

R2RW

**Life of Project Strategy
and
Fifth Annual Work Plan**



Ridge to Reef Watershed Project

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

R2RW Life of Project Strategy and First Annual Work Plan

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Government of Jamaica's
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And the

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Implemented by:

Associates in Rural Development, Inc.
P.O. Box 1397
Burlington, Vermont 05402

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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 United States Agency for International Development (USAID). Three distinct, but interrelated activities, associated with improving the management of Jamaica's watersheds, will be carried out to form a synergy of interventions contributing to the achievement 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) are implementing R2RW with assistance from Cargill Technical Services, Inc. (CTS).

This combined Life of Project Strategy (LoPS) and First Annual Work Plan (FAWP) provides a thorough overview of the implementation strategy, activities, and tasks which R2RW will follow to address the Work Statement in USAID Contract No. 532-C-00-00-00235-00. The LoPS/FAWP provides an overall project implementation strategy for the period between the project mobilization date, August 26, 2000 and the projected completion date of the project, July 1, 2005 and detailed activities and implementation schedule for the first year of implementation. The FAWP is a living document designed to provide focus to achieve the project's intended results, but it is also prepared with sufficient flexibility to respond to emerging opportunities and constraints. The LoPS/FAWP links to other planning documents such as the Performance Monitoring Plan.

The Natural Resources Conservation Authority (NRCA) is undergoing a merger with Town Planning Department (TPD) and Land Development and Utilization Commission (LDUC). The new organization will be called National Environment and Planning Agency (NEPA). In this document, R2RW will use NEPA instead of NRCA.

ACRONYMS

ARD	Associates in Rural Development, Inc.
CBO	Community-based Organization
CDC	Community Development Committee
CIDA	Canadian International Development Agency
CO	Contract Objective
COP	Chief of Party
CR	Contract Result
CTO	Cognizant Technical Officer
CTS	Cargill Technical Services
CWIP	Coastal Water Quality Improvement Project
DDC	District Development Committee
EAST	Environmental Audits for Sustainable Tourism
EE&C	Environmental Education and Communication
EFJ	Environmental Foundation of Jamaica
EJASP	Eastern Jamaica Agricultural Services Project
ENACT	Environnemental Action Programme
ENGO	Environmental Non-governmental Organization
EU	European Union
FAWP	First Annual Work Plan
FD	Forestry Department
GEM	Gender Equity Mechanism
GNRS	Governance and Natural Resources Specialist
GRW	Great River Watershed
GOJ	Government of Jamaica
IR	Intermediate Result
JAMAL	Jamaica Movement for the Advancement of Literacy
JSIF	Jamaica Social Investment Fund
LGRP	Local Government Reform Process
LoPS	Life of Project Strategy
MOH	Ministry of Health
MOLE	Ministry of Lands and Environment
MOWH	Ministry of Water and Housing
NEEAP	National Environmental Education Action Plan
NEEC	National Environmental Education Committee
NEPA	National Environment and Planning Agency
NGO	Non-governmental Organization
NIC	National Irrigation Commission
NIWMC	National Integrated Watershed Management Council
NIWMP	National Integrated Watershed Management Program
NRCA	Natural Resources Conservation Authority
NWC	National Water Commission
OPM	Office of the Prime Minister
PADDC	Parish Association of District Development Committees
PAPAS	Participation and Public Awareness Specialist
PC	Parish Council
PDC	Parish Development Committee
PEPA	Portland Environment Protection Agency
PIC	Project Implementation Committee
PIOJ	Planning Institute of Jamaica
PMP	Performance Monitoring Plan
PMR	Performance Monitoring Report
PRA	Participatory Rural Appraisal
PSO	Private Sector Organization
R4	Result Review and Resource Request

RADA	Rural Agricultural Development Authority
RGW	Rio Grande Watershed
RRA	Rapid Rural Appraisal
RSR	Rapid Site Reconnaissance
SAPW	Strategic Action Planning Workshop
SAR	Semi-annual Report
SDC	Social Development Commission
SO2	Strategic Objective 2
SOW	Statement of Work
STTA	Short-Term Technical Assistance
TFT	Trees for Tomorrow
TAP	Targeted Appropriate Practice
USAID	United States Agency for International Development
WMS	Watershed Management Specialist
WPMB	Watershed Protection and Management Branch

(A) BACKGROUND AND PROBLEM STATEMENT

Jamaica's fragile economy rests on a delicate natural resource base. The majority of its revenue comes from tourism, bauxite, and agriculture. With mounting economic difficulties, increasing pressures are being exerted on both coastal and upland watershed areas, resulting in degraded forests, escalating soil loss, rising point and non-point source pollution, and the destruction of coastal areas and reefs.

The importance of sustainably managing Jamaica's watersheds has become apparent to the Government of Jamaica (GOJ) and a number of initiatives have been supported over the recent years. The Ministry of Agriculture, including its extension service and the Forestry Department, have supported initiatives aimed at soil conservation, agro-forestry, and forest management, as well as integrated watershed management and planning. The National Environment and Planning Agency (NEPA), through its Watershed Protection and Management Branch (WPMB), has supported numerous efforts to consolidate policy, database management, and national-level watershed planning. Recognizing the importance of watersheds and aware that many initiatives exist in support of watershed management, the GOJ has crafted a watershed policy for the country. A Green Paper for this policy provides the framework for integrated and coordinated watershed management and outlines a process for better planning and implementation of watershed programs.

USAID/Jamaica also has a long history of supporting hillside agricultural and natural resources management projects in Jamaica. Under the current Strategic Objective 2, programs focus on improving natural resources management in ecologically and economically important areas of Jamaica. The Ridge to Reef Watershed Project (R2RW), developed by USAID/Jamaica and the Government of Jamaica's National Environment and Planning Agency (NEPA) is a multifaceted approach to address degradation of watersheds on the island. This degradation is brought about by misuse of forests, destructive farming practices, and ineffective environmental stewardship. These problems can be addressed by improving natural resource management practices, increasing the population's awareness of the impacts of their activities, and linking government and civil society in mutually beneficial partnerships. R2RW is a five-year initiative aimed at improving environmental conditions in the targeted watersheds of Great River and the Rio Grande. These two watershed areas were chosen because of their strategic importance in terms of agriculture and tourism and the potential to stem environmental deterioration.

The Great River and Rio Grande watersheds have distinctly different characteristics. The Great River watershed is more highly and densely developed than the Rio Grande. In addition, agriculture in the Great River is comprised of larger, more concentrated farms than in the Rio Grande. Great River tourism concentrates mostly along the beaches and around the marine park adjacent to Montego Bay, while Portland and the Rio Grande are seen as alternative tourism sites to the north coast of Jamaica – more rich in natural character and environmental diversity. Tourism activities, and potentially clientele, differ between the two areas, with Rio Grande hosting more of the adventure and nature tourism market than the Great River basin.

The Great River links the four parishes of Hanover, St. James, Westmoreland, and St. Elizabeth while the Rio Grande is contained mainly within the parish of Portland. Economic development in the Great River parishes is quite diversified, with investments in tourism, large-scale agriculture, mining, and some small-scale industrial production, mostly in food processing, garments, and woodworking. Infrastructure in the Great River watershed is relatively developed. Montego Bay is connected to the major north coast highway and has an international airport and a major cruise ship harbor. There are good roads, water supply, and sewerage systems in the Greater Montego Bay area.

Agriculture is the dominant economic activity in the Rio Grande, with the major crops being coffee, bananas, and coconuts. Bad weather and insufficient markets have recently had very negative impacts on the agricultural sector in Portland, leaving the area with an official

unemployment rate of 17 percent and rising. Tourism, the second economic activity in the parish, and agriculture are both affected by poor and declining infrastructure. Marketing, communications, and transportation are most severely hampered by horrendous roads. Plans are being developed to improve the transportation network, and both economic and environmental impacts are expected from the upgrading.

The Great River faces many environmental threats. These include soil erosion; agrochemical pollution; downstream sedimentation; threats to the coral reefs from nutrients, over fishing, and physical damage; deforestation of the few remaining forested areas; and possible impacts from a proposed diversion of Great River water to Negril. Environmental threats affecting Portland and the Rio Grande come from deforestation, soil erosion from cleared agricultural lands and from road construction and maintenance, illegal sand mining in the river, poor sanitation and other point-source pollution from illegal squatter settlements, and unclear restrictions on poor land-use practices in fragile areas.

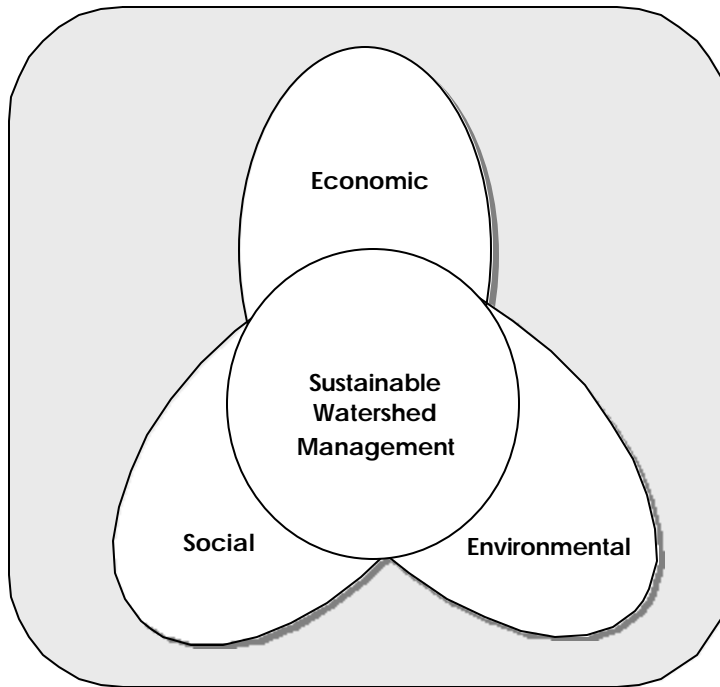
Donors have been fairly active in Montego Bay, but less so in the upper reaches of the Great River. For example, the Canadian International Development Agency (CIDA) has chosen St. James as one of its pilot sites for the Support to Local Government Reform Project (SLGRP). In addition, the Overseas Economic Cooperation Fund (OECF) has financed construction of a municipal wastewater treatment system, and the North Coast Highway project is expected to have significant social and economic impacts in the area.

Donor involvement in Portland is substantial. Currently, CIDA's Environmental Action Planning Project (ENACT) and Trees for Tomorrow (TfT), the European Union's (EU's) National Environmental Action Plan (NEAP) and the Eastern Jamaica Agricultural Services Project (EJASP), and the Inter-American Development Bank (IDB) have been implementing several projects in Portland. Next year, USAID/Jamaica's Coastal Water Quality Improvement Project (CWIP) expects to expand into the Port Antonio area. TfT is working in adjacent watersheds. The approach and methods of each should be reviewed in light of R2RW field activities. CWIP will be working with partners to address environmental threats along the coast. ENACT is working with the Portland Parish Council to develop a sustainable environmental action planning process. Coordination with both projects will be critical.

(B) PROJECT STRATEGY

The R2RW strategy is to build strategic partnerships to bring together the economic, social and environmental dimensions so as to promote sustainable watershed management. This relationship can be seen in Figure 1. The overall contract result “Natural Resources under Improved and Sustainable Management is represented as the addressing and achievement of issues in each sector in a coordinated manner.

R2RW Project Strategy



Economic	Social	Environmental
<ul style="list-style-type: none"> ▪ Sustainable agriculture ▪ Employment opportunities ▪ Eco-tourism ▪ Incentives for compliance with environmental regulations ▪ Road bank stabilization 	<ul style="list-style-type: none"> ▪ Poverty ▪ Gender considerations ▪ Genuine participation ▪ Institutional coordination 	<ul style="list-style-type: none"> ▪ Land cover ▪ Deforestation ▪ Solid waste pollution ▪ Improper sewage disposal ▪ Siltation ▪ Pesticide and fertilizer impacts

By the end of the Reef to Ridge Project, it is envisioned that *targeted appropriate practices* for viable and sustainable economic use of watershed resources will have been tested, promoted and in use in target areas of the Great River and Rio Grande Watersheds. This will be complemented with a rationalized set of regulations and policies that govern activities in the watersheds, enhanced understanding of these regulations, and improved compliance and compliance/enforcement of the regulations. On the institutional front, there should be improved capacity of local, regional and national officials in the public, private and NGO sectors in

sustainable resource management combined with viable and efficient systems for institutional coordination. By the end of the Project, there will be an enhanced understanding among watershed residents of the potential negative implications of their actions: upstream users will appreciate the consequences of soil erosion, agricultural runoffs, and improper waste disposal; and downstream users will appreciate the value of a reliable supply of clean and clear water.

Building Partnerships

R2RW stresses the need to ***increase sustainability by building simple, rapid, and practical processes for mobilizing partners at the local level to assist stakeholders within watersheds address environmental and natural resources management issues***

Implementation actions under R2RW should be:

- Demand-driven (based on stakeholder needs within the Rio Grande and Great River watersheds);
- Focused, doable, and practical (technical assistance provided to assist stakeholders to prioritize);
- Flexible (ability to shift gears/focus on short notice);
- Results-oriented (concentration on actions that lead to the most efficient and significant accomplishment towards SO2 objectives);
- Complementary (builds on and reinforces previous and current USAID/Jamaica, GOJ, and other donor activities); and
- Sustainable (strengthens local partners through technical assistance, training, and targeted programmatic funding).

In Jamaica today, there is an emerging link between environmental planning and local development planning. The parishes in both watersheds where R2RW will be working are now in the process of establishing Parish Development Committees and indeed, Portland, in the Rio Grande watershed is much farther along in this process. This process, by nature, involves building the capacity and coordinating local organisations and strategic partners in sustainable development planning.

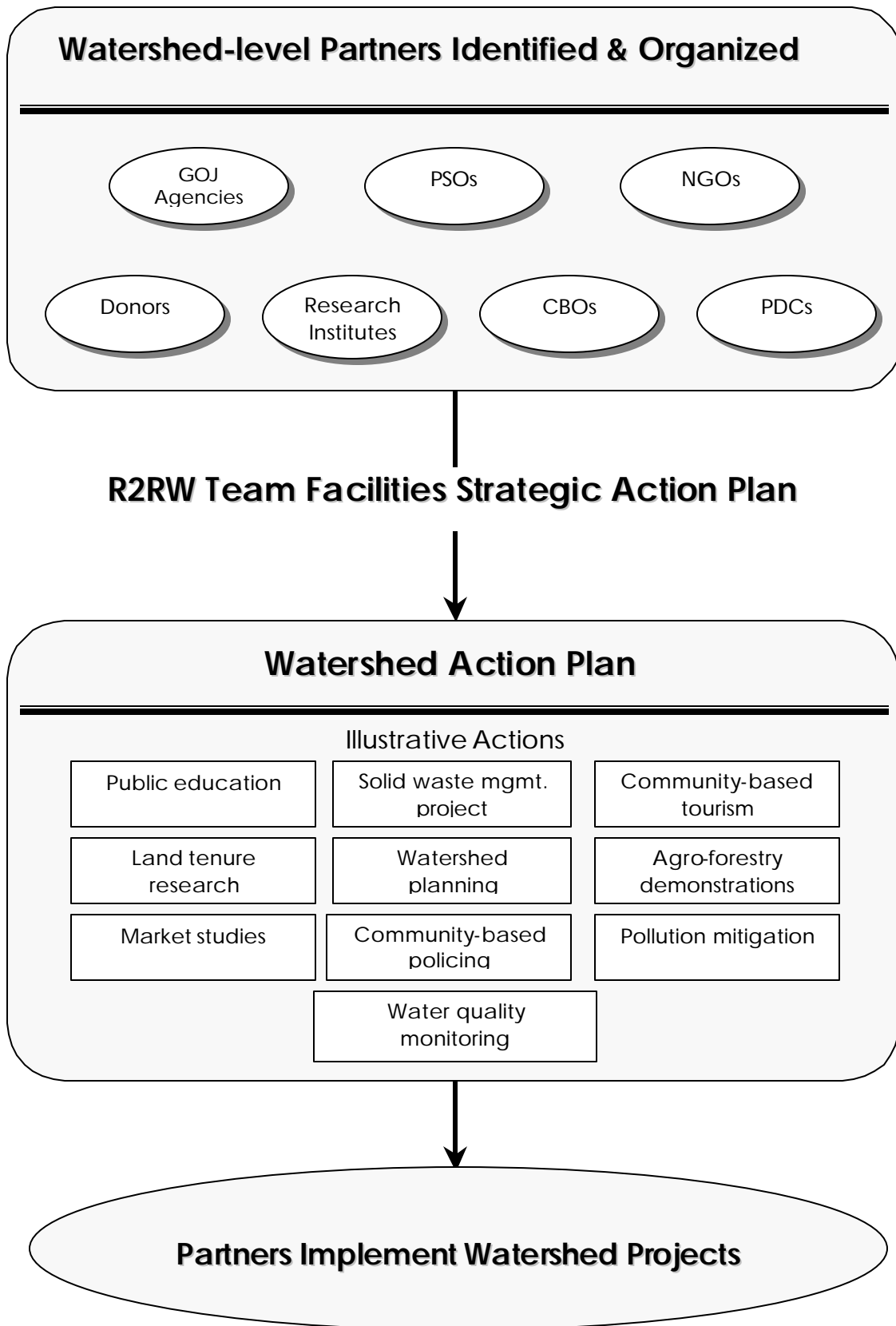
Based upon experience from the Coastal Water Quality Improvement Project (CWIP) and the experience of other projects, such as ENACT in Portland, it is clear that sustainability of initiatives is enhanced when activities are proposed, designed, and implemented by intermediate organizations (strategic local-level partners) in collaboration with communities. At the watershed level, partners will come from government agencies and civil society organizations. R2RW will use a participatory strategic action planning process to get parish and watershed-level partners actively organized in collaborative efforts towards addressing key, severe environmental threats. Partners will be strengthened so that they can effectively implement community-based projects and they will be supported by R2RW technical assistance and training. The R2RW technical assistance team will also assist partners to identify and leverage funds from other sources within Jamaica or internationally and complement these funds with strategic grants so that key partners can implement identified actions.

The R2RW Technical Team is cognizant of the moves to operate in a more participatory governance framework, and will implement activities in response to these initiatives. These include:

- Local Governance Reform Program being implemented through the MLGYCD. One of the two pilot parishes in St James in the GRW.
- The GOJ response to Local Agenda 21. The Parish of Portland is the demonstration parish for the Local Sustainable Development Planning. The Portland Parish Development Committee (PDC), a spin-off of Local Government Reform is among the most organized in the country.
- The Integrated Community Development Program (ICDP) brings the community input into local governance that is being implemented by the SDC.

The process to be used to mobilize partners in both the Great River and the Rio Grande watersheds contains five basic steps, illustrated in Figure 2 and briefly outlined below.

Figure 2: Building Partnerships



Step 1: Rapid Reconnaissance

Starting in Great River and later moving to Rio Grande, baseline assessments will be conducted to characterize the biophysical, socioeconomic, and institutional/organizational situation of the watersheds (see following CR 1 discussion). The first step of the assessment will be a Rapid Site Reconnaissance (RSR). The RSR will provide useful information that will be used by stakeholders later to discuss problems and determine opportunities for action. The RSR should provide:

- A preliminary definition of watershed boundaries (including sub-watershed areas);
- Socioeconomic overview;
- Soil, water, and vegetative characteristics, based upon existing documentation and rapid field visits and discussions with key individuals;
- Identification of most immediate and serious environmental threats within the watershed, by sub-watershed and summarized according to location and impact on downstream users and natural resources; and
- Preliminary organizational profile of potential partners within the watershed (i.e. GOJ/parish agencies, NGOs, PSOs, and other civil society groups and a preliminary assessment of their capabilities.

Step 2: Strategic Action Planning Workshop (SAPW)

SAPWs will be conducted to bring all of the relevant, potential parish-level (watershed specific) partners together, over a very short period of time, for:

- Building effective coalitions for the implementation of field-based watershed management programs and activities;
- Determining or confirming key watershed threats, problems, constraints, and opportunities for implementing a concerted and coordinated program;
- Developing specific actions that each of the partners are committed to implement over a short timeframe and provide financial or human resources towards implementation;
- Establishing a preliminary watershed coordinating body with responsibility for tracking progress, facilitating action, and building support.

Step 3: Form Watershed Coordinating Committee

Strategic partners from the watershed with the support of R2RW will identify actions for implementation. A coordinating body will guide this process at the watershed level. During the SAPW, partners will organize and define a coordinating group to support and monitor actions agreed to during the SAPW. Consistent with the overall intent of the Watershed Policy, the efficacy of these groups within Great River and Rio Grande as R2RW Coordinating Committees eventually can be assessed.

Step 4: Train Partners

For implementation of actions defined during the SAPW, partners agreeing to participate may require training in specific skill areas. Community animation, preparation of business management plans, identification of markets, development of community awareness programs, among others are some of the areas that partners may require additional training. R2RW will

provide or support others to train strategic partners in order to more effectively implement agreed upon actions.

Step 5: Implement Field-based Actions

A number of field-based activities will be supported within each watershed. Partners will implement these activities and the R2RW team, including members from the Watershed Protection and Management Branch, will assist by providing technical assistance, training, and targeted financial support.

Project Components

Three R2RW components, or Contract Results (CRs), have been developed to guide the conceptualization, implementation, and performance monitoring of the three components of R2RW. In this document, each CR is presented as a separate component stating the background, development hypothesis, strategy and assumptions, SO2 linkages, work plan, and benchmarks to be used to guide the project through. These CRs are:

- CR 1: Through targeted organizations, sustainable environmental management practices by resource users identified and promoted
- CR 2: Incentives for and obstacles to enforcement of targeted environmental regulations identified and solutions supported
- CR 3: Capacity of Jamaican government agencies, international donors, and private-sector and civil society organizations to implement effective watershed management programs enhanced

Figure 2 illustrates the three CRs and their relationship to the overall Contract Objective of *natural resources under improved and sustainable management in identified watersheds*. For each CR in Figure 2, the proposed activities to be completed under the LoPS/FAWP are illustrated. The proposed implementation timelines for each of the CRs with primary activities and tasks for the first project year are presented in Section (D). A budget to complement the FAWP is presented in Section (E).

Process for Development of LoPS/FAWP and Consultation

The R2RW LoPS/FAWP was prepared in three stages in order to involve as many stakeholders and key partners in the conceptualization of the project approach and in defining specific and relevant activities. These three steps were:

1. **Collecting relevant data.** The technical team collected background information on the two targeted watershed areas, as well as information relevant to coordination and policy at the national level. This information was used to create preliminary profiles of the Great River and Rio Grande watersheds and to identify apparent policy and institutional issues for use by the technical team and other key partners to define critical activities under each of the R2RW contract results packages.
2. **Strategic team planning.** Strategic planning occurred in two phases. During the first phase from October 10-13, the R2RW technical team and key staff from NEPA's WPMB developed a draft work plan. This draft framework was then shared with other key national partners, such as RADA and the Forestry Department, and relevant revisions were made. The FAWP was revisited in February 2001 after the arrival of the new Chief of Party.
3. **Consultation with key stakeholders.** Consultation was conducted with a wider array of stakeholders in Kingston and in each of the two watersheds. On October 18, stakeholders

from GOJ agencies, both from Kingston and their respective field offices, were consulted in Kingston. In November, stakeholder meetings were conducted in Montego Bay and in Port Antonio to present the draft work plan and to seek opinions and comments. Comments from both the Kingston workshop and the two watershed consultations can be found in Appendix 3.

Figure 2: Contract Objective

<u>Contract Objective</u> Natural resources under improved and sustainable management in identified watersheds		
<u>CR 1</u> Through targeted organizations, sustainable environmental management practices by resource users identified and promoted	<u>CR 2</u> Incentives for and obstacles to enforcement of targeted environmental regulations identified and solutions supported	<u>CR 3</u> Capacity of Jamaican government agencies, international donors, and private-sector and civil society organizations to implement effective watershed management programs enhanced
Complete Baseline Inventory	Inventory Regulatory Framework	Enhance NEPA's Capacity
Stimulate Communication and Public Awareness	Advise on Legal Reform	Develop Information Management Systems
Enhance Community involvement	Improve Selected Policy Implementation	Increase Public-Sector Involvement
Encourage Private-Sector Participation	Enhance Legal Enforcement Capacity	Increase Private-Sector Involvement
Adopt Best Management Practices (BMPs)	Highlight Economic Incentives and Disincentives	Increase Civil Society Involvement
Enhance Sustainability	Increase Public Awareness	Facilitate Coordination Mechanisms
	Support Community-based Enforcement	Assess and Integrate Training Programs
	Assist Advocacy Development	Special Studies

(C) CONTRACT RESULTS

CR 1 Through Targeted Organizations, Sustainable Environmental Management Practices by Resource Users Identified and Promoted

Background

Jamaica has had a series of watershed management projects that have encouraged the adoption of “improved land husbandry techniques” with varying degrees of success. In some cases, emphasis has been overly placed on the importance of “farmer groups” that were not linked to wider integrated development efforts. In other instances, dependence on free or subsidized inputs meant that project efforts were not sustainable.

Some of the lessons learned from these project experiences indicate that the end users were often not involved in the planning of project activities and hence, the technologies were not fully appropriate. In some cases, the agencies encouraging improved resource management techniques operated in a vacuum and were not part of an integrated community development approach. In others, implementing agencies have not been fully capable of delivering project interventions in a sustainable manner.

As a result, CR 1’s efforts will concentrate not only on introducing and extending Targeted Appropriate Practices (TAPs), but will focus on the link that has been missing in the past – strengthening the capacity of the organizations needed to transfer and sustain the effective use of TAPs in the watersheds. The basis of CR 1 is to work with local organisations, governmental, non-governmental, private sector, and community-based groups – to identify appropriate management practices for watershed resource users and to enhance the capacity of specific watershed communities to improve environmental management. R2RW will develop strategies for community-based activities aimed at producing resource management practices that are environmentally, economically and socially sustainable.

The capacity of local organisations and communities to implement environmental improvement initiatives will be facilitated in the R2RW project by:

- Working with strategic local partners to identify specific Targeted Appropriate Practices;
- Enhancing the capacity of partners to promote environmental management strategies;
- Enhancing community involvement in environmental planning and management;
- Enhancing public awareness and communication of TAPs options; and
- Improving private sector linkages and involvement in environmental management.

Development Hypothesis

The hypothesis that forms the basis of CR 1 can be stated as:

Providing targeted organizations and individuals with the ability and capacity to adopt and implement proven environmental practices will lead to sustainable reduction in environmental degradation and an increase in the percent of land under sustainable management in the selected watersheds.

R2RW will support and strengthen partner organisations working at the community level to develop and implement initiatives that address environmental issues and contribute towards sustainable management of natural resources. The hypothesis acknowledges the causal relationship between appropriate technologies, dynamic organizations and individuals and sustainable natural resources management.

Assumptions and Strategy

In order to develop CR 1 strategies, certain assumptions must be made. The major assumptions, underlying the goals of CR 1, are:

1. Local level organizations and community-based groups will be interested in, and committed to, environmental, economic and social improvement and will respond positively to R2RW interventions;
2. The transition process from NRCA to NEPA will encourage and help to institutionalize the involvement of local partners to adopt Targeted Appropriate Practices;
3. Key government agencies, such as RADA and Forestry Department, are willing and prepared to work cooperatively and to commit resources to the process.
4. Donors and their projects' technical staff are willing to work in a coordinated manner.

The capacity of communities and local organizations to identify and promote sustainable environmental management practices will be enhanced through the following specific strategies by:

- Compiling baseline information.
- Introducing improved technologies for improving and developing **Targeted Appropriate Practices (TAPs)**.
- Identifying and supporting the adoption of **TAPs** among resource users through community participation in planning and implementation.
- Stimulating **communication and public awareness**, especially of TAPs, through school-based, and non-formal adult education programs and extension.
- Enhancing the **involvement of specific targeted communities** to develop their own local Watershed Action Plans and building their capacity to implement such plans.
- Encouraging **private sector participation** in sustainable management and facilitating community-based micro-enterprise development and alternative livelihood strategies.
- **Enhancing economic sustainability** by promoting feasible marketing linkages.

In the first year, the baseline information gathering process will allow R2RW to identify and work with strategic partners, assess their capacity and provide technical training or other organizational support, and mutually enhance their management ability. Later on the project will work with those strengthened strategic partners and local communities to design specific activities to promote the adoption of Targeted Appropriate Practices.

SO2 Linkages

Activities and tasks undertaken under CR 1 will contribute to the USAID SO2 - Improved quality of key natural resources in selected areas that are both environmentally and economically significant - and to the Intermediate Results below:

IR 1	Increased adoption of environmentally sound practices
IR 1.1	Increased effectiveness of environmental NGOs
IR 1.2	Increased economic incentives for environmentally sound practices
IR 2.2.1	Increased capacity of key GOJ agencies

Work Plan

In the first year, the main activities of CR 1 will be focused firstly in the Great River Watershed (GRW) and later in the Rio Grande Watershed (RGW). Emphasis will be on assessing actual needs, building strategic partnerships with local organizations, and in designing activities to promote adoption of TAPs. The development of appropriate communication and public awareness strategies, as well as appropriate gender strategies to complement project implementation, will also be completed. These activities are illustrated in table below.

Conduct Baseline Assessment

With strategic partners, R2RW will prepare a sufficiently detailed baseline of existing biophysical, socioeconomic, and organizational conditions in each of the watersheds. As mentioned previously, a RSR will be the first step of this process to collect sufficient background information for the SAPW. At later dates, subsequent studies might be required to supplement the RSR in order to further characterize communities or areas within the watersheds. The baseline assessment will establish the existing situation with respect to (1) environmental resource use – needs, constraints, opportunities and threats; (2) existing knowledge of environmentally sound practices; (3) possible Targeted Appropriate Practices; (4) indicators for performance monitoring and evaluation; and (5) organizational capacity of R2RW strategic partners.

Support for Communication and Public Awareness Activities

Public awareness and education will be an important and integral part of activities under all of R2RW’s Contract Results. For CR 1, the following will be supported:

- Preparation of education materials to inform the public, at all levels, about R2RW, its objectives, approach, and activities;
- Identification and strengthening of strategic partners in both Great River and Rio Grande watersheds;
- Linking watershed efforts to National Environmental Education Committee (NEEC) mechanisms and resources; and
- Development and testing of participatory communication and public awareness strategies that are based upon not only delivery of materials and messages but have specific measurable indicators to determine results of approaches in adoption of new TAPs.

The R2RW Participation and Public Awareness Specialist (PAPAS) will lead the development and testing of these approaches. During the first quarter of 2001, priority will be placed on preparing education and awareness materials informing residents of the watersheds about R2RW. In the second and third quarters of 2001, emphasis will be focused on identifying key partners within the watersheds and developing an environmental education and communication strategies for the Great River watershed.

Support Adoption of Targeted Appropriate Practices (TAPs)

Targeted Appropriate Practices (TAPs) are generally considered to be structural, managerial, or vegetative practices that are used to protect, control, and improve surface water supply and quality.

Besides restrictions imposed by natural features, there are many factors that must be taken into consideration in the search for efficient and sustainable TAPs. These can be summarized as follows:

- Difficulties in getting planting materials especially disease and pest free seeds and seedlings and materials of disease resistant lines. For example farmers who produce ‘Scotch Bonnet’ peppers usually produce their own seedlings that are sometimes infested with mites before they are transplanted to the field.
- Lack of information on new disease resistant cultivars that in addition to eliminating labor and material cost associated with disease control, provide a better product. For example plantain cultivars that are resistant to the black Sigatoka disease.
- Lack of information on the positive effects certain improvement in infrastructure would have on the overall efficiency of production. E.g. replacing tracks on steep slopes with steps or ramps, installation of storage facilities for tools, inputs and produce.
- Lack of information on alternate economic enterprises with potential for higher returns.
- Lack of information on organic techniques that will conserve resources as well as increase product value.
- Lack of access to alternate markets, especially those for organic or certified forest products.
- Lack of awareness that many of the soil conservation techniques being used are not appropriate for some of the soils in the area.

During the first year of R2RW, further clarification and definition, as well as identification, of TAPs will be the priority. This activity allows for the identification of TAPs that are immediately available and that can be demonstrated within the watersheds. R2RW will support:

- *Definition and inventory of existing TAPs for sustainable land management.* Successful practices are being practiced in Jamaica, the region, and elsewhere with similar conditions. An inventory of these practices must be the first step. The initial inventory can be done at several stages, during the rapid site reconnaissance (RSR), the Strategic Action Planning Workshop, and during the PRA exercises conducted in communities by the watershed partners.
- *Criteria for selection of potentially useful practices.* With a clear definition and criteria for classifying a practice as applicable, a short list of proven TAPs will be produced. The final selection and promotion of certain TAPs requires that they be validated based upon practical experience. Only validated TAPs will be promoted for widespread demonstration and adoption.
- *Identification of partners for TAP promotion.* Partners, such as RADA, NGOs in the watersheds, and the Forestry Department, will be identified during the RSR. Assessments of their capacity to participate and contribute to the introduction and adoption of TAPs will be done and later in 2001, training programs will be conducted, as necessary for strengthening the capacity of these partners to identify and extend TAP technologies.

The WMS will lead this activity with assistance from the PAPAS, for identification and development of participatory extension methods. Short-term technical assistance will be required, especially assisting with a summary of forestry TAPs.

Community-based Approaches for Adoption of TAPs and Watershed Planning

Jamaica's current parish development planning process is built on the foundation of community participation. For this reason, R2RW will complement this process in both project watersheds. To support a local participatory process, R2RW's work program contains three main elements:

- Identifying Targeted Appropriate Practices to expand options available for sustainable natural resource use;
- Developing community-based Watershed Action Plans; and
- Providing support to strengthen organizations that promote sound environmental practices operating at the community level.

Because sustainable development requires consensus, the identification of TAPs and the development of Watershed Action Plans will also need to be demand driven and determined through a participatory community planning process involving strategic partners already working at the community level.

Participatory planning must first involve communities in determining a vision for their own development by assessing their environmental and developmental needs as well as their strengths and opportunities. Communities also need information on additional options to consider in the planning process. The pros and cons, advantages and disadvantages of these options must be clearly communicated and understood so that communities can consider them in a meaningful way. The process also needs to consider the differences among community members and factor in the special needs and requirements of vulnerable groups to ensure that planned actions are equitable and sustainable.

During the first project year, this process will be initiated in both watersheds, and actual planned community-based activities will begin to be implemented in the Great River Watershed. It is anticipated that the planning process will be completed in the Rio Grande Watershed by the end of Year 1. Coordination with the ENACT program, EAST project, CWIP, and others will be critical for effective operation in the Rio Grande Watershed.

Private Sector Involvement and Ensuring Economic Sustainability

Adoption of TAPs will not be done unless people perceive benefits accruing to them. A critical element of R2RW's success depends on economic returns from products. Economic sustainability, through the involvement of the private sector in partnerships with local producers, and in improving the ability of producers to connect markets with products, is critical. R2RW will focus efforts on:

- Identifying PSOs with interest in participating in partnerships with stakeholders in Great River and Rio Grande and ways in which they can participate;
- Supporting development of TAP and PSO partnerships;
- Identifying and developing options for building business management and marketing skills through mentoring and apprenticeship programs;
- Assessing options for small-scale enterprises to leverage commercial finance;

- Investigating ways to improve coordination among projects and programs in Jamaica, of support for medium and small-scale enterprises, such as coordination with the EJASP;
- Identifying and developing sustainable marketing links;
- Improving information exchange and coordination in attempt to overcome infrastructure deficiencies and other constraints to marketing; and
- Promoting private sector involvement in the National Integrated Watershed Management Council (NIWMC).

The WMS will develop these activities with short-term technical assistance from Cargill Technical Services (CTS) and from a number of agribusiness organizations within Jamaica.

Site Selection

R2RW will focus its activities in Great River watershed in the first 6-8 months of the project before beginning work in the Rio Grande watershed. It will be important to identify strategic areas for interventions, as it will not be possible to work in every community in each watershed. The selection of specific communities will need to be done through a transparent process with clear and concise criteria for ranking communities. This process will take place with local strategic partners who are expected to be involved in project implementation. Following the selection of pilot communities, project activities will then be phased to begin in Year 2. Additional communities will be identified for Years 3-5.

Year One Activities and Tasks

The following table presents the specific tasks, technical assistance needs, and resource requirements to carry out each CR 1 activity described below. Timing and duration of each task over the first year of the project is shown in charts in Section D.

Activity	Year One Tasks	Assistance Needs	Resource Needs	Completion Date
Conduct Baseline Assessment	Identify priority geographical areas	WMS lead, PAPAS	GIS and other Data sources	March 17 th
	Produce rapid appraisal of the Great River Watershed	WMS, STTA	Consultant, Access to GIS data sources	March 31 st
	Conduct inventory of other past and present watershed projects	WMS, GNRS	Project documentation	March 31 st
	Assess gender disaggregated data in review process	PAPAS	Census	March 31 st
	Prepare lessons learned document on experience of Jamaican and International WM Projects	COP Lead, Team	Project documents, interviews	April 30 th

Activity	Year One Tasks	Assistance Needs	Resource Needs	Completion Date
Conduct Baseline Assessment (cont'd)	Assess capacity of strategic partners	WMS lead, PAPAS, GNRS	ORS instrument	April 30 th
	Identify extent of existing practices to establish benchmarks for monitoring and evaluation	WMS lead, PAPAS, STTA	Field observation	June 30 th
Support Communication and Public Awareness Activities	Review capacity of strategic partners for public awareness activities	PAPAS lead,	Interviews	March 31 st
	Prepare education materials (brochures, newsletter, PowerPoint presentations) to inform communities about the project	PAPAS lead, ASC		March 31 st
	Prepare maps of GRW showing topography, land use, and infrastructure	WMS, STTA	STTA Contract	April 30 th
	Link with national NEEC mechanisms	PAPAS lead, STTA	NEEC documents	June
	Identify partners to support local public awareness objectives	PAPAS lead, WMS, STTA		July
	Build capacity of strategic partners	PAPAS lead, STTA	Training support	August - September
Support the Development of TATs	With strategic partners, define and identify process and TATs	WMS lead, PAPAS, STTA		March 31 st
	Determine existing knowledge and awareness levels of TATs	PAPAS lead, WMS, STTA		July - August
	Establish criteria for TAP selection and validation	WMS lead PAPAS, STTA		May 31 st
	Identify partners for TAP promotion	WMS lead, PAPAS, STTA		July - September
Enhance Community Involvement	With strategic partners, develop an approach for community involvement	PAPAS lead, WMS, GNRS, STTA		July

Activity	Year One Tasks	Assistance Needs	Resource Needs	Completion Date
Enhance Community Involvement (cont'd)	Conduct participatory community needs assessment of identified communities	PAPAS lead, STTA	Training support	August - September
	Identify vulnerable groups	PAPAS lead, STTA		September
Encourage Private Sector Participation	Identify PSOs in watershed areas	WMS lead		May
	Identify ways to involve PSOs and other relevant organizations in watershed management	WMS lead, CTS		August
	Develop research, mentoring and credit programs	WMS lead, CTS, STTA		September
	Establish linkages between Economic and environment committees of PDC and target communities	WMS		September

Activity Benchmarks

A summary of proposed benchmarks applicable to the first year of CR 1 implementation is presented below. Flexibility in project implementation must be exercised to maximize opportunities and to confront constraints.

Year One

- Baseline reports and feasibility studies completed
- Target communities for project activities identified
- Identified TAPs
- Memorandum of Understanding for promoting TAPs signed with partners
- Drafted community-based strategies for action
- Drafted communication and public awareness strategies

CR 2 Incentives for and Obstacles to Enforcement of Targeted Environmental Regulations Identified and Solutions Supported

Background

Beginning with the promulgation of the Wildlife Protection Act in 1945, the Government of Jamaica has developed national-level policies to organize a range of programs in response to environmental threats. However, a major constraint to environmental management is the failure to effectively implement policies and achieve on the ground compliance. Policies, plans, strategies, and regulations abound, but there are no specific regulations for watershed management. Commitment to implement falls far short in comparison to the time and resources invested in preparation of plans, documents, and meetings, workshops, and seminars to support policy development.

Despite this acknowledged reality, the majority of policy and regulatory related work that is occurring in Jamaica is focused on the development of new policies and regulations to meet macro-level needs. Policy implementation, regulatory compliance, and enforcement have not been supported with the same energy as policy generation, and regulatory promulgation. This disconnection between development and implementation has led to a range of high-quality policies that are not having their intended impacts in parishes, towns, and rural areas. However, the Watershed Policy, on completion, will provide a solid basis for the updating of watershed specific legislation.

Jamaican agencies, such as the NEPA, and their delegated representatives who help co-manage watersheds, face human and financial constraints in their efforts to enforce national and local policies and regulations. Typically, most organizations lack both the means and incentives to carry out their mandates in support of environmental management.

Development Hypothesis

The hypothesis, which forms the basis for inclusion of the compliance/enforcement component in R2RW, can be stated as:

By identifying incentives for and obstacles to enforcement of existing regulations and policies, public awareness and compliance can be enhanced, necessary new regulations and policies can be developed if needed, and natural resources management in targeted watersheds will be improved and sustained.

Consolidating the regulations impacting on this area, and supporting initiatives towards compliance and enforcement, will contribute to sustainable management of natural resources.

Assumptions and Strategy

The major assumptions that underlie the goals of CR 2 are:

1. National government will support watershed-level efforts through a clear definition of its own role in the management of natural resources;
2. National government will delegate authority to local level partners for co-management within the watersheds, and
3. Adequate resources will be provided to local partners for supporting compliance and enforcement

CR 2 strategy is built on the assumption that improving compliance/enforcement must begin with understanding the reasons why individuals and organizations do not currently obey prevailing policies and regulations. Subsequently, the judicial services must be engaged 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.

It is expected that activities under CR 2 should result in improved effectiveness of policy implementation and increased certainty of enforcement when infractions occur. A two-pronged approach is proposed to strengthen implementation and enforcement – (1) increasing popular and official awareness and understanding of the importance of enforcing environmental rules for watersheds, and (2) involving local government, civil society, and GOJ officials, including NRCA wardens, in backstopping community-based compliance/enforcement.

R2RW strategy for this CR focuses on eight activities:

- Inventory of Regulatory Framework
- Legal Reform
- Policy Improvement
- Legal Enforcement Capacity Improvement
- Economic Incentives/Disincentives
- Public Awareness
- Community-based Enforcement
- Advocacy

SO Linkages

CR 2 contributes to USAID's SO2 by reporting on indicators established for the following intermediate results:

IR 1	Increased adoption of environmentally sound practices
IR 1.1	Increased effectiveness of environmental NGOs
IR 1.2	Increased economic Incentives for environmentally sound practices
IR 2	Adoption of policies for improved Environmental Management
IR 2.1	Effective promulgation and enforcement of environmental regulations
IR 2.2.1	Increased capacity of key GOJ agencies

Work Plan

In the first year, the main activities of CR 2 will focus on the inventory of targeted regulations, identifying and implementing economic incentives, supporting community-based enforcement, increasing public awareness activities, and supporting legal reform.

Targeted Regulatory Framework Inventory

The diversity of policies and regulations that are important for effective watershed management necessitate interaction with a broad range of stakeholders. At the national level, legislation relevant to watershed management includes, at a minimum:

- Wildlife Protection Act (1945)
- Mining Act (1947)
- Watersheds Protection Act (1963)
- Land Development and Utilization Act (1966)

- Town and Country Planning Act (1988)
- Country Fires Act (1988)
- Rural Agricultural Development Act (1990)
- Natural Resources Conservation (NRC) Act (1991)
- Water Resources Act (1995)
- Forest Act (1996)

CR 2 will support NEPA to complete a targeted inventory of existing laws, in order to consolidate impact, and eliminate overlaps. This approach will include:

- Undertaking a review of existing laws and regulations;
- Assessing relevant initiatives and reports; and
- Reviewing existing policies.

This activity will commence in March 2001. Short-term technical assistance would be used to assist in this activity under the guidance of the GNRS.

Legal Reform

The NEPA administers both the NRCA Act and the Watersheds Protection Act. The Government of Jamaica promulgated the former Act to establish the NRCA as the principal planning, coordinating, monitoring, and enforcement agency for environmental management. NEPA exercises permitting authority over specific developments, construction, and certain categories of enterprises. Irrigation or water management projects, logging, and land clearing of more than 10 hectares for agriculture all require NRCA environmental permits.

Of primary importance is the 1963 Watersheds Protection Act. It seeks to conserve water resources by encouraging protection of land in or adjoining vital watersheds through proper land use, reduced soil erosion, maintenance of groundwater reserves, and regularization of stream flows. The Act adopted a top-down, regulatory approach as its implementation strategy. Consequently, it does not have provisions to involve local communities in joint management of watersheds and does not recognize the role of incentives and education in promoting desired changes in behavior among watershed users and other stakeholders. This Act requires updating to take in account strategies for involving local communities in watershed management.

NEPA has been discussing the potential for establishing an Environmental Court. This court would operate as other specialized courts do, in this case dealing with breaches of the law regarding environmental issues. R2RW will assist in identifying possibilities and any potential role in this area. Through CR 2, assistance will be provided during the life of R2RW to:

- Develop strategies to undertake legal reform that involve communities in joint management of watershed resources, and provide incentives for promoting desired changes;
- Evaluate potential for establishment of an Environmental Court; and
- Support targeted legal reform.

R2RW will start work on this activity in the second quarter of 2001 and it is expected to continue during the life of the project. Short-term technical assistance will assist the GNRS in completing tasks under this activity.

Policy Improvement

With this amount of relevant legislation leading to involvement of multiple stakeholders, rationalization of mandates and roles is an important step. A review of overlaps and gaps in legislation and policies governing watershed management and activities within watersheds has

recently been undertaken. The Government of Jamaica, through the NRCA, UNDP and the Office of the Prime Minister (National Watershed Task Force) has been leading a national consultative process to develop a comprehensive Watershed Policy. The government has prepared a draft policy (Green Paper No 2/99, "Towards a Watershed Policy for Jamaica") and has completed a series of public consultations on the draft. The main objective of the draft policy is to promote integrated protection, conservation, and development of land and water resources in watersheds, with the goal of achieving sustainable use.

R2RW, under CR 2, is expected to support NEPA improve policy implementation by:

- Consolidating policies; and
- Implementing reform strategies in relevant sectors.

Tasks under this activity are not likely to start during the first year of R2RW. This activity requires that the inventory of existing regulations be undertaken, and that those are evaluated to see what are the necessary legal reforms, before policy issues can be drafted. However, NEPA may require assistance in its attempts to move forward the draft Watershed Policy. Progress on the Watershed Policy will be reviewed accordingly and assistance provided as necessary. The GNRS will lead these efforts and short-term assistance contracted for completion of specific tasks.

Improve Legal Enforcement Capacity

It is important to note that GOJ's draft Watershed Policy proposes to enhance efficiency and effectiveness of watershed governance and management by creating watershed management committees for sustainable watershed development. The committees will work closely with the PDCs, NRCA, the court system and the police to integrate their inputs into compliance/enforcement strategy.

This activity is geared to:

- Develop compliance/enforcement capacity of relevant agencies; and
- Implement policy reform strategies.

Before incentives can be considered, the capacity of key organizations must be addressed, if the organizations are to participate in watershed management activities and create systems that lead to sustainable use of resources. These organizations include:

- NEPA
- Forestry Department (FD)
- Judiciary
- Rural Agricultural Development Authority (RADA)
- Civil society organizations
- Parish Councils
- National Government

R2RW will assist in developing the compliance/enforcement capacity of these agencies through:

- Developing curriculum for training compliance/enforcement personnel;
- Preparing courses and materials and conducting training;
- Conducting relevant workshops and sponsoring forums for sensitizing judges, police, and other stakeholders active in compliance/enforcement; and
- Assisting in identifying new sources of revenue to support compliance/enforcement.

This activity will commence as soon as appropriate partners are identified to facilitate its implementation, estimated to begin during the third quarter of 2001.

Implement Economic Incentives

Successful schemes to implement policies and regulations must pay careful attention to the issue of individual incentives. In other words, the advantages and disadvantages of activities and the constraints and opportunities involved in current behavior and possible future innovations must be viewed from the perspective of the individual stakeholder. CR 2 expects to:

- Undertake a review of the present fines associated with violations;
- Ensure that fines are a reasonable deterrent;
- Identify incentives to support TAPs;
- Document cost-effective pollution control mechanisms; and
- Support the promotion of TAPs.

The CR 2 Technical Advisory Group is expected to take the lead in this area with short-term technical assistance contracted as required.

Increase Public Awareness

Awareness programs, regarding compliance/enforcement of environmental regulations for watersheds, will be developed in collaboration with Parish Councils, PDCs, NGOs, concerned communities, the police force, NRCA, and the judiciary. Communities and watershed users are expected to play a strong role in crafting regulations within the context of national policy, and more specifically, local compliance/enforcement. This will heighten their legitimacy and create a solid foundation for co-management of watersheds in which users play key roles in compliance/enforcement.

Although substantial public awareness activity will be conducted under CR 1 and CR 3, CR 2 will complement those activities with additional focus on:

- Key aspects and requirements of national laws to judges, police, and administrative staff within the legal system;
- Current Public Awareness programs;
- Communication tools and materials;
- Stakeholders benefits from compliance/enforcement; and
- Watershed or parish exchanges to share lessons learned.

Public awareness activities under this CR are integrated within the R2RW main public awareness strategy. The GNRS will work with the PAPAS to develop the overall strategy and then lead CR 2 public awareness activities with assistance from the PAPAS, strategic partners in each of the watersheds and short-term technical consultants.

Develop Community-based Enforcement

For a system of local rules to function effectively at the watershed level, certain conditions must be met:

- Attributes of the resource targeted for protection must be appropriate for community management, control, and compliance/enforcement;

- Characteristics of local communities must facilitate organization for watershed-level management; and
- Existing systems of rules must be known and support devolving authority to watershed users to work with proper authorities to organize, develop, apply, and enforce rules and possibly to form special districts.

For co-management and local control over natural resources management to work effectively, partners must have the authority to exercise the standard range of powers of any working governance system, including capacity to:

- Make, modify, and suppress rules within their geographic jurisdictions and sectors of authority;
- Monitor compliance and sanction violations; resolve disputes, with procedures for appeal; and
- Mobilize human, financial, and physical resources necessary to carry out these activities.

To support community-based enforcement, the project will seek to:

- Establish role of communities;
- Incorporate TAPs into extension services; and
- Support voluntary compliance.

During the life of R2RW, an approach to devolved, co-management of natural resources and community-based policing will be developed and tested. We expect to identify pilot communities and develop with them an approach to watershed co-management that includes a community-based policing and enforcement element. This activity under CR 2 will be integrated with the Enhance Community Involvement activity of CR 1. In effect, these communities will become custodians of special districts, contiguous with the boundaries of their sub-watersheds.

The GNRS will work with the PAPAS and appropriate watershed partners in identifying these pilots and developing approaches for co-management and community-based enforcement. The CR 2 Advisory Group will monitor and provide oversight for these activities.

Promote Advocacy Mechanisms

One significant contribution with which R2RW can assist is the enhancing of the capacity of organizations to promote environmental advocacy. Advocacy skills are critical to ensure that civil society is able to contribute to good governance in sustainable management of natural resources. Indeed, advocacy indicates a healthy and robust relationship among civil society, the public sector and the government that ensures that transparency as well as appropriate checks and balances are in place so that all viewpoints are considered.

In Jamaica, effective advocacy is rarely practiced around environmental issues. Sustainable advocacy techniques, such as lobbying and petitioning, are not widely practiced. However, some recent examples of actions exist. In Negril, a lobby group composed of private sector, NGOs and civil society groups were effective in stopping the laying of telephone cables over the fragile coral reefs. With assistance from CWIP, the Ocho Rios Environmental Advisory Group plans to lobby local authorities in St. Mary and St. Ann to adopt appropriate wastewater management. Also with CWIP assistance, the Pimento Walk/Parry Town and Environs group has established a lobbying committee for the adoption of a solid waste system in their area. Both of these are examples of well planned and well thought out lobbying strategies. R2RW will build on these positive experiences and will work to build the capacity of local groups to lobby effectively so that the goals and objectives underlying all of the other project activities can be sustained.

This CR will contribute to assisting the overall advocacy activities of the watersheds by:

- Identifying factors needed for effective advocacy in Jamaica
- Assessing the capacity of local organizations in advocacy practice
- Developing a method for effective advocacy in Jamaica
- Supporting advocacy processes,
- Preparing training materials, and
- Conducting training.

During the first R2RW project year, the GNRS, assisted by the PAPAS, will identify appropriate partners to assess their capacity and support advocacy programs. Oversight will be provided by the Great River WAC and the CR 2 Advisory Group during the first project year.

Year one Activities and Tasks

The following table presents the specific tasks, technical assistance needs, and resource requirements to carry out each CR activity described above. Timing and duration of each task over the first year of the project is shown in the charts in Section (D).

Activity	Year One Tasks	Assistance Needs	Resource Needs	Completion Date
Targeted regulatory framework inventory	Undertake a review of existing laws & regulations	GNRS lead	ENACT Documents	March 31 st
	Establish CR 2 Advisory Committee	GNRS	NEPA, FS, RADA, etc	April 30 th
	Assess relevant initiatives & reports	GNRS lead, Team	Acts and Regulations	May 31 st
Advise NEPA on legal reform	Develop strategies	GNRS lead, CR2AC		July
	Evaluate role of Environmental Court	GNRS lead, CR2AC		August - September
	Implement policy reform strategies	GNRS lead, CR2AC		Year 2
Policy Improvement	Review policies and develop new regulations if necessary	GNRS lead, CR2AC	NEPA Legal counsel	August
Improve legal enforcement capacity	Assess capacity and constraints to enforcement of existing laws and regulations	GNRS lead, Team	Interviews, Field observation	June 30 th

Activity	Year One Tasks	Assistance Needs	Resource Needs	Completion Date
Improve legal enforcement capacity (cont'd)	Conduct inventory and analysis of training programs for compliance/enforcement personnel	GNRS	NEPA, Environmental Warden Service	July 31 st
	Develop curriculum for training compliance/enforcement personnel	GNRS lead, STTA	STTA	September
Implement Economic incentives	Identification and SWOT Analysis of Economic Incentives	GNRS lead, Team		July
	Support an initiative for increased fines	GNRS lead, STTA	STTA Contracts	August
	Document cost-effective pollution control mechanisms	GNRS lead, STTA	STTA Contracts	August
Increase Public Awareness	Identify and assess current PA programs for policies and regulations	GNRS lead, PAPAS	Team Input	August
	Develop PA strategy for enforcement and compliance	GNRS, PAPAS		September
	Enhance & design communication tools	GNRS lead, PAPAS & STTA	Team Input & STTA Contracts	August - September
Develop Community-Based Enforcement	Determine role of communities in compliance and enforcement of legal framework	GNRS lead, PAPAS	Team Input	July
	Develop strategy to enable community compliance and enforcement	GNRS lead, PAPAS	Team Input	September
Promote Advocacy Mechanisms	Assess existing advocacy practices	GNRS lead, PAPAS	Team Input	August

Activity Benchmarks

A summary of benchmarks established for the first year of this CR is presented below.

Year One

- Inventory of existing laws and regulations regarding environmental management issues completed
 - Relevant existing institutional policies are reviewed and policy reform needs are determined
 - Baseline assessment of current public awareness regarding watershed regulations and policies completed
 - Materials to inform public on environmental policies, rules and regulations are designed
 - Existing PA programs are reviewed and evaluated
 - Community role in policy compliance/enforcement is clearly defined
-

CR 3 Capacity of Jamaican Government Agencies, International Donors, and Private Sector and Civil Society Organizations to Implement Effective Watershed Management Programs Enhanced

Background

The threats to Jamaica's natural resources, particularly in the watersheds, cannot be overcome by direct efforts of a few agencies. Diminishing these threats require 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. 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.

Development Hypothesis

The hypothesis, which supports the inclusion of this component in R2RW, can be stated as:

Enhanced organizational capacity and increased information dissemination and coordination will lead to improved sustainable watershed management practices.

R2RW believes that this hypothesis is true and is fully prepared to assist NEPA in its execution.

Assumptions and Strategy

The major assumptions that underlie the goals of CR 3 are:

1. GOJ committed to fully establish NEPA as the leading agency to implement watershed management programs.
2. NEPA will take the lead in coordinating all interventions in the watersheds, and
3. International Donors, NGOs and other stakeholders are willing to work collectively with NEPA; and
4. Capacity to store, maintain, and disseminate information can be institutionalized with NEPA and other appropriate data centers.

Two strategy documents prepared over the last five years have increased the focus on capacity enhancement and coordination of watershed management activities in Jamaica. First, the 1995 National Environmental Action Plan committed the GOJ to increased engagement of stakeholders in formulation of policy and directing government environmental programs. In addition, the Green Paper No2/99, "Towards a Watershed Policy for Jamaica", details the added importance that government places on sustainable watershed management and the need for enhanced organizational capacity and better coordination among national and local partners implementing watershed management programs.

Using these strategies as guides, CR 3 focuses on enhancing NEPA's capacity, particularly the Watershed Protection and Management Branch (WPMB), 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.

SO2 Linkages

CR 3 will contribute to USAID's SO2 by reporting on indicators established for the following intermediate results.

IR 1	Increased adoption of environmentally sound practices
IR 1.1	Increased effectiveness of environmental NGOs
IR 2.2.1	Increased capacity of key GOJ agencies

Work Plan

CR 3 will strengthen NEPA's capacity for watershed management coordination and information dissemination. The following 6 major activities are proposed to achieve the intended results:

- Enhance NEPA's Capacity
- Increase public sector involvement
- Enhance national EE&C programs for watershed management
- Facilitate coordination mechanisms
- Coordinate and integrate training
- Special studies focusing on improved watershed natural resource management

These activities will be designed and implemented in consultation with NEPA.

Enhance NEPA's Capacity

R2RW will assist NEPA, and particularly the WPMB in the consolidation and development of a watershed management program inventory and information dissemination service. The intended result of this activity is to make available timely and appropriate technical information to policy-makers and practitioners of watershed resources management. This initial task will be implementation of needs assessment to identify the requirements for watershed management information by a wide range of policy makers, international donors and stakeholders. Currently, several agencies are using GIS to collect data and monitor information on watersheds. There is a need for centralizing the information collected and sharing it with all the partners. Therefore, when information needs are identified, a plan for the compilation, storage, and dissemination of information will be implemented. This activity will build upon and complement existing information bases such as NRCA/NEPA Documentation Center, and website.

In addition, R2RW will assist NEPA clarify the role for WPMB and help strengthen its capacity to carry out this role relative to other key partners, such as those identified in the Watershed Policy. Support to strengthen WPMB's capacity could be provided through on-the-job and in-service training, targeted workshops and symposia, and possible apprenticeships and peer exchanges.

Increase Public Sector Involvement

A number of public sector agencies have control over economic development impacting on the environmental conditions of watersheds. Permitting is done by NEPA, but design and building of public works can be quite destructive of soil and water resources. Roads, due to construction and poor maintenance, lead to increased soil erosion and increased runoff. Poor building design can have severe impacts on riverine areas or beaches. In addition, most construction activities lead to secondary impacts.

R2RW, because of its approach of working through partners and local government, provides a great opportunity to involve representatives of public sector agencies responsible for promoting and supporting larger-scale developments. This is especially true in both the Great River and the Rio Grande watersheds, given the emphasis on the Greater Montego Bay Development Plan and current proposals for developing the Port Antonio area.

During the first year emphasis will be placed on identifying natural resource users and those agency representatives responsible for promoting economic development. During the RSR, these organizations will be identified and they will be encouraged to participate in the SAPW and become part of efforts to develop comprehensive sustainable watershed plans. Recent parish development plans, by public sector organization, will be reviewed towards determining impacts on sustainable watershed natural resources management.

Enhance EE&C Programs

Jamaica has already developed a framework for environmental education and communication through its National Environmental Education Action Plan (NEEAP). In addition, a National Environmental Education Committee (NEEC) is already in place.

To date, the NEEAP has had a number of impressive achievements, among which is the Schools for the Environment Program. A series of watershed video programs and materials has also been produced by the WPMB of NEPA. In addition, the Forestry Department has been very effective at using community drama to promote forestry education. In short, the R2RW is in a position to take advantage of, and extend, many of the positive environmental education initiatives that already exist.

However, there are some areas that the NEAP has not yet been able to adequately address. Most notably among these are “community-based education” and “non-formal adult education”. Key agencies to support these activities, such as RADA and Jamaica Movement for Advancement of Literacy (JAMAL), are not now represented on the NEEC itself.

R2RW will be in a position to facilitate this link so as to ensure that non-formal and adult education are part of the public awareness and environmental education activities in the pilot watersheds.

Another consideration is the recognition that despite the materials produced, little evaluation of such programs has been conducted. In short, there are many Environmental Education and Communication (EE&C) outputs, but the actual outcome of these activities is not fully known.

For this reason, R2R will need to conduct its own assessment of existing EE&C materials and programs. Since evaluation of R2RW's communication efforts will not be based on the number or quality of “outputs” (the number of videos produced, press releases issued, and so forth), but rather on the outcomes of these activities (level of adoption of environmentally friendly practices) it is first critical that a baseline assessment of existing EE&C materials and programs be conducted. A baseline assessment of community communication channels, as well as the level of awareness of environmentally sound practices, will need to be conducted.

In the first year, R2RW will seek formal representation for the project on the NEEC and will aim to facilitate meetings and workshops among NEEC members and representatives of RADA, JAMAL and other strategic partners that will need to be involved in developing appropriate public awareness strategies.

A critical component will be an assessment of existing EE&C activities to identify impact on outcomes and to identify what, if any, new programs, materials and activities need to be developed through R2RW. The assessment will need to distinguish between ***what people say they know*** with respect to sustainable use of environmental resources and ***what they actually do*** in practice so as to develop appropriate indicators for monitoring and evaluation.

The next step will then be to work with strategic partners to develop communication strategies and additional educational materials to promote the adoption of sustainable practices. Their capacities to promote and sustain EE&C will be assessed in order to recommend capacity strengthening strategies.

Watershed Management Coordination

R2RW will assist NEPA and the WPMB to provide the leadership and resources to promote watershed resource management coordination. MultiTAPle efforts are currently underway to coordinate watershed management efforts. The Jamaica's National Integrated Watershed Management Program (NIWMP) recommends that it liaise closely with current projects, such as TtT, to determine the appropriate institutional requirements and coordinating processes and mechanisms needed to enable effective participation in overall NIWMP execution.

To begin refinement of a comprehensive sectoral network, R2RW will summarize actions taken toward coordination of activities and analyze any gaps in these activities. Based on the results of this inventory and gap analysis, a strategy will be developed for coordination of watershed management programs at the national level. A critical part of this is to examine how watershed management relates to governance initiatives of other donors, and to explore the options for effective coordination.

In addition, R2RW has a potentially vital role to play in assisting the National Integrated Watershed Management Council (NIWMC) in developing coordination mechanisms. NEPA has been proposed as the Secretariat, through the WPMB, and R2RW can provide resources to WPMB in that role.

Training Program Integration

A number of training programs that have relevance to watershed planning and management exist within Jamaica. RADA and the Forestry Department, for example, conduct training in soil conservation and agro-forestry, respectively. At the national level, training programs need to be relevant, coordinated, and integrated so that human and financial resources are optimized.

During the first half of project year one, in concert with the assessment of WPMB's role in coordinating watershed management, an assessment of overall training needs to effectively implement watershed management programs in Jamaica, will be conducted. Based on the results of this assessment, the NIWMC should be able to use its forum to suggest ways to develop an integrated and coordinated training program for watershed management.

Watershed Management Special Studies

It is expected that during the life of the project numerous activities will be identified based upon stakeholders' demands or to provide better understanding of conditions, policies, constraints or even incentives affecting optimal implementation of effective watershed management programs. Such topics include the analysis of the impact of land titling on adoption of conservation practices;

the potential for implementing matching funds and cost-share system for financing TAPs by resource users; an analysis of options for coordinated database management, including the use of GIS, its costs and options for cost recovery from fees and services; and investigations of natural resources use by gender. Regarding farmers security of land tenure for instance, it has often been suggested that the absence of security restricts farmers 'participation in conservation practices. The Government's divestment program for making land more easily available and affordable to a wider cross section of persons will facilitate persons obtaining land with security of tenure for agricultural purposes. At the same time, it should not be assumed that granting property titles will be enough to prompt significant changes in natural resource management practices. There is thus a need for timely special studies to address emerging and critical issues. R2RW will provide resources for NEPA to address these issues by conducting special studies on watershed resources management.

Year One Activities and Tasks

The following table presents the specific activities, tasks, technical assistance needs, and resource requirements to carry out each CR activity described above. Timing and duration of each task over the first year of the project is shown in the charts in Section (D).

Activity	Year One Tasks	Assistance Needs	Resource Needs	Completion Date
Enhance NEPA's Capacity in watershed management	Assess NEPA & WPMB's capacity, for the watershed management	COP Lead	NEPA merger documents, ENACT assessment	May 31 st
	Develop needs assessment for information requirements	COP Lead, STTA	STTA Contract	June 30 th
Increase public sector Involvement	Identify public sector resource users in watershed	COP Lead		May 31 st
	Review public land management strategy	COP Lead		July
Develop EE&C Programs for Watershed Management	Assess existing EE&C programs	PAPAS	NEEC	July
	Identify gaps, opportunities, and partners	PAPAS	Samples of existing EE&C materials	July
	Capacity of EE&C partners assessed	PAPAS		July
	Conduct workshops to develop strategies	PAPAS, ASC		August
	Complete national watershed public awareness strategies	PAPAS		September

Activity	Year One Tasks	Assistance Needs	Resource Needs	Completion Date
Facilitate Coordination mechanisms	Conduct study of governance and watershed management	GNRS, STTA	STTA Contract	March 31 st
	Clarify role and mandate of NIWMC	COP	WPMB, MOLE	April 30th
	Determine partner roles & responsibilities	COP		July
	Develop approach for watershed management planning	WMS lead with assistance from entire team		August
Assess and Integrate training programs	Assess current WSM training programs	COP Lead	RADA, EJASP, TFT	May
	Examine National level training needs	COP Lead		June
	Prioritize training needs	COP Lead		July
Support for special studies	Develop criteria for selection of special study topics	COP Lead, Team		June
	Conduct special studies to meet critical or emerging problems and needs	STTA, COP Lead	STTA Contract	July - September

Activity Benchmarks

A summary of proposed activity benchmarks established for the first project year for CR 3 is presented below. These benchmarks are projections. Flexibility in project implementation must be exercised to maximize opportunities and confront constraints.

Year One

- Plan for a comprehensive watershed management program inventory, and dissemination of information to targeted stakeholders developed with NEPA;
- NEPA sponsored fora for improved watershed resource management, coordination supported
- Training program for the WPMB developed
- Assessment of existing EE&C watershed programs completed
- Formal linkage with NEEC is established
- National level communication strategies drafted
- MOU signed with EE&C strategic partners
- First special study conducted

Cross Cutting Activities

In addition to the three CRs, the project will also initiate two cross-cutting activities that will relate to each of the CRs in one way or another. These two areas are:

1. The **Grant Fund** program that will provide funds for community-based activities, most likely those falling under CR 1 and CR 2; and
2. **Gender Equity** activities that will cut across all three CRs since gender considerations will need to be part of all CR activities.

These activities are now discussed in more detail.

Grant Fund Development

Strategy

A grant program will be developed to support community-based activities. The grant fund component of R2RW will be a very important vehicle for building partnerships and for taking the organizational strengthening process to another level. The R2RW grant fund will – by necessity – require local organizations to forge strong partnerships with other organizations (such as SDC), and with other donor agencies – especially EFJ and JSIF. This will enable local organizations to effectively leverage additional funds to make the most strategic use of available resources – which is the ultimate goal of the grant program. By adopting this approach from the very beginning, R2RW will be working with local organizations to develop these negotiating, leveraging and planning skills from very early on in all community-based activities.

To do so, Year 1 activities will concentrate on:

- Compiling lessons from other current grant programs in Jamaica, and in particular, the CWIP grant fund experience; and
- Cognizant of USAID regulations and requirements concerning grants and sub-grants, adopting the procedures developed by CWIP for grants management.

There are two expected results from the grant program:

- Environment activities are supported; and
- Organizational capacity increased

R2RW has a relatively limited amount of funds available for the grant program. For this reason, R2RW recognizes that these funds will be best utilized if leveraged in conjunction with other existing small grant funds available in Jamaica, including those of CWIP. This is especially true in the Rio Grande watershed, as numerous donors will be working there.

The principles of complete transparency and accountability will be incorporated into the grant fund design. This will be important not only to ensure that the program is developed in accordance with USAID requirements, but that it is also completely acceptable to the project's strategic partners. A clear, concise, and transparent method for administering the grant program will be established. The project Implementation Committee (PIC) will approve all grants.

Year One Activities and Tasks

Activity	Year One Tasks	Assistance Needs	Resource Needs	Completion Date
Grant Fund Development	Compile lessons from existing programs in Jamaica	COP lead, PAPAS	EFJ, JSIF documents	April 30 th
	Develop concept paper to describe R2RW Grant Program	COP	CWIP Grant Program documentation	May 31 st
	Establish internal grant administration processes	COP	ASC	June 30 th
	Develop Management Program Plan	COP		June 30 th
	Solicitation and review of grants for the Great River Watershed	COP lead, Team	PIC	July to September

Benchmarks

A summary of proposed benchmarks applicable to the first year of Grant Fund activities is presented below. These benchmarks are projections. Flexibility in project implementation must be exercised to maximize opportunities and to confront constraints.

Year One

- Grant fund program developed and approved
- Initial applications for grants in GRW are developed

Gender Equity Activities

Background

One of the reasons why past watershed management initiatives may not have been as successful as had been hoped is that they may have failed to consider gender realities. Technologies and activities may therefore have been targeted incorrectly and were thus ineffective. Sustainable natural resource use needs to consider the ways in which different genders use natural resources. It is critical to know **who** uses specific resources, **how**, and **for what reasons (why)** if project activities are to be designed appropriately and targeted correctly. Gender analysis helps to answer these questions and can help to ensure that project results are achieved.

Development Hypothesis

Gender Analysis, particularly using the tools of the Gender Equity Mechanism, will ensure that gender factors are considered in the design of project activities and to ensure that project results are gender balanced.

Strategy

During the past 20 years, the importance of gender equity has come to be recognized as critical for project success. Recently, the GOJ through the PIOJ, has been developing a specific “Gender Equity Mechanism” to be used as a tool in the design, implementation, monitoring and evaluation of all GOJ projects. The GEM provides indicators for assessing gender differences in access and control over resources, as well as for assessing gender differences in participation and community development.

With its strategic partners, R2RW will use the GEM developed by PIOJ as a guide for developing gender strategies for the watersheds. In order for ownership and true commitment to a gender approach, it is critical that:

- Training in the use of the GEM take place with strategic partners;
- That the GEM is used as a guide for partners, and communities, to develop appropriate gender strategies
- Gender indicators for monitoring and evaluation are developed through a participatory community-based approach.
- Gender appropriateness of TAPS determined

Assumptions

The major assumptions, which underlie the goals of Gender Strategy Component, are:

1. Gender differences in resource use do exist and will need to be factored into the design of project activities in order to achieve project success, and
2. Commitment for a gender approach can be reached among key strategic partners

SO2 Linkages

Activities and tasks undertaken through the implementation of the Gender Strategy will contribute to the USAID SO2 by including gender considerations:

IR1	Increased adoption of environmentally sound practices
IR1.1	Increased effectiveness of environmental NGOs and other local organisations (governmental and private sector)
IR1.2	Increased economic incentives for environmentally sound practices
IR2.1.1	Increased capacity of key GOJ agencies

Year One Activities and Tasks

In the first year, R2RW will seek to build consensus and commitment to a gender approach among its key strategic partners – first at the national level and then at the watershed level. It is critical that the heads of lead governmental partners support a gender approach to watershed management. To do this, R2RW will conduct gender training and sensitization workshops to garner this support.

In addition, similar gender training initiatives will take place in conjunction with key strategic partners at the watershed and community-based levels.

Out of these training initiatives, gender strategies for each watershed will be developed in conjunction with strategic partners. These strategies will relate to each of the three CR 1s and will outline actions to be implemented starting in Year 2, but with revisions possible for the remaining project years. Indicators for monitoring and evaluation will also be identified. In subsequent years of R2RW, an annual review will be undertaken to ensure that gender considerations are being incorporated into project interventions.

Activity	Year One Tasks	Assistance Needs	Resource Needs	Completion Date
Develop Gender Strategies for each Watershed	Baseline gender disaggregated data on each watershed compiled	PAPAS	Census data	March 31 st
	National sensitization workshop on gender awareness in watershed management	PAPAS, STTA, ASC	STTA Contract	August
	Watershed level training workshops on gender issues	PAPAS, Gender STTAs	Training support	August
	Field assessment activities to support strategy preparation	PAPAS		August - September
	Gender strategies drafted	PAPAS		September
	Gender considerations incorporated into MOU with strategic partners	PAPAS, COP		September
	Conduct annual review of R2RW gender activities	PAPAS, COP		September

Benchmarks

A summary of proposed benchmarks applicable to the first year of gender strategy related activities are presented below. Once again, these benchmarks are projections. Flexibility in project implementation must be exercised to maximize opportunities and to confront constraints.

Year One

- Gender strategies developed for each watershed
- MOU signed with strategic partners to implement gender strategies

(D) PROJECT MANAGEMENT

The two main clients for R2RW are USAID/Jamaica and the Government of Jamaica, implementing the project through its National Environment and Planning Agency (NEPA). Associates in Rural Development, Inc. (ARD) and its subcontractor, Cargill Technical Services, Inc. (CTS), are assisting the two clients in managing the implementation of R2RW. The three partners will form a Project Implementation Committee (PIC) that raises and deals with management and operational issues at PIC monthly meetings.

Several mechanisms have been developed to oversee, coordinate, and monitor implementation of R2RW. Overall guidance will be provided by an Interagency Steering Committee (ISC). The ISC is responsible for approving work plans, progress reports, and reviewing outputs of the project compared to expected results. Although not finalized, the ISC will probably meet quarterly.

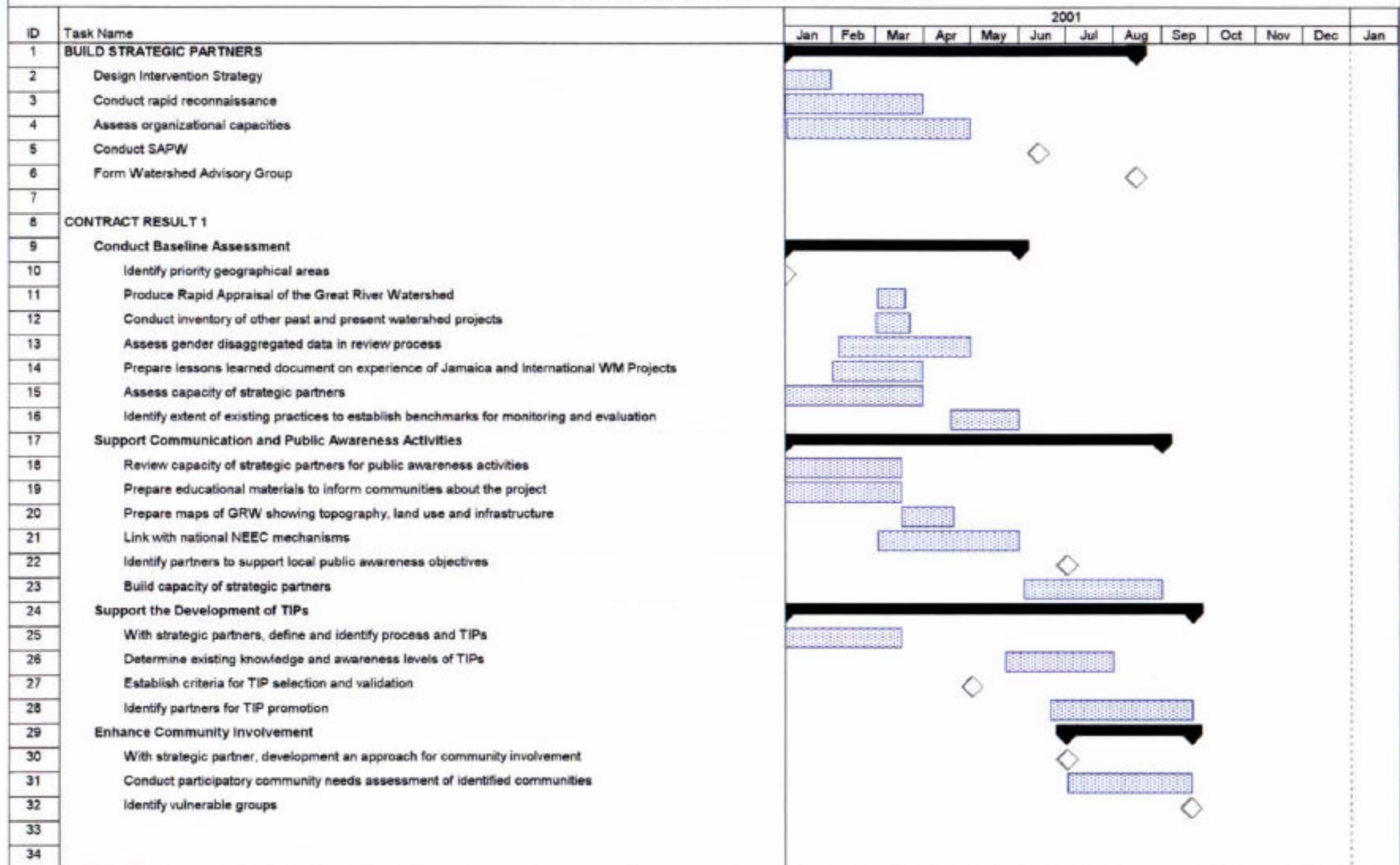
An Advisory Group (AG) will be established for each R2RW Contract Result. These AGs provide technical guidance, monitor results, and provide linkages to other relevant activities in Jamaica. The membership of the AGs is expected to fluctuate depending on issues arising and the technical direction R2RW takes.

The ARD Administrative Support Center (ASC) provides administrative support, such as logistics, financial management, and information management, to both R2RW and CWIP.

(E) IMPLEMENTATION SCHEDULE

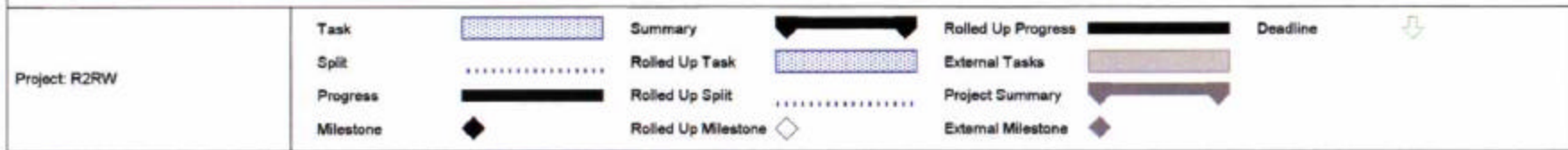
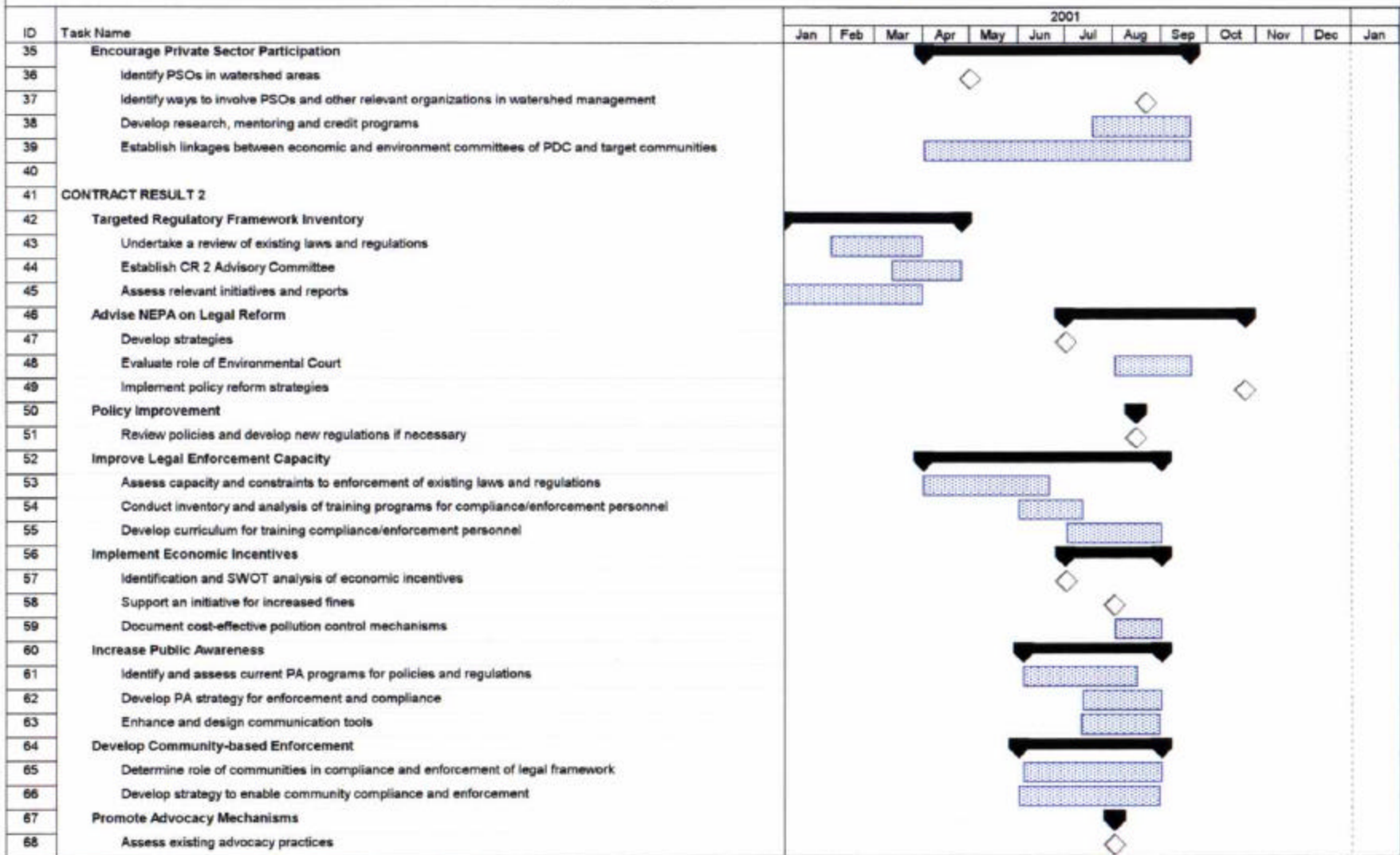
A summary of R2RW's implementation activities and tasks for the first year of the contract are presented on the following pages. The activities and tasks for each CR correspond to those presented and described in Section (C). Projecting in the detail done in this report is only a planning and management tool for optimal contract performance and adjustments are to be expected.

Life of Project Strategy and First Annual Work Plan

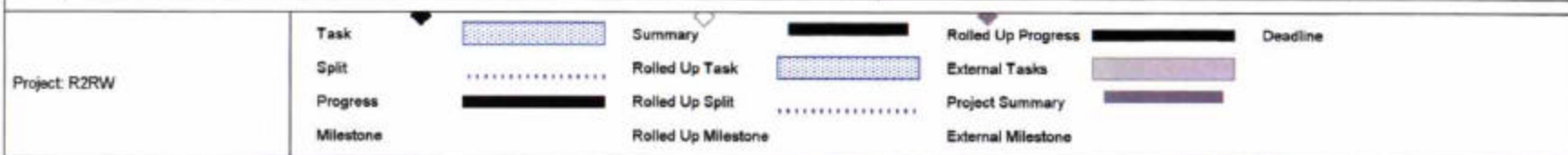
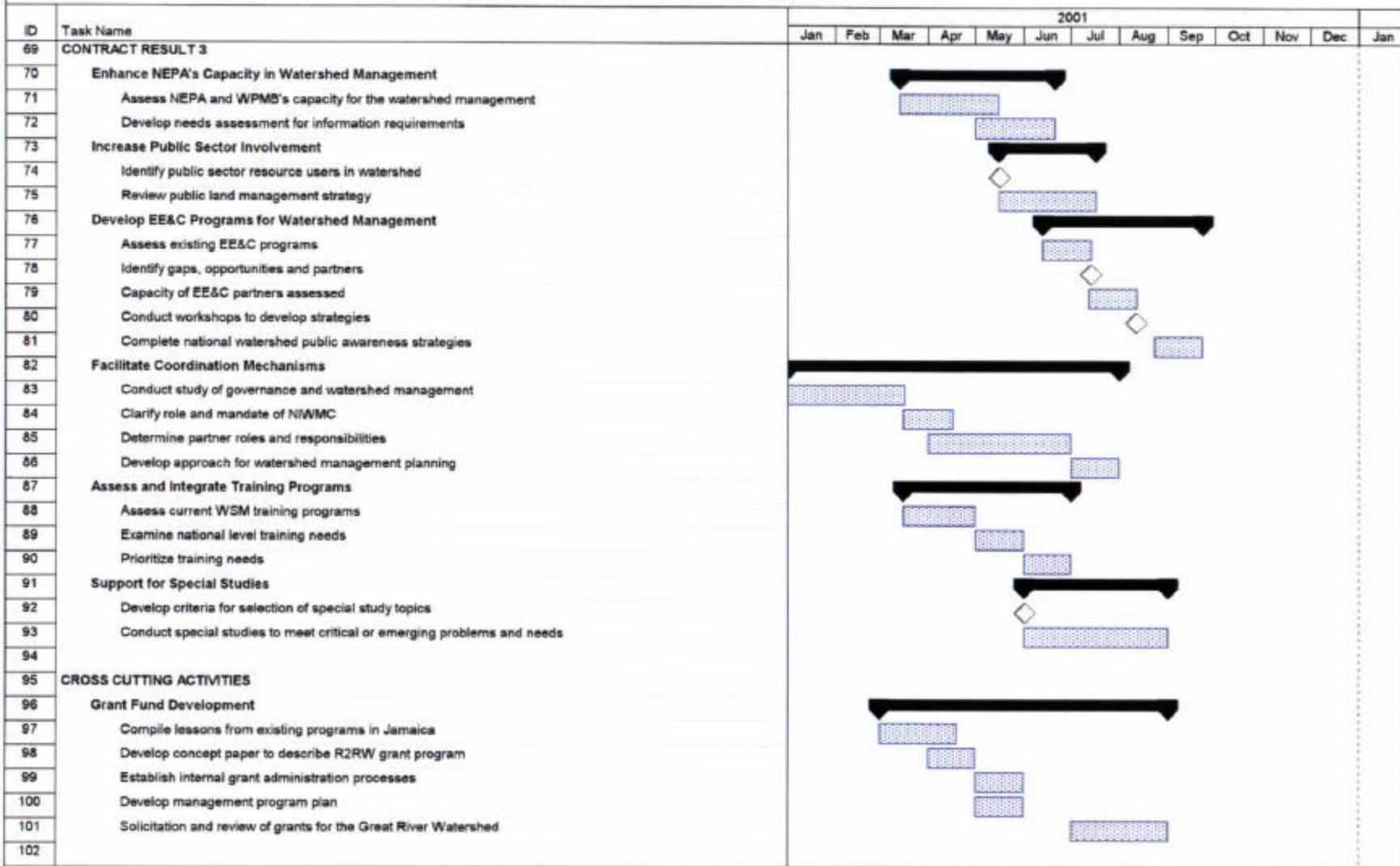


Project: R2RW	Task		Summary		Rolled Up Progress		Deadline	
	Split		Rolled Up Task		External Tasks			
	Progress		Rolled Up Split		Project Summary			
	Milestone		Rolled Up Milestone		External Milestone			

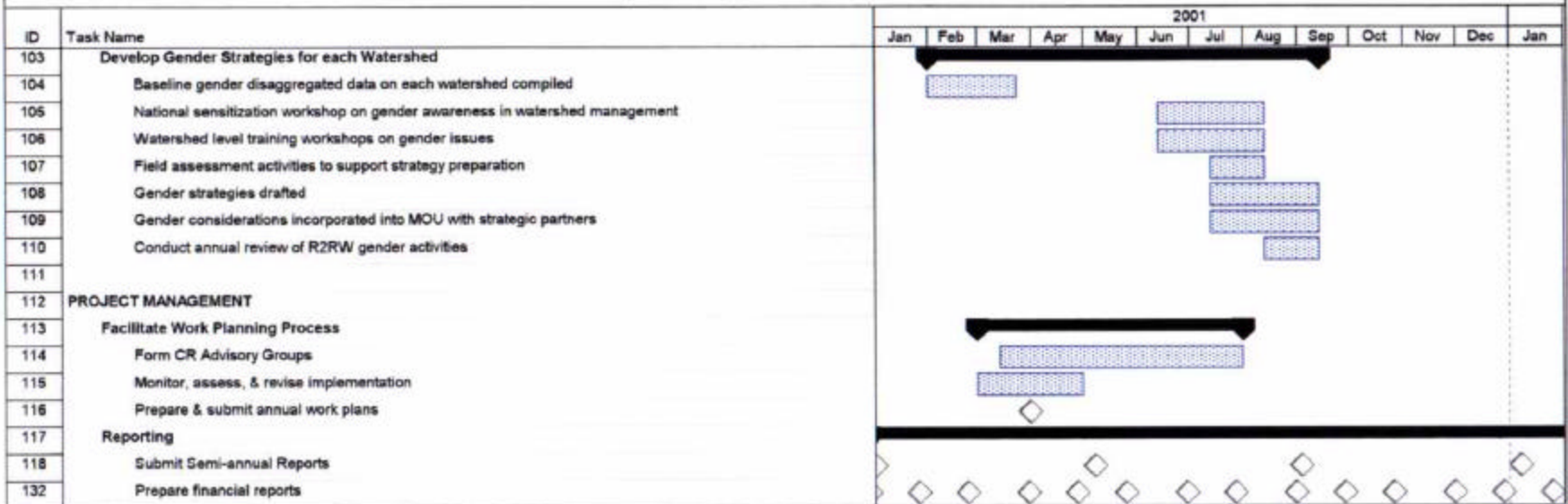
Life of Project Strategy and First Annual Work Plan



Life of Project Strategy and First Annual Work Plan



Life of Project Strategy and First Annual Work Plan



Project: R2RW



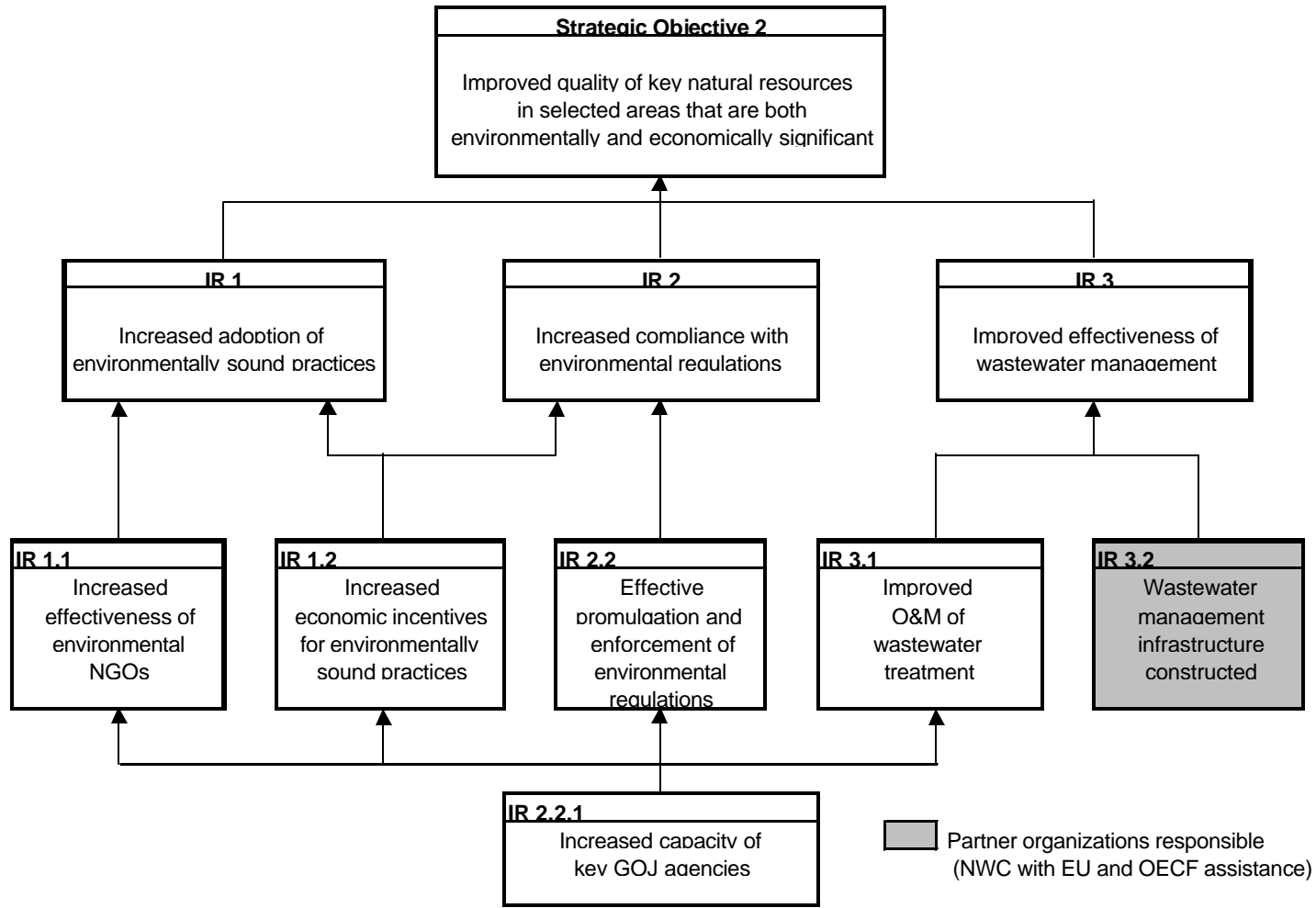
(F) FINANCIAL PLAN

The following page contains an estimated financial plan for the first sixteen months of implementation. This table is broken down by contract CLINs which are equivalent to the CRs discussed in this document. A more general five-year financial plan is presented in the Life of Project Strategy and First Annual Work Plan submitted with this document.

ARD, Inc.
Ridge to Reef Watershed Project
 First Annual Work Plan
 16 months
 Contract No. 532-C-00-00-00235-00

	CLIN 1	CLIN 2	CLIN 3	CLIN 4	CLIN 5	CLIN 6	Totals
Project Management & Admin	346,502	277,203	69,300	7,138	33,723	36,335	770,201
Travel, Transportation & Per Diem	87,354	69,884	17,471	0	9,195	7,576	191,480
Equipment & Supplies	74,380	59,504	14,876	0	7,830	0	156,590
Operating Costs	24,581	19,665	4,916	0	2,588	68	51,817
Subcontracts and Short-term Technical Assistance	163,135	130,509	32,627	0	17,172	0	343,443
Grants	0	0	0	83,333	0	0	83,333
Training							
- Study Tours	16,667	13,333	3,333	0	0	0	33,333
- In-Country	16,667	13,333	3,333	0	0	0	33,333
Totals	729,286	583,431	145,857	90,471	70,507	43,979	1,663,531

USAID/JAMAICA SO2 RESULT FRAMEWORK



POWERPOINT PRESENTATION OF R2RW APPROACH





R2RW Contract Objective

Natural resources under improved and sustainable management in identified watersheds



Lessons Learned

- ◆ No organizational sustainability
- ◆ Clear incentives to participant must exist
- ◆ Vulnerable groups & people
- ◆ Practices known & require few FS changes
- ◆ Reason for enforcement understood & supported & devolved to lowest possible level
- ◆ Group & gender use of NR not well understood



R2RW Implementation Principles

- ◆ Demand-driven
- ◆ Results oriented
- ◆ Sustainable & collaborative -- working through strategic partners
- ◆ Focused, practical, flexible, and doable
- ◆ Buttressed



R2RW Framework

Contract Objective		
Natural resources under improved and sustainable management in identified watersheds		
CR 1	CR 2	CR 3
Through targeted organizations, sustainable environmental management practices by resource users identified and promoted	Incentives for and obstacles to enforcement of targeted environmental regulations identified and solutions supported	Capacity of Jamaican government agencies, international donors, and private-sector and civil society organizations to implement effective watershed management programs enhanced
Complete Baseline Inventory	Inventory Regulatory Framework	Enhance NEPA's Capacity
Stimulate Communication and Public Awareness	Advise on Legal Reform	Develop Information Management Systems
Enhance Community involvement	Improve Selected Policy Implementation	Increase Public-Sector Involvement
Encourage Private -Sector Participation	Enhance Legal Enforcement Capacity	Increase Private-Sector Involvement
Adopt Best Management Practices (BMPs)	Highlight Economic Incentives and Disincentives	Civil Society Involvement
Enhance Sustainability	Increase Public Awareness	Facilitate Coordination Mechanisms
	Support Community-based Enforcement	Assess and Integrate Training Programs
	Assist Advocacy Development	Insure Accountability
		Special Studies



Contract Result 1

Through targeted organizations, sustainable environmental management practices by resource users identified and promoted



Contract Result 2

Incentives for and obstacles to enforcement of targeted existing environmental regulations identified and solutions supported



Contract Result t 3

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



Cross-Cutting Themes

- ◆ Grants & fund leveraging
- ◆ Integration of gender
- ◆ Public awareness & education
- ◆ Performance monitoring

Building Partners



Building Partnerships

PARTNER LEVEL

- Preliminary site reconnaissance
- Stakeholder workshop to build partnerships
- Partners form local watershed coordination committee
- Determine criteria and select communities
- Provide training

Partners Facilitate

COMMUNITY MOBILIZATION & PROJECT DEVELOPMENT

- Collect baseline information in communities
- Clarify needs, problems, and conflicts
- Prepare community action plan
- Implement community projects



Partner Level

- Preliminary rapid reconnaissance
- Organizational assessment of key potential partners
- Stakeholder action planning workshop
- Form Watershed Implementation Advisory Group
- Train partners
- Implement projects



Community - Project Level

- Community baseline
- Characterize needs, problems, and conflicts
- Develop Community Action Plan
- Implement community projects



Other Partner Activities

- School-based environmental education
- Eco-business market development planning
- Watershed inventory and mapping
- Watershed management planning
- Preventing pollution through environmental management

Contract Result 1

Through targeted organizations, sustainable environmental management practices by resource users identified and promoted

Proposed Strategies

- ◆ Complete Baseline Assessment
- ◆ Stimulate Communication and Public Awareness
- ◆ Enhance Community Involvement
- ◆ Encourage Private Sector Participation
- ◆ Support the Adoption of Best Management Practices (BMPs)
- ◆ Enhance Sustainability

Complete Baseline assessment

- ◆ Identify priority geographic & product areas for research
- ◆ Review existing information/experiences for Lessons Learned & Implications to activity
- ◆ Include gender analysis in data collection
- ◆ Collect information on BMPs
- ◆ Assess market opportunities for alternative income-generation

Stimulate Communication & Public Awareness

- ◆ Inform public of the project
- ◆ Identify partners which support project objectives for EE&C
- ◆ Develop participatory communication and public awareness strategies
- ◆ Build capacity of partners in EE&C
- ◆ Develop relevant EE&C materials to encourage adoption of BMPs
- ◆ Insist on outcomes/results vs. processes & paperwork

Enhance Community Involvement

With strategic partners, develop approach for community selection and involvement:

- ◆ Conduct participatory needs assessment to identify priority issues
- ◆ Identify vulnerable groups/resource users - including gender
- ◆ Develop community WSM action plans CAPs
- ◆ Support capacity to implement CAPs
- ◆ Foster linkages between upper WS users & lower WW users
- ◆ Seek community-based political support for selected programs

Encourage Private Sector Participation

- ◆ Generate Increased Demand for Environmentally Friendly Products by:
 - Identify Private Sector Organizations interested in WM in target areas
 - Identify ways to involve PSOs in WMP for mutual benefits
 - Support the development of sustainable BMP users/private sector participatory partnerships
 - Investigate mentoring program (large company executives increase management capacity on BMP supporting small enterprises)
 - Improve access of BMP small enterprises to commercial finance (USAID guarantee)
 - Investigate ways to improve coordination of MSME support project actors, including EJASP

Support the Adoption of Best Management Practices

- ◆ Define “Best Management Practices”
- ◆ Establish criteria for BMPs & prioritize
- ◆ Identify and research possible BMPs
- ◆ Identify partners for BMP implementation
- ◆ Identify incentives to encourage BMP adoption
- ◆ Promote BMPs in watershed areas
- ◆ Document BMP experiences for wider application

Enhance Sustainability (Economic, Environmental, Institutional, & Social)

- ◆ Example: Economic Sustainability:
 - Identify possible commercial opportunities and/or alternative income strategies
 - Conduct feasibility studies
 - Identify partners for promoting sustainable business enterprises
 - Develop sustainable marketing links
 - Enhance private sector role in NIWMC



Contract Result 2

Incentives for and obstacles to enforcement of targeted existing environmental regulations identified and solutions supported



Focus Question

How can we improve implementation of policies and enforcement?



Proposed Strategies

- Inventory
- Legal Reform
- Policy Improvement
- Improved Legal Enforcement Capacity
- Economic Incentives/Disincentives
- Public Awareness
- Community-Based Enforcement
- Advocacy



Inventory

Baseline Research on Existing Initiatives, Policies, Laws & Regulations

- Review existing laws & regulations relevant to WS management
- Review relevant initiatives & reports
- Review relevant existing institutional policies & determine their policy reform needs



Legal Reform

Incorporate Lessons Learned & Findings Into Recommendations for WS Legislation

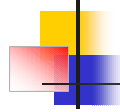
- Support NEPA to improve watershed legislation
- Support the creation of community based enforcement legal framework, e.g., user fees
- Assess R2RW likely involvement in promoting the establishment of an Environmental Court



Policy Improvement

Work with Relevant State Agencies to Support the Implementation of Selected Policies

- Define criteria for selecting & prioritizing policies
- Establish an implementation strategy for reform of selected/prioritized policies
 - Action plan, target activities, partners, target audience



Improved Legal Enforcement Capacity

Enhance Capabilities of Enforcement Personnel

- Train enforcement personnel e.g NEPA, Police in economic & environmental benefits of effective enforcement & value of NR
- Identify sources of new revenue for improved enforcement
- Develop & implement Workshops/Forums for judges & police
- Target enforcement capacity enhancement on regs. directly related to R2RW objectives



Economic Incentives/ Disincentives

Develop & Recommend Financial Incentives to Stimulate the Adoption of BMPs

- Coordinate an advocacy program to increase fines & equate amount of fine to damage caused or potential damage
- Identify specific economic incentives to stimulate the adoption & ongoing utilization of BMPs
- Help NEPA to define the most cost effective ways to resolve identified environmental problems related to industrial & agro-processing in the targeted WSs



Public Awareness

Increase Public Awareness in Support of Activity Objectives

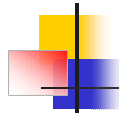
- Design simple communication tools regarding environmental policies
- Identify and support public awareness programs
- Design a participatory community education program
- Work with communities to identify local benefits to improved enforcement



Public Awareness

Increase Public Awareness in Support of Activity Objectives

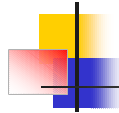
- Identify the role of local residents in the public education process
- Incorporate current regulations into BMP materials & extension efforts
- Encourage voluntary compliance



Community-Based Enforcement

Enhance the Capacity of Communities to Self-Enforcing/Policing

- Identify community benefits from enforcement
- Define local residents roles
- Develop models of community based enforcement/policing
- Build capacity of local enforcement bodies



Advocacy


Improve the Advocacy Capacity of Partners

- Assess the current advocacy capacity of existing R2RW relevant organizations
- Identify effective advocacy processes
- Identify advocacy materials/kits
- Provide training in advocacy skills



Contract Result 3

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



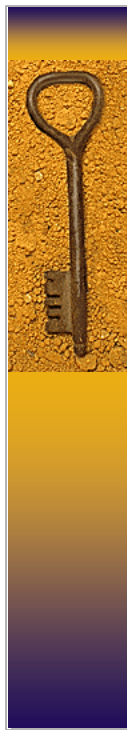
Focus Question

How can we improve the capacity of all those organizations involved in watershed management to effectively manage watershed management programs?



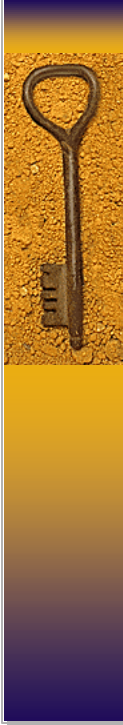
Proposed Strategies

- ◆ Enhance NEPA's Capacity
- ◆ Information Management and Sharing
- ◆ Public Sector Involvement
- ◆ Private Sector Involvement
- ◆ Civil Society Involvement
- ◆ Coordination
- ◆ Training
- ◆ Accountability
- ◆ Special Studies



Enhance NEPA's Capacity

- ◆ Assess capacity needs of NEPA, in particular the Watershed Protection and Management Branch (WPMB) and develop training program
- ◆ Assess current situation of watershed management database, identify gaps, prioritize needs
- ◆ Improve capacity of WPMB to digitize and map project areas towards watershed management plans
- ◆ Improve capacity of WPMB to monitor and coordinate watershed activities



Information Management and Sharing

- ◆ Develop conceptual framework for information sharing network, including an off-site back-up system
- ◆ Develop and implement policy for information sharing, especially GIS
- ◆ Promote annual workshop on watershed management information with partners
- ◆ Develop recommendations for improving human resource for information management
- ◆ Collect all WSM related information



Public Sector Involvement

- ◆ Identify public sector resource users and land owners in target areas
- ◆ Determine status of public land management plans
- ◆ Sensitize public sector users and owners on watershed management issues and their respective roles



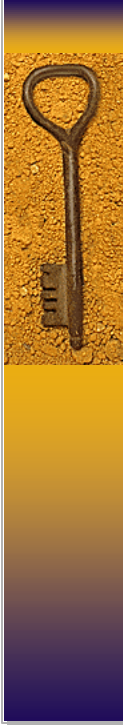
Private Sector Involvement

- ◆ Investigate enhancing capacity of SMEs management consulting firm (so that they can develop such BMP support small enterprises)
- ◆ Improve Access of BMP small enterprises to Commercial finance (USAID Guaranties) (CR 1)
- ◆ Involve private sector in the National Integrated Watershed Management Council (NIWMC) and Local Committees



Civil Society Involvement

- ◆ Facilitate linkages with NIWMC
- ◆ Facilitate linkages at the national level among civil society groups and NGOs in the project



Coordination

- ◆ Clarify role of NIWMC in Coordination of watershed Projects with strategic partners
- ◆ Determine roles & responsibilities of state agencies and/or strategic partners in WM projects
- ◆ Support the design and documentation of mechanisms for coordinating state roles & responsibilities



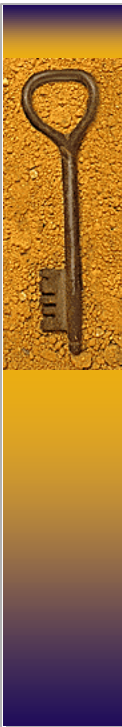
Training

- ◆ Identify current training programs in watershed management and assess effectiveness
- ◆ Assess relevant training needs for watershed management at the national level
- ◆ Assess level of coordination between agencies and organizations involved in field level training programs



Training

- ◆ Identify ways to improve practical training including site visits
- ◆ Facilitate workshops with targeted agencies to prioritize training needs and identify ways to combine resources and coordinate activities
- ◆ Support development of training materials through strategic partners



Accountability

- ◆ Facilitate measures and processes for accountability & transparency at local/PDC level (ex. Memorandum of Understanding)
- ◆ Facilitate linkage and transparency among local, state agency & NIWMC levels
- ◆ Link to advocacy mechanisms



The slide features a dark blue background with several white gear outlines of varying sizes. On the left side, there is a vertical strip with a colorful, abstract, pixelated pattern in shades of orange, yellow, and brown. The title 'Project Management System' is centered at the top in a bold, yellow, sans-serif font.

Project Management System

- Main clients are USAID & NEPA-NRCA
- Inter-agency Steering Committee (quarterly)
- Project Implementation Committee (PIC)
 - Implementation oversight (NRCA, USAID, R2RW)
 - on-going consultation
 - Periodic meetings

This slide is identical to the one above, featuring a dark blue background with white gear outlines, a colorful abstract strip on the left, and the title 'Project Management System' in yellow.

Project Management System

- Main clients are USAID & NEPA-NRCA
- Inter-agency Steering Committee (quarterly)
- Project Implementation Committee (PIC)
 - Implementation oversight (NRCA, USAID, R2RW)
 - on-going consultation
 - Periodic meetings

Gender Issues

Understanding "Gender" is about Understanding "People"

- _ There are many misunderstandings in Jamaica about what we mean about "**gender**"
- _ most people think "gender" means the same as "women"
- _ many people also think that "development" is a zero-sum game (scarce benefits and spoils)- if we benefit women, men will lose,
- _ but....

“People & Sustainable Resource Use”

- “**People**” are at the center of sustainable resource use - who else are resources “sustainable” for?
- It is “**People** who either manage or miss-manage natural resources”
- When we talk about “***gender***” we are talking about “***people***”

However, “People” are not the same...

- But “***people***” are also **different**
- Men are different from women
- Younger people are different from older folk
- Richer people are different from those who are poorer
- Some people are more educated than others
- In Jamaica, race and ethnic origin (eg., Maroon and non-Maroon) is also a difference that impacts on how people see one another and use resources

Gender Analysis

- *Gender analysis* is about understanding all of these differences and about addressing these differences through “appropriate” development initiatives

Gender & Equity

- The definition of “sustainability” implies equity - people need to have an equal opportunity to benefit from & manage resources sustainably
- But at present, certain social groups cannot use natural resources as readily as others
- Recognition of people’s differences is critical to equity and sustainability - people’s differences influence their different use (and misuse) of resources

At present, not all people have equal access to participation, or equal access to natural resources:

- For example, in Portland, **WHO** collects the Otehiti apples from the forest? Who sells them? Who gets the money? For **whom** is the money used?
- What opportunities are there for youth to participate? For women?
- If youth are planting ganja in the forest and other persons are cutting down trees, what can be done to provide them with alternatives?
- If women wash laundry in the river, how can this be changed to make their overall workload easier?
- Who are the people who are mining the river sand? Dumping garbage from other communities?

GOJ Commitment

The Government of Jamaica has committed itself to achieving the goal of gender and social equity by:

- Signing the **Beijing Platform for Action** 1995
- Incorporating "Gender, Social Equity and Environment" into the **National Industrial Policy**
- Signing the **Convention on the Rights of the Child** (most recent convention held last week in Kingston)
- In developing the **National Population Action Plan**
- Signing many other conventions and Action Plans...

Tools for Ensuring Gender Equity

- Fortunately, there are some **tools** that R2RW can use to pursue gender equity in its efforts. In particular, the **Gender Equity Mechanism (GEM)** - to be adopted by the PIOJ, will guide and evaluate all projects on the basis of gender equity
- This is the tool what R2RW should consider in its work

Who Else is doing “Gender and Environment Work” in Jamaica?

- CIDA/GOJ ENACT project has developed a gender strategy to guide its work
- The TFT in the FD is also developing a gender strategy
- IABD also has operating guidelines for gender considerations in their projects
- The CIDA Gender Equity Fund provides support to regional and national mainstreaming initiatives
- USAID also has very **STRONG** recommendations regarding gender equity and gender equality...

And, Ridge to Reef....

Parish and Watershed Profiles

The Great River Watershed

- Located in Northwestern Jamaica
- Large plots of low lands comprising of concentrated farms
- Tourism activities mainly on the coastal area. Focus is on sand, sea, and sun - traditional tourism
- Mainly utilized for large cattle, banana, and citrus farms
- Large urban population on the coast dominated by the city of Montego Bay

The Great River Watershed

- Land use characterized by small farming mostly on GOJ lands in the upper reaches; larger estates (sugar, banana, and live-stock) in the middle region; and high density settlement of residents and businesses along the coast
- Economically dominated by Tourism, but includes large-scale agriculture, mining, some small scale industrial production (food processing, garment, and woodwork)
- Montego Bay, a regional commercial transportation and service hub
- Lovely tropical climate

The Great River Watershed

- Four administrative parishes: St. James, Hanover, Westmoreland, and St. Elizabeth
- Relatively developed infrastructure, connection to North Coast Highway, International Airport, major Cruise Ship Harbor
- Environmental threats include soil erosion, agrochemical pollution, downstream sedimentation, threats to the coral reefs from nutrients, over-fishing, and physical damage, deforestation of the few remaining forested areas
- Areas of the Watershed renowned for the Sam Sharp Rebellion

The Great River Watershed

- Several historical and cultural sites exist in the Watershed
- Private Sector, (Sandals), State Agency, (RADA), and Community Partnership exist on the Mafoota Farms. The CIDA SLGRP is using St. James as one of two pilot parishes
- Partnership through the PDC not as strong in St. James, as it is in Portland
- Very strong and influential Private Sector and Political interests

The Great River Watershed

- Civil Society Groups powerful, but uncoordinated
- Parish Council leadership distracted over Street People Event
- Unsure status of Greater Montego Bay Re-Development Plan.

Rio Grande Watershed

- Located in Northeastern Jamaica
- Very mountainous, large inaccessible areas. Mainly small farming activities
- Oldest tourism product in Jamaica, but still under-developed. Great potential in Eco-Tourism
- Rich in natural character and environmental diversity
- Relatively small urban coastal population opening up into the town of Port Antonio and the District of St. Margaret Bay

Rio Grande Watershed

- Upper, middle, and lower regions dominated by agricultural activities (coffee, bananas, coconuts and dasheen). Extremely famous for it's Blue Mountain Coffee
- Economy dominated by agriculture, with declining international markets, low industrialized activities leaning to high employment
- Port Antonio considered a green lay-away
- High rainfall

Rio Grande Watershed

- Dominated by the Parish of Portland, with a minor Influence of St. Thomas
- Infrastructure poor and declining with marketing, communication and transport hampered by horrendous roads
- Environmental threats include deforestation, soil erosion from cleared agricultural lands and from road construction and maintenance, illegal sand mining in the river, poor sanitation and other point-source pollution from illegal squatter settlements, and unclear restrictions on poor land-use practices in fragile areas

Rio Grande Watershed

- Presence of an indigenous group, (The Maroons), with their distinct history, and culture
- Influenced by other unique cultural developments, such as the home of the first freed slaves in the country. Chinese and East Indian settlers also occupied the Valley. Descendants of the early East Indian settlers still occupy The Valley
- Very high levels of Donor activities in the Valley, (previous and existing). Extremely low sustainable impact of previous activities

Rio Grande Watershed

- Strong Parish Partnership in place
- Weak fragmented and absentia Private Sector interests. Political interests, very committed, but influence not as strong as in the West
- Weak and committed Civil Society Groups. Presence of some infighting
- Parish Council leadership hindered by lack of resources
- Parish Sustainable Development Planning Process, through ENACT, being closely watched by other Parishes. The UDC's North East Coast Sustainable Development Plan, which include Portland is being prepared

Appendix 3

STAKEHOLDER COMMENTS ON STRATEGY AND WORK PLAN

Participants at the National Level Planning Workshop Kingston, Oct 18, 2000

NAME	ORGANIZATION	TITLE	CONTACT
Gillian Young	SRC Hope Road	Scientific Officer	.927-1771 Fax 977-2194
George Wilson	R2RW		754-3910-2
Charles McKenzie	NRCA	Environmental Officer	979-5127 / 754-7567
Albert Shand	RADA	Executive Director	977-0609
Andrea Steel	NRCA	Environmental Officer	754-7567
Maria Protz	R2RW		754-3910
Jan Auman	CWIP	Chief of Party	754-3910
Trevor Spence	R2RW		754-3910
Franklyn McDonald	NRCA	Executive Director	754-7551
Bernard Delaine	R2RW	Chief of Party	754-3910
Jim Maxwell	Cargill Technical Services		
Jill Williams	MBMP		952-5619
Sadie Dixon	RADA, St. James	Executive Officer	952-1876
Chris Baker	EU/RADA/EJASP	Technical Adviser	970-3940
Learie Miller	NRCA		754-7550
Andreas Haidkuki	WRA		927-0302
Charlene Easton	ENACT		754-7568
Janice Blake	EFJ		978-8518
Howard Batson	USAID		926-3645
K.Hyatt	Ministry of Agriculture		927-1731
M. Rowe	CWIP		
S. Parke	USAID		926-3645
Harvey Webb	PEPA		
S. Gayle	JSIF		926-3414
David Smith	JSIF		
Donnette F. Buchanan	JCDT	Chief Operation Officer	960-2848-9

NAME	ORGANIZATION	TITLE	CONTACT
Juliette Lee-Tomlinson	SDC		928-2022
Raymond Martin			
Vitus Evans	JADF		929-8090
Joy Douglas	Valley Hikes		993-3881
Lemore Jones	NRCA		754-7586
Marilyn Headley	Forestry Department		
Daphne Hewitt	ARD		
Annette Prince-Carey	JAMAL		

REPORT ON WORKSHOPS

1. NATIONAL WORKSHOP

Follow up on planning workshop session, Oct 18

Comments, issues and suggestions

CR3

- What is the role of ENGOs/NGOs in CR3? ENGOs/NGOs need to be included in CR3 because they are also in need of institutional strengthening
- What mechanisms could support NGOs such as NEEC, parks management component through national committees?
- Would have liked to have heard of a synopsis of the watersheds first
- How will the bottom up approach be integrated into the Project?
- How are resources going to be spent?
- We need some clarification on the NIWMC
- How will the community planning process and the WM Committees related to the PDC process?
- What about the RADA Inter-Agency Committee level? This Committee should also be explicitly recognized
- Will the project be tackling coordination issues among land utilization department, FD, etc.
- We do need to come up with some national level alternatives strategies for natural resource use?
- We must be careful not to do more studies that have already been done. Need tangible results
- Need to look at the ENACT capacity evaluation of NRCA that has been done, same has not been done for FD, MOA, RADA, etc.
- Private sector inclusion seems to be more focused on small enterprise alone
- Query about the USAID guarantee mechanism
- If human resource capacity is critical to sustainability, there is no mention to which extent human resource deficiencies may impact or be addressed
- Will local agencies/partners be involved in the initial process of collecting background information, etc.

CR1

- Need to be very careful and thorough in defining what is a BMP - what is best, who determines what is “best”
- Land tenure and ownership vs important for adoption of BMPs
- Sustainability of community groups – do they have to be sustainable? There is a role for ephemeral groups too, promoting objectives of project
- Groups that are sustainable are those that make money.
- Target “consumers” in the public education process. Such as for organic products
- Not to focus too much a “community” because what is a community?
- Danger of working with groups comprised of multiple districts.
- Is community the most useful focal point for education, awareness etc? What about large producers, processing centers, etc.
- Where is the “reef”
- What are the tools for implementing CR1?
- Not just farmers that need to be involved.
- Charcoal production: other species have been identified? the problem is getting producers to make the change
- Can the project actually impact the creation of NIWMC? Suggesting the creation of sub-groups that address specific natural resources
- Upper watershed problems are mainly the result of large farmers, absentee landowners, etc.
- Community water catchments are an issue.

CR2

- Community based compliance? Should not only be linked to economic incentives but also to other values, such as health – quality of life values
- Community stewardship should be emphasized, develop “ownership & stewardship status”.
- Community “funds” not likely to happen in project lifetime, fees can’t come out, “service could”.
- What is the planning framework in all of the legislation & all other CRs?
- What is the economic framework of rural settlements, land tenure, implications needs to be considered
- What are the long-term economic implications when we talk about human settlements & sustainability?

- What are the economic policy implications for specific sections of the watershed
- Where is the Forest Policy legislation review?
- People who depend on water from a specific watershed are also stakeholders
- Need to look at new synergies issues; eco-tourism is now heavily favored but can't be a magic answer for everything. Need to always look at the framework overall.
- Where does the 'reef' fit in
- Need to give some weight to traditional values when gender is considered.
- Traditions such as "lend a day" could be revived
- Need to also consider indigenous knowledge and natural resource use.
- Information from FD, NRCA & other agencies could be put together & digitized within the WMB – available from one source or through another source
- Remember, we can't forget the "squatters" in the watershed
- Need also to understand "why" people are where they are – work with end users & BMPs
- Issues of landslides need to be considered
- Can't stop landslides, but they do need to be considered in the planning process & in education
- Community service is a better approach.
- In some cases of enforcement judges will also need to be educated of alternatives to fines, such as community service
- Communities need to be empowered with real information (internet, GIS, etc)
- Stewardship could be linked to National Youth Service
- Concerns about the PDC & the obstacles that it may cause to enforcement/compliance
- At the same time, need to give the PDCs a chance
- Planning needs to be "bottom up", but also need work at the top, side national, regional and local levels.
- Also linkages via EEC
- *Note for legislation component:* consider reviewing legislation with coffee industry board regarding boundaries for Blue Mountain Coffee.
- *Donor Linkage Coordination:* In Portland, there will be soon a planning workshop process the PDC & all donors to look at how projects fit into the governance structure.

Activities identified by other stakeholders

- Coordination & info-sharing not only among donors GOJ agencies & NGOs

- Standardize framework for coordination
- ARDI would be interested in activities related to organic certification
- SRC's Food technology Unit has a number of projects with great potential.

2. MONTEGO BAY WORKSHOP

November 6, 2000

Evaluation Results

	1	2	3	4	5	Total
#1			1	5	7	13
#2				6	7	13
#3		2	7	3		12
#4			3	6	4	13

COMMENTS

- All persons indicated that they had a good understanding of the goals and objectives of the project now.
- 40% had a very good understanding and 60% reported now having an excellent understanding of the project's overall goals and objectives
- 100 percent indicated a very good to excellent understanding of CR1.
- 90% indicated having a good to very good understanding of CR2
- No working group session was held on CR2 because all participants opted for CR1 or CR3 which represented more of their concerns
- Approximately 80% opted to participate in discussion of CR1
- Response to question 3 showed that 100% had a good understanding of CR3 with over 75% reporting very good to excellent understanding

Responses to question 5, what suggestions should be made to the R2R project, are listed below. 8 of 13 participants provided responses, as follows:

- Ensure that all stakeholders are given reasonable opportunities to participate in the project
- Also that adequate resources are provided to help ensure the success of the project
- Strengthen existing laws and regulations governing watershed areas where necessary and see to enforcement of all laws and regulations

- This is a welcomed project, best wishes in its implementation
- To enhance sustainability, participants should be properly trained and adequate benefits and incentives made available
- Presentations were good and brainstorming techniques used were excellent
- Avoid organizing workshops for Mondays
- Workshop could be held over two days so that adequate time could be given to explore the various CRs
- Whatever programs are decided on, there should be adequate private sector involvement for maintenance of sustainability
- Incentives are necessary for the success of the project
- Make good use of the educational programs through JIS videotapes, etc
- Organize farmers groups within the watershed
- Make use of resource groups, for example, RADA, Forestry department
- Listen to the communities' needs/wants
- Try to give more notice before future meetings
- User fee systems to be made more sustainable
- Make every effort to allow NRCA to acquire the legal teeth it needs to implement programs
- Members involve in the planning workshop will require feedback from each of these meetings
- Forestry should be an integral part of the watershed management process
- The workshop provided adequate information and it is hoped follow-up will be done with the agencies present to sustain the objectives
- Press on!

Reasons for Participating in the Workshop:

- To develop partnerships with NRCA
- To acquire knowledge on watershed projects
- To get buy-in to the process
- Information sharing
- To familiarize with other agencies concerned with environmental protection
- To gain insight into proposed draft FAWP
- To gain insight into integrated approach to environmental protection

- To identify more environmentally sustainable practices for farmers
- To participate in forums where sustainable agriculture is paramount
- To be part of the project planning process
- To access information to assist community education
- To participate in awareness generation of watershed issues
- To foster a better relationship with other stakeholders in the GRW
- To foster and identify sustainable environmental management practices
- To gain a better understanding to the R2R project
- To create an active network on the proposed project
- To facilitate and implement authorized forestry projects in western Jamaica through R2R and to improve the watershed
- As a librarian, I need knowledge on the different disciplines so that the library can serve its clients
- Watershed management and use is important for the preservation of the marine park
- Impact of watershed management is critical to coastal marine resources especially coral reefs
- MPMP is affected by the Great River watershed and we are responsible for the resources within our boundaries which may soon extend to Tryall, Hanover
- The GRW is within the Montpellier Citrus Company's Farm (for about 1+km) and therefore the farm will be in a position to contribute and/or benefit from the project
- To liaise officially on behalf of the Forestry Department as the new Watershed management officer

LIST OF PARTICIPANTS

- | | |
|---|--|
| <p>1. McLean (Community Development Officer)
 Social Development Commission
 Albion Road, P.O. Box 839, #1 P.O.
 Montego Bay
 Phone: 952-6814, 940-6596 or
 707-7236
 Fax: 940-7068</p> | <p>3. Sadie Dixon
 Extension Officer
 RADA – St. James
 Catherine Hall
 Montego Bay #2, St. James
 Phone: 952-1876/79
 Fax: 952-3661</p> |
| <p>2. Venton Bucknor
 Regional Marketing Officer
 Rural Agricultural Development
 Authority
 Catherine Hall, Montego Bay, St. James
 Phone: 952-1876/79
 Fax: 952-3661</p> | <p>4. Trevor Martin
 Zonal Director
 Rural Agricultural Development
 Authority
 Catherine Hall
 Montego Bay #2, St. James
 Phone: 952-1876/79, 952-4803
 Fax: 952-3661</p> |

5. Noel Scott
Principal/Leader
Retrieve All Age School
Retrieve Local Management Advisory
Committee
Cambridge P.O.
St. James
Phone: 605-9504, 605-9731
 6. Lurline Hosang
Parish Coordinator
Social Development Commission
Watson Taylor Park
Lucea P.O., Hanover
Phone: 956-2548, 956-3899
Fax: 956-3778
 7. Nerval W. Brown
Regional Officer
Forestry Department
P.O. Box 612, Montego Bay 2
Phone: 952-0848
Fax: 979-1833
 8. Marilee Moodie
Librarian
St. James Library
Phone: 952-4185
Fax: 952-4186
 9. Jennifer Becker
Public Relations Officer
Montego Bay Marine Park
Pier 1, Howard Cooke Blvd.
Montego Bay, St. James
Phone: 952-5619
Fax: 940-0659
Email: mbmp@n5.com.jm
 10. Kristen Clarke
Science Officer
Montego Bay Marine Park
Pier 1, Howard Cooke Blvd.
Montego Bay, St. James
Phone: 952-5619
Fax: 9400-0659
Email: mbmp@n5.com.jm or
kristenclarke@hotmail.com
 11. Nicholas Jones
Managing Director
Montpellier Citrus Co.Limited
P.O. Box 13, Montpellier, St. James
Phone: 956-4747, 4779
Fax: 956-4749
Email: montp@cwjamaica.com
 12. Lois E. McNeil-Pearson
Principal Lecturer in Geography
Education and Development Studies
Sam Sharpe Teachers College
P.O. Box 40, Granville, Montego Bay
Phone: 952-4000-1
 13. Leon H. Hopkins
Regional Environmental Officer,
Western Region Health Authority
P.O. Box 900 Montego Bay
C/o Cornwall Regional Hospital
Phone: 952-3678
Fax: 952-4074, 2963
 14. Donna Lowe
Watershed and Soil Conservation
Officer
Forestry Department Ministry of
Agriculture (Head Office)
173 Constant Spring Road
Kingston 10
Phone: 924-2667-8
Fax: 924-2667
dlowe@forestry.gov.jm
 15. Stanley R. Dodd
Parish Agricultural Manager
RADA
Haughton Court
Lucea, Hanover
Phone: 956-2252/2378
Fax: 956-2378
- 3. PORTLAND WORKSHOP**
Rio Grande Workshop – Port Antonio
Nov 10, 2000
- Ridge to Reef Watershed Project**
Portland Workshop
Friday, November 10th, 2000
Crest Hotel, Port Antonio
- List of Participants:**
1. Silbert Davis
Chief – Public Health Inspector
Portland Health Department (NERHA)
Smatt Road
Port Antonio P.O.
Portland
Phone: 993-2557
Fax: 993-9426

2. Joy Douglas
Chairman
Valley Hikes
P.O. Box 89
Village of St. George
Port Antonio, Portland
Phone: 993-3881
Fax: 993-4962
Email: valleyhikes@cwjamaica.com
3. Eugene Richards
System/Distribution Supervisor
National Water Commission
West Street
Port Antonio P.O.
Portland
Phone: 993-3692 or 715-4033
4. Chadwick Ralph Falloon
Field Officer
ENACT
Shop 29, Village of St. George
2-4 Georges Street
Port Antonio
Phone: not yet assigned, c/o
ENACT/NRCA
5. Avis Lungren
Parish Coordinator
Social Development Commission
Smatt Road
Port Antonio, Portland
Phone: 993-2644
Fax: 993-4962
6. Wesley Williams
District Operations Supervisor
National Water Commission
50 West Street
Port Antonio, Portland
Phone: 715-4033
Fax: 993-3692
Email: wes_wil@yahoo.com (or – wes-wil@yahoo.com)
7. Layfeete McDonald
Forest Warden
Forest Department
Folly Road
Port Antonio, Portland
8. Lennox Brown
Agricultural Assistant
Rural Agricultural Development
Authority (RADA)
Folly Road
9. Fay Neufville
Disaster Coordinator
Portland Parish Council
1 Gideon Avenue
Port Antonio, Portland
Phone: 993-2665
Fax: 993-3188
10. Owen Bogle
Land Husbandry Officer
RADA
Fairy Hill Post Office
Port Antonio, Portland
Phone: 963-2687, or 2763
11. Trevor Tyrell
Area Officer
Coffee Industry Board
Regulatory Division
Willie Henry Drive
Kingston
Phone: 758-3903
12. Victor Marine
Field Assistant
Coffee Industry Board
Regulatory Division
Hope Bay P.O.
Portland
Phone: 996-1489
13. Rob Holbrook
Watershed Education Officer
Portland Environmental Protection
Agency
6 Allen Avenue
Port Antonio, Portland
Phone: 993-9632
Fax: 715-3705
Email: pepa@cwjamaica.com
14. Harvey Webb
Chief Executive Officer
Portland Environmental Protection
Agency
6 Allen Avenue
Port Antonio, Portland
Phone: 993-9632
Fax: 715-3705
Email: pepa@cwjamaica.com

- | | |
|---|--|
| <p>15. Cynthia (Polly) Perry
Regional Manger
Jamaica Tourist Board & PEPA
P.O. Box 151
City Centre Plaza
Port Antonio
Phone: 993-2587
Fax: 993-2117
Email: pperry@cwjamaica.com</p> | <p>Chief of Party
NEPA/USAID
Coastal Water Quality Improvement
Project
C/o 5 Oxford Park Avenue
Kingston 5
Phone: 754-3910-2
Fax: 754-3913
Email: ard@cwjamaica.com</p> |
| <p>16. Melburn Ming
System/Distribution Supervisor
National Water Commission
15 Summers Town Road
Port Antonio
Phone: 993-3692</p> | <p>b) Albert Merkel
Consultant – USAID
SO-2 Evaluation
Address: Care of Howard Batson
USAID Kingston
Email: almerkel@yahoo.com</p> |
| <p>17. Clarence N. Brown
President
Buff Bay Development Action
Committee (BUBADAC)
5 Fifth Avenue
Buff Bay
Portland
Phone: 996-8383 (Home)
886-1956 (Office)</p> | <p>c) Winston Anderson
USAID – Evaluation Team
SO-2 Evaluation
Phone: 702-0761
Fax: 702-0761
Email: wesa@wtjam.net</p> |
| <p>Observers:</p> <p>a) Jan K. Auman</p> | <p>d) Ralph Field
USAID – S02 Evaluation Team
Address: Care of Howard Batson
USAID Kingston</p> |

CHARACTERISTICS OF THE WATERSHED

Focus question: *What are the opportunities in and the threats against good environment management in the Rio Grande watershed?*

1. What are the economic resources available, to assist in the development of the RGW ?

- The Rio Grande itself
- Agricultural land: banana, coffee, dasheen
- Medicinal herbs and organic farming
- Tourism, and eco-tourism, rafting
- Forestry and agro-forestry resources
- Cultural and historical resources
- Human resources
- Mining activities (mining and Quarry)
- Bio-diversity
- Development of a trail to the Maroon land
- *(Lack of proper roads, which limit the development of the area)*

2. What environmental issues to be addressed (Green)

- Conflicting use of common resources
- Poorly planned development (construction)
- Poor waste water management
- Poor solid waste management
- Inadequate enforcement of existing environmental legislation

- Dumping of solid waste
- Waterfalls
- Marine, sea
- Pollution of the rivers by plastic, chemicals, pesticide
- Deforestation
- Landslides or slippage (270 in 2 days)
- Infrastructure
- Natural and man-made threat
- (Distinguish between the Rio Grande valley and Rio Grande watershed)

3. What social capital exist (Peach)

- Schools – 3 hi-schools but problem in distribution within the watershed
- Churches
- Human resources
- Maroon culture (Nanny town)
- Survival instinct + Nanny Land
- Diversity of settlers & settlements
- *(Need to reduce handouts. We should go for incentives)*
- Land tenure issues and Specific interest groups

4. What Governance issues must be dealt with (blue)

- Limited capital
- No transparency and no confidence
- Lack of accountability
- Limited capacity
- No clear mandate
- Lack of revenues
- Poor housing
- Disconnected policy
- Networking lacking

CR 1: Through targeted organizations, sustainable environmental management practices by resource users identified and promoted

Focus question: *What needs to be done to achieve sustainable environmental management practices in the RGW?*

1. Which organizations are currently working in the area of sustainable environment management?
 - PEPA
 - RADA
 - Valley Hikes
 - Parish council
 - SDC
 - Forestry
 - Ministry of health
 - Case (farm practices)
 - EJASP
 - TPDCO (rafting)
 - Maroon council
 - NWC Test water-quality, but do not share information)
 - NEPA

- JCDC
- JCDD

2. What are the tools currently used to undertake environmental education?

- Pep clubs
- JIS mobile unit
- Local TV station
- Flyers, leaflets, drama, meetings workshops
- Demonstration project work days

3. What income generating activities exist/could be developed in the watershed?

- CB eco-tourism
- Valley hikes
- Maroon
- Health tourism (herbal medicine)
- Agro industry
- Farming and organic crops
- Crafts
- Churches (to be developed)

4. Which Best management practices are currently being implemented in the WS

- Soil conservation techniques (Rada)
- LUJ (Forestry projects)
- Scholl based recycling plastic bottles
- PDC plan
- Valley hikes trail management
- PDC-partnership best management
- Community planning process

5. Best Management Practices: "Livelihood and lifestyle which involves economic, social environmental well being which can be sustained and repeated where applicable"

CR 2: How can we improve compliance with and enforcement of environmental regulations in the Rio Grande Watershed?

1. What regulations currently exist in the area?

- NRCA act
- Forestry act – clean air and burning
- Watershed act
- Wildlife act
- Mining and quarry act
- NRCA Permit & License system
- Water resource act
- Public health act
- Litter act
- Country fire act

2. What incentives could be used to support compliance?

- Public education & training
- Grants in cash,
- Materials

- Community partnership
- Recognition and award of Best Environment practices
- Model farm designed
- Water quality and quantity could be improved. It should be a major incentives to communities

3. What type of enforcement could be used to assist in the area?

- Fines
- User fees
- Community watch committees
- Wardens/rangers
- Environment court

CR 3: What is the capacity of the GOJ agencies and other institutions to implement effective watershed programs?

1. How can NRCA best coordinate and share information on WM?

- Identification of roles of agencies (clearly defined)
- Regulations on watershed should be clearly defined
- Education: simple terms, roles, drama

2. How can NRCA get greater private sector

- Identify & educate private sector on the losses. Ex. Economic/social environmental issues
- Incentives: tax, matching funds for community
- Voluntary compliance

3. What needs to be done to improve accountability of agencies working in this area?

- Mandatory for agencies to meet
- Greater involvement from PPC

Evaluation Results

- Most persons indicated that they had a clear to very clear understanding of the overall goals and objectives of the project
- All persons indicated that they have a clear understanding of CR1 with 25% having an excellent to very clear understanding
- Again, most persons indicated a clear to excellent understanding with more than 75% having a good understanding
- Over 75% had a good understanding but an additional 19% indicated only a fair understanding.

Comments

- To make sense the communities are educated on the project.
- Research to be done on the most appropriate way in which funds will be disbursed for project. Transparency will be very important for those accessing funds.
- Involvement of community members from the groundwork which will enhance discussion making.
- Using electron media to educate personnel.
- Ensure that you have persons in the community being involved right from the initial stage. This will make it work for sure.
- Go-ahead!
- To work with existing community groups.
- A few community members should have been here. To have follow-up workshops.
- Follow-up works to the seminar important.
- Getting to the local communities and dialogue with important agency, example RADA, is important.
- To continue interactions with local residents/stakeholders to achieve objectives.
- R2RW is envisaged to promote environmental management practices, which will enhance the Rio Grande Watershed.
- Put more money into the grant project.
- Why, out of \$8 million US is only \$450,000 being spent on grants fund?

- At the end of the day, I have clear idea of how R2RW will co-exist with other agencies, etc. I think it is a good step to continue the implementation of sustainable development in the watershed areas.
- With speedy implementation of this watershed management, this will enhance improvement of the quality of life for both plants and animals.
- The objectives were met. The session was informative. I still have reservations about the number of projective initiatives coming to the parish all at once and how the lead agency the Parish Council – all deal with these projects with its limited capacity.
- The objectives were mostly achieved. There was clarity in principles of R2RW. Implementation was not detailed but I guess this will follow in the next steps.
- A good workshop. A few community members should have been here.
- A good workshop but follow up on the ideas and suggestions are needed.
- Informative and good planning in terms of environmental issues.
- Develop school nurseries that grow fruit trees to sell to farmers, farmers develop orchard crops and produce fruit juice/pulp to sell to schools develop organic coffee and vanilla projects
- Seminar was good, very informative

METHODOLOGY FOR GROUP SESSION

(A) Characteristics of the Watershed

FOCUS QUESTION: What are the Opportunities in, and the Threats Against good environmental management in the Rio Grande Watershed?

Use the following questions to guide the discussions:

1. What are the economic resources available, to assist in the development of the Rio Grande Watershed?
2. What environmental issues must be addressed?
3. What social capital (Education, Health, etc., exists)?
4. What Governance issues must be dealt with?

(B) Contract Result 1 (CR-1)

FOCUS QUESTION: What needs to be done to achieve sustainable environmental management practices in the Rio Grande Watershed?

Use the following questions to guide the discussions:

1. Which organizations are currently working in the area of sustainable environmental management?
2. What are the tools currently used to undertake environmental education?
3. What income-generating activity exist/could be developed in the watershed?
4. Which Best Management Practices, (BMPs), are currently being implemented in the Watershed?

(C) Contract Result 2 (CR-2)

FOCUS QUESTION: How can we improve compliance with and enforcement of environmental regulations in the Rio Grande Watershed?

Use the following questions to guide the discussions:

1. What regulations currently exist in this area?
2. What incentives could be used to support compliance?
3. What type of enforcement could be used to assist in this area?

(D) Contract Result 3 (CR-3)

FOCUS QUESTION: What is the capacity of GOJ agencies and other institutions to implement effective watershed programs?

Use the following questions to guide discussions:

1. How can NRCA best co-ordinate and share information on Watershed Management?
2. How can NRCA get greater private sector involvement in this area?
3. What needs to be done to improve accountability of agencies working in this area?

RIDGE TO REEF WATERSHED PROJECT

Great River Workshop
Monday, November 6th, 2000

The R2RW team very much appreciates your feedback on the workshop today.

On a scale of 1-5, as follows, please rank the following questions:

1. From this workshop, did you get a clear understand of what the overall goals and objectives of the project are?

0 1 2 3 4 5

Zero (not clear at all) **Three (clear)** **Five (very clear)**

2. Did you get a clear understanding of CR1? – **“Working with local organizations to identify and promote sustainable environmental management practices”**

0 1 2 3 4 5

Zero (not clear at all) **Three (clear)** **Five (very clear)**

3. Did you get a clear understanding of CR2? **“Identify existing incentives and constraints affecting the enforcement of selected existing environmental regulations”**

0 1 2 3 4 5

Zero (not clear at all) **Three (clear)** **Five (very clear)**

4. Did you get a clear understanding of CR3?– **“Enhance the capacity of Stakeholder organizations to implement effective watershed management programs”**

0 1 2 3 4 5

Zero (not clear at all) **Three (clear)** **Five (very clear)**

5. What suggestions would you make for the R2RW project?

ADDITIONAL COMMENTS:

R2RW

Ridge to Reef Watershed Project