wanted to recognize the existence of other avenues of public participation in water management, which are not restricted to the committees themselves.

Since there is no sub-committee for the Pirajussara River, other institutional spaces concerned with water management in the area gain relative importance. In Pirajussara for instance, there is the Pirajussara Commission Against Flooding (*Comissão de Combate a Enchente no Pirajussara* – CEPP), a local association that denounces and brings public pressure on the government for improvements in the area, using media and environmental education.

Annual results

Some of the key results of the project during 2004-05 include: (a) team definition, (b) development of a detailed research action plan, (c) preliminary mapping, (d) student exchanges, (e) team meetings, and (f) website creation.

a) In the beginning of this period, the Brazilian project team coalesced as a group. The two academic coordinators in São Paulo and Piracicaba (Prof. Pedro Jacobi and Prof. Dalcio Caron) assumed direction of the research and the respective field work coordinators (Cissa Riccio de Carbalho and Fabiola Zerbini) were hired and began their work. Ecoar also designated a manager and webmaster, Amanndha Pina.

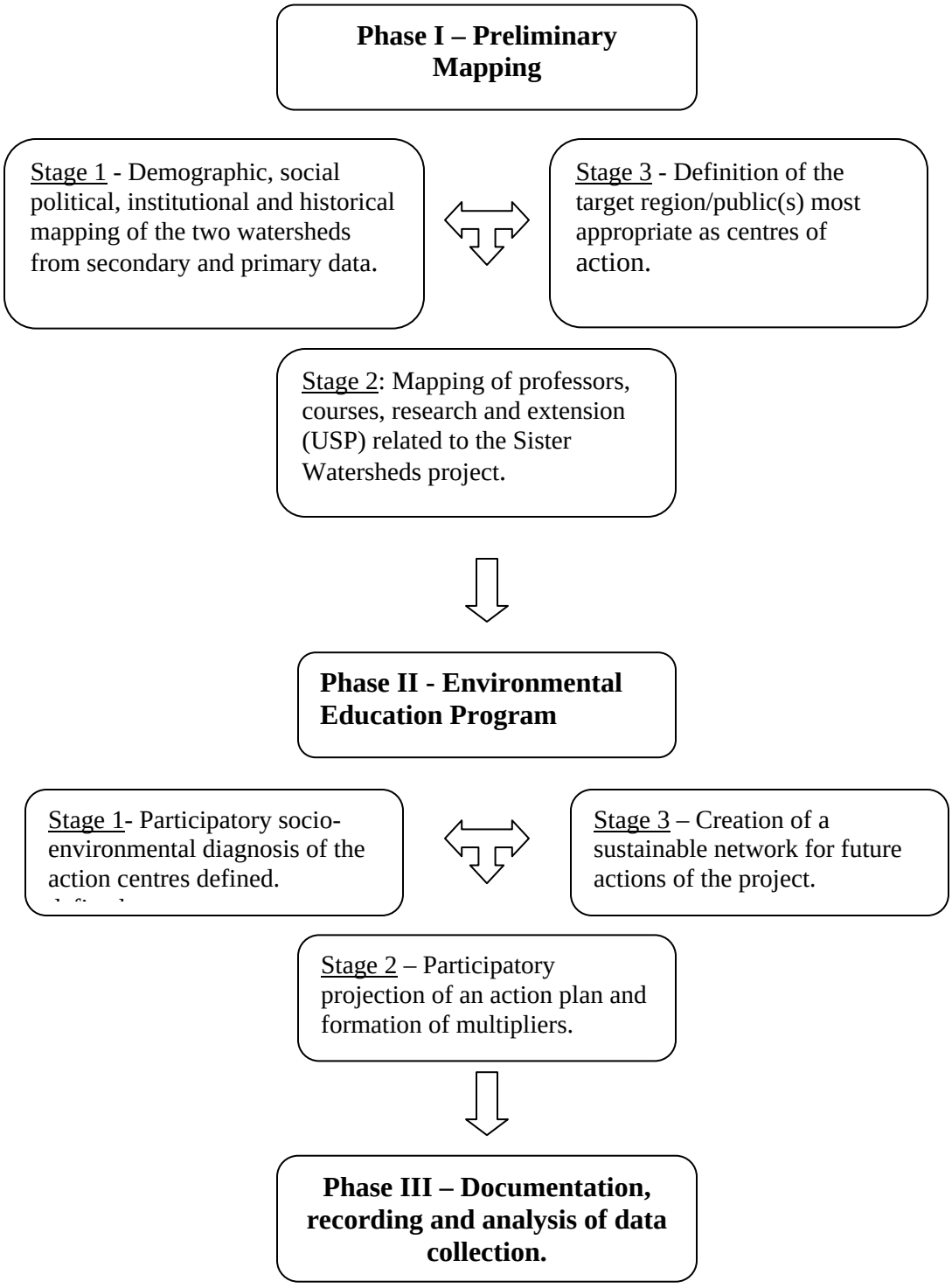
b) Research Action Plan. Also in the beginning of the period, the Brazilian team built the Research Action Plan, which has the general objective of developing and implementing a research-action project aiming to investigate the relationship between environment education projects and the territorial, social and institutional dimensions of the integrated management of water resources in two micro-watersheds close to the two university campuses of USP (Piracicamirim and Pirajussara).

   The specific objectives of the research action plan were:
   I - To develop, implement and evaluate a project of environmental education, together with the communities of both sub-watersheds, directed to promoting knowledge about the multiple dimensions of the management of the element "water" in urban areas, and to provide technical background and necessary political skills to strengthen the involvement of civil society in the protection of the resource "water" as participants in the process of shared/integrated management of water resources.

   II - To stimulate the involvement of undergraduate and graduate students, teachers and surrounding communities in an interactive network of education, research and extension, associated with the theme of the integrated management of water resources.

III - To develop and systematize socio-economic, bio-physical, and institutional data from the two sub-watersheds involved in the project.

The objectives of the research are to be concretized through 3 distinct phases. Phase 1 is directed to the geographic, demographic and institutional mapping of the selected watersheds. Phase 2 is concerned with the implementation of the environmental education program towards strengthening civil society participation in the process of integrated management of water resources. Phase 3 will happen throughout the project in parallel to phases 1 and 2. It includes the documentation and registration of all data and materials developed. Each of the phases described will be divided into STAGES that will be used as targets for the project execution. They can be visualized in the following scheme:


Phase I – Preliminary Mapping
Stage 1 - Demographic, social political, institutional and historical mapping of the two watersheds from secondary and primary data.
Stage 3 - Definition of the target region/public(s) most appropriate as centres of action.
Stage 2: Mapping of professors, courses, research and extension (USP) related to the Sister Watersheds project.
Phase II - Environmental Education Program
Stage 1- Participatory socio-environmental diagnosis of the action centres defined.
Stage 3 – Creation of a sustainable network for future actions of the project.
Stage 2 – Participatory projection of an action plan and formation of multipliers.
Phase III – Documentation, recording and analysis of data collection.

c) Preliminary mapping. This first phase is currently concluded. Geographical, historical and socio-economic data were collected for the two selected sub-watersheds. In parallel, lists of committee members for pilot watersheds were organized and civil society organizations in the watersheds identified. Three reports were produced by the Brazilian team and a summary of the information was published on the project's website at www.baciasirmas.org.br . More information on these reports is provided in the Appendix.

d) Student exchanges. Three Canadian students traveled to Brazil in the period: Marcia Chandra, Nicole Worsley and Rami Hanna.

Marcia, who went to Brazil from May to October 2004, conducted research on the Pirapora sub-watershed, which has been suffering from severe pollution problems including the accumulation of toxic, sudsy foam created by turbulence in the polluted river which at times overflows the river's banks and floods downtown Pirapora. Marcia did two presentations of her results, one in Brazil and another in Toronto. She also wrote her master's paper on the issue. Another product of Marcia's exchange was an Exchange Report which became a model for future exchange students. Please see Marcia's Exchange Report and master's paper in Appendix 5 and 6.

Ramy Hanna went to Brazil in January 2005 and is expected to return in August 2005. Ramy is currently taking classes at USP and doing field research in the Piracicaba watershed doing an analysis of the participation of civil society members at the Piracicaba, Capivari and Jundiai Committee (CBH-PCJ).

Nicole Worsley went to Brazil from January to May 2005. Nicole did research on the Pirajussara watershed and took classes at USP.

d) General team meeting. The trip of the Canadian team to Brazil for a week in January 2005 made possible discussions between project team members that resulted in the following decisions:

(1) With the conclusion of the preliminary mapping phase, the Brazilian team felt the need to systematize the information gathered in a visual presentation. It was decided that a socio-geographical visual presentation would be built by ECOAR and be presented to community members as well as members of the watershed committee and government officials, in order to disseminate information and raise general awareness about the Pirajussara. A budget revision was made in order to include funds for this activity, included in the Budget category: Other Direct Costs.
(2) The Brazilian team decided to start the public environmental education phase of the project by doing a community perception survey on water management and environmental education, using local public schools as starting points. This perception study is intended to be repeated at the end of the project, which will serve as an evaluation of the intervention itself.

A budget revision was made in order to include funds for this activity, included in Other Direct Costs.

e) Website. The Brazilian Website was launched at www.baciasirmas.org.br in Portuguese and with documents in English as well. For the period from January to March 2005 the site had 1,872 visits. This website is managed by ECOAR. At York University, a website in English is also under construction by the undergraduate assistant Maryanne Obaka at www.yorku.ca/siswat which contains translations of some of the materials posted on the Brazilian site as well as specific information about the project for Canadian readers.

Results variance

Beyond the details noted above, so far there is no clear gap between the results expected and actual results achieved to date.

Implementation variance

So far there is no relevant gap between types of activities planned and completed. The mid term evaluation is anticipated in January 2006.

Spinoff activities and unexpected results

One of the unexpected results beyond what was formally planned has been the involvement of Fabiola (the Pirajussara field work coordinator) and Nicole (Canadian exchange student) with the favela community of Embu, located at the source of the Pirajussara river. This community represents the lower income part of the Pirajussara sub-watershed and was visited by the Brazilian and Canadian team in January, and a few times before that by the USP Sao Paulo team. Aware of the problems experienced by the community population and the inexistence of a local association against flooding (which is common in the area), Fabiola and Nicole decided to facilitate bi-weekly community meetings to talk about water problems, with agendas decided by the members of the community themselves. The meetings are still going on and receiving a growing number of participants.

Another spinoff activity was the decision for the perception survey. Originally the Brazilian research team had in mind the selection of local pilot centres for intervention that would be representative of the population of the watersheds. But after the preliminary mapping phase the diversity of the population was so evident that the Brazilian team decided to start its work with local schools at a starting point. During the January 2005 meeting in Sao Paulo both teams realized it was possible to relocate funds to make possible the perception survey and to repeat it at the end of the project as an evaluation tool.

A third unexpected result was the discovery of the gap between the committees and civil society – already mentioned in the project context section above.

Another type of activity that has received emphasis this year is the dissemination of project results. Both Brazilian and Canadian teams realized that the participation of project team members in seminars and workshops is an important tool to monitor our actions and enhance our network. Having this in mind, the Brazilian team organized a workshop on Brazilian Water Management at the World Social Forum in January 2005 (please see pages 27-31 and 68-72 of the Brazilian Report # 3 in the Appendix). In parallel, the Canadian team organized a Seminar on Brazilian Water management in March 2005 in partnership with CERLAC/York.

Finally it is important to highlight the development of the research by York research assistants on the Black Creek watershed (in which York University is located), with the purpose of comparing Ontario and Brazilian pilot cases. During the summer of 2004 Nicole and Lara assembled a document called "Institutional Structure of Water Management in Ontario". This draft document was later expanded and systematized by Marcia in the Winter of 2005 (appendix 7). Ramy also produced a Manual for incoming Brazilian exchange students containing preliminary information about the Black Creek watershed (Appendix 8). All of these documents will serve as a guiding tools for research in Ontario by Canadian and Brazilian exchange students coming to Toronto.

5) Communication products

A banner was produced by the Brazilian team promoting the Sister Watersheds project and used at the Pisca Week; a copy was given to the Canadian team.

Flyers in Portuguese with information about the project were produced and distributed at the World Social Forum in Porto Alegre.

The Brazilian website was developed: www.baciasirmas.org.br

The Canadian website was developed: www.yorku.ca/fes

The March 2005 seminar on Brazilian Water Management at York was video-taped.

Ellie Perkins's conference paper entitled "Participation and Water Management: Experiences from Brazil" was written, presented and made available on project websites.

6) Other information

At the general meeting in January 2005 both Brazilian and Canadian teams decided to plan for the mid-term evaluation in January 2006. The project is expected to wind up in December 2008.

Due to the increase in project activities, the Canadian coordinator, Andrea Moraes had her working time for the project increased from 40% of a full time appointment to 60%. This was discussed and approved during the January 2005 project team meetings.

The first Brazilian exchange students are expected to come to Toronto for six months in the fall of 2005. They will have the chance to participate in the general team meeting scheduled for September 2005 in Toronto, which will include a Seminar open to York community and the general public.

Appendices

Appendix 1 - List of Contents from 3 Brazilian Reports

Appendix 2 - Brazilian Report # 1 - From April 2004 to July 2004, with Partial Brazilian Research results.

Appendix 3 - Brazilian Report # 2 - From August 2004 to September 2004, with Partial Brazilian Research results.

Appendix 4 - Brazilian Report # 3 - From October 2004 to February 2005, with Partial Brazilian Research results.

Appendix 5 – For Marcia's Exchange Report please see appendix 1 from Brazilian Report #3.

Appendix 6 –Marcia Chandra Master's paper "Downstream Pollution, Upstream Power".

Appendix 7 – Marcia, Nicole & Lara's "Institutional Structure of Water Management in Ontario". Version May 2005.

Appendix 8 – Ramy Hanna. Fall 2004. "Manual for Exchange Graduate Students".

Appendix 1 - Brazilian Reports Contents Summary

BRAZILIAN REPORT – I

I.1 –Contents of the report from Pirajussara River from April to July 2004:

a) Exchange activities (p.2)
b) Record of general (Piracicaba and Piracicamirim) team meetings in number of thirteen (p.4-5)
c) Description of the research action plan (p.4-13)
d) Results from preliminary mapping – secondary data (p.14-16)
e) Record of visits and meetings with community members – total of 10 for the period. (p.16-17)
f) Partial results with data, tables and photos from the sub-watershed Pirajussara (p.17-44)
g) Description of the Alto Tiete Watershed Committee (CBH-AT)to which the Pirajussara River belongs, including list of committee members. (p.45-53)

I.2 - Contents of the report from Piracicamirim River from March to June 2004:

h) Presentation and history (p. 57-59)
i) Description of the research action plan (p.60-68)
j) Sum of activities (p.68-69)
k) Results from preliminary mapping – secondary data (p.70-73)
l) Record of visits and meetings with community members – total of 43 for the period (p.73-79)
m) Administrative information about water management in Sao Paulo state (p.81-85)
n) Description of the Piracicaba, Capivarí and Jundiaí Watershed Committee (CBH-PCJ) to which the Piracicamirim River belongs, including list of committee members. (p.85- 94)
o) Partial results with data, tables and photos from the sub-watershed Piracicamirim (p.95- 122)

BRAZILIAN REPORT II

II.1– Contents of the report from Pirajussara River from August to September 2004:

a) Introduction (p.1-2)
b) Update of the sub-watershed mapping – history (p.2-7)
c) Update of the sub-watershed mapping –photographical report (p.7- 23)
d) Update of the sub-watershed mapping –map of projects of environmental education in the region (p.24- 26)
e) Update of the sub-watershed mapping –institutional map – neighbor associations (p.26- 31)
f) Update of the sub-watershed mapping – characterization by territories (p.31- 36)
g) Update of the sub-watershed mapping – list of environmental education projects in the area (p. 37-50)

II.2. Contents of the report from Piracicamirim from July to September 2004:

h) Introduction (p.51-54)
i) Update of the sub-watershed mapping – list of environmental education projects in the area (p. 55-59)
j) Update of the sub-watershed mapping – characterization by territories (p.60-65)
k) Methodology and Partnerships 65
l) Partnerships - Appendix one - Sample questionnaire from Individual Project of Property (p.69-83)
m) Partnerships – partner student master research project (p.84-104)
n) Update of the sub-watershed mapping – maps and photos (p.105-110)

BRAZILIAN REPORT III

III.1– Contents of the report from Pirajussara River from October 2004 to February 2005:

a) list of contents (p.2)
b) Report on student exchange Marcia Chandra(p.3-6)
c) Report on the visit of the Canadian team (p.6 – 9)
d) New exchange student Nicole Worsley (p 9- 10)

e) Action research plan – 10-14
f) Geographical reference plan 14-15
g) Description of Socio-environmental perception study 15-16
h) Bibliographical review – concept (16-17)
i) Bibliographical review –methodology (17-19)
j) Bibliographical review – theme (19-20)
k) Socio-environmental perception study – first actions (p. 20-24)
l) Methodologies, tools and environmental education activities research related to water and participation (24-26)
m) Report on Institutional communication – materials 26-27
n) Report on Institutional communication - participation in the World Social Forum (p. 27-31)
o) Appendix 1 – Graduate Student Exchange Report from Marcia Chandra (IN ENGLISH) (p.32-44)
p) Appendix 2 – V World Social Forum – Platform of Fight for Water (p.45-46)

III.2– Contents of the report from Piracicamirim River from September 2004 to February 2005:

q) Introduction (p.48)
r) Report on team meetings (p.49- 50)
s) Student exchange – plans for Ramy Hanna (p. 51-52 and p. 73 in ENGLISH)
t) Events and Activities (1) – participation on the Technical Chamber of Environmental Education from the Piracicaba, Capivari and Jundiaí Watershed Committee. (p. 52-53 and p. 74-91)
u) Events and Activities (2) – participation in the First Seminar on Socio-Environmental Responsibility (p.53-62)
v) Events and Activities (3) –participation in the creation of a Nucleus of Culture and Extension of Education and Environmental Conservation. (p. 63 and 92)
w) Events and Activities (4)- participation in the Congregation of Environmental Groups from Campus *Luiz de Queiroz* (p.63-66)
x) Events and Activities (5) participation in the PISCA week (p.66 – 67 and appendix at p. 93-127 and 129-131)
y) Events and Activities (6) – participation in the project “A Very Special Conquest” (p. 67 – 68 and appendix at p.128).
z) Events and Activities (7) participation in the V World Social Forum – (p.68- 72)