



**ANNUAL REPORT**  
**October 2001 – September 2002**  
**And**  
**4<sup>th</sup> SEMI ANNUAL REPORT**  
**April 2002 – September 2002**





# Ridge to Reef Watershed Project

USAID Contract No. 532-C-00-00-00235-00

**ANNUAL REPORT  
October 2001 to September 2002  
And  
4<sup>TH</sup> SEMI ANNUAL REPORT  
April 2002 to September 2002**

October 31, 2002

Prepared for the:

Government of Jamaica  
National Environment and Planning Agency

And the

United States Agency for International Development

Implemented by:

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## **Preface**

The Ridge to Reef Watershed Project (R2RW) is a five-year bilateral initiative between the Government of Jamaica's National Environment and Planning Agency (NEPA) and the Government of the United States Agency for International Development (USAID). The Project focuses on three distinct, but interrelated activities working towards the objective of improving the management of Jamaica's watersheds. The R2RW Project Components are:

- Component 1 Sustainable Environmental Practices
- Component 2 Compliance and Enforcement
- Component 3 Institutional Strengthening

The Project is directly supportive of the USAID Strategic Objective 2 (SO2) – Improved quality of key natural resources in selected areas that are both environmentally and economically significant. Associates in Rural Development, Inc. (ARD) implement the R2RW

This is the 2<sup>nd</sup> Annual Report for the period October 2001 to September 2002, and the fourth Semi-Annual Report (SAR) for the R2RW Project for the period April 1, 2002 to September 30, 2002. This SAR provides a comprehensive overview of the progress on project implementation under USAID Contract No. 532-C-00-00-00235-00, and reports on progress on meeting the R2RW Second Annual Work Plan. This SAR contributes to the fulfillment of the overall Ridge to Reef Watershed Project Life of Project Strategy, as well as reports on progress made under the R2RW Performance Monitoring Plan (PMP). Finally, this SAR summarizes achievements under the agreed performance benchmarks, and reports on the financial operations for the period April 2002 to September 2002.

## Acronyms

ARD	Associates in Rural Development
ASC	Administrative and Support Center
CASE	Collage of Agriculture, Science and Education
CETF	Compliance and Enforcement Task Force
COP	Chief of Party
CTS	Cargill Technical Services
CWIP	Coastal Water Improvement Project
EE&C	Environmental Education & Communication
EJASP	Eastern Jamaica Agricultural Support Project
EWS	Environmental Wardens Services
FD	Forestry Department
GNRS	Governance and Natural Resources Specialist
GOJ	Government of Jamaica
GRW	Great River Watershed
GRWMC	Great River Watershed Management Committee
ISC	Inter-Agency Steering Committee
JAS	Jamaica Agricultural Society
MBMP	Montego Bay Marine Park
MLGYCD	Ministry of Local Government, Youth and Community Development
NEEC	National Environmental Education Committee
NEPA	National Environment and Planning Agency
NIWMC	National Integrated Watershed Management Council
NGO	Non-Governmental Organization
NRCA	Natural Resources Conservation Agency
NSWMA	National Solid Waste Management Authority
PAPAS	Participation and Public Awareness Specialist
PATF	Public Awareness Task Force
PDC	Parish Development Committee
PIC	Project Implementation Committee
PMP	Performance Monitoring Plan
RADA	Rural Agricultural Development Authority
R2RW	Ridge to Reef Watershed Project
SAPW	Strategic Action Planning Workshop
SAR	Semi Annual Report
SDC	Social Development Commission
SO2	Strategic Objective number 2
SOW	Scope of Work
SSU	Sanitation Support Unit
STTA	Short-Term Technical Assistance
SWB	Sustainable Watersheds Branch
TAP	Targeted Appropriate Practices
TOR	Terms of Reference
USAID	United States Agency for International Development
WMC	Watershed Management Committee
WMS	Watershed Management Specialist

# Table of Contents

<b>Preface</b>	<b>3</b>
<b>Acronyms</b>	<b>4</b>
<b>1. Introduction</b>	<b>7</b>
<b>2. Project Vision and Strategy</b>	<b>11</b>
2.1 Vision	11
2.2 Project Strategy	12
<b>3. Component 1A</b>	<b>16</b>
3.1 Fostering the Growth of the GRWMC	16
3.2 Production and Marketing Activities	19
3.3 Water and Sanitation Activities	26
3.4 Public Awareness Activities	28
3.5 Gender Considerations	36
3.6 Analysis of Activities	38
3.7 Issues and Resolution	38
<b>4. Component 1B</b>	<b>40</b>
4.1 Rapid Rural Appraisal	40
4.2 Strategic Action Planning Workshop	42
4.3 Initiation of a Rio Grande Watershed Management Committee (RGWMC)	44
4.4 Identification and Implementation of Priority Activities	46
4.5 Public Awareness in the RGW	47
4.6 Gender Considerations in the RGW	48
4.7 Issues and Resolution	50
<b>5. Component 2</b>	<b>51</b>
5.1 Inventory of Regulatory Framework	52
5.2 Enforcement	53
5.3 Policy Improvement	55
5.4 Compliance and Enforcement in the GRW	57
5.5 Compliance and Enforcement in the RGW	59
5.6 Economic Incentives	61
5.7 Public Awareness	63
5.8 Gender Considerations	64
5.9 Issues and Resolution	65
5.10 Analysis of Activities	65
<b>6. Component 3</b>	<b>67</b>
6.1 Capacity Building of the Sustainable Watersheds Branch (SWB)	67
6.2 Enhancing Coordination	71
6.3 Public Awareness	81
6.4 Incorporating Gender Consideration	86
6.5 Lobbying and Advocacy	87

6.6	Special Studies	88
6.7	Issues and Resolution	90
6.8	Analysis of Activities	90
<b>7.</b>	<b>Project Management</b>	<b>92</b>
7.1	Grant Fund Management	92
7.2	Staffing	94
7.3	Management Arrangements	95
<b>8.</b>	<b>Performance Indicators</b>	<b>97</b>
8.1	Overall Project	99
8.2	Component 1	100
8.3	Component 2	101
8.4	Component 3	104
8.5	Cross-cutting Themes	105
<b>9.</b>	<b>Semi-Annual Period Performance Benchmarks</b>	<b>108</b>
<b>10.</b>	<b>Program Expenditures</b>	<b>110</b>



# 1. Introduction

This Second Annual Report and 4<sup>th</sup> Semi Annual Report (SAR) covers the period October 1, 2001 to September 30, 2002 and April 1, 2002 to September 30, 2002 respectively. This period represents the second year of planned 5-year Ridge to Reef Watershed (R2RW) Project. The R2RW Project built on the solid start given during the first year to consolidate initiatives that established the foundation for project implementation. A Second Year Work Plan was developed, and work methodically undertaken to achieve as many of the outcomes as possible.

Watershed Management is complex. There are a host of environmental, economic and social issues to be addressed by a large number of stakeholders. These include more than 10 Government of Jamaica (GOJ) agencies, many non-governmental organizations (NGOs), a host of community-based organizations (CBOs) and a number of active and concerned private sector agencies. The legal framework is complicated by some 14 laws, many of which are out-dated, and there is limited enforcement of these laws.

Staffing adjustments were made during the period with the addition of a Sanitation Management Specialist and a Project Assistant. In addition, the Watershed Management Specialist was replaced during September 2002, and some of the core functions spun off into a new position of Agronomic Specialist. The core team has coalesced into a functioning, structured entity capable of leading the R2RW Project over the remainder of the Project. The core team meets regularly and has had spirited dialogue on a variety of issues facing the Project including:

- How to develop consensus on partnership approaches
- How do we mobilize community involvement and stewardship
- What are the best Targeted Appropriate Practice (TAPs); and
- How do we devise sustainable solutions to watershed issues.

R2RW is focused on enhancing sustainable environmental practices, improving compliance and enforcement, and strengthening the capacities of organizations involved in watershed management. But more than just simply achieving these goals, R2RW is also about the **process** of achieving these goals. In addressing economic issues such as productivity and income generation, social issues such as gender and public awareness, and environmental issues such as poor sanitation and soil erosion, the R2RW simultaneously works to develop functioning coordination mechanisms that will sustain Project interventions through our strategic partners. This process orientation affects the pace of implementation in that it takes longer to develop projects while forging joint program initiatives through a Watershed Management Committee (WMC). Work during the reporting period to build the Great River Watershed Management Committee (GRWMC), its four issues oriented task forces, and the National Integrated Watershed Management Council (NIWMC) serve as the foundation on which to build a feasible integrated watershed management model.

The first four sections of this Second Semi Annual Report (SAR) highlight progress on the three R2RW Project components, as well as the crosscutting themes that comprise the Project. The three components are:

## *Component 1A*

Through targeted organizations, sustainable environmental management practices by resource users identified and supported in the Great River Watershed.

### *Component 1B*

Through targeted organizations, sustainable environmental management practices by resource users identified and supported in the Rio Grande Watershed.

*Component 2:* Incentives for, and obstacles to, enforcement of targeted existing environmental regulations identified and solutions supported.

### *Component 3*

Capacity of Jamaican government agencies, international donors, and private sector and civil society organizations to implement effective watershed management programs enhanced.

Section 5 examines Project Management aspects including: project operations, project management and oversight, monitoring and reporting, and staffing. Section 6 presents an update of the Performance Indicators that were originally set out in the Performance Monitoring Plan. Section 7 proposes performance benchmarks for the next six months. Finally, Section 8 presents a summary of program expenditures for the reporting period.

### **Summary of Project Achievements**

The reporting period covers the period October 2001 to September 2002. Major accomplishments during this period may be summarized as follows:

#### **Component 1A: Sustainable Environmental Practices: Great River**

- The GRWMC continued to grow as a viable entity capable of addressing solutions to the difficult issues of watershed management in the Great River.
- Training given in writing press releases, media, production of videos, and proposal writing.
- Implementation of a Goat Improvement Project in the GRW to improve livestock opportunities and encourage more environmentally friendly practices.
- Development of a Plant A Tree Campaign and Program.
- Completed 2 sanitation and wastewater disposal demonstrations in Retrieve, St. James.
- Completion of water harvesting and sewage disposal upgrade at Retrieve All-Age School.
- Work underway on water harvesting and sewage disposal project at Pisgah.
- Implementation of water quality monitoring program in the Great River.
- Regular promotion of community activities in the GR in mainstream media.
- Actively participated in shows, and expositions (Green Expo, Montpelier JAS Fair, Denbigh, etc.).
- Gender sensitization training for GRWMC Executive Committee.
- Communities engaged in stewardship activities (tree-planting and community cleanups).

### **Component 1B: Sustainable Environmental Practices in the Rio Grande**

- Project initiatives were launched in the Rio Grande Watershed including a Rapid Rural Appraisal, and a Strategic Action Planning Workshop.
- Formation of the Rio Grande Watershed Management Committee.
- Established Compliance and Enforcement Task Force, Water and Sanitation Task Force, and Public Awareness Working Group.
- Developed and signed MOU between the RGWMC, R2RW and the Portland Parish Development Committee.

### **Component 2: Enhanced Compliance and Enforcement**

- Completed inventory of Legislation for watershed Management *A Review of existing Laws and Regulations*.
- Training of trainers course (with ENACT and NEPA Legal Dept.) in Compliance and Enforcement for NEPA field officers held.
- Completed draft (with ENACT) of Pocket Guide to Compliance and Enforcement of Environmental Laws.
- Undertook review of draft Watershed Policy.
- Started database and inventory of organizations and groups involved in compliance and enforcement in the GRW.
- Establish the Compliance and Enforcement Task for Portland including a work plan with priority actions.
- Completed draft report on "*Private Sector Involvement in Watershed Management*".
- Developed jingle and drafted posters for popular C&E campaign.

### **Component 3: Enhanced Capacity To Implement Effective Watershed Management Programs**

- Training events were held for the Sustainable Watersheds Branch in effective writing and presentation skills.
- Field Equipment and computers were procured for the Sustainable Watersheds Branch of NEPA.
- Held retreat to clarify mandate of the NIWMC.
- Developed concept paper on strategic directions for the NIWMC.
- Clarified mandate and approaches to establishment of LWMCs and outlined certification process.
- A Project launch was held in January 2002.
- Four newsletters were issued and distributed.

- 12 news releases written and 8 radio interviews conducted.
- Completion of detailed Knowledge, Attitudes and Practices study for four Jamaican watersheds.

### **Project Management**

- A Staffing Functions Assessment was performed, and two new positions: Sanitation Management Specialist and Project Assistant were added.
- A new position of Agronomic Specialist was added in September 2002.
- A new Watershed Management Specialist was hired at the end of the reporting period.
- Coordination achieved through regular management meetings.
- The Grants Program was formally designed and two grants were implemented.

## 2. Project Vision and Strategy

The Second Annual Work Plan presented a detailed description of the overall vision and strategy for the Ridge to Reef Project during the second year of project operations. The assessment of progress on the vision and strategy is normally done on an annual progress in the Annual Work Plan. This section of the document provides a review of the vision and strategy highlighting evolution in thinking that have occurred during the reporting period.

### 2.1 Vision

The R2RW Project has held a series of public consultations, stakeholder workshops, management committees and task forces. Progress has been achieved in terms of articulating and further refining a desired end-of-project status. The principle aspects of the vision are as follows:

#### Improved Governance

- At the national level, Government agencies are more accountable to local communities. R2RW established mechanisms for local accountability. Management policies tested and adapted.
- Local authorities are playing active role in watershed management.
- Greater relationship and interconnections between lower and upper watershed residents. Facilitation of dialogue among communities of common interest – cross-fertilization and exchanges among watershed residents.
- Greater compliance and enforcement and number of cases prosecuted to demonstrate enhanced compliance and enforcement. This includes an improved regulatory framework for watershed management. A new Watershed Protection Act developed that incorporates the challenges of enhanced governance.

#### Effective Institutional Arrangements for Watershed Management

- More efficient local sustainable Watershed Management Committees (WMCs) to serve as examples or models for other watershed areas. Effective local and National Watershed Management Councils. Combined a bottom-up approach with effective policy support. The process of watershed management was followed through.
- Better usage of the resources in the watershed. Improved natural resources management with an integrated approach.
- Incorporation of R2RW data into the Sustainable Watersheds Branch (SWB) database. Improved management mechanisms that can be replicated. Standardized protocols for watershed monitoring and evaluation.

#### Enhanced Public Awareness

- Public knowledge of a Watershed Management Unit (WMU). Watershed signs more prominent. Positive change in the attitude of the land users and identification with the watersheds.

- People’s awareness, understanding and appreciation of which laws govern their everyday lives, and how it applies to them. e.g., Farmers ought to understand how their actions and decisions affect water quality downstream.
- Increased linkage between watershed management and improved quality and quantity of water. Teaching tools for communities about the importance of watersheds.
- The Project that produced the most watershed management material for Jamaica, including a significant increase in the understanding of what and where is a watershed.

### **Improved Policy, Legislation, Compliance and Enforcement**

- New and revised Watershed Act. Environmental issues in watersheds are higher on the national agenda. The project that challenged the government because of cohesiveness in purpose.
- Two watershed management plans for the Great River and the Rio Grande. Watershed management appreciably cleaner to stakeholders.
- Communities solving their own problems. Improved well being of watershed residents.

### **Capacity Building**

- Increased human resource development and capacity to monitor in the SWB. Transfer of the project back to NEPA when the Project ends. Transfer of information and lessons learned. (e.g., there should be a manual available for use, by the SWB, when the project ends).
- Use of Great River and Rio Grande as prototypes for water quality monitoring protocols. Procedures, methods and technologies introduced. Creation of a demonstration plot to show good watershed management practices.
- Team of agencies with the capacity to guide the dynamics of sustainable watershed management.
- Greater coordination of projects within watersheds.

## **2.2 Project Strategy**

The R2RW Project strategy to achieve the overall goal of “Natural resources under improved and sustainable management in identified watersheds” has evolved and matured during the reporting period. This section articulates progress on the four (4) strategic principles under which the Project is implemented. These principles underlie the activities that are presented under the components in the sections that follow. It is important to stress that these strategies and principles do not operate in isolation, but inform and influence each other as project activities unfold. The four strategic principles are:

- Building Strategic Partners;
- Approach to Community Involvement;
- Identifying Leverage Points;
- Targeted Appropriate Practices;

### **2.2.1 Building Strategic Partners**

The Project depends upon its partners to participate in, contribute to, and ultimately to implement R2RW supported activities. In the past, because of expediency, projects have tended to build up separate implementation structures to carry out programs and meet their objectives in a timely and efficient manner. The concept of implementing a project through strategic partners means that R2RW needs to identify and address the constraints these organizations face in affecting environmental management. In addition, it means finding ways to motivate and work with their existing field staff, and to build working arrangements with and between public sector agencies, NGOs and CBOs.

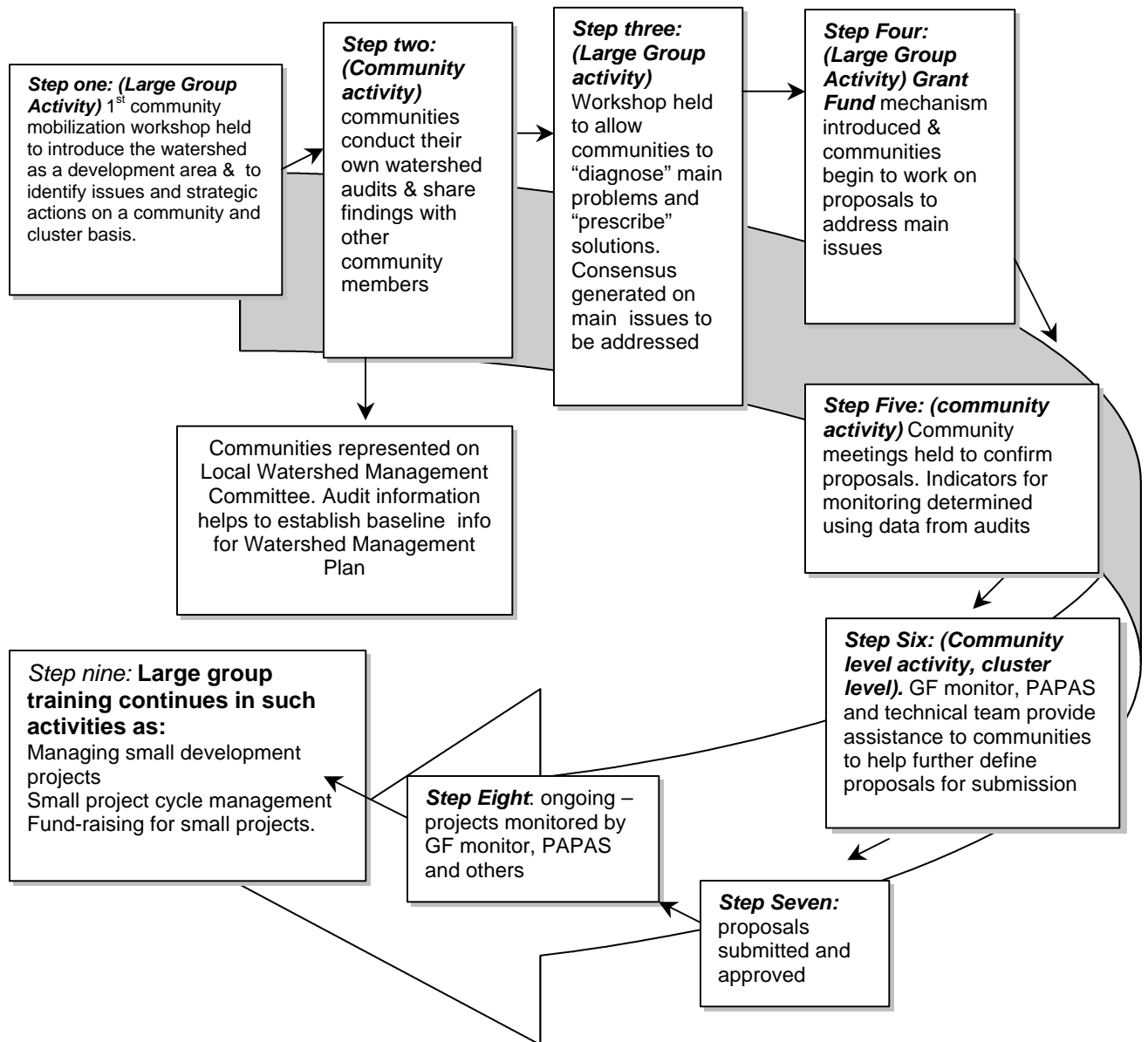
### **2.2.2 Approach to Community Involvement**

During the reporting period, R2RW's approach to the community mobilization process and its link to the watershed management process has evolved. For a Local Watershed Management Committee to be sustainable, input is required from the local communities that live within the watershed. These communities need to play a dynamic role in the implementation of watershed management activities.

R2RW has initiated activities in the GRW that is helping to lay the foundation for the above process and plans to follow this process in the RGW as well.

*Figure 2.2.2* below illustrates the stages and steps involved in the process and indicates which steps have been achieved to date. The shaded areas are those that have been completed in the GRW. It is envisaged that this process may be cyclical to some extent as communities become more actively engaged in watershed management planning and as they gain more experience in implementing their own local watershed management activities.

## Stages and Steps in the Process of Community Mobilization



### 2.2.3 Identifying Leverage Points

Given the limited project staff, the R2RW project will need to be strategic in its approach to project implementation in order to progress towards accomplishing the above-articulated vision. Being strategic involves careful analysis of factors that influence the change process, and defining project activities so as to have the maximum impact. Tools such as the Gender Equity Mechanism piloted by the Planning Institute of Jamaica can offer important insights into key individuals and groups with influence over the shaping of public opinion. Social marketing



strategies will need to be adopted. For example, there may be a limited group of clergy, teachers, or public servants whose views help to shape community attitudes towards the environment. Targeting skills building initiatives, tools for development, and information provision could serve to leverage broader social, economic or environmental change.

#### **2.2.4 Targeted Appropriate Practices**

During the period under review, selected TAPs were discussed at task force meetings. Those TAPs judged appropriate for selected communities in the GRW were presented for development of community projects. Some have been written up but are awaiting employment of STTAs to assist with implementation. So far the Goat Improvement Project has been initiated:

- Goat Improvement Project;
- Fruit trees and fruit forests; and
- Acquisition and multiplication of Black Sigatoka Resistant Plantain and Banana.

### 3. **Component 1A: Through Targeted Organizations, Sustainable Environmental Management Practices by Resource users Identified and Supported in the Great River Watershed**

#### **Introduction**

Since 1944 there have been a series of projects in Jamaica with the primary objective of facilitating adoption of technologies that reinforce resource conservation while enhancing income generation and improving the well being of small farmers, especially those cultivating marginal hillside lands. However, results varied and sustainable management for efficient production and resources conservation remains elusive. In many cases, projects were unsuccessful because of over reliance on engineered structures such as terraces, contour bunds and drains that farmers were not taught, or were unable to maintain; over emphasis on “farmer groups” that were not linked to the wider development efforts; and dependence on free or subsidized inputs to encourage farmer participation.

Lessons learned from these projects indicate that when end user stakeholders were not involved in the planning of project activities, technologies introduced were not fully understood, and if inappropriate were not accepted. Often, agents promoting resource conservation technologies failed to use an integrated community approach and were unable to deliver project interventions in a sustainable manner.

Consequently, Component 1 not only concentrates on introducing and extending Targeted Appropriate Practices (TAPs), but also focuses on previously missing components – strengthening the capacity of community based organizations to facilitate effective transfer and integration of new technologies into production systems and development of sustainable practices.

Working with community-based organizations, private organizations and individuals, NGOs and government agencies, Component 1 has embarked on a search for appropriate technologies that are environmentally and economically sustainable. Activities over the past six months included:

#### **3.1 Fostering the Growth of the GRWMC**

Considerable progress was made towards the growth of the Great River Watershed Management Committee (GRWMC). Each of the four task forces – Production and Marketing, Water and Sanitation, Public Awareness and Compliance and Enforcement, have met regularly and developed an agenda of priority issues. Working within the Task Forces established under the GRWMC, the Project has devised a community-oriented strategy that emphasizes livelihood enhancement, governance, stewardship, and compliance and enforcement.

Activity	Great River Watershed Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
<b>3.1</b>	<b>Fostering the Growth of the GRWMC</b>					
3.1.1	Facilitate the work of the GRWMC	x	x	x	x	Regular meetings held quarterly, Executive Committee also meets quarterly

Activity	Great River Watershed Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
3.1.2	Facilitate the involvement of 4 PDCs	x	x	x	x	Limited progress, PDCs not as active in Western Jamaica
3.1.3	Investigate the possibility of developing a Great River Brand.		x	x		The branding concept needs to be reworked into a more limited logo of recognition
3.1.4	Develop the skill of GRWMC members	x		x		Training ongoing and includes media training
3.1.5	Assist in the development of a GRWMC Plan			x	x	Initial SOW developed, but limited progress
3.1.6	Assist to develop the mandate of GRWMC and its task forces	x	x	x	x	Ongoing
3.1.7	Develop linkages between GRWMC and NIWMC	x	x	x	x	Discussion document developed and presented to the GRWMC and NIWMC

### **3.1.1 Facilitate the work of the GRWMC**

R2RW facilitated the work of the GRWMC by working with the Chairman and the Secretary on the membership list, invitations to meetings, meeting logistics and the taking of minutes. The Executive Committee of the GRWMC consisting of the Chairman, Vice Chairman, Secretary, and Chairpersons of each of the four task forces remained active. Special efforts were focused on obtaining community representation and involvement in the GRWMC and its task forces. A laptop computer, a desktop computer and a printer were purchased for the use of the GRWMC executive.

### **3.1.2 Facilitate PDC Involvement**

Members of the four Parish Development Committees and Parish Councils active in the GRW were invited to meetings. The 4 PDCs in the GRW area did not respond to the invitation, however, representatives of the four Parish Councils have been active in the Compliance and Enforcement Task Force and other special workshops.

### **3.1.3 Great River Brand**

Please refer to section 3.2.7.

### **3.1.4 Training needs of GRWMC**

A needs assessment exercise was conducted with the GRWMC to determine the priority training needs. Training needs include: project writing; project cycle management and reporting; caring of trees; communication/news writing; database/computer training; literacy and presentation skills; strategic management workshop and computer skills; consensus decision making/conflict resolution; as well as lobbying and advocacy.

### **3.1.5 Great River Watershed Management Plan**

Initial discussions on a SOW took place. Given that most stakeholders do not read long documents, it was felt that this Management Plan had to be brief and focus on strategic initiatives to improve the watershed. The activity was postponed until the hiring of a new Watershed Management Specialist, and will be conducted in the Year 3 Work Plan. .

### **3.1.6 Develop GRWMC mandate**

R2RW helped to facilitate the refinement of the mandate of the GRWMC and its task forces through leading dialogue on the long-term vision for the GRWMC. A consultant, Richard Lumsden, was contracted in January 2002 to make recommendations on options for incorporation of the GRWMC. However, incorporation was determined to be unnecessary for now since all of the desired functions of the GRWMC could be achieved without being formally registered. One of the main benefits of incorporation would be to facilitate the handling of funds. It was agreed that the matter would be revisited should the GRWMC start to handle funds on a regular basis. The following table summarizes the main points from this report

#### **Recommendations from “Report on Options for the GRWMC” by Richard Lumsden, January 2002.**

1. The present structure is adequate to allow the GRWMC to carry out its activities as planned at the present time
2. Maintaining the present structure does not preclude a decision to incorporate the GRWMC at a future date, when the legal and policy issues are resolved.
3. The present structure of an unincorporated committee is an accepted structure for inter-agency coordination and collaboration. By contrast a formal incorporation of such a committee would represent an innovative development by the GRWMC.
4. The present structure will give the GRWMC the ability to secure limited funding from donor agencies and sponsorship.
5. The present structure does not require any statutory reporting requirements, whereas incorporation of the GRWMC as a company limited by guarantee will mean that a number of statutory reporting requirements will have to be met.
6. As an unincorporated committee the GRWMC would reduce its funding costs for administration including reporting and auditing.
7. As an unincorporated committee the GRWMC would not be a legal entity which can own and dispose of assets
8. As an unincorporated committee the GRWMC would not be able to initiate legal action in its own name.

The GRWMC should continue to function as an unincorporated committee or association at the present time, unless the following conditions apply:

- i. The ownership of assets in other productive enterprises or ownership of intellectual property becomes a priority for the Committee;
- ii. The Committee accumulates significant funds in excess of its operating needs;
- iii. The possibility of legal action against the Committee is considered significant;

### 3.1.7 GRWMC linkage to NIWMC

R2RW worked to develop linkages between the GRWMC and the National Integrated Watershed Management Council through advancing a position paper to clarify the expected roles and responsibilities of each group. This included a definition of the importance of recognition and certification sought by GRWMC within the overall national framework for watershed management.

Criteria for WMC Registration	What does a LWMC get for registration?
<ul style="list-style-type: none"> <li>▪ Keep regular meetings with Minutes and records.</li> <li>▪ Have named Officers.</li> <li>▪ Composition list of individuals and organizations.</li> <li>▪ Have basic system for financial procedures.</li> <li>▪ Geographic area of focus delineated: including a definition of the geographic extent, and listing of the districts included in the LWMC.</li> <li>▪ Statement of what they consider to be their mandate, objective and vision.</li> <li>▪ Programmatic areas of concern outlining the subject matters of greatest concern e.g. garbage collection, water quality, agricultural development, etc.</li> <li>▪ For each area of concern a basic description of the types of actions the LWMC proposes to do.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Be part of a national network for watershed management,</li> <li>▪ Participation in an annual LWMC networking seminar/workshop</li> <li>▪ Certificate of Registration</li> <li>▪ Access to external help to:               <ul style="list-style-type: none"> <li>- <i>Leverage the support of central government agencies</i></li> <li>- <i>Suggestions on directions or avenues to pursue</i></li> </ul> </li> <li>▪ Access to documentation of experiences of other similar groups</li> <li>▪ Handbook of how to set up and run a “LWMC”</li> <li>▪ Feedback on concerns taken forward to council</li> <li>▪ An annual visit from the NIWMC Secretariat</li> </ul>

### 3.2 Production and Marketing Activities

The Production and Marketing Task Force, with the assistance of the Project team, identified and discussed various enterprises that were potential income earners for stakeholders in the watersheds. Two partners, RADA and the SDC were instrumental in advancing dialogue and initiating activities in some communities of the GRW. Focus on economic activities through livelihood enhancement is critical because stakeholders respond more positively to practices that increase income. Only when improved livelihood provides more energy than is required for basic survival, will attention be paid to those aspects of the environment that are not perceived as essential to survival. Further, compliance with environmental laws is more easily achieved when potential offenders are occupied by legitimate income earning activities.

Activity	Great River Watershed Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
3.2	<b>Production and Marketing Activities</b>					
3.2.1	Develop plant nursery at Montpelier	x	x			Feasibility study completed, but unable to secure additional funding. Concept to be redesigned
3.2.2	Implement biological soil conservation techniques	x		x		Seeds of both <i>Flemingia congesta</i> , and <i>Mucuna utilis</i> planted for soil conservation
3.2.3	Introduce disease resistant crops	x		x		Black Sigatoka resistant Banana and Plantain cultivars imported
3.2.4	Encourage orchard crop development		x	x	x	Planted at 12 farmers in Catadupa, 4 in Duckets, Knockalva Ag.School and Montpelier Research Station
3.2.5	Develop goat farming potential		x	x	x	Two mother farms started: 1) 4H Club Roehampton. And 2) A Local farmer in Retrieve.
3.2.6	Encourage the production of herbs and essential oils	x	x			Project not yet initiated
3.2.7	Enhance local and international markets	x	x	x	x	SOW for local wholesale Market at Montpelier developed, awaiting commitment from partners.
3.2.8	Assist with tourism product improvement			x	x	Not pursued
3.2.9	Encourage private planting of forest trees			x		Plant A Tree campaign developed and coordinator hired

### 3.2.1 Plant nursery

After extensive consultations with stakeholders in the project area, it emerged that one of the highest priorities in the GRW was the establishment of a crop nursery. Farmers have great difficulty in producing viable vegetable seedlings on regular schedules to meet market demands (particularly for the tourist market). They have pointed out that there was no place in the western part of Jamaica where good seedlings may be obtained. Vegetable Producers lamented that much effort was spent in producing seedlings as insects often ate the seeds. Additionally, bad

weather and/or animals frequently adversely affected many small nurseries. In these cases the losses were often significant as seeds (especially hybrids seeds) are very expensive. Seedlings were produced under conditions in which they were exposed to disease, nematodes, and insects before transplantation to the field. Consequently crops from these seedlings performed poorly and low yields resulted in low income.

Studies carried out by R2RW revealed that nurseries for vegetable seedlings were very uncommon in Jamaica and there were none in the Western Region of the island. With respect to fruit and timber seedlings there were no certified nurseries in or near the GRW, and local farmers had to go as far as Portland to get seedlings of fruit trees. Regarding forest trees, the nearest source is Williamsfield, about a 100 km from the center of the watershed. A subsequent survey of the area revealed that the few backyard nurseries in the area were grossly inadequate, improperly managed, and at best produced mainly fruit tree seedlings and cuttings of common ornamental plants.

R2RW commissioned a feasibility study not only to determine if a nursery was required, but also to determine if the nursery would be economic and sustainable as a private entity with the proper management. The study was completed in November 2001. It revealed that a nursery as proposed was a necessary initiative for the return of the viability of the small farming sector of the GRW, and if properly managed would be both sustainable and profitable. Based on this report R2RW invited various organizations with interest in farming and the environment to participate in the project by investing in or becoming a partner of the project. The invited organizations included the Jamaica Agricultural Society, Agricultural Support Services Project, the Environmental Foundation of Jamaica, and PC Bank St James.

The immediate objectives of the Nursery were:

1. Improve the quality of vegetable seedlings available to farmers in the GRW; and
2. Reduce the time and resource spent by farmers in self-propagation of planting materials allowing farmers to plan production.

The long-term objectives of the Nursery were:

1. To contribute to the economic well being of the people, and stability of the environment in the GRW;
2. Reduce the need for chemical application by the use of disease resistant and pests free plant materials;
3. Create economic incentives to switch from current undesirable methods of farming, to crops and methods more suitable for environmental protection and sustainability; and
4. Introduce new crops and/or improve varieties of selected crops more suitable for the conditions of the GRW.

The start of the Montpelier Nursery has been delayed because of difficulties in getting partners with supporting funds. One concern of these agencies has been the size of the nursery and the expected rate of return given the current plan. The concept is therefore to be redesigned to scale-down the nursery design, to a level that can be implemented in the first phase by R2R, with the possibility of other partners joining later.

### **3.2.2 Biological soil conservation techniques**

A workshop was held in November 2001 at the Terra Nova Hotel to bring together Jamaican agricultural professionals involved in soil conservation. Several individuals made presentations on past and present initiatives that limit soil loss from agricultural plots. The group agreed to meet on a periodic basis to exchange information and ideas.

### **3.2.3 Disease resistant crops**

Black Sigatoka resistant plantain and banana cultivars identified and imported into Jamaica. These cultivars are already under going multiplication at the College of Agriculture and Science Education (CASE), Portland, and at the Agricultural Research Station at Montpelier, St. James. More materials including a new cultivar FHIA 17 arrived from The International Network for the Improvement of Banana and Plantain (INIBAP) through its multiplication and distribution center in Belgium and from the Banana Breeding project at FHIA (Fundacion Hondurena de investigacion de Agricola), Honduras. These new entries are still in post entry quarantine detention at the Banana Breeding Scheme Station, Bodles.

A workshop held on March 13, 2002 at the Terra Nova Hotel brought together Jamaican experts in biological control of agricultural pests. The purpose of the workshop was to share the latest information and techniques for the biological control of crop pests. The workshop resulted in the formation of a working group that will meet on a periodic basis to exchange information.

### **3.2.4 Orchard crops**

Small plots of Jew plum and Barbados cherry were established in the Catadupa and Ducketts areas of St. James. In addition, small plots for multiplication were established at the Montpelier Agricultural Research Station.

### **3.2.5 Goat farming**

A contract was signed with the Goat Breeders Association of Jamaica to implement two “mother farms” in the Great River Watershed – Retrieve and Roehampton. The year-long project will seek to introduce new goat varieties and improve goat production methods through more intensive on-farm management using goat pen structures.

The **overall objectives** of this project at the national and the watershed level are:

1. To find a new income generating enterprise for farmers of the GRW.
2. To find an efficient alternative for beef cattle production in the GRW.
3. To effectively utilize pastures and other livestock rearing facilities left by the beef cattle enterprise that is no longer viable in the GRW.
4. To increase national goat meat supply and reduce the country’s dependence on imported goat meat and its substitutes.

The **specific objectives** of the project are:

1. Establish two “Mother Farms” to serve as focal points for an initiative to increase goat production in the Great River Watershed.
2. Establish goat rearing groups in Retrieve and Roehampton



3. Demonstrate improved methods of goat production to local farmers including systems for shelter, feeding and security.
4. Establish a revolving doe scheme to promote the dissemination of improved breeds of goats.
5. Provide high quality technical assistance to implement techniques on mother farms, and to disseminate methods and techniques to interested farmers in the two identified target communities.

### **3.2.6 Herbs, spices, flowers and essential oils**

Dialogue occurred with the Scientific Research Council regarding new germ plasm for ginger production. However after discussion the Production and Marketing Task Force, it was determined that R2RW should not be financing ginger production as it has a tendency to be associated with high rates of erosion.

### **3.2.7 Marketing**

#### **Montpelier Country Market, Recreational Park and Fairgrounds**

In 1998 the Jamaica Agricultural Society (JAS) established a farmer's wholesale market at Montpelier at the JAS show ground, located about 30 km from Montego Bay on the main road that leads in and out of the watershed and to other major town such as Savanna-la Mar and Santa Cruz. This market was intended to bring purchaser from nearby Montego Bay. Unfortunately the desired effect was not achieved as in response to the high demand farmer hiked prices and customers drifted away as prices reached the equivalent of retail ones in Montego Bay. This market still operates but only as a shadow of what it was intended to be, with only a small number of farmers selling mainly to residents of Montpelier. Farmers state that while the farmers market is still a good idea the failure was partially due to the lack of facilities such as shelter to protect vendors and customers from the rain, sanitary conveniences, and absence of stalls to properly display products.

Early in its deliberations on marketing, the Production and Marketing Task Force realized the importance, and the potential of the farmers' market location, which it decided to seek funds to rehabilitate. As the concept circulated more ideas on what should be included to make the project viable and successful were articulated including:

- a. A wholesale Produce Market with adequate shelter, sanitary conveniences and display facilities;
- b. A roadside restaurant specializing in local dishes and suitable for entertaining tourists;
- c. Recreation facilities to accommodate concerts and parties;
- d. Playing areas with facilities for cricket, volley ball and basket ball;
- e. Facilities for packing of produce for export through Montego Bay's seaport and airport;
- f. A farm store to serve farmers;
- g. Handcraft manufacturing and sale;
- h. A Museum of the watershed;

- i. Show ground for JAS;
- j. Occasional animal auction and sale;
- k. Exercise track around the perimeter; and
- l. A Botanical Gardens.

The Tourism Product Development Company (TPDCo) thinks the concept will be beneficial to tourism interests and has indicated its willingness to assist in promoting development of the project. A Committee has been formed to expedite its development, and a SOW was developed to hire a landscape architect to further define the project.

The project has however been slow in taking-off, as it has proven difficult to get any of the major stakeholders' to take the lead-role in the process to date. A letter was sent to the JAS in July 2002 requesting they indicate how they intend to participate in, and lead the development of the business plan for the property as well as a topographical map showing the boundaries of the property and the acreage, and documentation of land ownership.

### **Great River Brand**

A SOW was prepared, and discussed with Cargill Inc. to implement the development of a Great River Brand. However, the Production and Marketing Committee did not consider the proposed scale of the project recommended by Cargill feasible. In assessing the feasibility of the proposal, the task force attempted to answer the following questions:

- a. What special identification should be given to a product to signify it has a GRW product?
- b. What makes a product different?
- c. What are the special features of the **GRW**?
- d. Do we need to brand all products or do we brand only selected products?
- e. Will **GRW** brand clash with brands of other organizations in the watershed?
- f. What emblem will facilitate a brand for many products?
- g. Is this brand for the local and foreign markets?
- h. Who will be able to use the brand?
- i. How will counterfeit be prevented?
- j. Who sets criteria for brand users?
- k. Should there be user fees for the brand?
- l. Will there be one brand for all products or will there be separate brands for different products?
- m. Will the **GRWMC** be capable of policing the brand as like a patent it will only be as good as the promoters' ability to police and protect it?

Based upon discussion of the above points, it was decided that a Great River Brand per se was a too ambitious of an idea at the present time. It would be preferable instead to scale back the “branding” concept to one the more focused on using a Great Rive Logo as a form of a “stamp of approval” for promoting the marketing of products from the Great River.

### **3.2.8 *Tourist attraction improvement***

Planned for next reporting period.

### **3.2.9 *Forestry***

In an effort to encourage stewardship values and to also enhance natural resources in the Great River Watershed, the Public Awareness Task Force and the Production and Marketing Task Force of the Great River Watershed Management Committee (GRWMC) have articulated the need for a “Plant-A-Tree” Campaign. The PAPAS led the development of a proposal for the Plant A Tree campaign to encourage more persons and communities in the Great River watershed to plant trees for both for economic, cultural and environmental purposes. The objectives of the campaign are to:

- a. Encourage a revival of traditional environmental stewardship values and practices such as honouring new babies by planting trees when they are born;
- b. Encourage the new practice of honouring persons with gifts of trees either as a recognition of specific accomplishments, recognition of special events or as a memorial;
- c. Support the objectives of the Forestry Department in its private tree planting programme and its own on-going public awareness activities;
- d. Promote orchard crop production through such efforts as the Tree Crop Project of the Ministry of Agriculture;
- e. Enhance public awareness of, and appreciation for, the various types of trees, their purposes and their differences; and
- f. Enhance the environment and natural resources in the watershed.

The campaign, has both a “production and distribution” dimension and a “public awareness/communication” dimension, also seek the involvement of private sector representatives and representatives of large estate owners. At the end of the reporting period, the proposal for the Plant A Tree Campaign was developed, and two SOWs developed for persons to implement aspects of the program. A Program Coordinator was identified and will begin to work in October 2002 to cordinate the tree production and distribution efforts relating to this plant a tree campaign, in association with the Great River Watershed Management Committee, the Forestry Department and other relevant stakeholders.

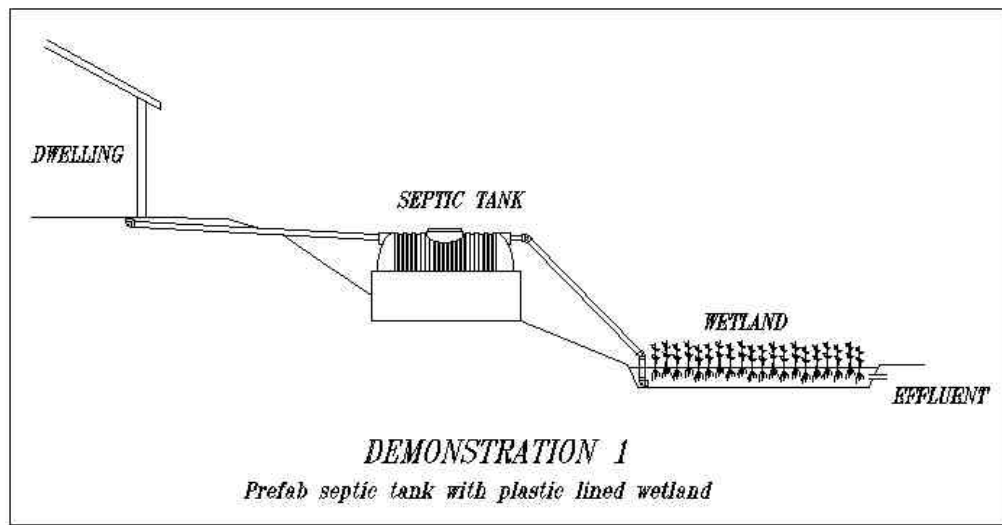
### 3.3 Water and Sanitation Activities

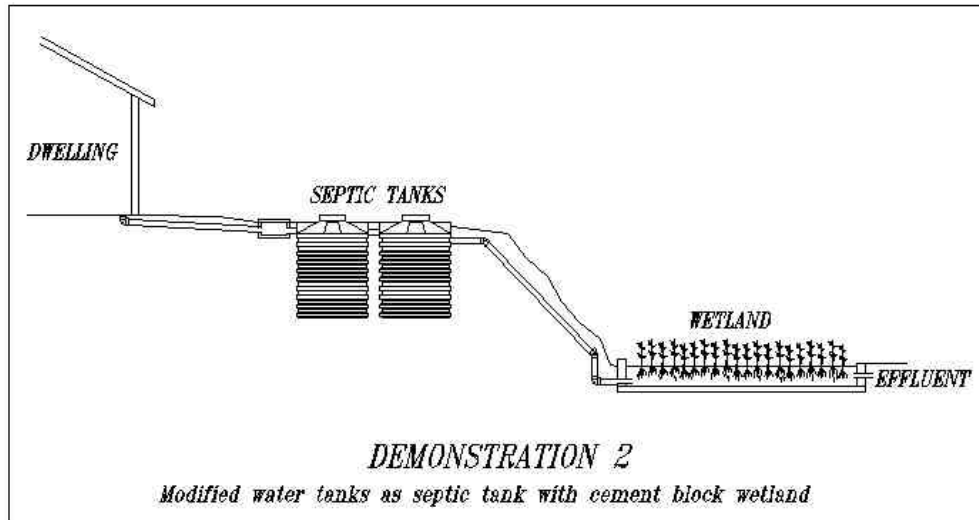
Activity	Great River Watershed Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
<b>3.3</b>	<b>Water and Sanitation Activities</b>					
3.3.1	Demonstration of low cost flush toilet systems	x	x			Completed
3.3.2	Design for low cost village sanitation system	x	x	x	x	2 of the proposals were integrated into water harvesting projects, & third is being worked on with NWC
3.3.3	Water harvesting, storage and application			x	x	1 <sup>st</sup> project (Retrieve) is complete, 2 <sup>nd</sup> project (Pisgah) is under construction
3.3.4	Garbage audit and recycling		x			Audit questionnaire complete, and being distributed to communities.
3.3.5	Water quality monitoring	x	x	x	x	Program underway, 3 quarterly reports completed.

#### 3.3.1 Demonstration of low cost flush toilet sanitation system

Shown in **Figure 3.3.1** are two demonstration household septic systems (composed of a septic tank, wetland, & soak away) that were constructed in Retrieve in the GRW with the assistance of the R2RW team and SSU. During the construction of the septic systems minor errors were made and corrected. Both systems are functioning well.

#### Demonstration household Septic Systems





### **3.3.2 Design for low cost village sanitation system**

The project proposal submitted by (CRDC) was reviewed by both the R2RW team and GRWMC. The R2RW team decided to focus on communal approaches to show the cost effectiveness of the village solution approach as opposed to the individual. Two of the three projects would be located at educational institutions to maximize the educational and public awareness components of the projects, while the third project would be in a community center to meld the Production and Marketing activities to the Waster and Sanitation activities. The intent is to show a more holistic approach to the projects and consequently strengthen the connections between the components in a watershed management plan.

The first of these low-cost village sanitation systems was implemented through a grant to the Retrieve All Age School Parent Teachers Association. The purpose of the Grant was to develop a water harvesting mechanism at the Retrieve All Age School, and then to utilize the water to operate flush toilets that will replace the present system of pit latrines. In addition, the project demonstrated the use of a constructed wetland to treat wastewater from such a system. The project financed a new guttering system that channeled water into a series of 800-gallon plastic tanks. The water thus collected was pumped to an overhead tank using a solar water pump. This water was then used in a series of flush toilets, and the effluent from the toilets channeled into a buried double-hulled plastic tank aerated by a solar aerator. The liquid effluent from this system was then run into a constructed wetland that purified the effluent before being released into the environment.

A second village sanitation system was being installed at the All Age School in Pisgah at the headwaters of the Great River at the end of the reporting period

### **3.3.3 Water harvesting, storage and application**

Water harvesting and storage principles were incorporated in the village sanitation projects described above.

### **3.3.4 Garbage Audit**

This activity was not formally undertaken for the whole GRW although it was included as part of the watershed audits conducted by several communities in the Great River Watershed.

### 3.3.5 **Water quality monitoring**

The R2RW is response to a proposal from the Discovery Bay Marine Laboratory of the University of the West Indies, and approval from the GRWMC, funded a water quality monitoring program for the Great River Watershed. The program cover 18 sites from Stone Henge near the headwaters to the mouth of the bay where the Great River flows into the sea.

Parameters monitored under the program include pH, conductivity, total suspended solids, calcium, magnesium, sodium, potassium, acid neutralizing capacity, ammonia, nitrate, total dissolved nitrogen, soluble reactive phosphorus, total dissolved phosphorus and silicate and faecal coliforms. Sediment samples from three sites (upper river, at the NWC dam and within the estuary) are collected for the determination of pesticides and their possible metabolites. And finally, river flow is measured at key sampling sites and this information compared to measured values from the Water Resources Authority from historical and current data.

During the reporting period, 6 sets of samples were collected from each of the 18 sites identified, and samples analyzed for most of the parameters stated above. The only exception to the original plan was the collection of sediments for pesticide analyzed proved more difficult than first expected, but this is now being corrected. Preliminary analysis to date shows the following:

1. The concentrations of oxidized nitrogen, ammonia and soluble phosphorus are elevated.
2. Rainfall event lead to high suspended solids and peaks in Nitrogen concentrations.
3. The suspended load reaching the coast is high, especially under flood conditions.
4. The bacteria load in the river is significantly elevated.
5. Some phosphorus and ammonia may be released to the coastal waters from particles carried to the coast in the river.

### 3.4 **Public Awareness Activities**

Over the past year, the project's public awareness activities in the Great River Watershed have sought to:

1. Enhance **community understanding** of environmental issues affecting watershed management;
2. Foster **community identity** the Great River Watershed as a "Development Area";
3. Educate communities about the conditions of their own watershed area by engaging them in **local watershed audits** and **inventories**;
4. Educate local communities and partners about of the **four elements** required for sustainable watershed management, including:
  - The importance of sustainable livelihood activities
  - The importance of "good governance" that enhances relationships among local organizations and state agencies

- The need for compliance and enforcement that encourages communities to understand that environmental regulations enhance their *own legal rights*
  - The adoption of *stewardship values* that encourage communities to care for their local environments
5. Educate communities and partners with respect to the various “targeted appropriate practices” and ***technical solutions*** that can help to resolve their local environmental problems;
  6. To enhance the capacity of local partners and local communities to ***promote and publicize their own environmental activities*** through regional media; and
  7. And to encourage local partners to develop their own proposals for public awareness initiatives that they would like to implement with R2RW support.

Activity	Great River Watershed Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
<b>3.4.1</b>	<b>General Public Awareness Activities</b>					
3.4.1.1	Complete the Audience Assessment begun in Year 1	x	x	x	x	KAP survey completed. National workshop was held in September and a draft 3-year communication strategy has been developed that will be fleshed out in more detail with stakeholders in the first quarter of year 3.
3.4.1.2	Regular promotion of GRW/R2RW activities in mainstream media	x	x	x	x	Community news releases have been developed and published on the Shettlewood “African” Navel string tree planting activity, and on the Haughton Grove Community Clean-up. Other releases have also been published on project activities related to goat production Dwarf orchard trees, and on the water harvesting project in Retrieve.
3.4.1.3	Documentation of indigenous environmental knowledge		x		x	This activity was not undertaken directly, but was incorporated to some extent in the production of the GRW video and in the KAP survey.

Activity	Great River Watershed Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
3.4.1.4	Promotion of enhanced public understanding of environmental issues	x	x	x	x	Completed through the community mobilization process, educational meetings, production of posters and brochures on the GRWMC and participation in Green Expo. Additional activities are now being developed to enhance public awareness of water and sanitation, stewardship values and other more specific public awareness issues.
3.4.1.5	Training in video techniques for outreach to communities		x		x	Training course for MBMP, FD, RADA, SSU and other staff completed. GRW video produced as a training output. The video will be used throughout the watershed as a first step to promoting more detailed public awareness around water and sanitation issues especially.
3.4.1.6	Participation in local exposition and shows			x		Participation in the Montpelier JAS Fair, Easter Monday, participation of GRW community members in the Green Expo in Kingston
3.4.1.7	Continued support to the Public Awareness task force	x	x	x	x	On-going
<b>3.4.2</b>	<b><i>Sanitation and Waste Management</i></b>					
3.4.2.1	Explore the "Clean cab/car campaign" idea		x			Brainstorming workshop was held with relevant stakeholders and state agencies. Activity idea has been scaled back but further discussions will be held with the NSWMA in the first quarter of Year 3 and it is expected that an initiative will be supported early in 2003. Also, a poster to discourage vehicular littering is being developed as part of the "Popular Compliance and Enforcement" materials activities at the national level.



Activity	Great River Watershed Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
3.4.2.2	Strengthen the SSU and the PHD with specific activities for adoption of sanitation solutions	x	x			Meetings have been held with SSU but a core group is now looking at developing an overall public awareness strategy to address WQ & Sanitation in the GRW. This initiative should be finalized and approved by the PATF to begin in the first quarter of Year 3.
3.4.2.3	Reproduction of specific SSU public awareness materials			x		Quotation/proposal was submitted but not accepted.
<b>3.4.3</b>	<b>Production and Marketing</b>					
3.4.3.1	Public Awareness of the Great River Brand			x	x	The branding concept is being scaled back (see. 3.2.7) to instead function as a "stamp of approval".
3.4.3.2	Collaborate with RADA in disseminating land and soil conservation techniques		x			Not yet started. Waiting on inventory results of existing materials.
3.4.3.3	Development of "Plant a tree campaign"	x	x			Proposal drafted. MOU developed between R2RW, GRWMC and FD. SOWs STTA hired. To be initiated in the first quarter of year 3.

### 3.4.1 General Public Awareness Activities

#### 3.4.1.1 Audience Assessment

In November 2001, a scope of work was developed to conduct the audience assessment and three firms were invited to tender on the assignment. Using a criteria-based selection process, the consultant firm – Psearch Associates – was contracted in January 2002 to undertake the assignment. The assessment includes both qualitative and quantitative research elements. Originally it was envisaged that the audience assessment would focus only on the two R2RW watersheds – the Great River Watershed and the Rio Grande Watershed. But at the request of the SWB, in order to make the findings more relevant for watershed-related public awareness programs nationally, two additional watersheds were included in the design – the Wag water watershed and the Rio Cobre watershed. This has allowed for more comparison among urban and rural watershed communities. To a great extent, therefore, although this initiative includes survey information from both the Great River and Rio Grande watersheds, it should be considered a "national level" activity as well.

Two methodologies were used to determine community awareness and response:

1. Participatory qualitative techniques comprising e.g. content analyses, focus groups, in-depth interviews, key informant panel discussions, observations, mapping, ranking, photography; trend and transect analyses; and

2. Household survey – conducted amongst 831 households residing in the four (4) watersheds. Enumeration Districts (ED's) were used for sampling households, and one (1) qualified person was selected for interview in each sample household. Amongst other criteria, respondents had to be between 15 and 84 years of age.

Findings indicated a general lack of awareness amongst watershed residents of details related to environmental management. Discussions, and observations of poor practices substantiated this conclusion. It further appeared that the main reasons for poor practice were either due to (a) tradition i.e. people tended to do what they (and forefathers) always used to do; or (b) circumstances – economic survival made it wise to use available watershed resources for an income.

Of much importance is the fact that the term “watershed” and its definition are virtually unknown. Very few persons really “knew” what it meant. Definitions often focused on it being “a place to store water”. There was little concept of persons “living in a watershed area”, and therefore there were few situations in which persons felt that their actions had a serious effect on any other persons and/or the survival of a larger community. It was only with when there was an event with very negative consequences e.g. excessive floods with loss of life or property. Historically, the Rio Grande valley has suffered the most, but even though these residents were very aware of what “could” happen, very few really understood the effects that their actions could have and how to try and avoid such negative outcomes. In some communities, the residents expressed the feeling that occurrences such as landslides, were just “God’s work”, and there was little that humans could do to prevent what would happen. Since the KAP survey was completed, some communities in the GRW area have experienced quite extensive flooding as well, so their feelings about “natural disasters” may now be much more similar to those of persons living in the RGW.

Rivers play a very central role in the activities of certain communities, but were generally less important to persons in the GRW than they were in the other watersheds surveyed. These important rivers are not however, always the main river after which watersheds are named. Instead, residents tended to refer to the river that was mainly used for recreational and/or domestic and/or economic purposes. Despite the fact that residents used certain rivers so much and felt close to them, there was also a deep fear. This fear seemed mostly to have been created over time by actual events – some of which are “unexplained”, stories of past occurrences as told by other residents, and myths – the latter relating mainly to the “river-maid”.

The “river-maid” or “mya-maid” or “mermaid” stories were told in almost every community visited. Although there were some variations, there were mainly very striking similarities. It was said that the river-maid was found in key areas of rivers i.e. the “river-head” and/or other still/pure and/or “sacred” sections of a river. Older and/or middle-aged residents were found more likely to have had encounters with the “river-maid”, but many younger residents were also quite aware of them. The river-maid was supposed to have very strong powers, including being responsible for deaths. Because of this, it caused people to be cautious in using certain areas of the river but generally did not totally prevent them from using the rivers.

People used rivers in many different ways e.g. bathing, for provision of drinking water, and washing (mainly clothes). Rivers were also often used for individual/household incomes, the main such activities being: farming, fishing, mining, and rafting. Large and small farmers used rivers as a source of water for crops and animals. In these situations, however, the farms were often quite near to the rivers, and therefore any chemicals used on the farm would likely be washed into rivers. Some farmers were often quite unaware of the types of negative effects that this could have themselves, and for others using the river elsewhere.

Fishing was both a hobby and a source of income, with boys and men catching crayfish as well as a variety of scaled fish e.g. perch. Mining for sand and stones was also an important activity in some of the rivers, but most evident and on very large scale in the Rio Grande. Rafting was the

other economic activity conducted in rivers, mainly on the Rio Grande, but to a lesser extent in recent times, on the Great River.

Use of other watershed resources was also investigated. A fairly wide range of trees, bushes, and herbs was found to either provide income or prevent expenditures, for households. The main uses were for furniture, medicines and health-maintenance e.g. tonics.

With all these activities in and around the watersheds, some concerns were raised about water quality. Residents were concerned about solid waste, but mainly sewage. People tended to measure the environment in terms of what they could see. The forms that were felt to create most nuisance and harm were: (a) individuals and/or households eliminating and/or dumping raw sewerage into the waterway; (b) Pampers; (c) PET bottles; and (d) Styrofoam containers. Overall, it was felt that there were not enough systems for managing these types of solid waste and therefore residents did not always have enough choice, so for example, many residents either burned or buried their garbage. It appeared that people were less concerned about liquid forms of output into the river-ways, e.g. chemicals, soapy residue. People also used some sort of feedback from public health officials in determining whether or not river-water was clean.

It was not always clear who should be responsible for keeping the environment clean. However, in looking towards the future, it seemed that two (2) types of persons were most likely to either volunteer or have a real interest in keeping the area in good condition: (a) young persons e.g. in secondary school and already having a keen interest in environmental issues; and (b) persons who regularly use the river for their livelihood – but especially rafts-men. In discussing this issue, it was clear that being an “environmental steward” would not be an easy task, especially since (a) it was unclear whether “guilty” persons would really listen without an “enforcer”; and (b) the fact that few people knew the existing environmental laws.

Communication was found to be an important factor in e.g. what people knew, who knew, and what they did about what they knew. Amongst the findings were:

- Literacy levels in some watershed communities are low. Nevertheless, people with low literacy levels have clearly formed opinions, culture and reasons related to issues and actions.
- The communication between large-and smaller- farmers is not close and neither is it ongoing.
- Larger- farmers represent role models for some of the smaller farmers. A similar situation was found for persons of higher social / political status.
- Communication patterns within-community are not always effective, and community-based organizations have had limiting success in adequately and/or completely involving communities in decision-making and action.

The KAP survey also noted that the “sense of community” was weakest in the GRW and this will have implications for R2RW as it continues to encourage community initiatives for sustainable watershed management.

#### 3.4.1.2 Regular promotion of GRW/R2RW activities in mainstream media

Two main activities were undertaken:

1. The development of a script for a GRW video. This video was produced as an activity of the Public Awareness Task Force based upon a video training course held. The video unit of the Montego Bay Marine Park finished the video, after incorporating feedback from the Task

Force and R2RW staff. The final video was distributed to R2RW clients, partners, and a wide selection of Jamaican media outlets. The video will be used as part of a public awareness program to promote water and sanitation awareness that is to begin in the first quarter of year three.

2. Training community members in "how to write effective news releases" was an activity requested by members of the Public Awareness Task Force of the Great River Watershed Management Committee. The Workshop held on March 4, 2002, at Wexford Hotel in Montego Bay included 19 individuals, representing government agencies, environmental NGO's, communities and civil society.

The objectives of the workshop were to:

1. Involve youth from the Great River Watershed in the promotion of activities that encourage sustainable watershed management.
2. Introduce participants to the skills of effective writing so that they can report on environmental activities in their own communities.
3. Foster a relationship between community members and the local press.
4. Develop a plan for regular reporting of community activities in the local media.

Since the training, a minimum of two news releases written by community members has been published in the local media.

#### 3.4.1.3 Oral environmental history documentation of indigenous environmental knowledge

No formal project activity or contract was organized to achieve this objective. However, some oral history documentation was accomplished informally through the audience assessment activity and through the GRW video process.

#### 3.4.1.4 Promotion of enhanced public understanding of environmental issues

This activity was initially envisaged to support the work of the Schools Environment Program (SEP) through poster competitions and other activities. However, the Jamaica Environment Trust (JET) was unable to take an active role on the PATF due to other responsibilities. Nevertheless, public understanding of many issues was enhanced through the community mobilization process that has emphasized education on stewardship activities as well as other factors. A program for public awareness around water and sanitation is now being developed, as is a program to promote community stewardship and leadership.

#### 3.4.1.5 Continue training in video techniques for outreach into communities

This activity was completed and a video on the GRW was produced in conjunction with partners from RADA, the Forestry Department, SSU, and the Montego Bay Marine Park. The MBMP has also submitted a proposal to R2RW to regularly document R2RW activities on video so that promotional and educational videos can be used for outreach to the GRW communities and/or to cover GRW/R2RW on the local cable TV stations. However, no further training activities are expected *per se*.

#### 3.4.1.6 Participation in local exposition and shows such as the Montpelier Agricultural Fair

R2RW and its partners participated in the Montpelier Agricultural Show on Easter Monday.

R2RW also participated in Green Expo (June) as well as the Denbigh Show (July/August).

The GRWMC had its own displays as part of the R2RW-NEPA booth at Green Expo and several community members participated in the Expo as well. The activities of the PMTF and the WSTF were especially highlighted. A water harvesting and constructed wetland model was displayed to illustrate how systems being constructed in the GRW actually work and this was well explained by community members to persons who came to visit the booth. Several posters profiled the various activities of the PMTF including the chocolate production, the recycled mats, honey production, improved goat production and dwarf orchard tree production. The PMTF also provided some very delicious samples of products made from old-time chocolate, honey samples and also various craft items made from natural resources found in the watershed. Participation in the Green Expo was definitely considered to be an important experience for the community members who participated and stayed for the weekend.

3.4.1.7 Continued support to the Public Awareness task force through organizing and facilitating, meetings, training events and other activities

This is an on-going activity. The Public Awareness Task Force of the GRWMC meets regularly

**3.4.2 Sanitation and Waste Management**

3.4.2.1 Explore the “Clean cab/car campaign” idea with relevant partners

The goal of this initiative was to try to reduce the amount of in-transit garbage and litter that is thrown or dumped from vehicles in the watershed. R2RW team recognized that this activity was more than the mandate of the project allowed. However, the project organized a “brainstorming” session in March which was well-attended by members of the CETF, and also by the National Solid Waste Management Authority (NSWMA), the Ministry of Local Government and Community Development, as well as the four parishes in the watershed. The consensus was that the issue of local enforcement of in-transit littering is complex. However, the NSWMA indicated at the meeting that it is developing a national “public awareness” program which R2RW could perhaps help to strengthen at the GRW level in-lieu of a “clean cab” campaign. It is expected that further meetings with the NSWMA will take place for the development of a modified campaign to be launched early in 2003.

3.4.2.2 Strengthen the Sanitation Support Unit and the Public Health Department with specific activities for adoption of sanitation solutions

The SSU submitted a proposal that includes public awareness activities, but the proposal was not approved and is to be revised.

3.4.2.3 Reproduction of specific SSU public awareness materials

A quotation for the cost of reproducing SSU materials was received just prior to the Green Expo, but was rejected. Some reproduction may be reconsidered so that SSU materials can be included in the Public Awareness Kits that are being developed with NEPA’s Public Education Branch. Other sanitation materials will be developed as part of a larger public awareness program to promote water and sanitation education in the GRW.

**3.4.3 Production and Marketing**

3.4.3.1 Development and promotion of the Great River Brand

This activity is on-hold, waiting further development by the PMTF.

3.4.3.2 The explanation and dissemination of land and soil conservation technologies with RADA including brochures, specification sheets, video technology packages and on-site demonstration activities.

This activity was not further developed further but is expected to be designed at the beginning of 2003 now that a new WMS has been hired by the project..

3.4.3.3 The development of a “plant a tree campaign” – related to traditional cultural beliefs (i.e., planting the umbilical cords of newborns with tree seedlings)

A proposal has been developed with the Forestry Department and the project has since hired a Production Coordinator to work with the campaign. An MOU with the FD should be signed shortly and the campaign is likely to be launched in November 2002. Concept designs have been submitted to a graphic artist for the development of posters and billboards to support the campaign.

In the meantime, a number of communities in the GRW are going ahead with their own tree-planting promotion exercises, although they are not strictly part of an overall “campaign”. R2RW supports these activities that include:

- Tree-planting in honor of all the new babies born this past year (Shettlewood Police Youth Club – Environment Day, June 1<sup>st</sup>)
- Cambridge Citizen’s Association Labour Day tree planting/beautification project
- Montpelier Citizen’s Association Triumphant Basic School tree planting project (Labour Day – May 23<sup>rd</sup>)
- In addition, the PMTF has been supporting tree-planting exercises in the Catadupa community

**3.5 Gender Considerations**

The R2RW Project focused on the collection and assessment of gender disaggregated data to serve as a basis for making project interventions. A background paper on gender considerations and guiding principles for the development of a gender strategy was presented for the project. In addition, a gender-disaggregated data from secondary sources was compiled to provide a general gender profile of both project areas.

Although a gender checklist was developed for project activity reports and is used by PAPAS, the progress with respect to gender mainstreaming in the project was been slower than expected, but has improved substantially over the past six months:

Activity	Great River Watershed Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
<b>3.5</b>	<b>Gender Considerations</b>					
3.5.1	Introduction of gender principles to various task forces		x			One training session with the GRWMC executive.
3.5.2	Use of gender checklist in development of sub-project activity	x	x			On-going by PAPAS.

Activity	Great River Watershed Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
3.5.3	Identify appropriate indicators for all GRW activities			x		Completed. Specific indicators to be discussed with the GRWMC executive as activities are approved for implementation.
3.5.4	Train SDC staff and strategic partners on gender analysis, monitoring and evaluation techniques		x			Not done as a separate activity. SDC did participate in the first training session and would like similar sessions for their own staff at some point.
3.5.5	Monitor and review gender indicators and do a "gender report"		x		x	In progress. To be completed by end of October or early November

### **3.5.1 Introduction of "gender principles" to the various task forces**

"Gender factors" were on the agenda for the past two meetings of the GRWMC. But because of time constraints, it was not possible to discuss the topic at length as part of the regular GRWMC scheduled meeting. A gender-training course for the executive and a few of the Task Force chairs was held on August 28<sup>th</sup> and was very well received.

### **3.5.2 Use of the R2RW gender checklist for the development of specific sub-project proposals and activities**

A gender checklist was developed by PAPAS and is being used to prepare a gender report on sub-activities. The checklist has yet to be "mainstreamed" by the task forces.

### **3.5.3 Identification of appropriate indicators for all GRW project activities**

This identification was not accomplished. A set of indicators will be developed based on the gender report by PAPAS and should be verified by the GRWMC as part of the training on basic gender principles.

### **3.5.4 The training of SDC staff and other strategic partners in gender analysis, monitoring and evaluation techniques**

The training was not done. The project believes it is best to focus its gender-sensitization on the GRWMC and the task forces and to mainstream activities there, rather than concentrating on only one partner agency.

### **3.5.5 Monitor and review gender indicators and processes throughout the year's activities and provide a "gender report" of results at the end of year one**

In progress. To be completed by PAPAS in the next quarter. Delays resulting from the delay in sensitizing the GRWMC and the various task forces.

### 3.6 Analysis of Activities by Percentage of Planned Activities Completed

The Table below highlights the estimated percentage of planned activities completed for the period under review.

#	Activities	Estimated % Completed	Comments
3.1	Fostering the growth of the GRWMC	90%	Considerable progress made
3.2	Production and Marketing Activities	65%	Initiatives on-going, but nursery and market still to get going
3.3	Water and Sanitation Activities	90%	Water quality monitoring on-going (50%), implementation of grant projects, begin focusing on solid waste issues, & work out village sanitation project details with NWC and GRWMC.
3.4	Public Awareness Activities	95%	These activities are progressing in pace with the partners in the watershed.
3.5	Gender Consideration	60%	A good start for gender mainstreaming has begun and a good base for sensitization of the GRWMC has been initiated with positive feedback. A core group of persons have expressed interest in a regular – perhaps quarterly or twice yearly review – of activities to monitor the gender implications.

### 3.7 Issues and Resolution

**Issue:**

Partners, especially RADA, have insufficient resources to participate adequately in Project activities.

**Resolution:**

R2RW agreed to finance supplemental travel claims for RADA field officers directly engaged in R2RW related field activities.

**Issue:**

Increased work load on initiation of project implementation

**Resolution:**

The employment of additional short-term technical assistance such as with the Goat Breeders Association of Jamaica was instrumental in alleviating work load pressure. In addition, the employment of a Sanitation Management Specialist increased the technical depth of the core Project team. STTAs employed.



***Issue:***

Raising donor fund, to establish crop nursery. Some donors were not willing to support profit orientated projects; others wanted participating owners to be registered, however most organizations in the GRW are unregistered.

***Resolution:***

R2RW spent more time than was expected in the putting together of a financing package and the management arrangements.

## 4. Sustainable Environmental Practices in the Rio Grande Watershed

The Rio Grande Watershed benefited from the process established during Year 1 in the Great River Watershed. A six-step process was planned:

- Rapid Rural Appraisal
- Strategic Action Planning Workshop
- Initiation of a Rio Grande Watershed Management Committee
- Identification and Implementation of Priority Activities
- Public Awareness enhanced
- Gender considerations incorporated

### 4.1 Rapid Rural Appraisal

Activity	Rio Grande Watershed Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
<b>4.1</b>	<b>Rapid Rural Appraisal</b>					
4.1.1	Develop SOW for consultants	x				Completed – Project Team lead by Robert Kerr
4.1.2	Complete the RRA	x				Completed in February 2002

As was done for the GRW, a Rapid Rural Assessment (RRA) was done for the Rio Grande Watershed (RGW). A multi-skilled, inter-disciplinary, three-person team was contracted in December 2001 to conduct a Rapid Rural Appraisal (RRA) of the Rio Grande Watershed. The report presents an integrated profile of the Rio Grande Watershed Management Unit and documents natural resources as well as environmental, social and economic features. It also identifies ecological and socio-economic problems and presents critical assessments of the current situation in the watershed. The RRA will serve as a baseline document and will be used in measuring the impact of interventions, and in prioritizing issues for targeted interventions in the watershed.

The information was generated from reviews of literature, documents, maps, limited aerial photographs as well as interviews of government agents, farmers, businessmen, community leaders and NGO officials. From this information will come profiles of villages that will be selected for priority attention.

Like that for the GRW the data show a watershed in an advance state of degradation and decline. The biophysical features are badly degraded due to improper farming techniques, fragile soils, steep slopes and high intensity rainfall. The local economy is in decline largely because of black Sigatoka, a disease affecting banana and plantain, that has reduced the yield of banana the most important crop and economic enterprise in this watershed. It has also reduce the production of plantain that was the mainstay of many small farmers who produced it for the local market. Also tourism, for which the major attractions are rafting on the Rio Grande and hiking through the

tropical rainforest, has declined because tour operators are no longer taking visitors into the area because of the deplorable conditions of the roads.

#### **4.1.1 Scope of Work for Consultants**

The three-person team was led by Community Development Specialist Robert Kerr, and also contained Natural Resources Management Specialist, Sheila Carman, and Sociologist, John Cunningham.

#### **4.1.2 Complete the Rapid Rural Appraisal**

A draft document was presented in February 2002, and excerpts used at the Strategic Action Planning Workshop (SAPW) held in Port Antonio in that month. Two subsequent drafts of the document were produced to clarify questions encountered in the drafts, and the final document was published in April 2002.

### **Table of Contents – Rapid Rural Appraisal of the Rio Grande Watershed**

#### **1.0 Background**

- Orientation
- Terms of Reference
- Data Sources
- Structure of the Report
- Constraints and Omissions

#### **2.0 Description of Study Area**

- Project Area
- Physiography
- Hydro-Stratigraphy
- Major Geological Formations of the RGW
- Soils
- Natural Hazards
- Stream Flow Analysis and Streamflow Distribution
- Climate and Rainfall
- Water Quality Monitoring Results
- Flooding
- Landslide Potential
- Land Use and Vegetation

#### **3.0 Human Settlement**

- Regulatory Framework
- Impact of Floods and Landslides
- Governance
- Maroon Community
- Sustainable Development and Democracy
- Representation
- Local Government Reform
- Social Capacity
- Education and Training
- Development Initiatives in the RGW
- Natural Disaster – Flooding and Landslides

- Rehabilitation and Pre-Disaster Preparation
- Agriculture and Development
- Financial Institutions
- Sand Mining
- Watershed Protection
- Infrastructure and Services
- Cultural Heritage

#### 4.2 Strategic Action Planning Workshop

Activity	Rio Grande Watershed Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
<b>4.2</b>	<b>Strategic Action Planning Workshop</b>					
4.2.1	Identify and meet with stakeholders	x				Completed
4.2.2	Participate in Portland coordination meetings	x	x	x	X	Ongoing – several meetings held with the Portland PDC executive, Education Subcommittee of the Portland PDC, and the Interagency Compliance and Enforcement Committee
4.2.3	Identify community groups interested in participation	x				Completed
4.2.4	Hold SAPW in early 2002		x			Completed – Held on February 19, 2002

Over eighty people, representing government agencies, private sector, communities and civil society participated in a one-day highly participatory Strategic Action Planning Workshop (SAPW) held at the Jamaica Crest Resort Hotel outside of Port Antonio on February 19, 2002. The objective of the SAPW was to identify the environmental challenges and corresponding opportunities for programming interventions. The SAPW was designed not just to identify problems, but to formulate realistic priority environmental action plans. This *Rio Grande Watershed Stakeholder Report* summarizes the participatory methodologies utilized in conducting the planning exercises and the subsequent. Below are eight environmental strategic directions that were identified and are presented in order of the highest to lowest priority:

1. Enhance public awareness of environmental and watershed practices.
2. Promote activities geared to improve the economic well being of residents of the Rio Grande Watershed.
3. Enhance waste management.
4. Support infrastructure development - roads and water.
5. Enhance the institutional capacity of organizations active in the Rio Grande Watershed Promote good stewardship and compliance.
6. Undertake research and development.

7. Develop a comprehensive plan that addresses carrying capacity, water quality, and Management.

The workshop established illustrative priority actions, key activities, stakeholder roles and responsibilities for each of the eight environmental strategic directions. The strategic directions were then analyzed and compared to the R2RW technical mandate to identify shared programming opportunities. The specific activities identified in the work were as follows:

**4.2.1 Identify and meet with stakeholders**

Several members of the R2RW Team met with the SDC and other key institutions to identify all stakeholders that would need to be invited to the SAPW. Based upon the meetings a list of 106 persons was developed and invitations issued.

**4.2.2 Participation in Portland donor coordination meetings**

To identify issues which may need to be considered in the SAPW. R2RW participated in meetings led by both NEPA and the PDC in this regard.

**4.2.3 Identify community groups**

Efforts were made to identify and contact all the known community groups to ensure that they were adequately represented at the SAPW, especially upper watershed communities

**4.2.4 Organize the SAPW**

The SAPW was held on February 19, 2002. The table below summarizes the principle results of this workshop.

<b>RESULTS OF SAPW FOR RIO GRANDE WATERSHED</b>	
<b>Top Five Vision Statements for the RGW</b>	<b>Priority Action Areas Selected for Attention</b>
<ol style="list-style-type: none"> <li>1. Training opportunities, the use of appropriate technology, and best practices that would lead to more environmental friendly land-use systems. <b>(26)</b></li> <li>2. The creation of parish partnerships which will involve government, citizens, businesses and community members in environmental stewardship activities. <b>(24)</b></li> <li>3. Reforms of agricultural policies as it benefit small, medium, and large-scale farmers in crop diversification, agro-forestry and agro-processing in order to enhance production. <b>(15)</b></li> <li>4. Strategies for the utilization of the parishes abundant water resources to meet the need of its residents in a sustainable way, and the sustaining of the quality of those water resources, developed. <b>(11)</b></li> </ol>	<ol style="list-style-type: none"> <li>1. <b>Public Awareness:</b> Develop and implement a public education program - including schools and using cable services - to improve community understanding of, and support for environmental issues. <b>(26)</b></li> <li>2. <b>Improve Economy:</b> Develop and promote economic activities in Agriculture and Forestry, with emphasis on planting of orchard crops, agro-processing, and marketing. <b>(26)</b></li> <li>3. <b>Waste Management:</b> Develop and implement a solid waste management plan - including disposal sites and collection systems - that include communities' input. <b>(25)</b></li> <li>4. <b>Infrastructure:</b> To develop and implement more sustainable designs and construction practices for the repairs and maintenance of roads and water supply in the watershed. <b>(22)</b></li> </ol>

RESULTS OF SAPW FOR RIO GRANDE WATERSHED	
Top Five Vision Statements for the RGW	Priority Action Areas Selected for Attention
5. Balanced and sustained forest, mountain, wetland and marine ecosystems. <b>(10)</b>	<p>5. <b>Enhancing Institutional Capacity:</b> To ensure that local organizations are better equipped to govern the development area. <b>(18)</b></p> <p>6. <b>Stewardship &amp; Compliance:</b> To improve understanding and responsibility of stakeholders in the Rio Grande Watershed in order to achieve acceptable levels of compliance and stewardship. <b>(14)</b></p> <p>7. <b>Research and Development:</b> Establish and implement a process to undertake research and development in the RGW, in order to inform, support and ensure sustainable impact of the intervention of the R2RW Project. <b>(9)</b></p> <p>8. <b>Comprehensive Plan:</b> Develop a comprehensive plan for the RGW that addresses carrying capacity, water quality and management, and begin to implement the plan that would lead to the improvement of 2000 hectares of the watershed area. <b>(4)</b></p>

#### 4.3 Initiation of a Rio Grande Watershed Management Committee (RGWMC)

Activity	Rio Grande Watershed Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
<b>4.3</b>	<b>Form a Rio Grande Watershed Management Committee</b>					
4.3.1	Organize meetings of the RGWMC		x	x		Completed – First meeting held on June 19, 2002
4.3.2	Conduct training program for RGWMC members				x	A preliminary list of training needs has been developed towards prioritization of a training program. Training initiated have been a proposal writing workshop (July 10)
4.3.3	Define mandate of RGWMC and its task forces			x	x	Completed – Stated in minutes of June 19, 2002
4.3.4	Develop linkages between RGWMC and NIWMC				x	Ongoing

A 90-day start-up plan was prepared and implemented from April to June 2002 as part of the SAPW that included working out the optimal institutional arrangements for the Rio Grande. A Rio Grande Watershed Management Committee was formed in July 2002 with a direct linkage to the Portland Parish Development Council.

#### **4.3 1 Organize meetings of the RGWMC**

Four Meetings of the Rio Grande Watershed Management Committee were held during the period.

June 19, 2002	Inaugural Meeting
July 4, 2002	First meeting of the Executive Committee
July 24, 2002	Second Meeting
Sept. 4, 2002	Third Meeting

The members of the executive are as follows:

1. Mr. Harvey Webb – Chairman
2. Col. Wallace Sterling – Vice Chair
3. Winifred Moore - Secretary
4. Lorenzo Hill – Treasurer
5. Lennox Brown – Assistant secretary/treasurer
6. Maisilyn Campbell and Linette Wilks – Public Relations Officers

#### **4.4.2 Training of RGWMC members**

Training needs were identified, but no training courses carried out during the reporting period.

#### **4.3.3 Define mandate of RGWMC**

The functions of the RGWMC were defined as follows:

- Advise the R2RW technical team and NEPA on activities in the RGW.
- Support environmental issues and activities identified and prioritized by stakeholders for project implementation.
- Review RGW Grant Fund Proposal applications.
- Promote R2RW and other environmental activities.
- Provide a forum for sharing lessons with other watersheds and to influence national policy.
- Work with other groups to monitor activities.

The operational procedures for how the RGWMC would operate were agreed as follows:

- Membership is voluntary. It was stressed that dedicated active volunteers were required.
- Meet regularly (possibly quarterly).
- Established agreed committees to work around identified priority areas.
- Make timely decisions as required.
- Report to the PDC - need to tell people what is being done.
- Provide leadership.

- Monitor the implementation of R2RW activities in the RGW

#### **4.3.4 Develop linkages to NIWMC**

NIWMC activities as well as national level activities of the R2RW Project were discussed at the four RGWMC meetings held.

#### **4.4 Identification and Implementation of Priority Activities**

Activity	Rio Grande Watershed Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
<b>4.4</b>	<b>Identification and Implementation of Priority Activities</b>					
4.4.1	Establish top priorities issues to be addressed in the RGW		x	x		Strategic Action Plan Workshop held on February 19 and two community mobilization workshops held.
4.4.2	Along with GOJ agencies, design projects to address issues			x	x	Ongoing – task forces are currently developing ideas
4.4.3	Begin implementation of prioritized activities				x	Pending

Based upon the experiences of the priorities identified at the SAPW for the RGW, a series of priority action areas was identified. The list will require fine-tuning through community mobilization workshops and stakeholder organizations in a newly formed RGWMC. Each task force will be asked to brainstorm ideas for consideration, and based upon criteria for selection, a matrix will be developed to numerically prioritize the most important issues to be addressed.

#### **4.4.1 Establish top priorities**

Based upon Strategic Action Planning Workshop, enhancing public awareness, improving economic opportunities and improving solid waste management were identified as the top priorities. See section 4.2.4 above.

#### **4.4.2 Design of projects to address top priorities**

Progress has been made in terms of the Grant Program which has received 10 grant applications from the Rio Grande Valley. Of the 10 applications received, 6 concern water supply initiatives, 2 deal with improving sanitation, and 2 concern demonstration of improved agricultural production techniques.

#### **4.4.3 Begin implementation of the prioritized activities**

Planned for next period.



#### 4.5 Public Awareness in the RGW

Activity	Rio Grande Watershed Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
<b>4.5</b>	<b>Public Awareness in the RGW</b>					
4.5.1	Conduct audience assessment of existing levels of awareness		x			Completed as part of the KAP survey.
4.5.2	Arrange field trips and exchange of ideas and awareness			x		Ongoing.
4.5.3	Facilitate development of community-based awareness materials			x		One brochure of the RGW to support the community mobilization process.
4.5.4	Participate in local expos such as Portland Jerk Festival				x	Not done as the RGW public awareness-working group was not yet officially formed.
4.5.5	Oral environmental documentation				x	Only as part of the KAP survey.

The project has just begun work in the RGW and a Public Awareness Working Group has recently been formed. It was important for R2RW to sign a MOU with the Portland PDC which already has its own Education Sub-committee. As a result, it was decided that the project should not establish a separate committee or task force to work on public awareness activities, but rather that a “working group” be formed that would report to the PDC education committee. To date, initial members of the working group have met and agreed on the TORs for the group to function. However, several other members were also identified as being important to include in the working group. The first formal meeting of the entire “working group” will be held in mid-November.

Members of the Portland PDC Education Committee were invited to the KAP workshop that was held in September and many participated. Once the working group meets, it will already be sensitized to the priorities identified during the workshop. The JCDT has submitted a proposal for a community-based public awareness program that they would like the working group to consider.

The Public Education Sub-Committee of the PDC in Portland has developed a Public Awareness strategy with assistance from the ENACT project. R2RW can help to complement this strategy by extending its reach to the upper watershed communities. In addition, the CWIP project has been working in the area of solid waste and sanitation education, so R2RW may be able to help extend these activities to upper-watershed areas as well. It is not expected that the working group will waste much time mobilizing public awareness activities in the watershed.

With respect to what was initially proposed for the last year, however, the following activities have taken place:

##### **4.5.1 Conduct an audience assessment of existing levels of awareness**

Communities within the Rio Grande Watershed were also included in the Audience Assessment survey. As a result, the findings of the AA will be directly relevant to the stakeholders in the RGW and to the public awareness strategies that are developed.

**4.5.2 Arrange for field trips and exchanges partners in Portland and the GRW to share the public awareness and environmental education experiences**

No field trips have yet taken place, but it is expected that this will be a useful exercise once the working group starts to meet regularly.

**4.5.3 Facilitate the development of community-based awareness materials such as visual community profiles of environmental issues**

Some materials have already been developed through the GRW community mobilization workshop and will be adapted to the RGW. In addition, a brochure for the RGW was developed and was used for the two community mobilization workshops that were held in May and July.

**4.5.4 Participation in local expos and shows such as the Portland Jerk Festival**

Participation in the Portland Jerk Festival was not deemed to be appropriate for R2RW at the Public Awareness Working Group was not yet established. However, R2RW has participated in a local community health fair in Moore Town that was held in September.

**4.5.5 Oral environmental history documentation of indigenous environmental knowledge**

This was done on a limited basis and only indirectly through the audience assessment. This activity will need to be demand driven by the stakeholders in the watershed.

**4.6 Gender Considerations**

Activity	Rio Grande Watershed Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
<b>4.6</b>	<b>Gender Considerations</b>					
4.6.1	Determine existing activities related to gender equity		x			SDC has had some sensitization conducted. This activity still needs to be initiated.
4.6.2	Introduction of gender principles to various task forces			x		Not yet taken place. Will be conducted on November 7 <sup>th</sup> .
4.6.3	Use of gender checklist in development of sub-project activity			x	x	Starting to happen as Grant Fund proposals are submitted. Still very early
4.6.4	Identify appropriate indicators for all RGW activities				x	Indicators are suggested, but need to be discussed with the RGWMC.

Gender initiatives have not been initiated, as the project was just starting work in the RGW. However, PAPAS is reviewing the Grant Fund proposals submitted by community groups, and will incorporate some of the emerging gender issues into the training for the RGWMC.

**4.6.1 Liaise with other project activities in the area to determine existing activities related to gender equity so as to determine how R2RW should interact and/or complement such activities**

This activity should occur within the next six months. Some discussion of gender factors will be addressed through the planned community mobilization process. Factors affecting “special groups” will also be addressed. Also, the audience assessment has revealed important findings with respect to gender that the project will need to address in RGW.

**4.6.2 Introduction of “gender principles” to the various task forces**

This activity is scheduled to take place in November 2002.

**4.6.3 Use of the R2RW gender checklist for the development of specific sub-project proposals and activities**

In progress.

**4.6.4 Identification of appropriate indicators for all Rio Grande project activities**

To be done together with the RGWMC once gender training has been completed.

**4.7 Analysis of Activities by Percentage of Planned Activities Completed**

The Table below highlights the estimated percentage of planned activities completed for the period under review.

#	Activities	Estimated % Completed	Comments
4.1	Rapid Rural Appraisal	100%	Document Completed
4.2	Strategic Action Planning Workshop	100%	Document Completed
4.3	Form a Rio Grande Watershed Management Committee	100%	Done
4.4	Identification of Priority Activities	75%	Priority activity areas were identified in the SAPW
4.5	Public Awareness	25%	These activities are just starting in the RGW since the relationship between the RGWMC, the PDC and the PDC Education Sub-committee needed to be facilitated first.
4.6	Gender Considerations	10%	This activity is still at a very early stage.

#### **4.8 Issues and Resolutions**

***Issue:***

How best to collaborate and coordinate with the Parish Development Committee process and the central State Agencies active in the Parish. Also several external projects including CWIP, EAST, ENACT and the Eastern Jamaica Agricultural Support Project need to be brought together.

***Resolution:***

NEPA is to be encouraged to take a active role in the close coordination of projects under its influence. This is especially critical since Portland is a pilot initiative in local sustainable development planning. Special efforts will need to be made to provide and share information, collaborate on the design of initiatives, and to ensure that participants are fully engaged in monitoring and oversight.

## **5. Component 2 - Incentives for and Obstacles to Enforcement of Targeted Existing Environmental Regulations Identified and Solutions Supported**

### **Introduction**

Component 2 works with the assumption that improving enforcement must begin with understanding the reasons why individuals and organizations do not obey current policies and regulations. The judicial services must be assessed to determine the issues that prevent them from adequately supporting enforcement decisions. From dialogue, strategic actions will emerge that will, undoubtedly, involve increasing the awareness of stakeholders of existing regulatory systems and the roles individuals and organizations would play in an improved system. Activities under this component should result in improved effectiveness of policy implementation and increased certainty of enforcement when infractions occur.

Attempts to support a national enabling environment and to achieve more community participation to encourage compliance with, and greater enforcement of environmental laws by all stakeholders, have highlighted the need for higher levels of understanding of these laws, and a trained cadre of officers to assist with compliance and enforcement of these laws. Major accomplishments under Component 2 during this reporting period are highlighted below.

Eight activity areas to address the above problems were identified in the First Annual Work Plan, and sub-activities developed to assist in the achievement of these. The same eight activity areas continued to be emphasized in Year 2, through the Second Annual Work Plan. These are presented in the diagram below:

#### **Activity Areas Identified for the Second Annual Work Plan**

1. Targeted Regulatory Inventory Framework
2. Advise NEPA on Legal Reform and the Enforcement of Environmental Laws
3. Support the undertaking of Activities for Policy Improvement
4. Improve Legal Enforcement Capacity
5. Support the development and implementation of existing and new Economic Incentives
6. Support the enhancement of Public Awareness Programs
7. Encourage the development and implementation of existing and new Community-based Enforcement
8. Support the promotion of Advocacy Mechanisms

## 5.1 Inventory of Targeted Regulatory Instruments

The Table below shows the progress over the last year related to *Inventory of Targeted Regulatory Instruments*.

Activity	Compliance and Enforcement Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
<b>5.1</b>	<b>Inventory of Regulatory Framework</b>					
5.1.1	Consult with selected legal experts to gain input	x				Breakfast Meeting with selected legal experts undertaken, and feedback included in the final document "A Review of existing Laws and Regulations"
5.1.2	Consult with GRW stakeholders	x				Workshop with GRW Stakeholders held, and feedback included in the final document "A Review of existing Laws and Regulations"
5.1.3	Integrate feedback in a final report	x				A Final Report entitled "Policy and Legislative Framework for Watershed Management in Jamaica – A Review of Existing Laws and Regulations", completed and distributed. A subsequent "Review of the new Solid Waste Management Act, 2001", was undertaken.

The R2RW Project produced a draft "*Review of Existing Laws and Regulations relating to Watershed Management in Jamaica*". This review provides a background to the conceptual framework for enabling policies and legislation for local governance and watershed management in Jamaica. It lists 14 of the Acts relevant to watershed management and highlights lessons from the international and national context.

The review indicated that the majority of cases related to environmental enforcement activities in Jamaica were being undertaken by the Environmental Wardens Services (EWS) under the Litter Act. However, "The National Solid Waste Management Act, 2001" was established, with Article 70 of this new act repeals the Litter Act. A review of this new act was also undertaken, and is available as an addendum to the "*Review of Existing Laws and Regulations relating to Watershed Management in Jamaica*".

## 5.2 Advise NEPA on Legal Reform and Enforcement of Environmental Laws

Activity	Compliance and Enforcement Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
<b>5.2</b>	<b>Legal Reform and Enforcement of Environmental Laws</b>					
5.2.1	Establish community-level role in compliance/enforcement		x	x	x	Led by the Public Awareness Task Force, this activity has been expanded into a community stewardship program. A concept paper has been prepared by the PAPAS, and accepted by GRWMC, and is being actively pursued.
5.2.2	Community photography and video techniques			x	x	Training commenced – ongoing
5.2.3	Develop strategies to undertake legal reform		x	x	x	STTA contracted re policy issues. Legal reform strategy to follow.
5.2.4	Evaluate potential of establishing environmental court			x		SOW developed, but after discussions with NEPA, Environmental Court has been placed on the “backburner”.
5.2.5	Develop linkage to the Island Constabulary Force to provide up-to-date information on environmental laws		x	x	x	Activity expanded to include sensitization of judges and other court personnel (Please see 5.2.6 below) The training of police has been adjusted to the training of enforcement officers, to conform to USAID policies. A SOW has been developed and consultant identified. R2R also shared with ENACT in a “Training of Trainers” activity for NEPA, and in the production of pocket-size field-guide.
5.2.6	Undertake sensitization activities for judges, and other court personnel			x	x	This activity developed from 5.2.5 above. A SOW has been developed, and consultant identified. The activity is awaiting a NEPA-led meeting with the Chief Justice.

The Table presented above highlights the planned and actual activities undertaken in this area. A number of environmental laws, impacting on watershed management exist, and some are currently under review. Despite the wealth of legislation, enforcement of laws and regulations is less than optimal. Enforcement takes place through several mechanisms including some thirteen Groups. The work undertaken through Component 2, and the experiences of other programs such as ENACT, highlights the urgent need to develop a trained, uniformed, capable, and

properly equipped cadre of Enforcement Officers at the national level, and a similar empowered Municipal or Parish Wardens at the parish level. Constraints to enforcement include lack of awareness of environmental laws, and general emphasis on criminal behavior rather than on environmental violations. Since watershed management falls under many different categories of responsibility and authority, it is important to consider whether and where a legal enabling environment is established.

New environment management legal instruments, using participatory governance is being considered by several Central Government Agencies - NEPA, Forestry Department, Ministry of Local Government, and SDC - and is being written into new laws such as the Forest Act, the Draft Watershed Policy, and the Biological Diversity Strategy. These recent changes must be understood by Enforcement Officers in order to have an effective enforcement system.

A number of SOWs have been drafted, and STTAs contracted/being contracted to impact on this activity. These STTAs will do the following:

1. Undertake a review of the recommendation for the establishment and operation of a specialized Environmental Court. Preliminary findings indicate that Enforcement Officers are experiencing great frustrations with the general courts. Environmental violations are given extremely low priority in a judicial system overwhelmed with cases concerning drugs, guns and other violent crimes. Where and when environmental violations do come before the courts, the lower end of the fines are applied, leading to further frustrations for the Enforcement Officers. A draft SOW was developed to address this area, but after discussions with the Legal Division of NEPA, the decision was taken to put this matter on the "back-burner".

The stakeholders -who had prioritized this activity, accepted this recommendation.

2. To develop a process to support sensitization of Judges, Justices of the Peace (JPs), and other court personnel, and the training of Enforcement Officers at both the national and parish levels, on environmental issues, in order to increase the effectiveness of the courts in this area.

This Sow was broken out into two:

- A Consultant was identified to undertake the sensitization of judges and other court personnel. This was integrated into existing activities of the Legal Division of NEPA. A meeting was set-up with the Chief Justice to obtain his input before implementing this activity. This Meeting has been re-scheduled for the end of October 2002.
  - The training of Police Officers was adjusted to the training of enforcement officers to fit with USAID policies. R2RW joint ventured with ENACT in supporting NEPA with the "Training of Trainers" Workshop. Over 30 of NEPA's officers took part in a 3-Day Workshop, to equip them to train other officers. The National Solid Waste Management Act has recently replaced the Litter Act. All these changes and Acts must be understood by Enforcement Officers in order to have an effective enforcement system. Environmental Wardens and other enforcement personnel need specialized training on environmental issues in order to better prepare cases for the courts.
3. Supported was jointly given by ENACT and R2RW to assist NEPA to produce a Pocketsize field-guide The ENACT Project has supported NEPA to prepare a comprehensive *Enforcement and Compliance Manual*. This is a large manual, with over 150 pages describing the acts and regulations, as well as legal, investigative and court procedures, and



case preparation. This version is considered suitable for office use. The pocket size version of this guide will be taken into the field by enforcement officers.

**Pocket Guide to Compliance and Enforcement of Environmental Laws**

*Enforcement of legislation related to the environment in Jamaica is hampered by several factors which include but are not limited to the following:*

- *Insufficient human and financial resources to provide comprehensive protection*
- *Lack of knowledge on the part of the persons given the task of enforcing, of the various offences prescribed under the legislation as well as the powers they are granted thereunder*
- *The often guarded response from the judiciary in relation to the imposition of the maximum penalties*
- *The outdated and inadequate penalties provided under many of the Acts and Regulation*

*The lack of knowledge is one of the areas that can be readily addressed. The National Environment and Planning Agency in an attempt to boost the effectiveness of this cadre of personnel has sought via various means, including the creation of a concise version of environmental laws of Jamaica, to increase this awareness.*

*The main objective of this booklet is to ensure that a comprehensive but portable point of reference is available for use by the persons given the task of protecting Jamaica's natural resources. In keeping with this thrust, the sections of the relevant Acts and subsidiary legislation which addressed the powers of the 'enforcers', the offences and the accompanying penalties were extracted and compiled in the following manner. Each 'enforcer' will therefore be able to draw on this source for clarification or confirmation where required.*

In order to co-ordinate efforts, discussions continue to take place with the ENACT Program, the Compliance and Regional Services, and the Legal Services Divisions of NEPA, in this area.

**5.3 Support the undertaking of Activities for Policy Improvement**

Activity	Compliance and Enforcement Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
<b>5.3</b>	<b>Activities for Policy Improvement</b>					
5.3.1	Work with SWB on Watershed Policy	x	x	x	x	Review was completed with Green Paper taken through an intensive period of community consultation, and feedback integrated into revised version, but following significant delays in moving Green Paper to White Paper, and noted omissions in the Policy, a Consultant is currently reviewing the Policy.
5.3.2	Implement reform to Watershed Protection Act	-	-	-	-	No progress to date. Awaiting the completion of 5.3.1 above

With the promulgation of the Natural Resources Conservation Act in 1991, the NRCA was created with several divisions including a Watershed Protection and Management Branch (WPMB). However, due to staffing and funding limitations, the Branch focused primarily on regulatory and public education activities.

In response to growing concerns about the continued deterioration of the nation's watersheds, a Watershed Task Force, chaired by the Senior Advisor to the Prime Minister, was appointed in 1998. Among the achievements of this Task Force are the development of an Integrated Watershed Program, and the establishment of the National Integrated Watershed Management Council (NIWMC), with various Sub-Committees. The revised Sustainable Watershed Branch (SWB) of the reformed NEPA is the secretariat to this Council.

The NRCA prepared a Green Paper in 1999 *Towards a Watershed Policy for Jamaica*. This was taken through a consultative process, and recommendations integrated into a final draft that should have moved to a White Paper status. There has however been a delay in this process. During the period of delay, a number of areas for improvement have been identified in this Green Paper. These include, but are not limited to:

1. The need for a clearer definition of Local Watershed Management Committees (LWMCs), and their roles and responsibilities;
2. The omission of an implementation Plan;
3. The omission of any graphics in the Policy;
4. The lack of an articulation of incentives in the Policy; and
5. The lack of a clear strategy for implementation.

STTA has been contracted by R2R to review the current policy, propose changes to be made to address the areas identified for improvement, seek to develop consensus on the proposed changes through a national workshop, and prepare the final draft of the Watershed Policy.

The updating of the Watershed Protection Act is awaiting the completion of work on the Watershed Policy

Work with the Great River Watershed Management Committee (GRWMC), and the Rio Grande Watershed Management Committee (RGWMC) suggests the need for NEPA and its SWB to articulate a clear policy on the role of the Local Watershed Management Committees (LWMC). This is also true for the Forestry Department, where, with Trees for Tomorrow Project, a Local Forestry Management Committee (LFMC) has already been established in the Buff Bay/Pencar Watershed.

STTA was contracted to undertake a review of the different processes currently taking place regarding interventions in watershed management, and recommend a generic process to facilitate collaboration and uniformity where possible in these interventions. This review will serve to assist the Local Group Coordination Working Group of the NIWMC to recommend appropriate actions to the NIWMC, and will serve as useful guidance to field practitioners on how to best form local community or watershed wide groups.

### Tasks to conduct a review of LWMCs

- Review existing Reports/Materials
- Conduct interviews and attend briefing sessions
- Review existing LW/LFMCs, and articulate the positive and negative aspects of each approach.
- Examine governance issues in the context of establishing LWMCs' and make recommendations on the mandate
- Describe the linkage between LWMCs and the NIWMC
- Recommend a generic process towards establishing such Committees
- Develop a Manual for how to establish a Local Watershed Management Committee
- Examine how LWMCs should best be integrated into other local governance mechanisms
- Prepare draft Report and brief major clients/stakeholders
- Prepare final Report

#### 5.4 Improve Compliance and Enforcement Capacities in GRW

Activity	Compliance and Enforcement Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
<b>5.4</b>	<b>Compliance and Enforcement in the GRW</b>					
5.4.1	Work with C & E Task Force to implement priority activities	x	x	x	x	Quarterly Task Force Meeting held to monitor the implementation of priority activities. A SOW has been developed to review the C&E resources in the GRW, and is being implemented.

The GRW continues to experience limited, and often, ineffective enforcement. Additionally, there are indications that communities are experiencing a breakdown of core values, that compliance with laws are limited, and very little enforcement of violations are taking place. There is a need to include community input regarding sanctions against environmental breaches.

The Great River Compliance and Enforcement Task Force (GRWC&ETF) have prepared and instigated a work plan, with prioritized activities to deal with these issues. This Task Force consists of inter-agency members, (national and local), representatives from the four parish councils, civil society, private sector and representatives from communities. The Forestry Department chairs this Task Force, which meets quarterly to monitor the implementation of activities. Special efforts have also gone into gaining the participation of key stakeholders in the work of the Task Force. These include the Superintendent of Police in charge of all four parishes, representatives from the Parish Councils, Public Health Department, and the National Solid Waste Management Authority.

The C&E Task Force has started to implement a **Neighborhood Sensitization Program**, which forms a part of the GRWMC **Stewardship Program**. The goal is to encourage local committees to add a “watershed lens” to their regular activities and to adopt easy steps for community enforcement.

To commence this work, STTA has been contracted to assist the GRWC&ETF, the Great River Watershed Management Committee, NEPA, and the R2RW Project Technical Team to review State, Private Sector, Civil Society, and Community Organizations, involve in Compliance and Enforcement in the GRW, develop a database, and conduct a Workshop to present and prioritize these findings.

#### **Activities for Consultancy to Review C&E in the GRWMC**

1. Meet with relevant R2RW, GRWMC and GRWC&ETF Members, and NEPA representatives to review the current reality with respect to opportunities and constraints to greater compliance and enforcement in the Great River Watershed area.
2. Develop questionnaire for use in interviewing State Agencies, Private Sector, NGOs, and CBOs involved in Compliance and Enforcement activities in the GRW. This should include the human and financial resources, contact information, roles and responsibilities, resources available for sharing among Agencies, and capacity to carry out enforcement activities. Present this information in the form of an organization assessment that deals with the specific attributes of each organization analyzed.
3. Undertake interviews, conduct research, and review existing documents of the GRWC&ETF, enforcement agencies and court records, to determine the major types of environmental violations coming before the Courts, under what Laws and Regulations violators are being charged, who is bringing forward these charges, and the major environmental concerns of communities in the GRW.
4. Based upon the above, prepare:
  - a. An inventory of equipment
  - b. A database of contact information for all personnel involved in C&E activities in the GRW
  - c. A matrix of environmental violations in the Great River area for the past three years.
5. Investigate the potential of Burial Societies, Garden Clubs, Churches, and other similar groups supporting compliance and enforcement of environmental sanctions at the community level.
6. Review information prepared on the community stewardship program, and make recommendations on how community residents in the Great River Watershed can best support compliance and enforcement of environmental laws;
7. Prepare and make presentation of findings from 1-6 above at a Workshop with the GRC&ETF.
8. Prepare a Final Report that includes the output of 1-7 above.

## 5.5 Improve Compliance and Enforcement Capacities in RGW

Activity	Compliance and Enforcement Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
<b>5.5</b>	<b>Compliance and Enforcement in Portland</b>					
5.5.1	Participate in ENACT Portland C&E Focus group	x			x	Attend two Workshops put on by ENACT. Concept Paper developed by R2R to carry forward the mandate of the Focus Group towards establishing a parish-wide C&E Task Force
5.5.2	Participate in review and training for field guide			x		R2R jointly funded a NEPA 3-day Training Workshop on C&E. STTA contracted by R2R to use the C&E Manual to develop a pocket-size field-guide. Draft completed, and awaiting "Review Workshop", before being handed back to ENACT for printing.
5.5.3	Develop a C&E Task Force for the Rio Grande				x	Draft TOR developed for C&E Task Force. First Meeting held, and Executive Committee appointed to undertake follow-up, and report back to the Task Force.

Collaborative work was already taking place in Portland between with ENACT and NEPA's Compliance and Regional Services Division, before R2RW's entry in that watershed. Two workshops were held in Portland, working with an Inter-Agency Working Group on Compliance and Enforcement. The decision coming from these workshops was to establish a Portland Task Force on Compliance and Enforcement to continue the work of the Inter-Agency Working Group, and serve as the body through which R2RW could implement Component 2 activities.

The first meeting of the Portland Compliance and Enforcement Task force has taken place, which was followed by a meeting of the Executive Committee of this Task Force. These meetings have led to the development of a draft Work plan that is to be confirmed by the next meeting of the Task Force, and for implementation to commence.

ELEMENTS OF PORTLAND C&E TASK FORCE WORK PLAN	
NEPA	ENACT
a. NEPA would use its new Portland office to facilitate actions around multi-agency co-ordination, especially as it relates to compliance and enforcement.	g. ENACT to take lead in investigating and implementing certified training courses for current and potential enforcement personnel. Input would be gained from EWS, MIND and Police Training School etc.
	h. The completed Field-Guide to be placed in all

<b>ELEMENTS OF PORTLAND C&amp;E TASK FORCE WORK PLAN</b>	
<b>NEPA</b>	<b>ENACT</b>
<ul style="list-style-type: none"> <li>b. The Public Education Department of NEPA to work towards improving materials relating to lobsters, turtles, conch, and bird shooting.</li> <li>c. The Legal Sub-Committee, and the Legal Division of NEPA to be pro-active in producing necessary briefs for amendments of existing regulations to upgrade existing fines. The R2RW Project has prepared a <i>Statement of Work</i> for STTA to undertake further research in this area.</li> <li>d. NEPA to initiate MOU to facilitate planning and enforcement policies and procedures in Portland. ENACT to establish a draft to inform for NEPA, MLE, PPC, PPDC, MoH, and SDC.</li> <li>e. NEPA, with assistance from ENACT to revise forms/processes used to undertake field monitoring.</li> <li>f. Recommendation for NEPA to re-activate Honorary Games Warden, with appropriate training and tighter administrative support.</li> </ul>	<p>Police Station, with the approval of the Commissioner of Police. EWS to assist with this venture. Closer working relationship to be established with the JCF.</p> <ul style="list-style-type: none"> <li>i. The Field-Guide to be completed by ENACT, integrating comments from Workshops.</li> <li>j. A Pocketsize version of the Field Guide is to be developed by ENACT with input from R2R.</li> <li>k. Training - to include - Field-Guide Demonstration, Advocacy and Lobbying, Conflict Resolution, and Fire-Fighting to be undertaken by ENACT and R2R.</li> </ul>
<p><b>R2RW Project</b></p> <ul style="list-style-type: none"> <li>l. Information Packages on sensitization of judges and other court personnel to be prepared and implemented by NEPA and R2R.</li> <li>m. R2R to link Compliance and Enforcement to Community Stewardship and to increase community understanding of key laws.</li> <li>n. Attempts to be made to circulate and use CWIP and R2R Monitoring Data.</li> <li>o. R2R to work with ENACT, and NEPA to establish a <i>Portland Compliance and Enforcement Task Force</i>, that would continue the work of the Multi-Agency Working Group. R2R would also facilitate the decision-making process to determine how this group relates to the PDC, and the Collaborating Body for the R2R Project in Portland.</li> </ul>	

**5.6 Support the development and implementation of existing and new Economic Incentives**

Activity	Compliance and Enforcement Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
<b>5.6</b>	<b>Economic Incentives</b>					
5.6.1	Review present fines associated with violations	x	x	x	x	SOW developed incorporating changes in concept agreed on by key stakeholders, and two STTAs currently implemented this SOW to review and recommend incentives that will encourage private sector investment in watershed management
5.6.2	Identify incentives to support TAPs		x	x	x	The current STTA is expected to identify incentives to support TAPs, and more specifically, Private Sector investment in watershed management.
5.6.3	Document cost-effective mechanisms for controlling pollution			x		Not Done. Activity will be reviewed with Production and Marketing Task Force
5.6.4	Stage competitions on improved community C&E			x	x	Not Done. New strategy developed to pursue this activity as a part of an overall Stewardship Program.
5.6.5	Investigate the use of economic incentives for “whistle blowers”			x		Revised by stakeholders as a Year 3 activity, after there is a greater understanding of the issues affecting C&E
5.6.6	Conduct a study of successful models of economic incentives for compliance and enforcement				x	Being undertaken as a part of the SOW now being implemented to examine incentives to encourage private sector to invest in watershed management.

Economic incentives were identified as essential to achieve community support for compliance and enforcement of environmental laws. Cases going before the courts are receiving inadequate sanctions. For instance, the maximum fines that are allowed under some old laws are not more than \$100, which causes much frustration for environmental officers.

Discussions held with the NIWMC, FD, and NEPA have led to a re-focus of this activity on examining and recommending financial incentives that will encourage private sector investment in improved watershed management activities.

A brief diagnostic of Incentives for Watershed Management in Jamaica, undertaken by Steve Bass for the Caribbean Natural Resources Institute, under Phase 1 of a global initiative of the

U.K. Department for International Development, begins to address incentives, albeit in a very generic way. According to the Study, "there is general agreement that - for cultural, political, and economic reasons – fully-fledged market-based approaches being employed in other countries do not offer promise for Jamaica at this stage. In the search for solutions, however, non-market, and pre-market, incentives for improved watershed management have been highlighted, but there has been little progress to date in identifying effective incentives and putting them in place." The study goes on to articulate what needs to be done to improve the environmental situation faced in Jamaica's watersheds and to identify incentive possibilities that warrant further exploration.

The team of two consultants contracted by R2RW has been in the field examining: **“Private Sector Involvement in Watershed Management”** and they have produced a draft of their findings. This was presented to three Focus Groups in Kingston, Montego Bay, and Port Antonio. Written feedbacks were received from several groups. These are now being integrated into a final report.

<b>CREATING INCENTIVES FOR WATERSHED MANAGEMENT</b>	
A successful strategy for private sector investment to sustain watersheds’ integrity must target both positive and negative features of current practices – some negatives are:	
<ul style="list-style-type: none"> <li>▪ Indiscriminate harvesting of trees</li> <li>▪ Non-contour farming on steep hillsides</li> <li>▪ Improper technologies for watershed health</li> <li>▪ Persistence of crop types non-resistant to pests</li> <li>▪ Uncertain land tenure system</li> </ul> <p>Criteria for Establishing Workable Incentives</p> <ul style="list-style-type: none"> <li>▪ The incentive must be credible, leading to readily observable community benefits</li> <li>▪ The community must be involved in its determination</li> <li>▪ Governance of its modalities must be transparent</li> </ul> <p>Behaviors and activities to be encouraged by private sector initiatives include:</p> <ul style="list-style-type: none"> <li>▪ Donations</li> </ul>	<ul style="list-style-type: none"> <li>▪ Conservation Easements</li> <li>▪ Conservation Agreements</li> <li>▪ Land Exchanges</li> <li>▪ Encouraging Participation by Tax Incentives</li> <li>▪ Income tax deductions</li> <li>▪ Deductions for specified land use</li> <li>▪ Tax exemptions for watershed activities</li> <li>▪ Tax allocation</li> <li>▪ User fees to support conservation:</li> <li>▪ Control access to shared resources:</li> <li>▪ Tradable Development Permits:</li> <li>▪ Eco-labeling:</li> <li>▪ “Biodiversity Prospecting” Elimination of “Perverse” incentives</li> </ul>



## 5.7 Support the enhancement of Public Awareness Programs

Activity	Compliance and Enforcement Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
<b>5.7</b>	<b>Public Awareness</b>					
5.7.1	Support public awareness of national laws		x	x	x	STTA have been engaged to develop a musical jingle, posters and brochures to support better awareness of compliance and enforcement. To be completed in October.
5.7.2	Develop public awareness programs and tools for rural areas			x	x	Posters and tools are being designed and once pre-tested, will be produced for wide-scale distribution.
5.7.3	Disseminate information on environmental laws to the judiciary			x	x	Video completed, audience assessment being prepared - awaiting meeting with NEPA and Chief Justice to determine most effective approach. STTA available for this activity.
5.7.4	Undertake parish/watershed exchange to share lessons learned				x	Shifted to a Year 3 Activity

The Stakeholders in the GRW have identified the need for public awareness of current laws and regulations as a major constrain to enforcement of environmental breaches. Many enforcement officers do not know the regulations by which they should prosecute environmental violations; many who violate the laws are not fully aware that they are breaching those regulations.

A pocketsize version of the Field-Guide is being developed out of the partnership with ENACT, while the PAPAS and the PATF have been examining communication tools for enhancing public awareness. These include developing a radio jingle, poster and brochure to support the overall theme of "***Environmental Laws Protect our Rights***".

### Tasks to Develop Popular Compliance and Enforcement Materials

- a. Janneth Mornan-Green (Communications Consultant)
  - Review Relevant Background Information
  - Prepare a draft written version of posters (3 versions for each of the eleven topic areas to be addressed) to be pre-tested with focus groups
  - Prepare draft version of brochures (one version each) to be pre-tested with focus groups
  - Finalize materials for production
  - Prepare final report

- b. Claudia Chambers (Communications Researcher)
  - Conduct focus group assessments
- c. Paul Carroll (Musician)
  - Develop draft version of radio jingle for pre-testing.
  - Revise and record final version of jingle once pre-testing is completed.
- d. Delroy McDowell (Graphic Artist)
  - Design mock-ups of posters (3 for each topic area) to be pre-tested
  - Design mock-ups of brochures to be tested (eight in total)
  - Finalize poster design once pre-testing is completed and designs approved.

### 5.8 Gender Considerations

Activity	Compliance and Enforcement Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
<b>5.8</b>	<b>Gender Considerations</b>					
5.8.1	Gender analysis regarding breaches of existing laws	x				Investigated. Gender disaggregated data not available. Some disaggregated data included in the KAP survey with respect to awareness of environmental laws.
5.8.2	Gender analysis of how environmental offenses in watershed affect other social groups within community		x			Some information is in the KAP survey. Not formally conducted.
5.8.3	Development of community compliance strategies that consider gender realities			x		Gender Strategy prepared and Community Assessment in the GRW and the RGW being undertaken. To be included in the design of the “community stewardship” program.

The Project attempted to consider gender factors in all its activities. Maria Protz, working with the other members of the Technical Team, has developed a Gender Strategy that would assist in guiding R2R interventions. This will be especially useful for Component 2 to know who are responsible for the environmental violations in the watersheds – men, women, young people, children, farmers, coal burners etc.

Dialogue with key stakeholders help to determine that gender in the Jamaican context is not Women in Development, or even male and female social and economic equity. Gender analysis for the project includes equity and non-discrimination in the social and economic structures for all

– women, men, youth, children, farmers, rural and urban residents, mental and physically disabled, and all other specially identified groups whose life interacts with the Watersheds.

## 5.9 Issues and Resolution

The following Table show three priority issues that were identified during the reporting period, with some thoughts for possible resolutions:

Issues	Possible Resolutions
<p>1. In spite of the multiplicity of environmental laws, most enforcement activities are being undertaken using the Litter Act, and by EWS. With the establishment of the National Solid Waste Management Act, 2001, which abolishes the Litter Act, and the prioritization of solid waste issues by stakeholders, there is the need for Enforcement Officers to understand the new Act.</p>	<p>There is the need to develop a good understanding of the National Solid Waste Management Act, 2001, by the Parish Councils, EWS, and others who undertake enforcement activities</p>
<p>2. The R2RW Project has supported NEPA to establish the GRWMC and its related Task Forces. A similar process has been undertaken in the RGW where the RGWMC has been established. In addition, the Forestry Department established the Buff Bay/Pencar Local Forestry Committee. Dr. Ellison in his work for R2R identified the need to establish how the Local Management Committees will relate to existing, and emerging structures</p>	<p>Work with NEPA, and FD to articulate a clear policy on Local Management Committees. This would include how they will relate to NEPA, FD, and other State Agencies, as well as to Stakeholders Groups such as the Community Development Committees (CDCs), Development Areas (DAs), Parish Development Committees (PDCs), and the National Integrated Watershed Management Committee (NIWMC).</p>
<p>3. Several Divisions and Departments of NEPA impact on watershed management activities. These include SWB, Compliance and Regional Services, Planning, and Legal Services Divisions, Public Education Department, and EWS.</p>	<p>Work with Policy, Projects and Programs Co-ordination Division of NEPA to ensure proper co-ordination of all R2RW Project activities.</p>

## 5.10 Analysis of Activities by Percentage of Planned Activities Completed

The Table below highlights the estimated percentage of planned activities completed for the period under review.

#	Activities	Estimated % Completed	Comments
5.1	Targeted Regulatory Inventory Framework	100%	All activities in this area completed, and Final Report distributed. In addition, a subsequent review was undertaken of the NSWM Act.

#	Activities	Estimated % Completed	Comments
5.2	Advise NEPA on Legal Reform and Enforcement of Environmental Laws	70%	NEPA made decision to put the issue of Environmental Court on the "backburner". USAID policies led to the modification of strategies with JCF to be strategies with enforcement officers. Activity to sensitize judges is awaiting meeting with the Chief Justice
5.3	Undertake Activities for Policy Improvement	70%	Delays in moving Green Paper to White Paper have led to a further review of Policy, now underway. An examination of the Act is to follow
5.4	Improve Compliance and Enforcement Capacity of GRW	100%	Activities prioritized, and quarterly meetings of Task Force being held to implement and monitor activities. A SOW has been developed to review the C&E resources in the GRW, and is being implemented
5.5	Improve Compliance and Enforcement Capacity of RGW	100%	C&E Task Force developed from Portland C&E Focus Group, and Workplan developed, and Executive selected. Review and training for field-guide undertaken. In addition, R2R is now contributing to the development of a pocket-size field-guide.
5.6	Develop and Implement existing and new Economic Incentives	80%	SOW being actively pursued on incentives for private sector participation in watershed management. Other aspects of this component to be reviewed.
5.7	Enhance Public Awareness Programs	80%	Popular materials being designed and produced to support community compliance & enforcement and other stewardship efforts.
5.8	Gender Considerations	50%	Gender factors are being included in the design of Public Awareness materials as a result of the KAP survey. Both other official data not easily available. Very big endeavor to obtain original data. More gender mainstreaming is needed to review implications for specific compliance and enforcement activities.

## 6. Component 3 - Capacity of Jamaican Government Agencies, International Donors, and Private Sector and Civil Society Organizations to Implement Effective Watershed Management Programs Enhanced

### Introduction

The threats to Jamaica's natural resources, particularly in the watershed areas, cannot be overcome by the direct efforts of a few agencies. Diminishing these threats requires that effective partnerships, at both national and local level, are established and supported. It is through the participation of stakeholders that more effective natural resource management can evolve. Promoting the formation and strengthening of stakeholder groups and providing information and coordination necessary for sound environmental management will contribute to long-term, comprehensive environmental improvement.

Many aspects of watershed management are best implemented by local government, NGOs or private sector entities. However, coordination, oversight and regulatory responsibilities for watershed programming must remain the responsibility of GOJ agencies. The newly renamed Sustainable Watersheds Branch of NEPA is expected to play a lead role in policy, information management and monitoring of watersheds. It is expected that the ability of all partners to implement watershed management programs will be enhanced through better cooperation, capacity strengthening and coordination of activities.

Component 3 focuses on enhancing NEPA's capacity, particularly the Sustainable Watersheds Branch (SWB), in watershed management programs. Key to this capacity strengthening will be: improving dissemination and use of information to promote more effective coordination of programs and collaboration of organizations; improving the coordination and effectiveness of data collection, use and sharing; improving mechanisms for involving the private sector, public sector and civil society; and supporting special studies to meet emerging needs, such as a study of the impact of land tenure on adoption of conservation practices, among others.

### 6.1 Capacity Building of the Sustainable Watersheds Branch (SWB)

Activity	Institutional Strengthening Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
<b>6.1</b>	<b>Capacity Building of the SWB</b>					
6.1.1	Conduct needs assessment of the SWB	x				Completed in first quarter
6.1.2	In consultation with NEPA HRD, produce a training plan		x			Training activities prioritized
6.1.3	Identify trainers and implement training plan			x		1. Effective Writing Skills. 2. Equipment use. 3. Presentation skills 4. WGO training
6.1.4	Follow up with procurement of equipment started in year one	x	x			Initial procurement completed. Specifications for additional equipment being developed.

Activity	Institutional Strengthening Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
6.1.5	Develop and implement protocols for water quality monitoring		x		x	Monitoring program on-going in the Great River – basis for WQ Monitoring protocol
6.1.6	Produce public awareness kits for field officers			x		Inventory completed. Kits are being worked on by NEPA and R2RW. Draft budget has been developed.
6.1.7	Liaison with the FD on joint initiatives	x		x		Joint design of Plant A Tree Campaign, Consultancy for WM Incentives and WMC C&E TFs

### 6.1.1 Needs Assessment of the SWB

R2RW assisted in identifying training needs and opportunities for the SWB in collaboration with the NEPA Human Resource Department.

### 6.1.2 Training Plan

Training needs were identified, however the analysis of an appropriate action plan based on this data has yet to be completed.

### 6.1.3 Implement Training

R2RW organized and implemented training sessions in overall strategic planning, writing skills, and presentation skills (2 sessions). In addition, the SWB organized a equipment training with its own resources to develop skills in equipment purchased with R2RW funds.

#### Tips for Effective Report Writing

Written reports (monthly, trip or other reports) serve multiple functions

- Document present conditions
- Putting it in writing makes it official and actionable
- Serves as a written record to document work accomplishments

Mechanics: Notes; Images; Outlines; Topic sentences; Paragraphs Use simple formula:

- Tell the reader what you plan to tell them (introduction)
- Tell them the detail (body)
- Tell them what you just said (conclusion or summary)

Strive to be concise yet comprehensive; Avoid the use of unnecessarily flowery language:

Style:

- Use headers, section titles, and bold font to break-up text
- Use of tables or graphics to convey information
- Pictures are “worth a thousand words”

Always consider your audience.  
 Be proud of what you write. It is a permanent record of you and your work.

<b>An Introduction to Presentation Skills for Community Meetings</b>	
<b>OUTLINE</b>	
<p>Determining What you Want to Present</p> <ul style="list-style-type: none"> <li>▪ Know your Objective and Topic – what do you want to communicate</li> <li>▪ Focus on One or Two Simple Messages to Get across (KISS principle)</li> </ul> <p>Knowing your Audience</p> <p>Preparing your content</p> <ul style="list-style-type: none"> <li>▪ Develop a “Terms of Reference for Your Presentation”</li> <li>▪ Relate to people’s present situation and priorities (pose problems that they can relate to)</li> <li>▪ Be practical – pose steps and solutions that people can actually implement as follow-up actions</li> <li>▪ Research and write out your notes completely in point form</li> <li>▪ Anticipate Questions and Develop Responses</li> <li>▪ Repeat, Repeat, Repeat: (1) Say what you are going to say; (2) Then Say it; and (3) Summarize (Recap) what you have said</li> </ul>	<p>Developing a Creative Approach to the Presentation</p> <ul style="list-style-type: none"> <li>▪ Develop a “Hook” to capture people’s attention and reel them in</li> <li>▪ Use anecdotes, proverbs, personal stories and appropriate jokes</li> </ul> <p>Developing Visual Aids and additional Materials</p> <ul style="list-style-type: none"> <li>▪ Use a variety of visual aids</li> <li>▪ Provide handouts of what you have covered</li> <li>▪ Provide follow-up information on where you can be contacted</li> </ul> <p>Rehearsing</p> <ul style="list-style-type: none"> <li>▪ Rehearse your presentation – practice makes perfect and builds confidence</li> <li>▪ Project your Voice</li> <li>▪ Make Eye-Contact</li> <li>▪ Be participatory and inter-active</li> </ul>

**6.1.4 Procurement**

Follow through procurement of field and computer equipment was undertaken with the purchase of additional computers and camera equipment.

<b>Equipment Ordered for SWB</b>	
8 Digital Camera - Kodak DC 5000	8 Binoculars
1 LCD projector - small size - hand held - portable	8 50 meter Measurement tapes - durable for field use
1 Computer for SWB Head Office	8 Backpacks suitable for carrying field equipment
5 Computers for SWB Field Offices	8 Range finders Publications:

Equipment Ordered for SWB	
3 Ink Jet Color Printers (extra ink cartridges)	Suunto PC Orienteering Educational Package
1 Scanner: flat, 11 inch by 17 inch	How to teach with Topographic Maps
8 UPS units/Surge protectors	The Basic Essentials of Map and Compass
8 Altimeters - metric	Your Way with Map and Compass - Teachers Edition
8 Compass	Your Way with Map and Compass - Student Edition
8 Clinometers	
1 Table mirror stereoscope	

### 6.1.5 Water Quality Protocols

Through the establishment of a contract with the UWI during the period, field-testing of a model water quality monitoring protocol was begun. Parameters monitored in the Great River included pH, conductivity, total suspended solids, calcium, magnesium, sodium, potassium, acid neutralizing capacity, ammonia, nitrate, total dissolved nitrogen, soluble reactive phosphorus, total dissolved phosphorus and silicate and faecal coliforms. The intent was to have developed a generic water quality monitoring program during the year that described the minimum parameters to be monitored, however, this activity had to be postponed due to a staffing limitation. This task is to be assigned to a core team member under the Third Annual Work Plan

### 6.1.6 Public Awareness Kits

A Plan of Action to develop Public Awareness kits for field officers that included the following steps:

1. A **complete inventory** of existing materials from all of the above sources.
2. Coordination with all other agencies in addition to NEPA to select materials for consideration.
3. An **assessment** of the existing materials to select the best materials, to identify gaps in information and to tell whether or not materials may need to be redesigned.
4. **Selection** (based on some specific criteria and with indicators for assessing impact).
5. **Assessment of posters to be included.**
6. **Budget preparation** for a complete set of materials.
7. **Production** of any materials necessary to address **gaps** in information.
8. **Focus group testing** to ensure that clear messages are communicated in all posters.
9. **Re-design** of materials, if needed.
10. **Printing** and/or reprinting of materials
11. **Copying** of relevant **videotape** cassettes and/or **DVDs** to be included in the kit.



12. **Laminating** of posters to ensure durability.
13. Preparation of **JAMAL** support materials and **key word lists**.
14. Preparation of Supporting **Fact Sheets**.
15. Preparation of supporting **News Releases/radio scripts**.
16. Preparation of **Stewardship package for Church groups**.
17. **Label design**.
18. **Packaging** of all materials in a handy, **durable portfolio** or **kit** that will ensure that materials are well kept and that will allow them to be easily carried to communities.
19. Printing of additional materials for distribution/posting in communities.

At the end of the reporting period, steps 1-6 had been completed.

### 6.1.7 Liaison with FD

Planned for next period.

## 6.2 Enhancing Coordination

Specific activities to enhance coordination took place at four levels:

- NIWMC
- Other national initiatives
- Great River Watershed
- Rio Grande Watershed

Activity	Institutional Strengthening Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
<b>6.2</b>	<b>Enhancing Coordination</b>					
<b>6.2.1</b>	<b>National Integrated Watershed Management Council</b>					
6.2.1.1	Assist SWB in supporting the NIWMC	x	x	x	x	Prepared Concept Paper for NIWMC, and documents for Local Group Coordination
6.2.1.2	Sponsor NIWMC retreat in early 2002		x			Completed
6.2.1.3	Sponsor watershed tour by council members		x			Completed
6.2.1.4	Rationalize approach to LWMCs and LFWMCs	x	x	x	x	Consultancy underway
6.2.1.5	Encourage public sector agencies to incorporate R2RW initiatives into their corporate plans	x	x			Limited progress

Activity	Institutional Strengthening Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
6.2.1.6	Develop linkages between LWMCs and the NIWMC	x	x	x	x	Criteria for Certification of WMCs developed
<b>6.2.2</b>	<b>Other National Activities</b>					
6.2.2.1	Develop a community involvement strategy	x				Strategy designed and implemented. Three community mobilization workshops held in GRW. Two in the RGW.
6.2.2.2	Work with the FD on joint initiatives (tree planting, LWMCs)	x	x			Plant A Tree Campaign designed
6.2.2.3	Conduct quarterly liaison with other watershed projects	x	x	x	x	Done through Local Group Coordination Working Group
6.2.2.4	Contribute to the work of NEEC		x		x	NEEC has not formally met during the year, but there have been regular discussions on activities with the Executive Director. NEEC members have been invited to the KAP workshop.
6.2.2.5	Participate in shows such as Denbigh and Green Expo				x	Participated in both Denbigh and Green Expo as a part of NEPA's displays and demonstrations.
6.2.2.6	Stage "Open House" on R2RW project for NEPA staff	x				Completed. Also participated in Projects Day at NEPA
<b>6.2.3</b>	<b>Great River Watershed</b>					
6.2.3.1	Chart long term vision for GRW	x	x			Priorities established.
6.2.3.2	Continue secretariat functions	x	x	x	x	Completed. GRWMC has established Secretariat function
6.2.3.3	Document progress on initiatives and report to stakeholders	x		x		Task Forces regularly report to GRWMC
6.2.3.4	Work with task force to implement priority field projects	x	x	x	x	On-Going
<b>6.2.4</b>	<b>Rio Grande Watershed</b>					
6.2.4.1	Identify all relevant stakeholders	x				Completed
6.2.4.2	Organize a Strategic Action Planning Workshop		x			Completed February 2002
6.2.4.3	Identify relationship the Portland PDC and the RGWMC	x	x	x		MOU developed
6.2.4.4	Participate in NEPA led coordination efforts for RGW	x	x	x	x	On-going. Produce weekly list of activities

## **6.2.1 National Integrated Watershed Management Council (NIWMC)**

### 6.2.1.1 Support the NIWMC

Support was provided to the SWB in its responsibilities to the NIWMC especially in areas relating to secretariat functions, task force participation, and follow up on matters discussed at Council meetings. Support also included organizing a bus tour and retreat, development of a concept paper on strategic directions, and recommendations on the relationship of the NIWMCs to LWMCs. Below are recommendations from the Concept Paper on Strategic Directions.

#### **Excerpt from Draft Concept Paper - NIWMC: Strategic Directions for the Future**

Working from top to bottom, the NIWMC is well positioned to attract donors and high level players in the GOJ to direct funding to WM and to communicate the importance of WM. Working from bottom to top, the NIWMC can focus on communicating the importance of WM at the local level, with the goal of developing local capacity. One of the more prevailing constraints to successful WM is the lack of local capacity--reflected in the lack of sustainable on-the-ground interventions and the unavailability of local partners with which to work.

In response to the constraints identified above, this Concept Paper recommends that the Council adjust its strategic direction as described below.

#### **1. *Community-focused, demand-driven approach to WM***

The NIWMC should be committed to building local capacity. As a demand-driven entity, the NIWMC (through the LGC Working Group) should pull in expertise on an as-needed basis. The NIWMC should get commitment from resource organizations to support community initiatives. Local level needs and requirements are the engine that drives this process. To fulfill this function, the Council should focus on capacity building and public education, and on developing innovative partnerships between local groups and private sector expertise; or between local groups and GOJ representatives. Innovative partnerships would help build local capacity to implement and sustain WM interventions. The LGC Working Group is the key to catalyzing the community and identifying resource links to help communities implement sustainable WM.

#### **2. *Fundraising***

The NIWMC should focus on attracting funding sources. Essentially, the NIWMC is a Board of Directors, and in this capacity should use its influence to attract donors to invest in WM. To attract donors, the NIWMC will have to show the basis for prioritizing interventions; should continue to monitor and evaluate interventions; and should make donors feel comfortable with their investments. A scheme to track WM achievements will be useful in attracting donors. This feeds into the NIWMP framework, where the NIWMP is meant to be the conduit for all future watershed interventions in Jamaica. The framework intends for bi and multi-lateral donors to focus their objectives, and attribute their funding to the NIWMP core projects.

#### **3. *Information Dissemination/Communication/Coordination***

The NIWMC should serve as a high level coordinating body, a central clearinghouse for information on the status of WM interventions in Jamaica. The Council is well-positioned to disseminate lessons learned. It should especially focus on the R2R-supported Great River Watershed, which will likely be a good example of local capacity building and demand-driven, sustainable interventions. Communication and coordination are cross-cutting themes, and should flow from the Council to high levels of government, as well as from the Council to local entities.

### 6.2.1.2 NIWMC Retreat

R2RW provided financial support and professional facilitation for a retreat of the NIWMC in February 2002. The retreat clarified the mandate, vision and strategy for the Council and the work of the subcommittees. The box below summarizes the follow-up actions that were to be taken based upon the retreat

### 6.2.1.2 NIWMC Retreat

R2RW provided financial support and professional facilitation for a retreat of the NIWMC in February 2002. The retreat clarified the mandate, vision and strategy for the Council and the work of the subcommittees.

#### **Summary and Next Steps from NIWMC Retreat, Feb. 2002**

1. All working groups/committees (except Finance and Incentives) are meeting. What are the potentials for internal and external finance – it may not always involve finding a public sector budget. Innovative ways were needed to fund activities such as public education. Ideas were presented here that can be followed up on – e.g. billboards by-lines that may be relatively inexpensive.
2. The Incentives working group was established to consider what incentives could be given to private sector persons to achieve their buy-in. The forms and recommendations need to be considered. People need to be shown the benefits.
3. Getting the local committees going is a matter of importance. We often don't think that money is being spent – but when we examine what each organization is doing as there a number of programs being done. Projects would be targeted to assist in the establishment of Local Watershed and Local Forestry Management Committees.
4. The Public Education Working Group is to be the main medium for sharing information on what is taking place in the Council. All parties present were asked to arrange to have a set of public education materials for their agencies sent to Rosemarie Chung, chairperson of the Public Education Working Group.
5. The sub-committees can meet as often as they like, and may take their own decisions including setting up their own sub-committees. As actions are developed, the related Working Groups should run with these. There are a lot of people in the system. Consider all options – e.g. the SDC can carry messages to communities. The Groups should use all the means and resources available to move things forward.
6. We should put everything together so that there is a report at the end of the year - end of March 2002. In addition, status reports should be developed every six months even if only for information, and presented to Cabinet, heads of Agencies, and the private sector.
7. Stamps and other commemorative symbols could be used to promote environmental messages.
8. The Churches and cultural groups need to be engaged, and encouraged to give an environmental message periodically. In addition, the dance hall culture needs to be tapped to assist in the promotion of positive environmental messages.

9. One of the resources that are ignored is the staff of existing governmental agencies. Because of funding shortages they may get overlooked or may get shuffled off into administration. The Public Sector Reform Programme is to be encouraged to look at incentives for technical persons.
10. The programmatic framework included the involvement of the donors needs to be updated. A completed plan is to be shared with donors such as USAID. The Council would come back to R2RW to help in specific activities towards fleshing out, and solidifying plans.
11. The Compliance and Enforcement Task Force was asked to undertake an inventory of who were undertaking what enforcement activities.
12. The National Integrated Watershed Management Plan, Water Sector Policy, Forestry Action Plan, and the Watershed Policy documents need to be examined and synchronized.
13. A number of suggestions were put forward on the funding of the NIWMC including:
  - (a) Working group to inventory all the potential funding sources.
  - (b) The Council can also serve as a lobby group to increase funding for mitigation measures.
  - (c) Separate what the Council does from what the Council implements. It was expected that individual agencies would fund specific activities, with the Council undertaking a coordinating role.
  - (d) NEPA would also identify Capital A Budget.
  - (e) Funding would also be identified from local donors, such as EFJ.

### 6.2.1.3 NIWMC Tour

Members of the NIWMC conducted a tour on January 31, 2002 of the Buff Bay/Pencar and the Rio Grande watersheds. The tour was instrumental in helping to develop a common understanding of priority watershed issues. The itinerary is reproduced below:

<b>NIWMC Bus Tour - January 31, 2002</b>	
Depart Kingston for Pencar-Buff Bay WMU	7:30 am
Stop at Section to see Agroforestry	8:45 am - 9:15 am
Belcarres to Dr Douglas' farm to see recent Cedar plantation	10:00 am - 10:45 am
Tranquillity School to see school project and meet President of Local Forest Management Committee	11:00 am - 11:30 am
LUNCH – Kildare House Buff Bay	12:15 pm - 1:15 pm
Depart for Rio Grande WMU	1:20 pm
Fellowship to see Forest Reserve etc.	2:15 pm - 2:50 pm
Coopers Hill to see Agroforestry	2:50 pm - 3:40 pm

#### 6.2.1.4 Approaches to LWMCs

Through the Local Group Coordination Group, the R2RW assisted in articulating the role of LWMCs in national development. This matter came up at several meetings of the Working Group, and a brief concept paper outlining the criteria, benefits and obligations of LWMCs to become registered by the NIWMC. The box below summarizes the proposal presented to the NIWMC.

### **Criteria, Benefits and Obligations of NIWMC Registration**

#### **1. Criteria for Registration:**

In keeping with section 3.4 (vii) of the draft watershed policy it is proposed that the minimum conditions for registration of a Local Watershed Management Committee are as follows:

- The group is a community based organization or is a part of some recognized national umbrella group or organization e.g. JAS, NIC, NWC that has regular meetings with minutes and records (financial and other where relevant).
- The group should have an executive or committee with a President or Chairman and officers inclusive of a treasurer and secretary.
- The group should have a current list of members and where applicable other organizations that are linked to them.
- The group should have basic system for financial procedures inclusive of a properly administered bank account.
- The group's geographic area of focus should be delineated and include a definition of the geographic extent.
- The group identifies the issues they consider to be relevant and in need of being addressed. These issues would form a part of or whole of their mandate.
- The group should identify programmatic areas of concern outlining the subject matters of greatest concern e.g. garbage collection, water quality.
- The group should give a basic description of the types of actions the LWMC will address with respect to identified.

#### **2. What are the benefits to LWMC registration?**

- Membership in a national network for watershed management of which a directory listing member groups will be compiled to assist in networking.
- Participation in an annual or biennial LWMC networking seminar/workshop which can provide a medium for exchange of lessons learnt and streamlining of initiatives.
- Registration acknowledged by provision of a membership certificate.
- Access to external assistance.
- Access to documentation of experiences of other similar groups.

- Provision of a “How to start up and run a LWMC Handbook”.
- Feedback on concerns taken forward to council.
- An annual visit from the NIWMC Secretariat.

### 3. What are the obligations of LWMC registration?

The groups registered in the national network should:

- Submit an annual report of activities at the end of every calendar year.
- Implement activities stated in their programmatic areas of concern and action plan.
- Pay an annual registration fee.

#### 6.2.1.5 Roles and Responsibilities for Watershed Management

A meeting involving all the related divisions and branches within NEPA was held to articulate the roles and responsibilities of all parties in initiatives facilitated by the R2RW. This effort will need to be expanded in the next six months to include agencies and departments outside of NEPA.

#### 6.2.1.6 Linkage of NIWMC to GRWMC

A position paper was developed to articulate the linkage between the GRWMC and the NIWMC.

#### **Relationship of the GRWMC to the NIWMC**

<b>What can the GRWMC bring to the NIWMC</b>	<b>What can the NIWMC do for the GRWMC</b>
<ul style="list-style-type: none"> <li>▪ On the ground experience of a pilot program in developing a WMC</li> </ul>	<ul style="list-style-type: none"> <li>▪ Provide a national framework in which to operate</li> </ul>
<ul style="list-style-type: none"> <li>▪ Quarterly progress reports</li> </ul>	<ul style="list-style-type: none"> <li>▪ Provide legitimacy through official recognition – allowing for</li> </ul>
<ul style="list-style-type: none"> <li>▪ Putting teeth to the words of watershed management</li> </ul>	<ul style="list-style-type: none"> <li>▪ Source funding for priority projects of the GRWMC</li> </ul>
<ul style="list-style-type: none"> <li>▪ Methodology for coordination of resources of stakeholder agencies</li> </ul>	<ul style="list-style-type: none"> <li>▪ Provide policy support to local activities</li> </ul>
<ul style="list-style-type: none"> <li>▪ Input into national policy issues affecting watershed management</li> </ul>	<ul style="list-style-type: none"> <li>▪ Provides credibility in approaching external donors</li> </ul>

### **6.2.2 Other National Activities**

#### 6.2.2.1 Work with the Social Development Commission to develop a community involvement strategy

This has been completed at the GRW level and includes a process wherein communities conduct a watershed audit that can be linked to the “Community Development Planning” process. Communities that are engaged in the process of “diagnosing” the core reasons causing local

environmental problems and issues are more engaged in “prescribing” community-based solutions that can be supported through the “Grant Fund” for community-based projects. The process is working at the GRW level and, if found to be useful in the RGW as well, could be taken to SDC at the national level to see how it can be mainstreamed as part of the LSDP process.

6.2.2.2 Work with the Forestry Department on joint initiatives

R2RW has continued to work with the Forestry Department at multiple levels of project implementation:

- “Plant-a-Tree” campaign proposal. R2RW and Forestry Department staff jointly developed this proposal for a public awareness and production campaign to plant 50,000 trees in the GRW.
- The recently retired head of the western regional office of Forestry was hired to be the program coordinator for the Plant A Tree program.
- Forestry Department staff actively participates in both GRWMC and the RGWMC activities. Personnel from the Forestry Department chair both the GR Compliance and Enforcement task Force, and the Portland Compliance and Enforcement Task Force.

6.2.2.3 Contribute to the work of the National Environmental Education Committee (NEEC)

The NEEC has met sporadically to date. However, a number of meetings were held with the NEEC secretariat and currently the secretariat is exploring how it can help to further the concept of developing an adult literacy program around environment/watershed issues with JAMAL. Initial discussions begun between the NEEC and the Ministry of Education, but a proposal has yet to be developed, although it is scheduled for the next six-month period.

6.2.2.4 Participate in national shows such as Denbigh and Green Expo

The project is to participate in the NEPA Launch for Earth Day, and will also work with its partners to participate in the Green Expo (environment week - June). As was the case last year, R2RW will participate in the Denbigh show.

<b>HIGHLIGHTS OF R2RW GREEN EXPO BOOTH</b>	
<b>Ridge to Reef</b>	<b>GRWMC</b>
1. Banner/header	1. Overall banner ( <b><i>The Great River Watershed Management Committee – Making the Great River “Great” Again....</i></b> )
2. Maps of both watersheds	2. Persons/agencies involved in the GRWMC
3. Posters showing the project's main components	3. What is a local watershed management committee
4. Fact sheets on the project	4. Functions of the LWMC in the GRWMC
5. Fact sheet on what is a ‘watershed’	5. Pictures of GRWMC meetings
6. Copies of the newsletter	6. Pictures touring the watershed across the top of the booth
7. The Grant Fund Brochure	



HIGHLIGHTS OF R2RW GREEN EXPO BOOTH	
Ridge to Reef	GRWMC
8. Special Studies Brochure.	7. GRW brochure
9. The relationship of the project to the SWB and NEPA	8. Posters depicting "greater production and sustainable livelihoods"
10. Main goals and objectives	9. Samples to share: Honey, Cocoa sticks, recycled tire mat
11. Approach to community involvement and stewardship	10. Posters depicting "through greater sanitation and water solutions that promote reducing, re-using and recycling"
12. Cross cutting issues – public awareness, gender	11. <i>Model:</i> water harvesting, wetland and recycling model (3X2 feet)
13. The team	12. Posters depicting "through greater involvement of communities in compliance and enforcement" <b>Slogan/message:</b> Environmental Laws Protect Our Rights!
14. USAID SO2 objectives	13. <b>Posters depicting Positive things that communities can do</b>
15. Interactive power point "Tree Graphic" of the Project	14. Posters depicting "through greater understanding of watershed issues and solutions"
	15. Posters on theme" through greater practice of environmental stewardship"

### 6.2.3 Great River Watershed

The GRWMC was very active during the period. The full GRWMC held its four quarterly meetings as scheduled, and an Executive Committee consisting of the Chairman, Vice Chairman, Secretary, and the heads of each of the task forces was formed and met regularly.

#### 6.2.3.1 Long-Term Vision

A series of community mobilization workshops were that helped to refine the long-term vision for the Great River Watershed. The evolving vision combines economically viable communities that are engaged in the active stewardship of their own communities. The new vision needs to be formally adopted by the GRWMC.

#### 6.2.3.1 Secretariat

Progress was made on establishing a self-sustaining secretariat function for the GRWMC through the election of officers, and the provision of office equipment to facilitate the taking of minutes, and the distribution of important communications.

Mechanism were established in both the GRW and the RGW to reimburse community members for travel related costs is association with attendance at quarterly meetings of the WMC or its task forces.

6.2.3.2 Documenting progress

The R2RW project has facilitated the dissemination of information through the widespread printing and dissemination of key reports on the project progress to the many stakeholders in the GRW.

6.2.3.3 Working intensely with the Task Forces to assess community priorities and implement priority field projects

The task forces became active in working with communities to identify local priorities, and how to address those priorities in a systematic manner that engaged the government agencies necessary for their resolution.

**6.2.4 Rio Grande Watershed**

Work began in the Rio Grande watershed in February 2002. The process of the formation of the RGWMC benefited from the work of the R2RW Project in the Great River and by the ground work laid by the ENACT Project to develop the Portland Parish Development Committee and the Local Sustainable Development Planning process. In addition, the CWIP Project implemented field projects in the coastal area around Port Antonio. R2RW needs to build on and expand programs wherever possible. Specific activities to enhance coordination include:

6.2.4.1 Identifying all relevant stakeholders

Done. See Section 4.2.1

6.2.4.2 Organize and facilitate a Strategic Action Planning Workshop

Done. See Section 4.2.4.

6.2.4.3 Identifying the relationship between the Portland PDC and the RGWMC, and articulating strategies to maximize the efficiency and minimize the limited time that participants can devote.

A MOU was developed, discussed, and agreed to between the R2RW, the RGWMC, and the Portland PDC.

<b>MOU: PORTLAND PDC; RGWMC, AND R2RW</b>	
<b>The Portland Parish Development Committee agrees to:</b>	<b>The Rio Grande Watershed Management Committee (RGWMC) agrees to:</b>
1) Establish a Sub-Committee, reporting to its Executive Committee as the major point of contact with the R2RW Project	1) In addition to its mandate under NEPA, become a Sub-Committee of the Portland PDC,
2) Appoint a representative or representatives to the RGWMC,	2) Work with CBOs, CDCs, and other Local Committees in the Development Areas for the Rio Grande, and Urban Port Antonio,
3) Receive, consider, and provide feedback on reports submitted to the Executive	3) Review and recommend for approval grants

<b>MOU: PORTLAND PDC; RGWMC, AND R2RW</b>	
<b>The Portland Parish Development Committee agrees to:</b>	<b>The Rio Grande Watershed Management Committee (RGWMC) agrees to:</b>
Committee, and General Meetings of the PDC, 4) Provide access to information, personnel, and facilities that would enhance the effective implementation of the project, 5) Liaison and coordinate with the RGWMC on the provision of administrative and secretarial support, 6) Establish other mechanisms where necessary to consider thematic, geographical, and other issues of mutual interest to all parties	to be undertaken by R2RW Project, 4) Establish the necessary Task Forces to undertake its mandate as a Watershed Management Committee. 5) Establish the necessary Secretariat support to undertake its mandate, 6) Fulfill all reporting requirements on a timely basis,
<b>The Ridge to Reef Watershed (R2RW) Project agrees to:</b>	
1) Participate in all agreed meetings, 2) Provide and assist with technical, financial, secretarial, and training resources, 3) Provide regular reports to the RGWMC and the PDC 4) Encourage Community, Private Sector, Civil Society, and State Agency participation in activities 5) Reimburse Community Members (through the SDC) for travel when they attend meetings 6) Provide grants, support special studies, strengthen organization/s capacity, and support other activities that fits in with R2W activities	

6.2.4.4 Participate in NEPA led coordination efforts for the Rio Grande

One formal meeting on this matter was held. Key branches and divisions within NEPA were brought together with representatives of the R2RW, CWIP and ENACT under the leadership of the Policy, Planning and Projects Coordination Division of NEPA. R2RW also participated in several Portland PDC meetings where the subject of project activities was discussed.

**6.3 Public Awareness**

Activity	Institutional Strengthening Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
<b>6.3</b>	<b>Public Awareness</b>					
<b>6.3.1</b>	<b>Project launch</b>					
6.3.1.1	Work with NEPA's Public Education and Outreach Dept.	x				Done. Launch held in January in the GRW.
6.3.1.2	Prepare press kits on R2RW for relevant media representatives	x				Completed

Activity	Institutional Strengthening Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
6.3.1.3	Preparation of a series of short news feature articles	x				Completed with assistance of STTA.
<b>6.3.2</b>	<b>Regular Press Releases</b>					
6.3.2.1	Issue press releases twice quarterly on R2RW activities	x	x	x	x	A total of twelve news releases have been developed, approved and distributed through appropriate media channels. Eight radio interviews have been conducted as a result of the releases.
6.3.2.2	Work with the JIS to receive regular coverage of its events	x	x	x	x	This has not been happening directly. JIS has facilitated coverage of events organized by STTA when contracted.
<b>6.3.3</b>	<b>R2RW Newsletter</b>					
6.3.3.1	Expand distribution of newsletters nationally and in Portland		x			Completed. 500 copies of the newsletter are now produced quarterly.
6.3.3.2	Electronic version of newsletter to be on the R2RW web site			x		The newsletter will be a link on the website when it is on-line.
6.3.3.3	If warranted, improve printing quality of the newsletter		x	x		Completed. A new design has been developed and it is now printed at Lithographic printers.
6.3.3.4	Editorial mechanism will be in place to ensure professionalism	x				Done. Topics are identified. R2RW project assistant solicits first draft of articles/stories to be included. PAPAS reworks articles and mock-up design is produced then edited for submission to USAID for final approval and revisions. Final electronic version is then given in for printing.
<b>6.3.4</b>	<b>Other National P.A. Activities</b>					
6.3.4.1	Creation of R2RW website	x				Completed. In July 2002.
6.3.4.2	With JAMAL, develop creative adult education material		x			Notes for JAMAL teachers will be prepared as part of the production of the public awareness kits so that the material can be used in JAMAL classes.

Activity	Institutional Strengthening Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
6.3.4.3	Make NWC water purification video more Jamaican friendly			x		This activity was not pursued, but a new activity dealing with a more holistic approach to water and sanitation public awareness is being developed.
6.3.4.4	Sponsor a competition for a new Watershed mascot	x				Competition sponsored. Activity closed.

In addition to the project launch that was held in January, the most important public awareness activity that has taken place at the national level was the workshop held in September to review the findings of the Knowledge, Attitudes and Practices (KAP) survey. The workshop brought more than 50 persons together from many different state agencies and different watershed areas, to work together on developing a three public awareness strategy to enhance public awareness for sustainable watershed management. A draft strategy and workshop report has been prepared and will be shared with participants for further input in the next quarter so that a strategy can be finalized.

### **6.3.1 Project Launch**

#### 6.3.1.1 Close collaboration with NEPA's Public Education Outreach Department

Through the Public Education and Outreach Department there has been good coordination in the planning for all national level activities and should be continued in further public awareness activities.

#### 6.3.1.2 Preparation of a press kit on the R2RW project for distribution to relevant media representatives

Completed.

#### 6.3.1.3 Preparation of a series of short news feature articles

A series of press releases were completed and published with the assistance of a public relations firm, but the topics varied somewhat from what was originally proposed.

### **6.3.2 Regular Press Releases**

The project had proposed to issue two news releases every quarter on current activities. The following news releases were published on the following topics:

- Ceremonial tree planting marks watershed project launch (Observer, January 28<sup>th</sup>).
- The formation of the Rio Grande Watershed Committee (Observer, September 23<sup>rd</sup>)
- Project to sustain watershed management launched (Gleaner, January 22<sup>nd</sup>).
- Old African tradition revived in Shettlewood (Gleaner, June 17<sup>th</sup>).
- The Dwarf Orchard-tree crop project in the Great River Watershed (Gleaner, August 24<sup>th</sup>)
- The Improved Livestock (Goat Project) in the Great River Watershed.
- The Haughton Grove Community Clean-up (Western Mirror, June)
- The Shettlewood Navel String-tree Planting activity (Observer, June 17<sup>th</sup>)
- Improved Sanitation Facilities at the Retrieve All-Age School (Observer, August 12<sup>th</sup>)

- Community mobilization in the RGW (Observer, August 5<sup>th</sup>)
- MOU signed with the PDC, RGWMC and R2RW

Further releases are being developed to publicize the following activities:

- Popular materials for compliance and enforcement;
- The Pisgah water harvesting project;
- Plant-A-Tree Campaign/launch for the GRW;
- And other activities.

<b>Radio Interviews – January to September 2002</b>	
▪ Wednesday, January 30 <sup>th</sup>	KLAS – 15 Minutes focus on Agriculture
▪ Tuesday, June 4 <sup>th</sup>	Power 106 – 10 Minutes with Ronnie Twaites – general R2RW progress
▪ Sunday, June 9 <sup>th</sup>	Power 106 – live broadcast from Green Expo
▪ June 9 <sup>th</sup> – 16 <sup>th</sup>	Power 106 spot announcements (10)
▪ Friday, August 2 <sup>nd</sup>	Power 106 – 10 minutes with Garnet Roper on the Retrieve Grant
▪ Thursday, August 8 <sup>th</sup>	Power 106 – 10 minutes with Garnet Roper on the RGWMC
▪ Monday, August 26 <sup>th</sup>	JIS Radio – Mention and interview excerpts
▪ Sunday, September 1 <sup>st</sup>	KLAS – Financially Speaking with Errol Gregory

Other releases were prepared, but not published.

The project has also been noted a number of times through the Observer’s “Green Thumb” and Eco-news column. In addition, coverage of the Retrieve grant was carried on TVJ and CVM. Finally, the video on the Project launch was run repeatedly on local cable television stations from January to March 2002.

6.3.2.1 Issue press releases twice a quarter on current activities being undertaken under R2RW

Regular news releases are now being issued and a total of 12 have been published this year as described above.

6.3.2.2 Work with the JIS regional offices to receive regular coverage of its events through JIS Radio and TV time slots

The project has not worked directly with JIS, but has received coverage and publicity from JIS TV and radio. The JIS produced a video of the project’s launch in January. Mark Nolan (COP) has also been interviewed by JIS radio ... times. JIS also covered the KAP survey workshop in September and aired TV segment as part of the nightly news. In the Great River watershed, JIS is now being approached to air the video that was completed by the Public Awareness Task Force and it is hoped that it will also be aired nationally.

### **6.3.3 R2RW Newsletter**

The project has greatly enhanced the quality of its newsletter in the past year. A new two-color design and masthead were developed. Three issues have been completed and the fourth is now being finalized for the printers. The newsletter now features:

- A partner profile story on one of the strategic partners that the project is working with.
- Regular reports from the Task Forces in each Watershed.
- Interesting facts/stories from each watershed.
- Other relevant items.

#### 6.3.3.1 In Year 2, the distribution of the newsletter will be widened with the extension of the project into Portland

This has been achieved and will continue to expand. The newsletter is being sent out to a mailing list of 345 individuals, and the balance are distributed at regular Project meetings.

#### 6.3.3.2 An electronic version of the newsletter will also be made available through the NEPA website and other relevant network sites

In progress.

#### 6.3.3.3 Newsletter production

The newsletter is now printed professionally through Lithographic printers. There have been some challenges, as the ASC and R2RW have only IBM-PC computer capabilities and most of the media houses use Quark Express and MAC systems. Lithographics has been best able to accommodate the Microsoft Publisher version that the project produces.

#### 6.3.3.4 An editorial mechanism will also be put in place to ensure that the newsletter is professionally executed

The editorial mechanism has been working well this past year. Different team members make different contributions to relevant articles, and these are then edited and revised by PAPAS who then makes an initial “mock-up” of the newsletter. This first draft is then reviewed first in-house by the Project Assistant and other team members and changes are incorporated by PAPAS before it then goes to the ASC to be put into a publisher format. At this point it is then shared with the clients for feedback. Once their changes and suggestions are reviewed and incorporated, the newsletter is the reformatted by ASC before going to the printers.

### **6.3.4 Other National PA Activities**

As was acknowledged in the previous work plan, in addition to its own national and watershed level activities, there are also opportunities and ways for R2RW to collaborate with wider public awareness activities as follows:

#### 6.3.4.1 Creation of a R2RW website to disseminate information on the Project

The R2RW Website can be seen at R2RW-JM.ORG. A mechanism has been put in place to regularly update the website.

6.3.4.2 Work with JAMAL to develop creative adult education materials that can be used in their adult literacy program

This activity is now being incorporated into the activity of producing the public awareness kits for NEPA officers and community leaders. The kits will contain a great deal of useful information and materials, and special sheets are being prepared for JAMAL teachers and students so that the material can also be used in JAMAL classes.

6.3.4.3 The NWC water purification video will be reproduced to be more appropriate for Jamaican audiences

A draft proposal was submitted to the project, but was considered too broad for R2RW to support. The NWC is now working with members of the Public Awareness Task Force in the GRW to develop a more localized watershed public awareness program that will deal more broadly with water and sanitation issues.

6.3.4.4 Watershed Mascot Competition

This activity has been closed. No final winner was selected by NEPA, but the entrants did receive letters acknowledging their participation in the competition. Since the close of this activity, however, the GRWMC has expressed interest in reviewing the entrants that were submitted with the possibility of developing its own watershed mascot.

**6.4 Incorporating Gender Considerations**

Activity	Institutional Strengthening Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
<b>6.4</b>	<b>Incorporating gender considerations</b>					
6.4.1	Gender checklist for all sub-project activities	x				Checklist is being used and will be revised with input from stakeholders in both watersheds. Input from the RGW stakeholders is still needed and will be received in November 2002.
6.4.2	Host forum within NEPA to review and amend checklist			x		Still to happen. This will now take place in year 3.
6.4.3	Sensitize SWB staff to principles of gender equity		x			This is taking place as gender mainstreaming principles are introduced to both of the local watershed management committees where the project is working. SWB staff in both watersheds are participating in the initial gender training sessions for the local management committees.

Some initial gender training sessions have taken place in both watershed areas and there is now a better level of comfort with, and understanding of, "gender equity" principles as they apply to the R2RW project.



**6.4.1 The finalization of gender checklist for all sub-project activities and proposal preparation**

To date, PAPAS has been using the gender checklist in reviewing project activities. However, the Grant Fund application form is also now being revised to include gender equity considerations so that community-based activities will also address some basic gender equity issues (such as timing of meetings to accommodate all members, ensuring that training is gender sensitive, and so forth). The checklist as it now stands, is really quite detailed and a bit too long for most local committees and community members. As a result, a simplified list of basic gender indicators for each project should be determined on a case-by-case basis as appropriate for different project. The overall gender checklist is more appropriate for R2RW’s own reporting purposes.

**6.4.2 Hosting of a forum within NEPA to review the checklist and to determine effective ways to use it as a tool for regular reporting of project activities to NEPA**

This has not proceeded, as consensus for this effort is still required.

**6.4.3 Sensitization of SWB staff to principles of gender equity**

The Manager of the SWB along with Environmental Officers in both watersheds where R2RW is working, have participated in initial gender training sessions.

**6.5 Lobbying and Advocacy**

Activity	Institutional Strengthening Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
<b>6.5</b>	<b>Lobbying and Advocacy</b>					
6.5.1	Document Jamaican experiences in lobbying/advocacy	x				Not yet done – new strategy developed, and being pursued.
6.5.2	Identify factors and methods needed for effective advocacy		x			SOW developed, but STTA did not complete assignment. An Internet Review completed by the Team
6.5.3	Assess the capacity of local NGOs/CBOs in advocacy practices	x	x			A new strategy –drawing on work already done by CWIP - developed, and implementation commenced.
6.5.4	Prepare material and training courses in GRW and RGW		x			Not yet done
6.5.5	Conduct national training workshop			x		Not yet done

A contract for the development of a “Lobbying and Advocacy” curricula along with case studies for how to proceed has been issued. The activity has been slowed by the fact that the consultant has experienced family health problems. Whether or not the consultant will be able to complete the assignment will need to be reviewed. Additionally, the timeliness of doing lobbying and advocacy is also under review because CWIP has undertaken advocacy/lobbying training in

Portland. Therefore, the exact area that R2RW can contribute needs to be reevaluated as the process has started to some degree in at least one watershed.

**6.5.1 Document Jamaican experiences in lobbying and advocacy**

This activity was started but was delayed to the limitations of the consultant.

**6.5.2 Identify the factors and methods needed for effective advocacy in Jamaica**

This activity was started but has been delayed to the limitations of the consultant.

**6.5.3 Assess the capacity of local organizations in advocacy practices**

To be done in the next reporting period

**6.5.4 Prepare training materials and conduct training courses in the GRW and the RGW**

To be done in the next reporting period.

**6.5.5 Advocacy Training Workshop**

The plan was to a national level training workshop to review lessons learned, and expand awareness of lobbying and advocacy as an effective tool in environmental management. This activity is scheduled for the next reporting period.

**6.6 Special Studies**

Activity	Institutional Strengthening Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
<b>6.6</b>	<b>Special Studies</b>					
6.6.1	Use special studies to highlight environmental issues		x		x	Flyer developed and approved by PIC
6.6.2	Follow up with implications of Governance & WM study	x				2 workshops held with legal professionals
6.6.3	Design pamphlet on special studies for key institutions UTECH etc.	x				Completed

The R2RW project administers a small technical assistance program, which provides financial support for NEPA and other stake-holders (involved in sustainable watershed management) to conduct Special Studies that provide information essential to environmental decision making at local, regional and national levels. These Special Studies foster the objective of coordinated watershed management by facilitating informed and timely decision-making with respect to controversial and complex environmental and development issues.

The following specific activities are envisioned:

### **6.6.1 Use of special studies to bring rigorous attention to issues of special concern**

Various ideas were proposed by the GRWMC for special studies including the impact of sand mining, the causes of fish kills, and the economics of timber production. However, no actual studies commenced.

### **6.6.2 Follow-up with the implications of the Governance Study**

A workshop was held with environmental legal personnel in October 2001 to study the implications of the governance study conducted in February 2001.

### **6.6.3 Design a pamphlet**

A two-page flyer was designed and printed to announce the availability of fund for special studies.

## **Selected Aspects of Special Studies Program**

### ***Types of Special Studies***

Studies concerned with impacts or trends in watershed management, including (but not limited to) Studies that will bring scientific rigor to complex issues of balancing economic development with conservation of natural resources such as:

- Resource extraction;
- Water quality improvement
- Soil conservation;
- Roadside stabilization;
- Land use planning and management

### ***Special Studies Applications should include:***

1. A brief project description;
2. Purpose of the special study;
3. What specifically will be done;
4. Expected impact or result;
5. Relevance to the selection policy criteria
6. Implementation timeframe;
7. Description of technical assistance required;
8. A description of the applicant;
9. Monitoring and impact assessment;
10. Contact information; and
11. Cost (estimated contributions of applicant/ beneficiary) & R2RW.

### ***Selection Criteria***

1. The extent to which the proposal addresses priority management decisions affecting communities in the targeted watersheds;
2. Whether the proposal focuses on resources of greatest risk or concern such as water quality or mining;
3. The extent to which the proposal allows for the establishment of sound financial bases for private or public operation of environmental services, user fee for publicly owned resources and incentives to encourage desirable private sector environmental initiatives;

4. Whether the proposal seeks to refine or develop environmental policy or legislation that promotes sustainable watershed management;
5. Whether the proposed activity will provide input to influence development planning/policy and building practices;
6. Whether the study seeks to determine appropriate standards for treatment and management of solid and liquid wastes; and
7. Demonstrated management and technical capacities of the proposed researcher  
The degree of stakeholder interest in the outcome (controversial and complex issues).

## **6.7 Issues and Resolutions**

### ***Issue:***

The issue identified by Dr. Kenneth Ellison in his "*Governance and Watershed Management*" Report of February 2001, regarding the relationship between LWMCs, LFMCs, and other mechanisms such as the Parish Development Committees (PDCs), Development Areas, and Community Development Committees (CDCs) need to be examined. This is of particular importance for Portland where several initiatives are already at work.

### ***Resolution:***

A short term technical assistance contract will be developed to review all the processes that involve local planning on a geographical and sector basis, and to bring all the relevant agencies together to review the findings in a workshop format.

### ***Issue:***

Several divisions and departments of NEPA impact on watershed management activities. These include SWB, Compliance and Regional Services, Planning, and Legal Services, Public Education, and EWS. In addition, several other state agencies play a key role in watershed management including Forestry Department, National Water Commission, the Rural Agricultural Development Authority and the Water Resources Authority. A mechanism for effective coordination is needed.

### ***Resolution:***

Effective coordination is needed by an agency or entity with the resources and mandate to lead coordination efforts. In the absence of a mandate to coordinate, or resources to support that coordination, present fragmented approaches are likely to continue.

## **6.8 Analysis of Activities by Percentage of Planned Activities Completed**

The Table below highlights the estimated percentage of planned activities completed for the period under review.

### Percentage of Planned Activities Completed

#	Activities	Estimated % Completed	Comments
6.1	Capacity Building of the Sustainable Watershed Branch	80%	More emphasis on training needed
6.2	Enhancing Coordination	95%	Active work with NIWMC
6.3	Public Awareness	100%	Many public awareness activities are taking place including regular newsletters, press releases, and comprehensive KAP survey
6.4	Incorporating Gender Considerations	40%	Checklist has been produced, is being tested and revised.
6.5	Lobbying and Advocacy	60%	Slow start on this activity, but strategy now being re-worked to integrate experiences of CWIP in this area
6.6	Special Studies	90%	Brochure developed

## 7. Project Management

### 7.1 Grant Fund Management

Activity	Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
<b>7.1</b>	<b>Grant Management Program</b>					
7.1.1	Participate in CWIP review of grant program	x				Review held in June 2002
7.1.2	Develop and issue criteria for grant selection	x				Completed
7.1.3	Develop grant program manual		x			Manual, brochure, simple application form and standard provisions developed
7.1.4	Update inventory of grant program available		x			Completed in Grant Program Plan
7.1.5	Examine how the "Lift up Jamaica" program can help in planting of trees			x		Not pursued

A grants management consultant worked in February to develop a Grant Program Plan and handbook that addresses the special needs of R2RW. The Grant Program Plan developed conforms to requirements and guidance of USAID in the R2RW Contract No. 532-C-00-00-00235-00. Further, the Plan is in compliance with USAID and ARD regulations and policies related to all proposed grants mechanisms including simplified grant, fixed obligation grant, and standard grant formats.

The grant program will provide funds to Jamaican organizations that are identified as Community-Based Organizations (CBOs), Non-Government Organizations (NGOs), and non-profit Private Sector Organizations (PSOs).

The types of organizations funded will be categorized into two Stages:

- Stage One organizations will be organizations that will receive funding under a simplified agreement format, similar to USAID's Special Development Activity Program, and receive organizational and technical support through R2RW to fulfill the objectives of the grant activity while respecting most of the USAID provisions found under the more ambitious Fixed Obligation grant agreement format. These organizations will be eligible for grants of up to US\$15k.
- Stage Two organizations will be organizations that are more capable of managing grant funds and project activities. These organizations will be subject to all of the pre-award and post-award requirements as stipulated by USAID provisions under a Fixed Obligation grant agreement format. The minimal criteria for achieving Stage Two status will be 1) being an officially registered entity with the Government of Jamaica, and 2) a documented history of having successfully managed significant development initiatives in the recent past. These organizations will be eligible for grants of up to and over US\$15k.

The types of potential initiatives to be funded will conform as closely as possible to local Community priorities as reflected through the Watershed Management Committee, including, but not limited to:

- Improvement of the quality of key natural resources in selected areas that are both environmentally and economically significant;
- Generation of employment and or business opportunities within low-income communities through environmental initiatives; and
- Improvement of local environmental conditions linked to watershed quality.

The specific activities in the Work Plan were as follows:

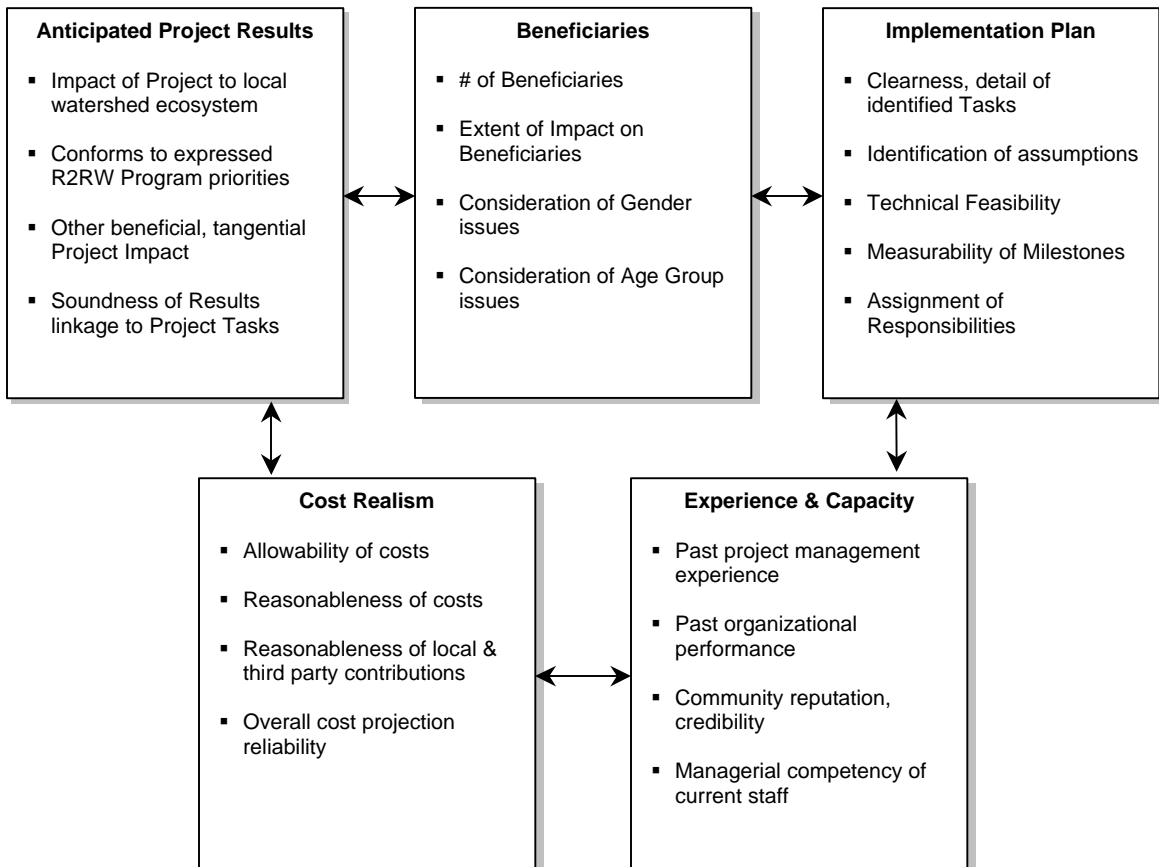
**7.1.1 Participate in CWIP review of its grant management program**

This activity was postponed, but extensive consultation with CWIP personnel took place in the design of the R2RW Grant Program.

**7.1.2 Develop and issue criteria for grant selection**

The criteria for selection are presented in the following table:

**Criteria for R2RW Grant Selection**



The relative weights of the criteria will be different for the Stage One and Stage Two Grants. The principle difference will be that greater weight will be given to anticipated project results for the Stage One grants, while greater weight will be placed upon experience for the Stage Two grants.

**7.1.3 Develop a grant program manual**

A grantee program manual that outlines the purpose of the grants program, assists grantees to fill out applications, and addresses financial and administrative issues has been developed.

**7.1.4 Update the inventory of grant programs**

As part of the Grant Program manual, an update was done of current grant initiatives such as the EFJ and JSIF.

**7.1.5 Examine how Government initiatives such as the “Lift-Up Jamaica” program could be used to assist in the planting of the trees**

This activity was not carried out.

**7.2 Staffing**

Activity	Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
7.2	<b>Staffing</b>					
7.2.1	Implement recommendations from Staffing Functions Assessment	x				Done. Project Assistant hired, WMS on part time,
7.2.2	Implement system to ensure timely editing of documents	x	x			Being done by the Project Assistant

A Staffing Functions Assessment was completed in November 2001 through a consultancy by Ms. Cordia Thompson. The results were reviewed by the Project Implementation Committee and recommended changes approved. The recommended modifications included the following:

- R2RW hire a Project Assistant to provide technical and administrative assistance to the Chief of Party (COP);
- The position of Watershed Management Specialist be converted to a six month renewable contract with specific outputs;
- A Sanitation Management Specialist be retained on a consultant basis to provide greater focus on sanitation issues; and
- The Administrative Assistant from the Administrative Support Center be regularized in the R2RW staffing structure.

The following specific activities are envisioned during the year:

**7.2.1 Implement recommendations from Staffing Function Assessment**

All of the recommendations coming from the above report were implemented.



The Watershed Management Specialist retired at the end of the reporting period, and the position was advertised in the local media. Five applicants were interviewed in September 2002, and the decision was taken to hire Mr. Hugh Graham for the position. In addition, some of the field and direct production responsibilities were spun off into a new position of Agronomic Specialist. Mr. Joseph Suah was selected for this new position.

### 7.2.3 Publication review and editing

A suitably qualified Project Assistant was hired to ensure the timely editing and review of all R2RW publications, brochures, reports, minutes etc.

## 7.3 Management Arrangements

Activity	Activity Description	Timing				Update
		Q1	Q2	Q3	Q4	
<b>7.3</b>	<b>Management Arrangements</b>					
7.3.1	Project Team Meetings	x	x	x	x	Held on monthly basis
7.3.2	Project Implementation Committee	x	x	x	x	Held on monthly basis
7.3.3	Interagency Steering Committee	x		x		One meeting held during year
7.3.4	Coordination with CWIP and the ASC	x	x	x	x	Weekly Senior Management meetings held
7.3.5	Close monitoring of the CWIP close-out	x	x	x	x	Done. Six month extension granted to June 2003

A series of Management Committees that was established during year 1 continued to meet regularly to ensure the smooth coordination and communication of activities of the R2RW within the team, NEPA, CWIP, the ASC and with other government agencies. The continued active participation in these mechanisms will be key to ensure that management issues are addressed in a rapid and efficient manner.

Due to the growth of the Project staff, the need for additional space, and the limitations of office space at NEPA, the decision was taken to re-locate the offices of the R2RW program from 10 Caledonia Ave to 5 Oxford Park Ave. The new offices are co-located with the CWIP Project and the Administrative Support Center, and the move works to facilitate close coordination on programmatic and administrative issues. The downside of the move is that the R2RW is no longer co-located with the Sustainable Watershed Branch of NEPA, and this separation hinders close coordination, formal and informal communication, and mentoring opportunities.

The close out of the CWIP Project will impact upon the staffing requirements for the Administrative Support Center. A close out plan has been prepared and agreed to by the NEPA and USAID. The implementation of this plan will be delayed if a CWIP extension is granted. The specific summary of the management arrangements planned in the Second Annual Work Plan is as follows:

### **7.3.1 Project Team Meetings**

The core R2RW technical team meets on a monthly basis to assess recent project activities, and plan for upcoming activities. Representatives from NEPA and USAID are also invited to these meetings, and attend if possible.

### **7.3.2 Project Implementation Committee**

The PIC meets the first Wednesday of every month to update the clients on project progress, address issues that need approval or resolution, incorporate client concerns into project implementation and to provide overall project management guidance. PIC meetings include the USAID Project Management Specialist, the Director of the Conservation Division of NEPA, Manager of the SWB/NEPA, the Projects Manager from PPPCD/NEPA, and the R2RW COP.

### **7.3.3 Interagency Steering Committee**

The Inter-Agency Steering Committee consists of a broad membership of the wider GOJ agencies impacting on watershed management including the NEPA, the Forestry Department, the Ministry of Agriculture, Ministry of Health, National Water Commission, Ministry of Health and Ministry of Tourism among others. The ISC met in March 2002 to review the Semi-Annual Report and Second Annual Work Plan.

### **7.3.4 Coordination with CWIP and the ASC**

Weekly meetings of the R2RW COP, the CWIP COP and the Director of Administration of the ASC continued over the reporting period. Topics covered during these meetings include logistical support requirements, administrative issues, staff coordination, financial updates, and project management concerns.

### **7.3.5 Close monitoring of the CWIP closeout plan**

The CWIP Project has been extended until June 2003. A Close out plan originally prepared in February 2002, was updated at the end of the reporting period. The plan covers the potential for equipment utilization, determine ASC support requirements for R2RW, and incorporation of CWIP programmatic initiatives into R2RW programs where possible. A proposed six-month CWIP extension will impact the timing of the close-out plan.

## 8. Performance Indicators

The R2RW Project contributed to the following USAID's SO2 Indicators established for the following Intermediate Results:

1. **IR 1 - Increased adoption of environmentally sound practices**, by commencing the Inventory of Targeted Regulations, and reviewing the Watershed Policy, for incorporating into the legal framework.
2. **IR 2 - Adoption of policies for improved Environmental Management**, through undertaking an Inventory of Targeted Regulations. This should provide a summary of all policies impacting on watershed management. The Review of the Watershed Policy is expected to assist NEPA to move the Green Paper, to a White Paper status. This should also assist.
3. **IR 2.1 - Effective promulgation and enforcement of environmental regulations**. The establishment of the Component 2 Advisory Committee, as well as implementing recommendations from the Consultant's Report on 'Governance and Watershed Management', would also assist in getting greater participation in the enforcement of environmental regulations.
4. **IR 2.2.1 - Increased capacity of key GoJ agencies**, benefited/will benefit from the Inventory of Targeted Regulations, the Review of the Watershed Policy, the establishment of the Component 2 Advisory Committee, and the undertaking, and follow-up actions on the Consultant's Report on 'Governance and Watershed Management'. In addition, the initiation of a training needs assessment, training events, and the procurement of needed field equipment help to strengthen the capacity of the SWB in watershed management.

It should be noted that the figures in the tables below are for the first half of the second year only.

## Contract Objective (CO) Indicators

### 8.1 Overall Project

PERFORMANCE INDICATOR	INDICATOR DEFINITION AND UNIT OF MEASURE	BASELINE DATA		PROJECT YEAR 1		PROJECT YEAR 2		COMMENTS	SUPPORT TO SO2
		Year	Value	Target	Value	Target	Value		
<b>Contract Objective: Natural resources under improved and sustainable management in identified watersheds</b>									
Percentage of land under sustainable management in targeted areas	<p><u>Sustainable Management:</u> Targeted appropriate practices and sustainable resource utilization principles applied</p> <p><u>Targeted Areas:</u> Geographic areas identified in work statement and prioritized for intervention following rapid reconnaissance and establishment of baseline data</p> <p><u>Unit:</u> Cumulative numerical</p>	2000	0	5	5	10	15	<p>19 Communities were targeted for project interventions. Of these, targeted appropriate practices and sustainable resource utilization principles were applied in 3 communities or 15% of the targeted area.</p> <ol style="list-style-type: none"> <li>1. Retrieve: sanitation systems and goat management projects</li> <li>2. Pisgah: sanitation project</li> <li>3. Catadupa: Tree planting activities</li> </ol>	SO2 Indicator

## 8.2 Component 1 Targets

PERFORMANCE INDICATOR	INDICATOR DEFINITION AND UNIT OF MEASURE	BASELINE DATA		PROJECT YEAR 1		PROJECT YEAR 2		COMMENTS	SUPPORT TO SO2
		Year	Value	Target	Value	Target	Value		
<b>Contract Result: Through targeted, sustainable environmental practices by resource users identified and promoted</b>									
Number of improved practices adopted by target populations	<p><u>Improved Practices Adopted:</u> Activities that improve environmental conditions and sustain resource base</p> <p><u>Unit:</u> Number of practices introduced that are applied and sustained by land managers. Cumulative numerical</p>	2000	0	2	4	6	6	<p>Practices were introduced to date. These are:</p> <ol style="list-style-type: none"> <li>1. Dwarf June plum</li> <li>2. Barbados cherries</li> <li>3. New varieties of bananas and plantains</li> <li>4. Constructed wetlands for purifying septic effluents</li> <li>5. Macuuna seeds for leguminous ground cover</li> <li>6. Intensive goat management systems</li> </ol>	IR 1
Number of organizations demonstrating tangible results to beneficiaries in the field	<p><u>Organization:</u> formalized group operating in the field</p> <p><u>Results:</u> Provision of technical, program and financial services</p> <p><u>Unit:</u> Cumulative numerical</p>	2000	0	1	2	3	5	<ol style="list-style-type: none"> <li>1. Sanitation Support Unit with demonstration project in Retrieve</li> <li>2. RADA with new crop technologies.</li> <li>3. JAS with marketing projects</li> <li>4. Goat Breeders Association with new goat management systems</li> <li>5. Farmer training by JOAM in organic farming</li> </ol>	IR 1.1

PERFORMANCE INDICATOR	INDICATOR DEFINITION AND UNIT OF MEASURE	BASELINE DATA		PROJECT YEAR 1		PROJECT YEAR 2		COMMENTS	SUPPORT TO SO2
		Year	Value	Target	Value	Target	Value		
<b>Contract Result: Through targeted, sustainable environmental practices by resource users identified and promoted (cont'd)</b>									
Number of Private Sector entities practicing or supporting environmentally friendly practices	<u>Private Sector</u> : Profit-making entities whether small, medium or large  <u>Unit</u> : cumulative numerical	2000	0	2	2	4	3	Work was done with 3 entities: <input type="checkbox"/> Farmers in Catadupa, <input type="checkbox"/> Farmers in Duckets. <input type="checkbox"/> Goat Breeders Association	IR 1 IR 1.2

### 8.3 Component 2 Targets

PERFORMANCE INDICATOR	INDICATOR DEFINITION AND UNIT OF MEASURE	BASELINE DATA		PROJECT YEAR 1		PROJECT YEAR 2		COMMENTS	SUPPORT TO SO2
		Year	Value	Target	Value	Target	Value		
<b>Component 2 Result: Incentives for and obstacles to enforcement of targeted environmental regulations identified and solutions supported</b>									
Number of new or revised regulations and policies drafted/developed	<u>New or revised regulations and policies</u> : Regulations and policies developed that promote sustainable environmental practices.  <u>Unit</u> : Cumulative numerical	2000	0	0	1	1	1	The target of <b>one</b> new or revised regulation and policy for years 1 and 2 was met with the Draft Watershed Policy reviewed in year 1. The expected movement of the Watershed Policy Green Paper to a White Paper and on to going through the legislative process did not materialize. A number of omissions have been identified during this period of delay. These are currently being addressed, before re-submission of the Green Paper. It is expected that a revision of the Watershed Protection Act will follow the updated Watershed Policy in Year 3.	IR 2 IR 2.1

PERFORMANCE INDICATOR	INDICATOR DEFINITION AND UNIT OF MEASURE	BASELINE DATA		PROJECT YEAR 1		PROJECT YEAR 2		COMMENTS	SUPPORT TO SO2
		Year	Value	Target	Value	Target	Value		
<b>Component 2 Result: Incentives for and obstacles to enforcement of targeted environmental regulations identified and solutions supported (cont'd)</b>									
Number of incentives in place to support compliance with and enforcement of environmental regulations	<u>Incentives:</u> payment or concessions in place promoting sustainable environmental practices and resource use  <u>Unit:</u> Cumulative numerical	2000	0	2	0	4	0	<p>No incentives were initiated in Year 1 or 2 to support compliance with and enforcement of environmental regulations, thus falling behind by the expected <b>four</b> to date. This was mainly because there was no consensus among the key stakeholders on how to proceed. A SOW has since been developed, and is being implemented, incorporating changes in concept agreed on by key stakeholders. Two STTAs are currently finalizing a Report - <b>review and recommend incentives that will encourage private sector investment in watershed management.</b> This will be followed by a National Workshop to prioritize these incentives. The incentives will be implemented nationally and in the two selected watersheds, and should achieve the cumulative Year 3 target of <b>six</b>.</p>	IR 1.2 IR 2.1

PERFORMANCE INDICATOR	INDICATOR DEFINITION AND UNIT OF MEASURE	BASELINE DATA		PROJECT YEAR 1		PROJECT YEAR 2		COMMENTS	SUPPORT TO SO2
		Year	Value	Target	Value	Target	Value		
<b>Component 2 Result: Incentives for and obstacles to enforcement of targeted environmental regulations identified and solutions supported</b>									
Increased compliance and enforcement of environmental regulations in targeted areas	<u>Increase Compliance and Enforcement:</u> Number of activities designed to increase knowledge and understanding of environmental laws  <u>Unit:</u> cumulative total	2000	0	2	3	5	8	<p><b>Eight</b> activities undertaken, against the projected <b>five</b>, to increase knowledge and understanding of environmental laws, as per adjusted definition in October 2001 – March 2002 Semi Annual Report. These are:</p> <ol style="list-style-type: none"> <li><b>Study</b> of Policy and Legislative Framework,</li> <li><b>Meeting/Workshop of GRW Task Force</b> to review draft Policy and Legislative Framework,</li> <li><b>Meeting of Legal and Policy Experts</b> to review draft Policy and Legislative Framework,</li> <li>Joint input of ENACT and R2R into the <b>preparation of a pocketsize field guide</b>, on Jamaica's environmental laws, geared towards supporting enforcement officers in the field,</li> <li>Input into the Portland Multi-Agency Group on C&amp;E, and lead-role in the <b>establishment of a Portland C&amp;E Task Force</b>,</li> <li><b>Four Meetings</b> of the GRWMC C&amp;E Task Force. Meetings are used as mini-workshops,</li> <li>Joint support by ENACT and R2R for a <b>3-Day "Training of Trainers Workshop"</b> for NEPA's staff,</li> <li>Three Focus Group Meetings (Kingston, Montego Bay, and Port Antonio), to review draft of a review of "Incentives to encourage Private Sector involvement in watershed management"</li> </ol> <p>Note: The definition was changed to quantify measurable activities</p>	IR 2 IR 2.1



### 8.4 Component 3

PERFORMANCE INDICATOR	INDICATOR DEFINITION AND UNIT OF MEASURE	BASELINE DATA		PROJECT YEAR 1		PROJECT YEAR 2		COMMENTS	SUPPORT TO SO2
		Year	Value	Target	Value	Target	Value		
<b>Component 3 Result: Capacity of Jamaican Government Agencies, International donors, and private-sector and civil society organizations to implement effective watershed management programs enhanced</b>									
No. of organizations participating in R2RW supported WM coordination activities	<p><u>Organization:</u> Group or institution</p> <p><u>Participating:</u> Acquiring and sharing information at the local or national level</p> <p><u>Unit:</u> Cumulative total</p>	2000	0	4	9	6	16	<ol style="list-style-type: none"> <li>1. Sustainable Watersheds Branch</li> <li>2. Min. of Land and Environment</li> <li>3. Rural Agricultural Dev. Authority</li> <li>4. Forestry Department</li> <li>5. National Water Commission</li> <li>6. Public Health Department</li> <li>7. Social Development Commission</li> <li>8. Sanitation Support Unit</li> <li>9. Montego Bay Marine Park</li> <li>10. Local Authorities (Parish Councils</li> <li>11. Water Resources Authority</li> <li>12. Sandals Hotel</li> <li>13. Round Hill Hotel</li> <li>14. Montpelier Citrus Company</li> <li>15. Portland Env. Protection Assoc.</li> <li>16. Valley Hikes</li> </ol>	IR 2 IR 2.2

## 8.5 Cross-Cutting Activities

PERFORMANCE INDICATOR	INDICATOR DEFINITION AND UNIT OF MEASURE	BASELINE DATA		PROJECT YEAR 1		PROJECT YEAR 2		COMMENTS	SUPPORT TO SO2
		Year	Value	Target	Value	Target	Value		
<b>Cross-Cutting Activities</b>									
<p><b>Gender Equity Strategy</b></p> <p>Number of partners implementing gender equity considerations</p>	<p><u>Gender Equity</u>: fairness and justice among men, women and special groups in accessing project benefits, participating in decision making and in undertaking project responsibilities</p> <p><u>Unit</u>: Numerical annual totals</p>	2000	0	1	1	6	3	<ol style="list-style-type: none"> <li>1. Gender training materials produced for the GRWMC</li> <li>2. Case study materials produced for gender training of the RGWMC</li> <li>3. Report of the Gender for the GRWMC</li> <li>4. Paper for the CWWA on R2RW's gender training approach</li> <li>5. Revision of the Grant Fund to include gender equity</li> <li>6. Report of Gender training of the RGWMC (to be completed in November)</li> <li>7. Overall gender report of project activities (to be completed after the training of the RGWMC – in progress).</li> <li>8. Draft checklist completed and in use</li> <li>9. Gender disaggregated data included in the KAP survey and is being used to guide the development of public awareness strategies.</li> </ol> <p>Note: Definition expanded to include “special groups” based upon stakeholders input.</p>	<p>IR 1</p> <p>IR 1.1</p> <p>IR 1.2</p>

PERFORMANCE INDICATOR	INDICATOR DEFINITION AND UNIT OF MEASURE	BASELINE DATA		PROJECT YEAR 1		PROJECT YEAR 2		COMMENTS	SUPPORT TO SO2
		Year	Value	Target	Value	Target	Value		
<b>Cross-Cutting Activities (cont'd)</b>									
<b>Grant Fund</b> Number and value of grants approved and implemented that promote adoption of sound environmental practices	<u>Environmental practices adopted:</u> activities that improve environmental conditions  <u>Unit:</u> Cumulative number and value (US\$ thousands)	2000	0	2 \$40	1 \$10	5 \$150	3 \$40	Grant Management Program designed and approved in May 2002  1. Sanitation demonstration projects in Retrieve  2. Water harvesting and waste water disposal at Retrieve All Age School  3. Water harvesting and waste water disposal at Pisgah School	S02
<b>Public Awareness</b> Number of public awareness activities conducted	<u>Public Awareness:</u> formal and non-formal education, information sessions, extension and environmental education  <u>Unit:</u> Numerical annual totals	2000	0	4	14	8	25	1. Tour of the GRW and launch. 2. Video training for PATF members in the GRW. 3. GRW video completed. 4. GRW PATF meetings held – 4. 5. Four newsletters produced. 6. Participation in Montpelier fair. 7. Participation in NEPA's Earth Day events. 8. Participation with NEPA in Green Expo. 9. Several posters and materials produced for Green expo 10. "Tree Graphic" Poster for R2RW.	IR 1

PERFORMANCE INDICATOR	INDICATOR DEFINITION AND UNIT OF MEASURE	BASELINE DATA		PROJECT YEAR 1		PROJECT YEAR 2		COMMENTS	SUPPORT TO SO2
		Year	Value	Target	Value	Target	Value		
								<ul style="list-style-type: none"> <li>11. GRW brochure.</li> <li>12. RGW brochure Training of SWB in presentation skills.</li> <li>13. Training in writing of effective press releases.</li> <li>14. 12 News releases produced.</li> <li>15. Audio/visual PowerPoint on project produced for Green expo.</li> <li>16. Participation in USAID's 40<sup>th</sup> anniversary.</li> <li>17. Participation in Denbigh show.</li> <li>18. RGW public awareness working group formalized.</li> <li>19. Mascot competition completed.</li> <li>20. KAP survey completed.</li> <li>21. KAP workshop held.</li> <li>22. STTA hired to design popular materials for C&amp;E</li> <li>23. Public Awareness kits for NEPA being developed.</li> <li>24. Stewardship/leadership training course being developed.</li> </ul>	

## 9. Semi-Annual Period Performance Benchmarks

This section provides an update of the performance benchmarks that were previously proposed for the second year of the R2RW Project.

### Component 1: Sustainable Environmental Practices

Performance Benchmark	Progress
<ul style="list-style-type: none"> <li>The GRWMC and its task forces are functioning smoothly and addressing priority issues in the GRW.</li> </ul>	Done. GRWMC and task forces meeting regularly and addressing priority issues
<ul style="list-style-type: none"> <li>3 projects implemented to address production and marketing issues identified by the task force.</li> </ul>	2 tree planting activities underway
<ul style="list-style-type: none"> <li>3 projects implemented to address water and sanitation issues identified by the task force.</li> </ul>	2 Demonstration projects of sanitation technology
<ul style="list-style-type: none"> <li>A program to enhance public awareness of priority issues implemented.</li> </ul>	Active, dynamic program on-going
<ul style="list-style-type: none"> <li>Gender considerations being incorporated into project initiatives.</li> </ul>	Gender checklist being utilized
<ul style="list-style-type: none"> <li>Rapid Rural Appraisal for the Rio Grande Watershed.</li> </ul>	Completed
<ul style="list-style-type: none"> <li>Strategic Action Planning Workshop in the Rio Grande Watershed held.</li> </ul>	Completed
<ul style="list-style-type: none"> <li>Rio Grande Watershed Management Committee formed.</li> </ul>	Not yet done

### Component 2: Compliance and Enforcement

Performance Benchmark	Progress
<ul style="list-style-type: none"> <li>Obstacles to compliance and enforcement identified and being addressed at both the community and national level.</li> </ul>	Obstacles identified
<ul style="list-style-type: none"> <li>Watershed Policy white paper submitted for adoption.</li> </ul>	Watershed policy still at Green Paper stage
<ul style="list-style-type: none"> <li>Amendments to Watershed Protection Act identified and incorporated.</li> </ul>	Not yet done
<ul style="list-style-type: none"> <li>Materials to inform public on environmental policies, rules and regulations are designed.</li> </ul>	Not yet done
<ul style="list-style-type: none"> <li>Compliance and enforcement issues being addressed by task forces in both the GRW and the RGW.</li> </ul>	GRW CEFT implementing action plan of priority issues

### Component 3: Institutional Strengthening

Performance Benchmark	Progress
<ul style="list-style-type: none"> <li>SWB Staff trained in 5 new skills as per training plan and are using these skills to improve watershed monitoring.</li> </ul>	Training conducted in Effective writing: presentation skills (2) and equipment use

Performance Benchmark	Progress
▪ NIWMC retreat held, and clear mandate developed.	Retreat held and outcomes documented
▪ Formal project launch of R2RW held in GRW.	Launch held in January 2002
▪ R2RW web site operating and providing current information to partners.	Web site in operation
▪ Gender checklist being routinely utilized in assessing projects.	Gender checklist developed
▪ Lobbying and Advocacy training course held.	Not done
▪ 2 special studies undertaken.	Not done

## 10. Program Expenditures

On the following page, a summary of program expenditures incurred during the period October 1, 2001 to March 31, 2001 is provided. The expenditures are listed by key support areas, with a breakdown of expenditures by project Components, which partially correspond to USAID-required Contract Line Item Numbers (CLINs). The expenditures relate to the projected fiscal plans submitted in the R2RW Life of Project Strategy and First Annual Work Plan. The key support areas in the expenditure summary also correspond to NEPA's code accounts for fiscal reporting to the GOJ.

**ARD, Inc.**  
**Ridge to Reef Watershed Project**  
**Period October 1, 2001 to March 31, 2002**  
 Contract No. 532-C-00-00-00235-00  
 \*\*\*\*\* Inception to Date \*\*\*\*\*

	Clin 1	Clin 2	Clin 3	Clin 4	Clin 5	Clin 6	Totals
Project Management & Admin	93,570	55,599	44,278	614	3,025	950	198,036
Travel, Transportation & Per Diem	23,240	10,567	2,669	0	1,199	0	37,675
Equipment & Supplies	18,180	14,282	3,571	0	1,879	0	37,913
Operating Costs	42,177	23,053	5,763	0	3,033	0	74,026
Subcontracts & STTA	59,351	27,903	1,010	0	532	0	88,796
Grants	0	0	0	0	0	0	0
Training							
- Study Tours	0	0	0	0	0	0	0
- In-Country	6,899	3,273	1,637	0	0	0	11,808
<b>Totals</b>	<b>243,417</b>	<b>134,678</b>	<b>58,928</b>	<b>614</b>	<b>9,668</b>	<b>950</b>	<b>448,254</b>





