



PD-ARSC-26C
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**U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT
ROCAP**

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REGIONAL OFFICE FOR CENTRAL AMERICAN PROGRAMS

Guatemala,
July, 20 1990

WILDLIFE CONSERVATION INTERNATIONAL
3713 N. W. 40th Street
Gainesville, Florida 32606
Attention: Dr. Archie Carr, III

Subject: Cooperative Agreement No. 596-0150-A-00-0587-00

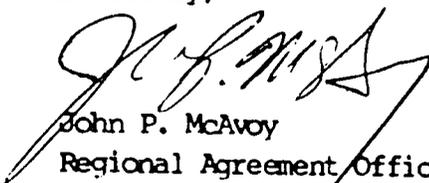
Gentlemen:

Pursuant to the authority contained in the Foreign Assistance Act of 1961, as amended, the Agency for International Development (hereinafter known as AID or USAID) hereby grants to Wildlife Conservation International (hereinafter known as Recipient or WCI) the sum of One Million Six Hundred Thousand US Dollars (\$1,600,000) to provide support over the life of the agreement for the Regional Wildlands Management objectives of the RENARM Project, as more fully described in Attachment No. 1 entitled Schedule and Attachment No. 2 entitled Program Description.

This Agreement is effective and obligation is made as of the date of this letter and shall apply to commitments made by the recipient in furtherance of program objectives during the period beginning with the effective date and ending no later than July 19, 1995. This agreement is made to the Recipient on the condition that the funds will be administered in accordance with the terms and conditions set forth in Attachment 1 entitled the Schedule, Attachment 2 entitled "Program Description", Attachment 3 entitled "Standard Provisions", and Attachment 4, "Applicant's Proposal", which have been agreed to by your organization.

Please sign the original and five (5) copies of this letter to acknowledge your receipt of the Agreement and return the original and (4) copies to USAID/Guatemala, Attention Regional Contracts Office.

Sincerely,


John P. McAvoy
Regional Agreement Officer

Attachments:

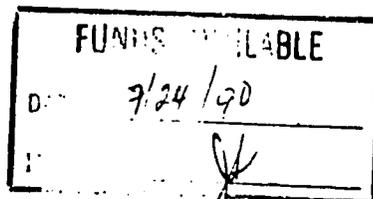
1. Schedule
2. Program Description
3. Standard Provisions
4. Applicant's Proposal

ACKNOWLEDGED 
By _____
Title 7/10/10 President
Date _____

FISCAL DATA

Appropriation No.:	721101021
Budget Plan Code:	LINA-90-25596-RG13
PIO/T No.:	596-0150-3-00041
Project No.:	596-0150
Total Estimated Amount:	\$1,600,000
Total Obligated Amount:	\$1,600,000

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CERTIFICATION AND DISCLOSURE REGARDING PAYMENTS
TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS
(52.203-11, JAN 1990)

(a) The definitions and prohibitions contained in the clause, at FAR 52.203-12, Limitation on Payments to Influence Certain Federal Transactions, included in this solicitation, are hereby incorporated by reference in paragraph (b) of this certification.

(b) The offeror, by signing its offer, hereby certifies to the best of his or her knowledge and belief as of December 23, 1989, that --

(1) No Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan, or cooperative agreement;

(2) If any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with this solicitation, the offeror shall complete and submit, with its offer, OMB standard form LLL, Disclosure of Lobbying Activities, to the Contracting Officer, and

(3) He or she will include the language of this certification in all subcontract awards at any tier and require that all recipients of subcontract awards in excess of \$100,000 shall certify and disclose accordingly.

(c) Submission of this certification and disclosure is a prerequisite for making or entering into this contract imposed by section 1352, title 31, United States Code. Any person who makes an expenditure prohibited under this provision or who fails to file or amend the disclosure form to be filed or amended by this provision, shall be subject to a civil penalty of not less than \$10,000, and not more than \$100,000, for each such failure.

(End of Provision)

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LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS
(52.203-12, JAN 1990)

(a) Definitions

"Agency", as used in this clause, means executive agency as defined in 2.101.

"Covered Federal action", as used in this clause, means any of the following Federal actions:

- (a) The awarding of any Federal Contract.
- (b) the making of any Federal grant.
- (c) The making of any Federal loan.
- (d) The entering into of any cooperative agreement.
- (e) the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

"Indian tribe" and "tribal organization," as used in this clause, have the meaning provided in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C.450B) and include Alaskan Natives.

"Influencing or attempting to influence," as used in this clause, means making, with the intent to influence, any communication to or appearance before an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any covered Federal action.

"Local government," as used in this clause, means a unit of government in a State and, if chartered, established, or otherwise recognized by a State for the performance of a governmental duty, including a local public authority, a special district, an intrastate district, a council of governments,, a sponsor group representative organization, and any other instrumentality of a local government.

"Officer or employee of an agency," as used in this clause, includes the following individuals who are employed by an agency.

(a) An individual who is appointed to a position in the Government under title 5, United States Code, including a position under a temporary appointment.

(b) A member of the uniformed services, as defined in subsection 101(3), title 37, United States Code.

(c) A special Government employee, as defined in section 202, title 18, United States Code.

(d) An individual who is a member of a Federal advisory committee, as defined by the Federal Advisory Committee Act, title 5, United States Code, appendix 2.

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"Person," as used in this clause, means an individual, corporation, company, association, authority, firm, partnership, society, State, and local government, regardless of whether such entity is operated for profit or not for profit. This term excludes an Indian tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other Federal law.

"Reasonable compensation," as used in this clause, means, with respect to a regularly employed officer or employee of any person, compensation that is consistent with the normal compensation for such officer or employee for work that is not furnished to, not funded by, or not furnished in cooperation with the Federal Government.

"Reasonable payment," as used in this clause, means, with respect to professional and other technical services, a payment in an amount at is consistent with the amount normally paid for such services in the private sector.

"Recipient," as used in this clause, includes the Contractor and all subcontractors. This term excludes an Indian tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other Federal law.

"Regularly employed," as used in this clause, means, with respect to an officer or employee of a person requesting or receiving a Federal contract, an officer or employee who is employed by such person for at least 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person for receipt of such contract. An officer or employee who is employed by such person for less than 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person shall be considered to be regularly employed as soon as he or she is employed by such person for 130 working days.

"State," as used in this clause, means a State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, a territory or possession of the United States, an agency or instrumentality of a State, and multi-State, regional, or interstate entity having governmental duties and powers.

(b) Prohibitions

(1) Section 1352 of title 31, United States Code, among other things, prohibits a recipient of a Federal contract, grant, loan, or cooperative agreement from using appropriated funds to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any of the following covered Federal actions: the awarding of any Federal contract; the making of any Federal grant; the making of any Federal loan; the entering into of any cooperative agreement; or the modification of any Federal contract, grant, loan, or cooperative agreement.

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(2) the Act also requires Contractors to furnish a disclosure if any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a Federal contract, grant, loan, or cooperative agreement.

(3) The prohibitions of the Act do not apply under the following conditions:

(i) Agency and legislative liaison by own employees

(A) The prohibition on the use of appropriated funds, in subparagraph (b)(1) of this clause, does not apply in the case of a payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action if the payment is for agency and legislative liaison activities not directly related to a covered Federal action.

(B) For purposes of subdivision (b)(3)(i)(A) of this clause, providing any information specifically requested by an agency or Congress is permitted at any time.

(C) The following agency and legislative liaison activities are permitted at any time where they are not related to a specific solicitation for any covered Federal action:

(1) Discussing with an agency the qualities and characteristics (including individual demonstrations) of the person's products or services, conditions or terms of sale, and service capabilities.

(2) Technical discussions and other activities regarding the application or adaptation of the person's products or services for an agency's use.

(D) The following agency and legislative liaison activities are permitted where they are prior to formal solicitation of any covered Federal action --

(1) Providing any information not specifically requested but necessary for an agency to make an informed decision about initiation of a covered Federal action;

(2) Technical discussions regarding the preparation of an unsolicited proposal prior to its official submission; and

(3) Capability presentations by persons seeking awards from an agency pursuant to the provisions of the Small Business Act, as amended by Pub. L. 95-507, and subsequent amendments.

(E) Only those services expressly authorized by subdivision (b)(3)(i)(A) of this clause are permitted under this clause.

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(ii) Professional and technical services

(A) The prohibition on the use of appropriated funds, in subparagraph (b)(1) of this clause, does not apply in the case of--

(1) A payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action, if payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action.

(2) Any reasonable payment to a person, other than an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action if the payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action. Persons other than officers or employees of a person requesting or receiving a covered Federal action include consultants and trade associations.

(B) For purposes of subdivision (b)(3)(ii)(A) of this clause, "professional and technical services" shall be limited to advice and analysis directly applying any professional or technical discipline. For example, drafting of a legal document accompanying a bid or proposal by a lawyer is allowable. Similarly, technical advice provided by an engineer on the performance or operational capability of a piece of equipment rendered directly in the negotiation on a contract is allowable. However, communications with the intent to influence made by a professional (such as a licensed lawyer) or a technical person (such as a licensed accountant) are not allowable under this section unless they provide advice and analysis directly applying their professional or technical expertise and unless the advice or analysis is rendered directly and solely in the preparation, submission or negotiation of a covered Federal action. Thus, for example, communications with the intent to influence made by a lawyer that do not provide legal advice or analysis directly and solely related to the legal aspects of his or her client's proposal, but generally advocate one proposal over another are not allowable under this section because the lawyer is not providing professional legal services. Similarly, communications with the intent to influence made by an engineer providing an engineering analysis prior to the preparation or submission of a bid or proposal are not allowable under this section since the engineer is providing technical services but not directly in the preparation, submission or negotiation of a covered Federal action.

(C) Requirements imposed by or pursuant to law as a condition for receiving a covered Federal award include those required by law or regulation and any other requirements in the actual award documents.

(D) Only those services expressly authorized by subdivisions (b)(3)(ii)(A)(1) and (2) of this clause are permitted under this clause.

(E) The reporting requirements of FAR 3.803(a) shall not apply with respect to payments of reasonable compensation made to regularly employed officers or employees of a person.

(iii)Disclosure

(A) The Contractor who requests or receives from an agency a Federal contract shall file with that agency a disclosure form, OMB standard form LLL, Disclosure of Lobbying Activities, if such person has made or has agreed to make any payment using nonappropriated funds (to include profits from any covered Federal action), which would be prohibited under subparagraph (b)(1) of this clause, if paid for with appropriated funds.

(B) The Contractor shall file a disclosure form at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the information contained in any disclosure form previously filed by such person under subparagraph (c)(1) of this clause. An event that materially affects the accuracy of the information reported includes --

(1) A cumulative increase of \$25,000 or more in the amount paid or expected to be paid for influencing or attempting to influence a covered Federal action; or

(2) A change in the person(s) or individual(s) influencing or attempting to influence a covered Federal action; or

(3) A change in the officer(s), employee(s), or Member(s) contacted to influence or attempt to influence a covered Federal action.

(C) The Contractor shall require the submittal of a certification, and if required, a disclosure form by any person who requests or receives any subcontract exceeding \$100,000 under the Federal contract.

(D) All subcontractor disclosure forms (but not certifications) shall be forwarded from tier to tier until received by the prime Contractor. The prime Contractor shall submit all disclosures to the Contracting Officer at the end of the calendar quarter in which the disclosure form is submitted by the subcontractor. Each subcontractor certification shall be retained in the subcontract file of the awarding Contractor.

(iv)Agreement. The Contractor agrees not to make any payment prohibited by this clause.

(v)Penalties.

(A) Any person who makes an expenditure prohibited under paragraph (a) of this clause or who fails to file or amend the disclosure form to be filed or amended by paragraph (b) of this clause shall be subject to civil penalties as provided for by 31 U.S.C. 1352. An imposition of a civil penalty does not prevent the Government from seeking any other remedy that may be applicable.

(B) Contractors may rely without liability on the representation made by their subcontractors in the certification and disclosure form.

(vi)Cost Allowability. Nothing in this clause makes allowable or reasonable any costs which would otherwise be unallowable or unreasonable. Conversely, costs made specifically unallowable by the requirements in this clause will not be made allowable under any other provision.

(End of Clause)

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ASSURANCE OF COMPLIANCE WITH LAWS AND REGULATIONS GOVERNING NON
DISCRIMINATION IN FEDERALLY ASSISTED PROGRAMS

WCI, (hereinafter called the "Applicant") hereby assures that no person in the United States shall, on the bases set forth below, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under, any program or activity receiving financial assistance from AID, and that with respect to the Cooperative Agreement for which application is being made, it will comply with requirements of:

- (1) Title VI of the Civil Rights Act of 1964 (Pub. L. 88-352, 42 U.S.C. 2000-d) which prohibits discrimination on the basis of race, color or national origin, in programs and activities receiving Federal financial assistance,
- (2) Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794), which prohibits discrimination on the basis of handicap in programs and activities receiving Federal financial assistance,
- (3) The Age Discrimination Act of 1975, as amended, (Pub. L. 95-478) which prohibits discrimination based on age in the delivery of services and benefits supported with Federal funds,
- (4) Title IX of the Education Amendments of 1972 (20 U.S.C. 1681, et. seq.) which prohibits discrimination on the basis of sex in education programs and activities receiving Federal financial assistance (whether or not the programs or activities are offered or sponsored by an educational institution); and
- (5) AID regulations implementing the above non-discrimination laws, set forth in Chapter II of Title 22 of the Code of Federal Regulations.

If the Applicant is an institution of higher education, the Assurances given herein extend the admission practices and to all other practices relating to the treatment of students or clients of the institution, or relating to the opportunity to participate in the provision of services or other benefits to such individuals, and shall be applicable to the entire institution unless the Applicant establishes to the satisfaction of the AID Administrator that the institution's practices is designated part or programs of the institution will in no way affect its practices in the program of the institution for which financial assistance is sought, or the beneficiaries of or participants in such program.

This assurance is given in consideration of and for the purpose of obtaining any and all Federal grants, loans, contracts, property, discounts or other Federal financial assistance extended after the date hereof to the Applicant by the Agency, including installment payments after such date on account of applications for Federal financial assistance which were approved before such date. The Applicant recognizes and agrees that such Federal financial assistance will be extended in reliance on the representations and agreements made in this Assurance, and that the United States shall have the right to seek judicial enforcement of this Assurance. This Assurance is binding on the Applicant, its successors, transferees, and assignees, and the person or persons whose signature appear below are authorized to sign this Assurance on behalf of the Applicant.

By (Signature) *[Handwritten Signature]* Title *[Handwritten Title]*

Typed Name *[Handwritten Name]* Date *[Handwritten Date]*

CERTIFICATION REGARDING DRUG-FREE WORKPLACE REQUIREMENTS

Alternate I

A. The grantee certifies that it will provide a drug-free workplace by:

(a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;

(b) Establishing a drug-free awareness program to inform employees about -

(1) The dangers of drug abuse in the workplace;

(2) The grantee's policy of maintaining a drug-free workplace;

(3) Any available drug counseling, rehabilitation and employee assistance programs; and

(4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

(c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);

(d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will -

(1) Abide by the terms of the statement; and

(2) Notify the employer of any criminal drug statute conviction of for a violation occurring in the workplace no later than five days after such conviction;

(e) Notifying the agency within ten days after receiving notice under subparagraph (d) (2) from an employee or otherwise receiving actual notice of such conviction;

(f) Taking one of the following actions, within 30 days of receiving notice under subparagraph (d) (2), with respect to any employee who is so convicted -

(1) Taking appropriate personnel action against such an employee, up to and including termination; or

(2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal State, or local health law enforcement, or other appropriate agency;

(a) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a), (b), (c), (d), (e), and (f).

B. The grantee shall insert in the space provided below the site(s) for the performance of work done in connection with the specific grant:

Place of Performance (Street address, city, county, state, zip code)


Signature

9/6/80
Date

ATTACHMENT NO. 1

COOPERATIVE AGREEMENT SCHEDULE

A. Purpose of Agreement

The purpose of this Cooperative Agreement with WCI is to implement the activities related to the Regional Wildlands Management Programs of the Regional Environmental and Natural Resources Management Project (RENARM) as described in Attachment No. 2 entitled Program Description, and Attachment No. 4 entitled Applicant's Proposal.

B. Period of Agreement

The effective date of this Agreement is the date of the Agreement cover letter. The expiration date is July 19, 1995.

C. Amount of Agreement and Payment

1. The total estimated amount of this Agreement for the period shown in B above is TWO MILLION SIX HUNDRED THOUSAND US DOLLARS (\$2,600,000.00); (\$1,600,000 from ROCAP and up to \$1,000,000 from USAID Mission buy-ins), subject to the availability of funds and the mutual agreement of the parties at the time to proceed.

2. AID hereby obligates the amount of ONE MILLION SIX HUNDRED THOUSAND US DOLLARS (\$1,600,000) for programs expenditures through July 19, 1995 and as shown in the Financial Plan below.

3. Payment shall be made to the Recipient in accordance with procedures set forth in Attachment 3 Optional Standard Provision No. 1 entitled "Payment - Periodic Advance."

D. Financial Plan

1. The ROCAP Budget and Recipient Counterpart inputs are presented in Exhibits A and B respectively. Revisions shall be made in accordance with the Standard Provisions.

2. The Budget presented is illustrative in nature. More detailed budgets will be defined and approved in bi-annual work plans.

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3. The Recipient will be held accountable for providing and reporting on the counterpart funds covenanted in this Agreement which total US\$1,600,000 as shown in Exhibits A and B.

Over the life of the Cooperative Agreement (CA), the recipient agrees to provide matching funds equivalent to the ROCAP contribution to the CA. The ROCAP contribution to this CA is \$1,600,000.00. If the recipient does not match that amount ROCAP will disallow costs that are in excess of the recipient contribution.

Counterpart contribution for USAID Mission buy-ins to this CA will be negotiated on a case-by-case basis.

E. Special Provisions

1. The Recipient agrees that A.I.D. funds provided pursuant to this agreement shall not be committed, disbursed or otherwise utilized in areas which would contravene any provision of the Foreign Assistance Act of 1961, as amended. ROCAP shall advise the Recipient in writing from time to time of such areas.

2. Within 60 days after the signing of this Agreement, the Recipient will submit to ROCAP a Work Plan and Budget for the activities to be carried out the first two years of the Agreement. Once this plan has been approved by ROCAP, the Recipient may request an advance of funds not to exceed three months of projected expenditures.

3. The Recipient will implement and monitor the performance under this Agreement to ensure that the work is progressing as planned and the targets are being met.

F. Authorized Geographic Code

The Authorized Geographic Code for procurement of goods and services shall be in accordance with Optional Standard Provision No. 5.

G. Agreement Officer's Technical Representative (AOTR)

1. The Agreement Officer's Technical Representative (AOTR) for the performance of this Cooperative Agreement is the ROCAP Agricultural Development Officer (RADO), or his/her designee. The Recipient will be notified in writing should the AOTR change. This individual shall have the following authority:

- a) Certification of work performed on all vouchers submitted.
- b) Necessary clarifications of, or minor, non-cost related adjustments to, the program description in Attachment 2.
- c) Approval of all reports, plans, timetables or other such technical submissions required under the Project Description.

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H. Establishment of Overhead Rate

The agreement budget (Exhibit A) establishes that \$112,191 will be allotted from the counterpart contribution to cover overhead expenses. Any changes in the allotment of counterpart contribution to overhead shall be approved by AID in writing. Overhead rates for subcontractors must conform to OMB Circular A-122.

I. Reporting and Evaluation

Reporting and evaluation requirements are specified in Attachment No. 2 of this Agreement. All reports shall be delivered in three (3) copies, in either English or Spanish, to the Agreement Officer's Technical Representative (AOTR).

J. Exhibits A and B with financial tables are attached.

_____End of Schedule_____

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EXHIBIT A

REGIONAL ENVIRONMENTAL AND NATURAL RESOURCE MANAGEMENT PROJECT
(RENARM)

PROJECT NO. 596-0150
USAID-ROCAP FFA 90-017

ILLUSTRATIVE BUDGET

ALL AMOUNTS IN US DOLLARS

COST ELEMENT	Total Cost	Counterpart	ROCAP
SALARIES			
U.S. Personnel			
Home Office	245,404	67,197	178,207
Field Staff	754,750	328,750	426,000
Subtotal	1,000,154	395,947	604,207
Other Personnel			
Field Professional	238,230	238,230	0
Field Other	30,526	30,526	0
Sub Total	268,756	268,756	0
Total Salaries	1,268,910	664,703	604,207
FRINGE BENEFITS	16,794	16,794	0
OVERHEAD	112,191	112,191	0
TRAVEL AND TRANSPORTATION	592,560	394,500	198,060
OTHER DIRECT COSTS	145,381	84,850	60,531
EQUIPMENT & FIELD OPERATIONAL EXPENSES	326,962	326,962	0
SUBCONTRACTS			
Tropical Research & Development, Inc.	536,782	0	536,782
Water & Air Research	100,333	0	100,333
University of Florida	100,087	0	100,087
GRAND TOTALS	\$3,200,000	\$1,600,000	\$1,600,000

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REGIONAL ENVIRONMENTAL AND NATURAL RESOURCE MANAGEMENT PROJECT (RENARM)
 USAID-ROCAP/RFA NO. 90-017
 PASO PANTEIRA CONSORTIUM
 TOTAL COST BY ORGANIZATION

EXHIBIT B

COST ELEMENT	WCI		CCC		TRD		WAR		UF		TOTAL	
	ROCAP	COUNTERPART	ROCAP	COUNTERPART	ROCAP	COUNTERPART	ROCAP	COUNTERPART	ROCAP	COUNTERPART	ROCAP	COUNTERPART
SALARIES												
U. S. Personal												
Home Office	159,250	22,000	18,957	45,197	87,329	0	7,920	0	5,984	0	279,440	67,197
Field Staff	426,000	328,750	0	0	73,848	0	20,240	0	32,528	0	552,616	328,750
Sub-Total	585,250	350,750	18,957	45,197	161,177	0	28,160	0	38,512	0	832,056	395,947
Other Personnel												
Field Professional	0	164,969	0	73,261	0	0	0	0	0	0	0	238,230
Field Other	0	0	0	30,526	0	0	0	0	0	0	0	30,526
Sub-Total	0	164,969	0	103,787	0	0	0	0	0	0	0	268,756
Total Salaries	585,250	515,719	18,957	148,984	161,177	0	28,160	0	38,512	0	832,056	664,703
FRINGE BENEFITS	0	0	0	16,794	19,341	0	9,500	0	5,834	0	34,675	16,794
OVERHEAD	0	0	0	112,191	131,778	0	36,890	0	16,241	0	184,909	112,191
TRAVEL & TRANSPORTATION	198,060	246,500	0	148,000	63,872	0	15,044	0	29,500	0	306,476	394,500
OTHER DIRECT COSTS	60,531	49,500	0	35,350	57,795	0	3,307	0	10,000	0	131,633	84,850
EQUIPMENT & FIELD												
OPERATIONAL EXPENSES	0	244,531	0	82,431	62,481	0	0	0	0	0	62,481	326,962
FEE	843,841	1,056,250	18,957	543,750	406,444	0	92,901	0	100,087	0	1,552,230	1,600,000
	0	0	0	0	40,338	0	7,432	0	0	0	47,770	0
GRAND TOTALS	843,841	1,056,250	18,957	543,750	536,782	0	100,333	0	100,087	0	1,600,000	1,600,000

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ATTACHMENT 2

REGIONAL WILDLANDS MANAGEMENT

PROGRAM DESCRIPTION

A. INTRODUCTION

This Attachment 2 provides a brief description of the program objectives and sets forth requirements for: 1) working with local counterparts; 2) monitoring and evaluation; 3) coordination; and 4) submission of work plans and reports. The applicant's proposal (Attachment 4) provides more details regarding specific activities to be implemented under the Agreement. In the event of any contradiction, this Attachment 2 has precedent over Attachment 4, and the Grant Schedule has precedent over both.

B. BACKGROUND

In RENARM, the process -- like the product -- must be sustainable. This requires the building of long-term, trust relationships between the principal players. Criteria for evaluating progress towards the establishment of sustainable benefit streams will be applied in this Project, especially with respect to the different participating institutions and local NGOs. It is recognized, however, that the process of facilitating lasting change and benefits, in the opposite direction of strong existing trends and currents, represents an immense challenge. Therefore, the project is designed to be flexible. Designs and plans will be modified to guide assistance towards the most successful interventions, identified through a continual process of monitoring and evaluation.

The RENARM Project is divided into four main components. Component 1, Natural Resources Policy Initiatives, is directed at public and private leaders. Component 2, Environmental Awareness, Education, and Bio-diversity Conservation, is aimed at people from all walks of life. It strives to create the conditions for improved E/NR policies and regulations and to protect key wildlands as biological reserves. It will also promote environmental education and consciousness raising.

Component 3, Sustainable Agriculture and Forestry will build on work under way with AID support in watershed management, forestry, and plant protection. The adaptation of technology will be supported at CATIE and the Panamerican Agricultural School, while outreach will be accomplished through a mix of private and public entities. Component 4 will support continuing institutional development of CATIE.

The Project will undertake training, outreach, technical assistance and research on a regional level, and it will provide policy guidance, regional coordination and information sharing among national agencies. In this regard, the Project will support public and private national institutions, bilateral USAID Missions and other donors in their efforts to provide quality services to project beneficiaries.

This Agreement corresponds to a part of Component 2, "Environmental Awareness, Education and Bio-diversity Conservation". The entire component includes five activities and will be executed primarily with the assistance and direct participation of international and local NGOs. An underlying objective is to get the people of the region to become more aware of - and active in - environmental issues and improved natural resource management.

The five interconnected activities of component 2 are directed towards environmental awareness and conservation in support of national and regional objectives. Specifically, the project aims to provide support to on-going NGO programs in order to: 1) strengthen coordinated monitoring, strategic planning and policy formulation for conservation; 2) foster environmental awareness and education; 3) institute wildlands management programs through coordinated pilot projects; and 4) support conservation information centers and data management. These activities will be implemented through a series of Cooperative Agreements with individual NGO's or NGO consortia. The Project will also undertake conservation training and support environmental research under this component through a separate contractual arrangement.

As a general rule, U.S. NGOs are expected to work through and with Central American NGOs to carry out this set of activities since the strengthening of local and/or regional NGOs to improve their capacity for continuing project activities into the future will be required. It is anticipated that a PASA arrangement to promote involvement of the Peace Corps and other U.S. Government entities will make additional technical assistance available to the organizations selected for these activities.

C. OBJECTIVES

This section describes the general objectives of the Agreement.

The "Regional Wildlands Management Programs" activity of the RENARM Project is designed to provide assistance to NGO programs which are directed towards improved management and protection of areas prioritized for the conservation of biological diversity in participating countries.

The number and the total area of parks and reserves in Central America has increased dramatically in the past decade. Nonetheless, most "protected areas" lack adequate staff and funding and are being seriously degraded. Furthermore, many fundamental issues have yet to be resolved. There has been little study of techniques to stabilize land use in buffer zones. There has been little attempt to promote management of wildlands by local governments, NGOs, indigenous groups and the private sector. Pilot projects and analyses which document alternative techniques for managing different sizes and categories of protected areas in distinct ecosystems are notably lacking. Consequently, there have been few tests of approaches to funding parks, promoting sustainable development in buffer zones, or fostering greater use of parks by the public, by researchers, or by eco-tourists.

All of these matters warrant study so that improved wildlands management techniques can be refined and disseminated.

The general objectives for this set of activities can be summarized as:

- Enhance management and protection of parks/reserves in Central America through the demonstration and promotion of improved and innovative techniques;
- At least one exemplary park/wildland and surrounding buffer zone in each participating country will serve as a source of lessons learned and training for other parks and reserves throughout the region;
- Residents of buffer zones will be employed and trained, improving their standards of living while practicing environmentally sound, sustainable development technologies;
- Strengthen the capacity of selected Central American counterpart organizations to continue similar work; and
- Improve local, inter-agency and international cooperation in wildlands management and protection.

The applicant's proposal (Attachment 4) provides a detailed description of the activities to be undertaken in order to achieve these objectives.

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D. REQUIREMENTS

1) Strengthen Local E/NR Capacity and Programs

Wildlands and buffer zone management are relatively new fields in Central America. CATIE has recently begun to develop programs in this area on a regional level and other groups are active locally; both lack funding and technical support. Therefore, the strengthening of counterparts through the provision of technical assistance and by directly involving them as participants in the activities to be implemented, is extremely important.

To the degree possible, the recipient should execute all ROCAP-supported activities using a process oriented methodology to assure maximum transfer of knowledge and self-confidence to counterparts in the region. The objective here is to facilitate the development of indigenous NGOs so that E/NR programs in the region may continue after RENARM Project completion (see RFA, Annex 5). This will require high degrees of flexibility, cultural and political sensitivity, openness and willingness to collaborate on the part of the recipient.

In addition to supporting involvement of local and regional entities in the activities undertaken by the recipient, ROCAP assistance is expected to help provide other types of technical assistance to selected counterparts on an as-needed basis. Technical assistance should be drawn from Central American sources to the extent possible as these human resources are identified and/or developed.

The applicant should be aware that ROCAP is prepared to assist with the provision of specialized technical assistance from other sources when necessary. The ROCAP RENARM team includes experts in areas such as forestry and forest production, conservation financing and policy. Additional support will be available through inter-agency agreements between ROCAP and other U.S. Government entities such as the Department of Agriculture (USDA), the Peace Corps, U.S. Park Service, etc. The recipient will be encouraged to utilize these resources whenever they may improve overall effectiveness of the activities presented in its application.

The desired results of this sub-activity over the life of the project can be summarized as follows:

- Selected Central American counterparts working in wildlands management have participated in the processes and activities executed by the recipient and increased their capacity and self-confidence;
- Activities are institutionalized at the local and regional levels; by year six, key counterparts use non-ROCAP sources of financial support to continue to provide services and implement activities which were initially supported by the recipient with assistance from the RENARM Project; and
- Local capacity for the management of wildlands and buffer zones is increased and the overall financial stability of counterpart organizations improved.

2) Monitoring and Evaluation (M&E)

Monitoring and evaluation will be continuous processes during the life of the Project and are intended to serve the overall AID E/NR Strategy and Program as well as the RENARM Project and the recipient. The purposes are: (1) to measure progress toward achievement of desired outputs and impacts and to propose needed corrective actions; (2) to facilitate linkages, meshing, and mutual reinforcement between and among the project's several components; (3) to build accountability into ongoing project actions; (4) to facilitate coordination between recipient and other E/NR programs or projects; and (5) to build the evaluation capacity of institutions and national counterparts who participate in project implementation. The monitoring and evaluation process should result in useful information for future redesign and for the inclusion of new elements in the project in order to orient program resources towards the most successful interventions.

ROCAP will contract with a specialized firm to help develop key indicators and an overall system for M&E. The recipient will be requested to participate in this monitoring and evaluation process. At the outset, the recipient will help to establish the list of key indicators for M&E of the activities supported through the Cooperative Agreement. Based upon the key

indicators, the recipient will assure that appropriate base-line data is available or collected at project start-up. The base-line data will be used for measuring the changes attributable to specific project actions. The selection of indicators is important; they must facilitate the measurement of impacts while permitting manageable, economic methods for data collection.

The recipient's participation in the global M&E program will also be necessary to facilitate standardized data collection, reporting and analysis. Close coordination with ROCAP and USAIDs will be required. Another requirement will be the disaggregation of data by gender whenever appropriate. Specific disaggregated benchmarks for monitoring and evaluation should be established where warranted to help identify involvement of and impacts on women.

In addition to the on-going M&E activities described above, more formal assessments of the impacts of the RENARM activities implemented through the recipient are planned for program years three and five. The recipient is expected to plan for and collaborate with the execution of these assessments.

The desired outputs of this sub-activity over the life of the project can be summarized as follows:

- Key indicators are established, monitored, and serve to focus resources in the most successful interventions;
- Formal evaluations are conducted and appropriate modifications are made in programs (o/a years 3 and 5);
- Local counterparts have increased capacity for planning and conducting effective monitoring and evaluation activities.

3) Coordination and Collaboration

The recipient is expected to implement all activities and provide all services in coordination with ROCAP, USAIDs and other entities active in Central American E/NR initiatives. As described in Section 2, the assistance to be provided forms only one part of a large ROCAP program which, in and of itself, forms a piece of a still grander regional AID strategy. To be successful, a great deal of effort must be dedicated by all to communication, coordination and collaboration.

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It is especially important that the recipient work in close coordination with other AID-funded activities in the region. AID is helping to finance a series of interventions which are inter-related and complementary to those detailed in this document. For example, numerous bi-lateral USAID Missions are planning or have on-going programs to support improved wildlands management, provide training to park personnel and strengthen local environmental NGOs.

ROCAP-funded initiatives which relate to this activity include the programs for Strategic Planning, Environmental Education and Awareness, and Conservation Information which will be implemented through NGOs. ROCAP support will also be available for participation of pilot site personnel in short AID-sponsored courses on themes related to wildlands, wildlife, and buffer zone management. These courses are expected to be organized by training institutions in the region such as CATIE, Zamorano (EAP), and the National University of Costa Rica.

While these actions are clearly correlated and overlap to some extent with the activities to be supported under the Cooperative Agreement, proper coordination can ensure that complementary efforts benefit all.

Other activities which relate to the subject of this RFA include: the Regional Training and Research Programs to be contracted out by ROCAP; other US Government E/NR initiatives and training programs in the region (such as those of the Peace Corps) which will be supported partially by ROCAP through a PASA agreement; bi-lateral AID programs designed to support the AID E/NR strategy; and related interventions of other donors. The recipient will need to be familiar with these activities to facilitate overall E/NR coordination in the region.

Therefore, the recipient is expected to actively promote constant communication and coordination with other donors, counterparts, and institutions involved in environmental protection and natural resource management interventions in the region. The recipient should take the initiative to assure that relevant actors are kept well informed of its plans, activities and results in a timely manner. The recipient should participate in and/or sponsor meetings and workshops to encourage communication and collaboration between these actors and to avoid duplication of efforts. The recipient must make special efforts to assure that it coordinates closely with USAID Missions in the region with respect to all RENARM financed activities. USAIDs should be given the opportunity to review and comment upon draft work plans and proposed agreements with local counterparts.

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The desired outputs of this sub-activity over the life of the project can be summarized as follows:

- Periodic meetings and workshops facilitate timely communication and coordination between the different entities involved with wildlands management in the region, including USAID Missions;
- Reports, plans and other information which facilitate productive coordination are prepared by the recipient and shared with other entities as appropriate; and
- Activities conducted complement those of other organizations involved in correlated efforts so that programs supported by AID assistance are widely utilized and overall benefits multiplied.

4) Submission of Workplans and Reports

As a part of the Agreement, the recipient will be requested to submit the following documents in form and substance acceptable to AID/ROCAP:

(1) Within 30 days of signing the Agreement, the recipient will submit to ROCAP an initial global (life-of-project) plan for carrying out activities and achieving the results as specified in the recipient's winning application.

(2) Within 60 days of signing the Agreement, the recipient will submit to ROCAP a work plan with budgets for the first two year's activities. This plan will include the proposed activities to be undertaken by technical assistance personnel under the contract, procurement plans, a breakdown of activities by component and country, and plans for relationships with local entities with which the recipient plans to work (copies of agreements when possible).

(3) The recipient will participate in a global M&E system. Upon request, it will submit for ROCAP review and approval, proposed indicators and plans for monitoring and evaluation. Within an additional 90 days after ROCAP approval of this M&E plan, the recipient will submit a baseline study which will facilitate the evaluation of project impacts by specific project interventions and serve as a point of comparison for future assessments of progress.

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(4) The recipient will submit updated surveys o/a years three and five (as a minimum) to determine the changes which have occurred in the baseline data and which are attributable to the recipient's interventions.

(5) The recipient will submit quarterly and annual reports to ROCAP on the agreed upon objectively verifiable indicators, results, distribution of benefits and overall implementation progress, with disaggregation by gender as appropriate. These reports will include a specific section which details the recipient's contributions (counterpart) made during the reporting period.

(6) The recipient will update and submit work plans for the coming two years no later than October 31 of each year.

5) Standard Provisions (Attachment 3)

The Cooperative Agreement shall incorporate the Standard Provisions of Handbook 13, chapter 4, Appendix 4C, which are applicable to AID grants and cooperative agreements with U.S. organizations. Additionally, Standard Provisions for agreements with non-U.S. organizations (HB 13, Chapter 4, Appendix 4D) shall apply for any sub-agreements or subcontracts with non-U.S. organizations funded by AID. (See Attachment 3 for details).

1.0 EXECUTIVE SUMMARY

1.1 Introduction

Most wildlands conservation organizations active in Central America have chosen to focus their energies and resources on the preservation of those few intact, biologically diverse parcels of land that remain in the region. In recognition of this strategy's merit, USAID/ROCAP's Regional Environment and Natural Resource Management (RENARM) program has defined one of its charter objectives as the conservation of biodiversity via the preservation and management of critical wildlands areas. This objective shall be largely realized via implementation of RENARM's Regional Wildlands Management Program.

Wildlife Conservation International (WCI) wishes to actively support the RENARM initiative and has therefore conceived a plan that exploits existing WCI investments of financial and human resources in the region, while further obligating itself to significant new commitments. WCI has also capitalized on the presence in Gainesville, Florida of the Caribbean Conservation Corporation (CCC), an NGO with deep roots in regional wildlife conservation efforts, and Tropical Research and Development, Inc. (TR&D), a private technical assistance firm committed to Central American natural resource management. These groups have associated in coalition to propose the development of "Paseo Pantera," an innovative, regional strategy that could set the course of Central American wildlands management for many years to come. To implement Paseo Pantera the WCI Coalition will draw upon additional Gainesville resources such as the University of Florida's Program for Studies in Tropical Conservation (UF/PSTC), and the ecotourism expertise of Water and Air Research, Inc.(WAR). The result is a unique combination of international conservation experience within one institution-- the Paseo Pantera Consortium.

1.2 Understanding the Problem

Conservationists recognize that species decline in Central America, the modern-day crisis in biodiversity, can be attributed in large part to a phenomenon called "habitat destruction." The term is often used too vaguely. Detailed studies on "forest fragmentation" are helping to define the problem more precisely. As habitat for the genetic wealth of the world, fragmented forests have two measurable short-comings: the parcels can be too small to harbor a hearty, resilient population of a given species, and the fragments can be too widely separated from one another to allow genetic exchanges among them.

Forest fragmentation, or better stated -- habitat fragmentation, is severe in Central America. Mountain forests, Pacific arid forests, and Caribbean wet forests have been reduced in size and fragmented into mere shards of once continuous expanses of habitat that united South America with Southern Mexico. In a global sense, that distance of such expanses, as well as and the total space encompassed by the forest habitats of Central America, was not large to begin with.

As a result of recent human population growth and enterprise the forest habitats of this small region have been subjected to fragmentation and degradation, in keeping with a pattern recorded throughout the tropical world. What is unique about the problem of habitat conservation in Central America is that the region has been subdivided at a broader geographical scale than conservationists and land managers are accustomed to considering. The small isthmus has been "fragmented" into 7 (with Mexico) independent and remarkably insular nations.

To make a meaningful contribution to biodiversity conservation in Central America, one must consider the isthmus as the target for action, and one must find ways to unite the sovereign states of the region into common cause. Biogeography shows the reason why, and ecotourism can provide the financial wherewithal.

1.3 Proposed Solutions to the Problem

The Paseo Pantera Consortium firmly believes that the development of a regionally operative system of financial support is the key to sustainable progress in the field of Central American wildlands management. Though the tremendous political divisiveness of the region would have presented a formidable challenge to any such multilateral process in the past, fresh opportunities have arisen as a result of the present "outbreak of peace".

The Paseo Pantera Consortium will therefore promote a Central American Nature Touring Circuit as a central objective of its regional wildlands management strategy. This circuit will rely initially upon the application of international standards of management to a core of "demonstration parks." These demonstration parks will set the stage for incorporating most of the regions wildlands areas into the tour route. This international focus on tourism will foster an equally valuable regional perspective on the management of the parks as biodiversity preserves.

1.3.1 Specific Regional Activities

Management of Central American wildland reserves will be strengthened via activities that focus on both the broad regional scale and on specific demonstration parks. Project activities in the former category will include:

- analysis and research to provide detailed technical and economic assessments of region-based ecotourism as a model for establishing financial stability for the management of wildlands.
- the drafting of a series of books that will for the first time establish a regional perspective on Central American natural history. The books will motivate regional collaboration on the management of protected areas and serve as a valuable source of educational, promotional and scientific material.

These activities will provide the intellectual underpinning for the approach to regional wildlife management suggested by the Paseo Pantera Consortium.

1.3.2 Park-Specific Activities

On selected demonstration parks in each of the target countries, project activities will be initiated to improve park management in such critical areas as:

- baseline descriptive and quantitative research,
- environmental education and information services,
- management of buffer zones for wildlife corridors,
- service and support provided tourists,
- management of buffer zones for income generation, and
- park planning and design.

1.3.3 Final Strategy

The information gained and lessons learned from these project activities will in turn form the basis of a regional strategy for wildlands management. This strategy will constitute one of the major outputs of the Paseo Pantera Consortium's Regional Wildlands Management program.

2.0 TECHNICAL DESCRIPTION

2.1 Understanding the Problem

The accelerating degradation of Central America's rich endowment of flora and fauna has become an urgent concern of many international conservation programs over the past decade. In tacit concession to the broad economic and demographic forces behind this process, many conservation organizations have focused their energies on the preservation of those relatively intact, biologically diverse parcels of land that remain. The USAID/RENARM program has recognized the value of this strategy, and has therefore defined one of its charter objectives as the conservation of biodiversity by means of the preservation and management of critical wildlands areas.

Large tracts of wilderness designated for exclusive use as biological reserves exist in an inherently unstable state in Central America. Forces eroding wildlands elsewhere in the region will operate with equal effect on parkland despite any legal ruling to the contrary. Economic realities are such that a reserve's periphery and interior will be used for unsustainable agricultural or forestry exploitation if the local human population cannot see any greater good in the existence of a park. Likewise host country government institutions have little reason to deprive themselves of the immediate economic return from over-exploitation of touristic areas unless equally rewarding alternatives can be credibly presented.

Furthermore, the fragmentation of habitats is having a uniquely tragic effect on the biodiversity of Central American wildlands. This is due to the historical role of the isthmus as a passageway for the dispersion of plant and animal forms between two continents. Conversion of parks and reserves into "island" environments amidst a sea of agricultural development is severing the biological "connectivity" of the region and disrupting this ancient continental corridor function.

In the case of Central American parks, these problems are worsened by a lack of scientific data describing the land's biological assets or functional relationship in the ecosystem. Park managers are therefore hampered in their efforts to guide local patterns of development and exploitation towards compatibility with their own fundamental mandate for conservation. Planners are likewise deprived of the tools they need to regulate tourist usage of environmentally sensitive areas or to foresee the effects of disrupting inter-park wildlife corridors with agricultural development.

Effective long-term management of Central American wildlands is predicated on resolving these problems. A program of activities designed to provide such resolution shall in turn be dependent on the development of substantial financial support that is independent of infusions from donor organizations or chronically cash-strapped host country governments.

2.1.2 Proposed Solutions to Problem

The Paseo Pantera Consortium firmly believes that the development of a regionally operative system of financial support is the key to sustainable progress in Central American wildlands management. Though the tremendous political divisiveness of the region would have presented a formidable challenge to any such multilateral process in the past, fresh opportunities have arisen as a result of the present "outbreak of peace." Encouraging new evidence suggests that the state of conflict will no longer completely overshadow the acute need to reverse widespread environmental degradation in the region. This has been most notable in Guatemala's recent dedication of 11% of its national territory to the Maya Biosphere Reserve.

This acknowledgement of the need for better natural resource management has heightened interest in ecotourism as an appropriate means for providing the necessary financial support. This partly stems from tourism's widely recognized low capital to labor ratio (a recent input-output study in Mexico showed that an \$80,000 investment created 41 jobs when invested in tourism; the same monies would have resulted in only 16 jobs in petroleum, 16 in metal products, or a mere eight in electricity). There is further recognition that a well developed national ecotourism network has enabled Costa Rica to make enviable progress towards wildlands conservation.

Despite such progress, the ecotourism initiatives to date continue to emphasize a nationalistic, and internationally competitive approach, thereby obscuring the tremendous complementary qualities each country could bring to a regional effort. The Paseo Pantera Consortium believes that in light of decreased regional tensions, a unique opportunity now exists to make a successful appeal to the Central American countries collective interests for collaboration in wildlands conservation.

The Paseo Pantera Consortium shall therefore promote a **Central American Nature Touring Circuit** as a central objective of its regional wildlands management strategy. The "chain of parks" concept will allow far more effective marketing of tourism than would similar efforts made on a country-by-country basis. More effective marketing will ultimately translate into greater capture of tourist dollars for each country. Of equal importance, the need for cooperation among network parks imposed by such a plan will institutionalize the process of regional communication and collaboration on wildlife management issues. This collaboration is vital to the greater goal of establishing direct biological linkages between parks via the creation of wildlife corridors. Corridors will allay the "island park" disadvantage that is inherent where biologically and geographically connected areas have been divided by national boundaries. Thus each individual park's contribution to the macro-scale conservation of biodiversity will be greatly enhanced.

To acknowledge the vital role played by the Central American isthmus in the modern distribution of American flora and fauna, the participating parks on a regional tourism route will be collectively known as the "Paseo Pantera", or "Path of the Puma" (the puma is present in all nations of the Western Hemisphere by virtue of migration through the Central American landbridge). Ultimately, Paseo Pantera shall represent not only a tourism

network but attain greater significance as the embodiment of the regional approach to wildlife management and the preservation of biodiversity.

2.1.3 Specific Project Activities

Management of Central American wildland reserves will be strengthened via activities that focus on both the broad regional scale and on specific demonstration parks. Project activities in the former category will include the drafting of a series of books that will, for the first time, establish a regional perspective on Central American natural history. The books will motivate regional collaboration on the management of protected areas and serve as a valuable source of educational, promotional, and scientific material.

Further analysis and research on the regional level will provide detailed technical and economic assessments of region-based ecotourism as a model for establishing financial stability for the management of wildlands. These activities will provide the intellectual underpinning for the approach to regional wildlife management suggested by the Paseo Pantera Consortium.

On selected demonstration parks in each of the target countries project activities shall be initiated to improve park management in such critical areas as:

- baseline descriptive and quantitative research,
- environmental education and information services,
- management of buffer zones for wildlife corridors,
- management of buffer zones for income generation, and
- park planning and design.

The information gained and lessons learned from these project activities shall in turn form the basis of a regional strategy for wildlands management. This strategy shall constitute one of the major outputs of the Paseo Pantera Consortium's Regional Wildlands Management Program.

2.2 Regional Scale

2.2.1 A Comprehensive Examination of Regional Ecotourism

Significant ecotourism development has already been realized for a few individual Central American nations such as Costa Rica and Belize. However a plan to consolidate these plus other Central American countries into a regional network of parks will require careful analysis. With strong technical support from Water and Air Research (WAR) of

Gainesville, Florida the Paseo Pantera Consortium shall call upon the broad ecotourism experience of Ray Ashton to perform this analysis. The assessment shall include the involvement of both North American (outbound) and Central American (inbound) professionals in the ecotourism industry and shall be comprised as a minimum of the following elements:

2.2.2 Assessment of Economic Return

The development of a regional ecotourism network will offer Central American countries an economic return while advancing the cause of conservation, therefore an assessment of likely economic returns as well as the potential for contribution to regional conservation will be conducted. Such analysis will document the anticipated economic return to the participating countries in general, and to the national park systems and associated human populations in particular. An output of vital importance generated from this activity will be a demonstration of how ecotourism can make substantial contributions to the preservation of Central America's wildlands via the creation of significant economic interest vested within those populations presenting the greatest potential threat to remaining wildlands.

2.2.3 Assessment of Constraining Factors

The development of a ecotourism network must also include an assessment of constraining factors. The present reality is that the majority of Central American parks of potential interest to the ecotourist cannot reliably deliver the quality experience required to establish a sustainable industry. A detailed analysis of the critical deficiencies contributing to this problem would include a detailed treatment of:

- adequacy of capital infrastructure such as roads, airfields, and electrical power;
- equitable access by rural populations around parks to financial benefits derived from ecotourism;
- marketing requirements among outbound tour operators;
- capabilities and resources possessed by the inbound tour operators in each country;
- transportation between, and ease of access to, the protected areas;
- consistency of service and support received by the tourist in each protected area, with specific reference to guides;
- quality of information provided in each protected area;
- the adequacy of financial support received by each park for the provision of required services and information;

- political conflict between and within neighboring countries;
- the adequacy of basic park management capabilities in such areas as staffing, training, enforcement and land acquisition;
- tourism and natural resource related government policies with particular regard to the self-financing of conservation; and
- the adequacy of baseline data permitting proper evaluation of tourism impacts on the park.

2.2.4 Action Plan

A detailed action plan will describe specific activities leading to improvements in all of the critically limiting problem areas. Such a plan will provide separate treatment for each of several distinct types of ecotourism:

- adventure tourism such as hiking, canoeing and rafting;
- wildlife viewing including bird watching and snorkeling;
- semi-mass tourism with facilities that provide more than 50 beds; and
- mass tourism.

The plan would consider the particular requirements of each type of tourism in making recommendations for ecopreserve zonation, impact reduction plans, infrastructure plans and development of adjoining areas.

Most importantly, any tentative itinerary for a regional nature tour must provide the traveler with a variety of experience between stops. If the experience at each park does not provide the tourist with a progressively greater understanding of the overall picture, the country-hopping ceases to have significance.

2.3 The Books: Validation and Description of the Regional Perspective for Wildlands Management and Ecotourism

The preparation of a series of books based on regional themes will articulate the motives for undertaking wildlands management and ecotourism at the multinational or "isthmian" scale. Though a thorough treatise may have already been rendered on many natural history topics in individual countries, the broad themes have never been presented as having any functional relationship to one another. Such presentation in a common format and under a common set of covers will automatically highlight their complementary potential to provide an experience to the tourist and an opportunity to the park manager unique in the world.

Considerable discussion will be fostered among national experts in each respective discipline as authors and editors draw out the common regional themes from the existing literature. A second, perhaps greater purpose of the books, therefore, is the process of regional communication. This process will set the stage for later collaborative initiatives on a broader scale.

The preparation of each book will require an innovative approach to insure that a regional portrait emerges, rather than a separate inventory of the natural characteristics of each individual country. To meet such a challenge the Paseo Pantera Consortium will recruit recognized leaders in each of the key disciplines of interest.

The books will be one of the most visible products of the RENARM Wildlands Management Project. Properly rendered and utilized, they will become a valuable resource for the park services and tourist industries of the region. Moreover, the books will also provide the intellectual materia prima for the balance of activities to be undertaken within the Paseo Pantera/RENARM project by:

- inspiring the imagination of the touring public in North America and Europe,
- providing ideas for tourism entrepreneurs who will assist in meshing the parks into a true network,
- providing raw material for the creation of marketing concepts for promoting tourism,
- providing raw material for the creation of environmental education and park interpretation materials, and
- guiding the direction of basic research in protected areas.

The books will also serve as the source from which individual natural history publications can be abstracted on such specific topics of broad public appeal as birds, fishes, corals or flowers. Such publications are vital to the promotion of the Paseo Pantera concept by tour operators and marketing organizations in both the United States and Central America. In addition to the target travel, education and scientific audiences, the books and their derivative publications will also reach the general public via feature newspaper articles and mainstream educational materials.

The proposed themes of the books are:

2.3.1 Ecological Life Zones

The Ecological Life Zone system provides the framework for a visitor to interpret the bewildering array of vegetation found in the region. Within each Life Zone classification (e.g. tropical dry forest, rain forest etc) regional botanical natural history will be further

interpreted in terms of the Great American Biotic Interchange; a pleistocene even that reconfigured the biological makeup of two continents. Owing to the topographical variation of Central America, trees more characteristic of the Northeastern U.S.A. persist in cool mountains of the isthmus, casting shadows over lowland forest that introduces the forms of South American origin. Parcels of remnant acacia woodlands remain through which mastodons once trod before the tropical rain forests invaded. These regional observations will be blended with more traditional discussions of species diversity to tell a unique and compelling story.

2.3.2 Zoology

This volume will take the perspective that the faunal distribution presently observed in Central America is the direct result of the pleistocene interchange. The present-day remnants of that faunal interchange include the regional patterns of species distribution across Central America.

This landbridge orientation of the zoology treatise also permits the idea that a central purpose of conservation in modern day Central America is to preserve or reestablish the biological linkages necessary for this profound physical instrument of zoogeography to persist. Preserving the landbridge is the contribution to the world that will distinguish the Central American efforts toward global conservation.

2.3.3 Ethnology

The isthmus hosts an array of ethnological diversity and distinct cultural identities. The indigenous people of the isthmus, from the Maya in the North to the Choco of the Darién, will be introduced in terms of their origins, activities and present status as an ethnic group. Of special relevance to the regional park system is that many indigenous people are using the protected area concept for cultural survival, thereby allowing real links to be established between native cultures, park management, and ecotourism.

2.3.4 Archeology

An examination of Mesoamerican prehistoric civilizations can provide valuable insight into understanding modern societies in the region. For example, the rise and fall of the various civilizations is now thought to be due to many factors, chief among them being a dissonance with their natural environments.

This volume shall take up the subject of pre-Colombian man and his remaining artifacts. Though the most dramatic remains are those of the Mayan eras, there is a larger history to be related on the special role the isthmus played in extending the human presence from North to South America.

2.3.5 Geomorphology

The dynamics of geomorphology are a dramatic presence in the journeys of the Central American travelers. Volcanoes dominate the skyline, and earthquakes are constant reminders of a living earth. As a result, the editorial challenge of this book will be made far less threatening. The document will discuss plate tectonics in laymen's terms, describing the origins of the two huge continents to the north and south, and will further describe the vulcanization resulting in the final bridging of the two landmasses. The author will interpret the major landscapes of the present day, explaining the existence of central mountain ridges, coastal plains, and such regional features as Lake Nicaragua and the karst topography of the Petén.

2.3.6 The Modern History of the Isthmus

The numerous countries that exist on the small area of the isthmus are testaments to a rich and complex regional political and societal history. Though much literature exists in this field, this book series will paint a regional portrait of the historical perspective. The discussion of the modern history isthmus will examine the forces behind the formulation of political boundaries and distribution of contemporary peoples and institutions. This volume will describe the common origins of the people of Central America and the peculiar circumstances that led to their isolation into seven (including Mexico) separate countries.

2.3.7 The Marine Systems of the Isthmus

The extensive coastline of Central America contains some of the richest marine areas in the Western Hemisphere. This book will seek to describe the outstanding natural areas of the maritime region of the Pacific and Caribbean. Marine systems such as the barrier reef will be discussed in holistic terms rather than the subject-specific style of other volumes. The coastlines will be initially described in general terms, followed by a more detailed treatment of specific sites. The result will be an appreciation of the fact that these largely forgotten shores harbor an immense treasure of unique, fascinating natural areas.

Though full publication is beyond the scope of the RENARM project, the Paseo Pantera Consortium will actively seek support for the publication of these manuscripts as a popular series in the style popularized by Time-Life books. This style features a highly readable narrative supported by abundant photographs, tabular data, and maps. Such a series could be translated into Spanish, with further conversion to European languages or Japanese as warranted by demand. Though not included in this proposal, translation and publication costs could be calculated and budgeted for as deemed necessary. Such publications would have a broad popular appeal, as well as be able to stand alone as first-rate scientific works.

2.4 Management of Individual Pilot Parks

The preservation of biodiversity in Central America will be made possible only by the effective, coordinated administration of the region's parks and protected areas. Critical management activities such as basic research, in-park and ex-park education and interpretation, buffer zone management, the development of biological linkages (wildlife corridors), and the institution of uniform standards for tourism must be initiated and sustained if the parks are to make any lasting contribution to regional conservation. Of greatest relevance to the tourist-oriented theme of Paseo Pantera, adequate monitoring of tourism impacts must be installed from the outset to prevent serious degradation of the parks' function as wildlife habitat.

With the inclusion of Nicaragua and Panama, more than 19 designated and planned protected areas might ultimately fit into the Paseo Pantera regional chain of parks. The Paseo Pantera Consortium's project will devote intensive attention to the aforementioned key management activities in a subset of these parks thereby demonstrating the potential for the entire group. An initial four parks have been selected on the basis of wide ranging ecological, cultural and geographic diversity as well as complementarily with WCI or CCC existing goals for these areas. The stage of development of these parks varies widely with regard to the management activities of critical interest, which shall in turn require a flexible approach in the use of the program's resources at each site.

While the RFA calls for the creation and support of five demonstration parks, the Paseo Pantera Coalition offers four parks in Belize, Costa Rica, Honduras and Guatemala (Figure 1) for immediate action, with the option of including a fifth in El Salvador. The proposed demonstration parks are:

- The Tortuguero National Park (Costa Rica)

Efforts at Tortuguero will complement the existing agenda of activities sponsored by the Caribbean Conservation Corporation and USAID/San Jose. Though Tortuguero is well known for marine turtle conservation, the park's unique contribution to the diversity of Paseo Pantera is an extensive, functionally intact lowland rain and coastal mangrove forest. Institutionally, the park also has a highly evolved capacity for environmental education and interpretation, as well as extensive activities with the human population in adjoining areas. The Tortuguero park personnel specifically and Costa Rica natural resource managers in general possess considerable knowledge in the development of ecotourism, which has great significance for the Paseo Pantera Consortium's goals for this activity. The Paseo Pantera Consortium will interact primarily with the Caribbean Conservation Corporation (CCC), and the Fundación de Parques Nacionales in the implementation of the Paseo Pantera Consortium activities under RENARM. (See Attachment 3). The proposed activity will augment CCC's ongoing work with A.I.D. in Tortuguero... new money will translate into a new level of effort and the possibilities of entirely new activities.

- The Belize Barrier Reef (Belize)

Though momentum is gathering for the designation of the Barrier Reef as a World Heritage site, only a small portion of the reef has received any status as a protected area to date. The activities of the Paseo Pantera Consortium in Belize under the RENARM program will be designed to support the management of the entire reef system according to the model offered by the Australian Barrier Reef Authority.

USAID/Belize is also supporting the development of ecotourism and natural resource management programs that are highly complementary with the Paseo Pantera Consortium/RENARM goals for the reef. Project activities will be implemented under auspices of the longstanding institutional arrangements between WCI and the Belize Audubon Society.

- The Rio Plátano Biosphere Reserve (Honduras)

On a continuum of "preparedness for international ecotourism" the Rio Plátano is the least advanced park of those proposed. However, the inaccessibility that produced this situation has also contributed to its present reputation as one of the most pristine areas of tropical forest remaining in Central America. Increasing human settlement of adjoining lands over the past 5-6 years has begun to threaten this reserve and create the need for stronger protective measures. These conditions, plus the striking variety of habitat types over the River's short course from highlands to estuary make the reserve a first round pick for inclusion in the Paseo Pantera. The Paseo Pantera/RENARM activities in the Rio Plátano area will be implemented through cooperative arrangements with the newly constituted Balam-Ha (Mayan for "la Casa del Jaguar") organization of Honduras. (See Attachment 3). The goal of Balam-Ha is to seek support for and guide the management of Honduran wildlands and reserves. This role would complement the activities of the Asociación Hondureño de Ecología (AHE), whose historical emphasis has been on environmental education and awareness. Further cooperation on the management of buffer zones around the Rio Plátano shall be arranged via the involvement of "Vecinos Mundiales" and "Mopawi". With the backing of the World Wildlife Fund these organizations are presently executing buffer zone projects with the rural population of lands adjoining the Rio Plátano Biosphere Reserve.

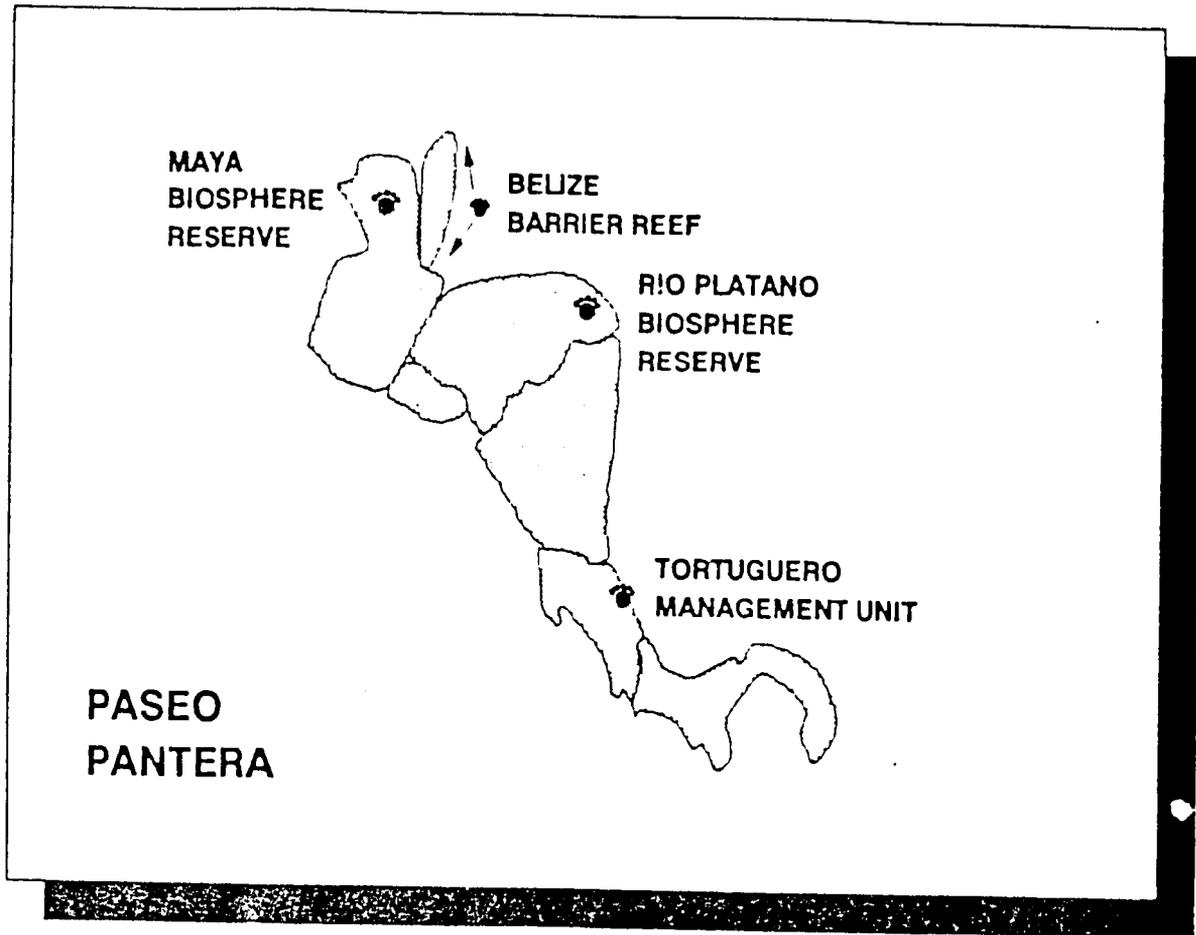
- The Mayan Biosphere Reserve (Guatemala)

The unique combination of climate and geological features in the Petén reserve has created one of the most biologically diverse lowland tropical forests in the world. This situation, coupled with the renowned Mayan ruins of Tikal, has led to widespread concern for and investment in the conservation of the Petén over the past decade.

Paseo Pantera goals in the Maya Biosphere Reserve will be greatly advanced by activities pending implementation under the USAID/MAYAREMA project, particularly with regards to buffer zone management (presently being designed by Consortium member TR&D). All project activities implemented under the RENARM program in Guatemala would be executed under the auspices of the Centro de Estudios Conservacionistas (CECON) based

on extensive collaborative agreements with WCI for the execution of other conservation activities in the region. (See Attachment 3).

Figure 1. Locations of Paseo Pantera Demonstration Parks



The universal project activities in each of these parks are:

2.4.1. A Baseline Research Program

The objective for such a program would be to provide basic description of the parks biological and physical assets. The research program will provide the basis for establishing park management practices and monitoring programs.

The research activities will be implemented by WCI, under the direct supervision of WCI staff members Jim Barborak and Archie Carr III. In addition, maximum use will be made

of the existing network of WCI research fellows in each country. The research program has four specific steps:

- Produce a macro-scale rendering of the park. This would be a GIS-type inventory of the ecosystem of concern.
- Conduct ground truth assessments to identify basic aspects of the parks such as the distinctive habitats and critical ecosystem functions.
- Description of the status and natural history of endangered species within each protected area.
- Description and natural history of those "keystone" species that play a disproportionately critical role in ecosystem function.

The above information will be combined into a baseline body of data that will serve the following function in park management:

- The design of long-term monitoring programs that will serve as the primary measure of the parks health and general status. The monitoring function will have immense significance as the parallel plan for ecotourism development produces increasing human use of the park.
- The design of tourism-use corridors within the park and zonations outside the park for various types of other compatible economic use.
- The preparation of popular tourist interpretive materials and marketing resources for use in training the park guides, operators, and promoters.

On all demonstration parks major emphasis will be placed upon the active training of local staff in the design, execution, analysis, and data interpretation from the research activities sponsored under Paseo Pantera. This feature of the research program will assure their continued utility beyond the five year life of the project.

2.4.2. Education and Information

Environmental education will be the primary responsibility of the Program for Studies in Tropical Conservation (PSTC) of the University of Florida's Department of Range Sciences and Wildlife Management. PSTC assistant director Susan Jacobson will participate directly in the execution of project activities in Environmental Education. As required, further short-term technical assistance is available from Margaret Carr of CCC and Sam Ham of the University of Idaho's Department of Wildland Recreation Management.

2.4.2.1 In-Park Interpretation

An environmental education and interpretation program will be designed for each park. This task will have the twin objectives of educating both the visitors to the park and the residents of the adjoining lands. None of the four parks can claim to provide adequate interpretative activities at present. The Paseo Pantera/RENARM program will therefore evaluate current circumstances for each site, taking into account managerial inputs, availability of facilities, materials and personnel. From this evaluation a complete plan for the development of park education and interpretation will be produced. Baseline research activities and material from the books will allow a unique opportunity to integrate regional information into site-specific interpretive programs.

2.4.2.2 Ex-park Education and Information Programs

Policy makers, special interest groups, the business community and the general public, most of whom never visit a park or preserve, all influence its existence, dictate its management objectives, and ultimately determine its effectiveness in preserving biological diversity and enhancing sustainable development in the region. Providing educational programs for the public beyond the park boundary is of paramount importance for long-term resource conservation, and is a critical mechanism for parks to increase their flow of benefits to the public by serving as an educational resource. Ex-park programs are crucial for promoting natural resources conservation, serving as a "science classroom without walls," training environmental managers, and fostering an environmentally literate public.

The development of ex-park education and information programs for the region's park systems will have the following objectives:

- Identification and analysis of the needs, goals, objectives, target audiences, and program content of ex-park education and information programs.
- Creation of a regional and park-specific model for the development, implementation and evaluation of programs. This will use specific target audiences, subject matter and communication techniques identified for the four protected areas.
- Preparation of a reference manual and book on ex-park education and information programs expanding on the first two objectives for use by park personnel, NGO staff, teachers, and others.

2.5 Buffer Zone Activities

In planning the long-term stability of any protected area, one of the most critical objectives is to attain influence over that surrounding belt of land where park management ends and all other types of utilization begin. In most cases such management will involve an agenda of extension activities to the residents of lands adjoining the parks. The purpose of the

extension program is to equate the economic self-interest of local residents with the maintenance of surrounding areas in a condition useful for wildlife.

The Paseo Pantera Consortium will perform field assessments on each park that will lead to the formulation of highly specific management plans for each buffer area. Strong consideration will be given to the adaptation of the African model of buffer zone management where at all feasible. Under this strategy, a "critical mass" or core area of crucial habitat is identified where minimal direct exploitation for tourism or any other use is allowed. Ecotourism on a significant, though controlled, scale is allowed via commercial concessions on a secondary belt of land surrounding the park. Such potentially disruptive patterns of utilization as mass tourism, agriculture, and commercial forestry are allowed on a tertiary belt of land surrounding the park. Finally, in light of Paseo Pantera's special goal for the restoration of "biological linkages" between parks, it should be noted that these strategies will also give major consideration to buffer zone function as wildlife corridors whenever possible.

The Paseo Pantera Consortium will implement buffer zone activities via consortium member Tropical Research and Development, Inc. (TR&D). TR&D associates Robert Peck and Donald Kass will provide expertise as required in the area of Agroforestry. Pierre Berner and Bob Simione will design Tropical Forestry Management projects, and Social Forestry will be directed by Gerald Murray and Kathy Parker. TR&D core staff members Josh Dickinson and Alberto Vega will bring strong technical backstopping capabilities in the management of protected area buffer zones.

2.5.1 Wildlife Corridors

Wildlife management activities for the areas surrounding the parks will focus on the development of corridor concepts. For each park a study will be conducted and a comprehensive description prepared on that areas "insular properties," the hazards those properties represent to the purposes of the protected area, and actions recommended to reduce these hazards over the long term. The principles highlighted in these reports will demonstrate on a site-specific basis how corridors and other non-park management schemes have the potential to link the "island parks" of the isthmus more fully, thereby restoring some of the "continental corridor" function of the isthmus. These studies would serve as a template for similar activities to be undertaken on all parks of the Paseo Pantera chain. Success at this level would complete the regional perspective -- initiated at the level of tourism and culminated in the creation of biologically functional linkages between parks.

The wildlife corridor studies will be complimentary objectives of the WCI field teams implementing all other park-related activities. Oversight and technical direction will be provided by Archie Carr, Jim Barborak and WCI Research Fellow Howard Quigley.

2.5.2 Buffer Zone Economic Activities

In buffer zone management for economic opportunity the emphasis is on compatibility with protected area management, sustainability and productivity. Buffer zone land uses considered a priori incompatible with protected areas management would be large scale production of cattle on pasture and urban/industrial development in the immediate vicinity or upstream of a protected area. Factors considered in defining incompatibility include sharp breaks in land cover such as occurs in the transition from forest to pasture, intensive agriculture, shifting agriculture under increasing population density, or urban land use.

Types of activities that shall be proposed for the buffer zone include:

- Sustained yield forest management, both of relatively undisturbed forests as well as successional forests in various stages of recovery after earlier cutting, can be compatible with the integrity of the natural systems in the park itself. If hunting is controlled, such areas can provide habitat for a variety of wildlife species and be an attraction for private-land ecotourism. A variety of forest management strategies show promise. These include the "CATIE" model for successional forest management and the "Palcazu" model involving narrow strip clear cutting in mature forests followed by utilization of nearly all wood cut. A variation has been developed by the Fundación Neotrópico around the Osa national park involving a slow evolution of management sophistication as farmers adopt practices presented by the project teams.
- The sustained yield management of forest plantations (silviculture) is an option for buffer zone utilization where natural forest management is not feasible. If successional forest is present, income can be realized by management of succession, selective cutting, and replacement with planted trees. Because of the long time lapse before return is realized, silviculture is likely to be of interest to corporate investors with a long time horizon.
- Though agroforestry involves significant deviation from the natural forest characteristics of a park it is much more appropriate buffer zone use than pasture or urbanization. Agroforestry is a loosely defined term representing a variety of strategies combining the maintenance of partial tree cover with small plot agriculture or intensive animal production systems. Tree products include high-value timber, fuel, forage, latex/chicle products, fruits, nuts, palm hearts, and ornamentals. Of the three buffer zone activities described, agroforestry offers the greatest potential for employment generation and increased incomes.
- Direct involvement in the parkland's ecotourism industry is perhaps the ideal economic activity for residents of adjoining lands. The park management plan will include a policy giving clear preference to the hiring and training of local residents as guides, park guards and service personnel. Likewise the granting of concession opportunities will be reserved for local residents wherever feasible. In the case of indigenous groups with a relatively intact cultural heritage their involvement with the park can include the provision of ready markets for locally made traditional goods.

In all cases where significant tourist usage develops, there will be opportunities for the production and sale of produce, furniture, and other necessities.

2.6 Technical Assistance in Long-Range Planning

Long-range plans will be developed for each of the demonstration parks under the supervision of Wildlife Conservation International. In addition to in-house expertise in this area available from Archie Carr III and Jim Barborak, short term technical assistance can be obtained as needed in parks planning from Allan Moore and in Tourism Development from Ray Ashton of WAR.

2.6.1 Tourism Development Plan

Tourism development plans will be prepared for each of the parks. This activity shall complement and complete the regional ecotourism constraints analyses described in Section 2.2.1.

Planning exercises shall be undertaken in the categories of:

- park-specific resource analysis;
- individual park objectives for tourism related development;
- recommended strategies for development of tourism activities;
- activity-specific guidelines for development;
- recommended actions to optimize tourist linkages to other parks on the Paseo Pantera chain; and
- training requirements for park staff, tour guides, NGO administrators and government officials.

2.6.2 Preparation of Park Management Plans

The research and assessment activities proposed for demonstration parks must be integrated into an administrative framework. The baseline data, educational materials and strategies for buffer zone management generated by Paseo Pantera will have little utility outside the context of a park-specific long range plan. Field activities initiated under the Paseo Pantera/RENARM project will therefore endeavour to include park management in their information stream. Linkages will be established between the individual park management plans in support of the regional goals for Paseo Pantera.

Institutional capacity for management planning is highly variable among the four parks, though some management authority exists in all cases. Paseo Pantera will tailor its support of management planning in the following manner to reflect this disparity of capability:

- Though USAID is funding Tropical Research and Development's preparation of a management plan for the Petén Biosphere Reserve, there is at present no economic support designated for its application to the field. Paseo Pantera will therefore seek means to facilitate the startup of park planning operations.
- Belize Barrier Reef and the Parque Nacional Tortuguero both have well established park planning capabilities. Paseo Pantera resources will therefore be committed to linking these park plans to those of the other member parks of the program.
- Though clearly defined park management authority is in place, the Rio Plátano Biosphere Reserve has the least developed capacity for long range planning of any of the demonstration parks. Paseo Pantera shall therefore undertake the preparation of comprehensive management plans for this park.

Within the consortium, Paseo Pantera park management and planning activities will be the direct responsibility of WCI. WCI will draw upon its considerable institutional skills and experience in this area through Paseo Pantera project principles Jim Barborak and Archie Carr III. Short-term technical assistance will be sought by WCI as needed through the use of park planning specialists such as Allan Moore.

2.7 El Salvador

The RFA has called for the involvement of one exemplary park or wildland in each of the countries participating in the RENARM Regional Wildlands program. Specific parks have been identified in Guatemala, Belize, Honduras and Costa Rica that offer an excellent chance for demonstrating the feasibility of Paseo Pantera's strategy for regional wildlands management. The selection of a comparable park in El Salvador however presents a special challenge in light of the exceptionally deteriorated state of that country's natural resource base. Though this condition has certainly been exacerbated by a decade of civil war, the country has had a long and unfortunate history of environmental abuse and misuse of resources that dates to well before the outbreak of conflict. This pattern has been largely driven by the most acute problems in the region with regards to population growth, unequitable income distribution and large-scale human migrations.

For this reason the Paseo Pantera Consortium recommends the initiation of a process for the selection of the candidate park in El Salvador, rather than risking the commitment of project resources to an inappropriate area.

The best area in which one could seek a candidate site is the Gulf of Fonseca. Such a park would focus on the extensive mangrove estuaries of this zone and would provide the first introduction of Pacific fauna to the Paseo Pantera network. There has also been

preliminary discussion towards the creation of a tri-national "Peace Park" in the Gulf of Fonseca that would be composed of territory contributed from El Salvador, Nicaragua and Honduras. Such an arrangement would be highly compatible with the goals of Paseo Pantera, and would provide El Salvador with its best opportunity to participate in the Regional Wildlands Management Program.

In any event, the Paseo Pantera Coalition will stay abreast of the USAID/El Salvador agenda of activities in Natural Resource Management. The Paseo Pantera Consortium will bring particular resources to the Salvadoran initiative by virtue of TR&D's recent participation in drafting a Natural Resource Management Concept Paper for El Salvador. TR&D will initiate further work in the Mission in June of 1990 that will develop this Concept into the National Action Plan for Natural Resource Management. One of the principle objectives of this Action Plan will be to select a Salvadoran NGO that would subsequently receive the necessary support to assume the leadership of Salvadoran natural resource management. One of the charter objectives of this agency would be the development and implementation of a national strategy for wildlands management.

The Coalition will build upon these relationships in the development of an agenda for El Salvador's participation in Paseo Pantera. As El Salvador formulates natural resource policy and develops strategies for its implementation, the Paseo Pantera input will assure compatibility with the regional management concept. Specifically the Consortium will:

- include GOES officials, conservation officers and NGOs in the information stream derived from Paseo Pantera activities on the demonstration parks;
- invite and support participation by El Salvadorans in regional workshops and conferences on wildlands management;
- provide technical backstopping in the development of wildlands management policy and strategies; and
- assist in the search for candidate protected areas for implementation of Paseo Pantera activities.

2.8 Final Strategy for Regional Wildlands Management

The results of project exercises at both the regional and park-specific level will be analyzed for critical lessons learned. This information will be integrated to produce a coherent, authentically regional strategy for wildlands management that will be appropriate for presentation to governmental authorities, multilateral development banks, other conservation NGOs, and the tourism community at large. The strategy in effect would be a functioning Master Plan for the full-scale implementation of Paseo Pantera.

Significant momentum for activating this plan can be gathered well before the end of the Paseo Pantera/RENARM project. A strategy will be incorporated into the project workplan

which would build outside support for Paseo Pantera from the program's inception. Features of this strategy would include:

- Direct lobbying with each of the major conservation NGOs of the Central American region. The objective of this effort would be to obtain their commitment that parallel conservation activities would be conducted in a manner supportive of the regional approach to park management.
- Presentation of the Paseo Pantera proposal in a major international conservation conference. Of particular interest is the Fourth World National Parks Congress scheduled for February, 1992 in Caracas Venezuela. Conducting a full discussion of Central American regional parks management under such auspices would generate invaluable support for and participation in Paseo Pantera well before the end of the RENARM program.
- Development of marketing materials that would encourage such private capital investment in tourism as tour operations, lodging, and other support.
- Development of marketing materials that would encourage large capital investment by the major development agencies in infrastructure such as roads and airfields.
- A conference at the inception of the Final Strategy development. The goals of this conference would be to review the lessons learned from the Paseo Pantera program activities in a venue that would allow substantive contribution from the major parties of interest in the field of tourism, conservation and biodiversity in Central America.

In its broadest application, the Final Strategy would set the stage for and facilitate the entry of most Central America countries to the Paseo Pantera circuit, resulting in its eventual extension from Southern Mexico to the Darién of Panama.

2.9 Project Implementation

The Paseo Pantera Project activities will be implemented over the five year life of the project (see Timeline attached, Figure 2.) according to the following schedule:

2.9.1 First Quarter

Upon signing of the Agreement, the Consortium will complete agreements with proposed project staff. An orientation session will be held in Gainesville between project manager Barborak and the Consortium principals. Following this meeting, the project manager and Consortium principals will undertake to:

- prepare a statement of Initial Project Objectives and Global Life of Project Plan,
- provide general orientation to participants in each country where activities shall be initiated,

Figure 2. Timeline

Paseo Pantera Time Line

Year 1	Year 2	Year 3	Year 4	Year 5
(1) Contract Negotiated and signed.	(1) Books Completed.	(1) Presentation of Paseo Pantera at World Nat. Parks Congress.	(1) Prepare & submit new work plan.	(1) Prepare & submit final survey.
(2) Agreements completed w/proposed project staff.	(2) Ecotourism study completed.	(2) Mid-term evaluation.		(2) Conference on final strategy for development of Paseo Pantera.
(3) Work Plan Submitted.		(3) New 2 yr. work plan.		(3) Preparation of Regional Strategy Document.
(4) M&E plan submitted: -list of criteria -baseline survey				
(5) Authors recruited & work initiated on books.	(4) Env. Ed. Program initiated.			
(6) Regional Ecotourism studies Initiated.	(5) Buffer zone activities initiated.			
(7) Baseline Research Program Initiated.				
				> Completion
				> Completion

- prepare a Work Plan with initial two-year budgets, and
- develop a Monitoring and Evaluation plan to include basic verifiable indicators and baseline study.

2.9.2 Remainder of First Year

The remainder of the first year will be dedicated to initiating the Regional activities described in the technical proposal:

- initiate preparation of natural history book manuscripts,
- initiate fieldwork and preparation of ecotourism feasibility studies, and
- complete design and composition of on-park project activities.
- initiate baseline research activities,

2.9.3 Second Year

Goals of the second year of the project will be to finalize the Regional activities and initiate the on-park management projects:

- finish book manuscripts,
- finish regional ecotourism feasibility studies,
- initiate development of environmental education materials, and
- initiate design of buffer zone management activities.

2.9.4 Third and Fourth Years

Goals of these years will be to further the objectives of the on-park activities. In the third year there will be;

- Workshop hosted on Paseo Pantera at international conference, and
- Mid-term project evaluation.

2.9.5 Fifth Year

The final year will see the completion of ROCAP support for the park activities. These activities will be continued under direct Paseo Pantera Consortium or host country support. Additionally there will be:

- an international conference to present the results of Paseo Pantera and discuss final strategy,
- the drafting of the final strategy and recommendations for the support of regional ecotourism and wildlands management, and
- final project evaluation.

2.10 Project Monitoring and Evaluation

From the outset the Paseo Pantera Consortium management will work closely with the Monitoring and Evaluation (M&E) specialists contracted by ROCAP in the development of key indicators for project performance. Given the broad geographic scope and ambitious goals of the Paseo Pantera project, considerable care must be used in the selection of performance indicators if any clear measure of success is to be obtained. The Paseo Pantera Consortium will draw upon the considerable in-house talents of CCC and TR&D in the development of these criteria and provide overall technical input on the M&E initiatives for this project.

The RFA lists a number of areas of expected impact as a result of the project. This list needs to be further refined during operational planning. Each area needs verifiable indicators for measurement. Those listed below can serve as a departure point in the M&E process. As a result of the project it is suggested that there will be an improvement or an increase in:

- regional collaboration on the management of wildlands,
- regional institutional linkages between Central American parks,
- strategies for regional biological linkages between parks,
- application of baseline research methodologies,
- methodologies and materials for park interpretation and environmental education,
- strategies and plans for management of buffer zones and involvement of local populations in parks,
- materials and information for marketing of nature based tourism,

- materials and information for servicing tourism, and
- strategies for large scale promotion of regional tourism.

Following the development of verifiable indicators and collection of baseline data, project evaluations will be conducted in the third and the final years of the project's life.

2.11 Coordination and Collaboration

The Paseo Pantera Consortium and subcontracting companies enjoy the remarkable advantage of a common location in the city of Gainesville, Florida. This will greatly facilitate direct interaction on matters of concern to the project. Consortium principals will therefore hold monthly planning sessions for the purpose of such business as:

- review and setting of project strategy,
- review and editing of quarterly and annual reports,
- preparation and review of work plans,
- allocation of short term technical assistance efforts,
- resolution of specific project related problems,
- preparation for project evaluations, and
- review of new initiatives resulting from Mission buy-ins.

2.12 Local Counterpart Involvement

WCI has a long-standing commitment of strengthening host country capacity for the management of wildlands. The majority of WCI personnel are nationals of the country in which the project is undertaken. That statistic reflects overt policy by WCI to enhance the manpower in Latin American conservation. In the past 3 years WCI has been rewarded with grants from the John D. and Catherine T. MacArthur Foundation, the J.N. Pew, Jr. Charitable Trust and the Jessie Smith Noyse Foundation totaling over \$1.5 million in support of training programs for foreign nationals. This year, WCI Conservation Fellow Ms. Janet Gibson of Belize won the Goldman Environmental Award, a \$60,000 cash prize for grass roots conservation awarded to one person from each of the inhabited continents of the world for her conservation work on Belize's Barrier Reef. In fact, two of the six recipients of the Goldman Award were nominated for the prize by WCI. WCI was acknowledged by the Goldman Foundation for its successful program of encouraging citizens of other countries to carry on the task of conservation.

Each project undertaken by WCI is the responsibility of a "principle investigator (P.I)." Each P.I. is required to be associated with creditable institution and these are normally either a university or a non-governmental organization. Consequently each project has a direct link with one and often two major local institutions.

In addition each project becomes affiliated with other institutions with similar conservation goals in a given area. For example, as many as six institutions are assisted by or associated with WCI's team of four Mexican biologists working to save the Lacandón Forest of Chiapas, Mexico. Among these is SEDUE, the federal agency with responsibility for parks and protected areas.

By virtue of this network, WCI is associated with nearly 60 institutions in Latin America. In ROCAP countries alone these figures work out as follows:

Guatemala: Four affiliated institutions
Belize: Four affiliated institutions
Honduras: Four affiliated institutions
Costa Rica: Six affiliated institutions
TOTAL: Eighteen affiliated institutions

The Coalition shall also take full advantage of ROCAP auspices for the promotion of regional workshops, training courses, and seminars for demonstration park staff and personnel. Not only can such events provide vital technical instruction, but will also be the primary venue for establishing professional and institutional linkages on a regional level. Additionally, meetings on such topics of particular interest to the goals of the Paseo Pantera Program as ecotourism development have been planned for direct support under this project.

3.0 MANAGEMENT PLAN

3.1 The Paseo Pantera Consortium

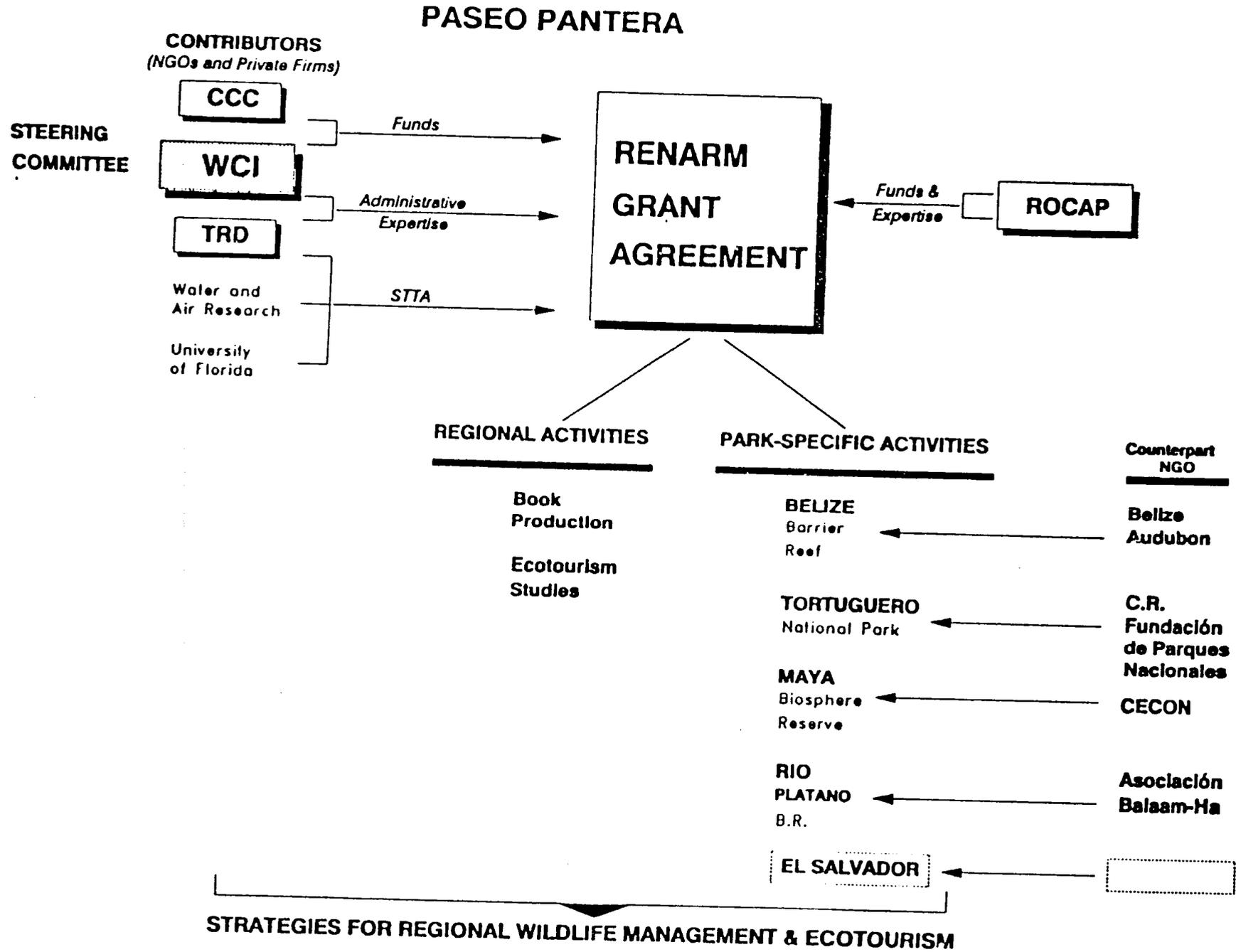
The Paseo Pantera Consortium consists of a combination of NGOs and private companies, each with valuable expertise in the myriad of components essential to any large-scale conservation effort. (See Organizational Flow Chart, Figure 3). The members of the consortium are Wildlife Conservation International (WCI); Caribbean Conservation Corporation (CCC); Tropical Research and Development, Inc. (TR&D); Water and Air Research, Inc. (WAR); and the University of Florida's Programs for Studies in Tropical Conservation (UF/PSTC). The steering committee of the consortium will include WCI, CCC, and TR&D.

Each member of the consortium brings with it unique experience and expertise particularly suited to implementing the Paseo Pantera flagship parks. WCI brings vast experience conducting large-scale conservation efforts; TR&D offers years of proven success coordinating and administrating development and conservation projects worldwide; CCC provides strong regional experience and a long-term commitment to conservation of wildlife and their habitats in Central America; WAR contributes impressive experience evaluating and developing ecotourism projects; and UF/PSTC provides unsurpassed expertise in environmental education and information.

The Paseo Pantera Consortium takes full advantage of the rare opportunity of having five such internationally respected organizations within the same city -- Gainesville, Florida. The advantages of the close proximity of the consortium members cannot be overestimated. Consortium members can convene on short notice, even within hours, as well as meet weekly or monthly as deemed necessary. Therefore, the Paseo Pantera Consortium can manage and direct a large-scale project with the tight control and timely responsiveness often only afforded small-scale efforts.

In addition to having the precise combination of expertise and international experience required by the Paseo Pantera Project, each Consortium member's past performance reflects a longtime commitment to conservation efforts throughout the region. The Paseo Pantera Consortium is dedicated to the successful implementation and management of a series of flagship parks that can be used as a model for countries and regions worldwide committed to wise and productive management of their valuable natural resources.

Figure 3. Organizational Flow Chart



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3.2 Consortium Participants

3.2.1 Wildlife Conservation International (Lead Agency)

Corporate Capabilities:

Wildlife Conservation International (WCI) currently supports more than 100 projects in 43 countries, 44 of which are in 14 Latin American countries. Under the auspices of the New York Zoological Society (NYZS), WCI designs, manages, and funds projects to protect endangered species and their habitats worldwide.

WCI's regional conservation activities include protection of vast tracts of natural forest in Mexico, Guatemala, and Belize; formulation of a national strategy for natural resource management for Belize, which includes protection of the 150-mile-long barrier reef; preservation of virgin forest in Amazonian Venezuela; and promotion of improved governmental policy, public education, and ecotourism throughout Latin America.

Under the direction of Dr. Archie Carr III, WCI's Coordinator for MesoAmerica and the Caribbean, encouraging progress in conservation and effective natural resource management has been made throughout Central America despite unsettled political conditions.

WCI has developed the reputation for strong field orientation, providing the data upon which critical commitments to species and habitat conservation are made by governments. WCI also applies strategies in land use planning, legislation, lobbying, and environmental education in seeking environmentally sustainable economic opportunities for rural populations. WCI is currently working with fishermen in Belize and Peru, gold miners in Ecuador, owners of vast haciendas in the Chaco of Paraguay, the forestry industry in Brazil, and indigenous people throughout Latin America to promote effective natural resource management.

WCI has a long history of collaborating with agencies and institutions throughout Latin America – 14 affiliated institutions in ROCAP countries alone. Successful collaboration with institutions in host countries makes WCI particularly qualified for organizing and managing the Paseo Pantera regional effort.

Project Duties and Responsibilities:

As the principal matching donor for the Paseo Pantera project, WCI will utilize its extensive regional experience to administer the project, providing essential technical direction and expertise in large-scale conservation project management. WCI will be responsible for directing the steering committee of WCI, CCC, and TR&D in all project-wide activities and concerns. Therefore, tone, direction, and priorities for the Paseo Pantera Project will ultimately be the responsibility of WCI.

To determine project direction and priorities, WCI will draw from its worldwide network of conservation experts, agencies, and researchers and utilize its extensive experience conducting international research efforts to design, initiate, and manage the baseline research project which will allow the development of park management practices and monitoring programs. WCI will rely on the baseline research program to coordinate the activities of all organizations carrying out the various components essential for effective individual park management.

Under the direction of WCI, each park will retain its own identity while functioning as part of a regional strategy for wildlands conservation. Therefore, WCI will be responsible for the development and management of wildlife corridors -- a park-specific activity which is essential to maintaining the project's regional focus. To establish wildlife corridors, WCI will conduct a study and prepare a comprehensive description on each park's "insular properties," the hazards those properties present to the protected areas, and actions recommended to reduce those hazards over the long term.

WCI will also manage and design tourism development plans for each of the four parks to complete and complement regional ecotourism objectives and constraints.

Additionally, WCI will draw on its internationally respected reputation, as well as that of the NYZS, to secure authors for the research and production of the manuscripts for a series of books which will give the project its intellectual foundation. WCI will collaborate with international experts in the areas of ecological life zones, zoology, ethnology, archeology, geomorphology, the modern history of isthmus, and the marine systems of isthmus to produce a series of publications which will serve as a departure point for park management planning, program education and interpretation, and park research applications.

WCI brings a wealth of international experience with large-scale conservation efforts to the Paseo Pantera project, enabling the project to achieve a delicate balance of effective, individual park management and regional conservation strategies.

3.2.2 Caribbean Conservation Corporation

Corporate Capabilities:

Founded by renowned conservationist Archie Carr, Jr., the Caribbean Conservation Corporation (CCC) has been the leading force in international efforts to conserve sea turtles and their habitats for more than thirty years. A non-profit organization, CCC conducts research, training, and education programs within the Caribbean to promote its goal of sea turtle conservation. CCC recognizes that conservation efforts of sea turtles have wide-reaching implications for general coastal and marine resource protection and management.

CCC's regional efforts, including more than 22 major research programs in 14 Latin American countries, have required strong regional coordination and cooperation. CCC's work at Tortuguero, Costa Rica has required the effective utilization international teams and resources, including funds from a variety of sources, to produce training and research programs. With funding from the U.S. Agency for International Development (A.I.D.), CCC established a regional interpretive center at Tortuguero to expand and renovate the research station, develop ecotourism as a viable enterprise within the community, and work on the establishment of a mega-park, the Llanuras de Tortuguero Conservation Unit.

CCC's commitment to environmental education has resulted in the establishment of Environmental Education and Interpretation (EEI) Center, which provides on-going efforts to develop a regional education program and interpretive materials. The Center will also develop a tour guide program for proper tourist management in sensitive turtle nesting areas.

CCC has demonstrated a high-level commitment to the concept of a mega-park or regional conservation unit at Tortuguero for more than two years. CCC established a committee to investigate the possibility of such a park and held an A.I.D.-funded workshop to discuss the plan with the Costa Rican Government.

Project Duties and Responsibilities:

CCC's regional-wide efforts, which span more than three decades, have empowered the organization with valuable experience and insight into coordinating development efforts which encompass a regional perspective. The nature of CCC's work has required that funds channelled through CCC from a variety of sources be well monitored and consolidated into a unified effort. CCC would therefore be responsible for coordinating the contributing agencies and organizations to secure the fulfillment of project goals and objectives. Additionally, CCC would be the regional safeguard to ensure that individual components of the project satisfy the particular requirements required of any regional level effort.

CCC will utilize the close proximity of the contributors to convene as necessary to discuss financial and logistic project concerns. CCC will also coordinate activities between the Consortium and ROCAP to ensure quality procedures and accordance of the Consortium's activities with ROCAP policy.

CCC's more park specific responsibilities will involve the successful integration of their on-going efforts in Tortuguero in the development of the park's management and development plan. CCC has laid significant groundwork in Tortuguero for the proposed activities under Paseo Pantera. CCC will therefore draw on this experience to manage the implementation of Paseo Pantera objectives and goals on Tortuguero. CCC's greatest relevant experience is in the promotion of a regional conservation unit by establishing a wildlife corridor between Tortuguero and the Barra Colorado National Wildlife Refuge.

Though UF/PSTC will have the lead in the more general field of environmental education, CCC will make valuable contributions in education based on experience in developing the EEI Center.

CCC's experience in the region is of great value to the Paseo Pantera Project. CCC's proven success in the region's conservation efforts makes it a vital member in the consortium and will ensure effective coordination of the contributors' efforts with project goals.

3.2.3 Tropical Research and Development, Inc.

Corporate Capabilities:

Tropical Research and Development, Inc. is dedicated to the analysis of natural resource management, land-use planning, environmental assessments, biodiversity concerns, and interactions of natural and man-made systems. TR&D employs a staff of more than 20 senior scientists, project coordinators, and administrative and financial personnel. TR&D's computerized data base provides access to a worldwide network of more than 2,000 professionals who have chosen to affiliate themselves with the firm and its projects.

All of TR&D's contracts are performed overseas in developing countries, and accordingly, TR&D is accustomed to providing all of the services that are essential for effective support of field teams.

TR&D's extensive portfolio of work with A.I.D. includes two Indefinite Quantity Contracts (IQCs): Environment and Natural Resource Related Activities, and Rural and Regional Income Generation and Natural Resources Management. Under work orders generated by these contracts, TR&D is responsible for rapid response to A.I.D. requests for technical assistance and tracking field teams to ensure precise and accurate work. Carefully edited documents, delivered on time and often under budget, have been a trademark of TR&D.

Tropical Research and Development, Inc. is a small business by definition. Yet the organization, in its role as a coordinator of worldwide development efforts, must manage an extensive network of individuals. This demands a solid *and* flexible management approach combining the person-oriented, hands-on style of a family business with the savvy and professionalism of an international company.

At TR&D, home office support is a working philosophy. The staff is trained to respond rapidly to concerns raised by field employees. At a minimum, TR&D stays in regular, weekly contact with overseas team members and A.I.D. project officers on short term assignments. This allows for course correction at an early stage and maintains open communication for technical and personal needs.

TR&D's document production staff consists of professional technical editors and writers to produce thorough, polished reports and presentations. TR&D provides complete in-house document production, from editing through design, printing, and binding. Reports produced by TR&D have helped to set high standards for the industry, incorporating clear and logical formatting; sophisticated computer graphics and tables; and hand-drawn illustrations and maps.

TR&D's information specialist is charged with the constant updating of the firm's computer capabilities, and training or assistance as required to ensure full utilization of sophisticated software, hardware, and printing equipment. Software programs used by the production and information management personnel include WordPerfect, Freelance Plus, PC Globe, Microsoft Windows, dBase IV, and Q&E SQL. TR&D currently has 17 PC computers, four portable computers for field work, two modems, two laser printers, and four additional letter-quality printers--all monitored by the in-house computer specialist.

The finance and accounting staff is headed by a certified public accountant and complemented by a travel/purchasing coordinator and a fiscal specialist, all of whom communicate regularly with the president.

TR&D's staff experience and expertise have been applied to research, teaching, and technical assistance focused on the inter-relationships between sustainable natural resource management and agricultural development. The company has been called upon by A.I.D., the Inter-American Development Bank, IUCN, The World Bank, the UNDP, and FAO to carry out interdisciplinary projects in fragile lands development, regional and sectoral planning, watershed management, and training, as well as for such highly specified activities as commercial mariculture.

TR&D's facilities combine highly trained staff and professionals with essential physical resources for unsurpassed logistic and backstopping capabilities. TR&D has developed a substantial library, monitored by a data base, that contains research documents, periodicals, maps, and scholarly publications collected over years of international study. TR&D, working under Development Strategies for Fragile Lands (DESFIL), has developed dozens of reports over the course of the project cycle, sharing these resources with institutions and governmental officials.

TR&D provides personal computers and printers for all short-term field personnel, while maintaining close telephone and fax connections with employees in a number of missions.

The company maintains open fax lines 24-hours a day and an E-mail system compatible with both IBM and MacIntosh computers. Ten separate phone lines ensure access to personnel in a quick and efficient manner. The company has accounts with several express

mail delivery services, including DHL, Federal Express, UPS, and the U.S. Postal Service. TR&D's office is equipped with an electronic postal scale and meter machine.

Since its founding in 1985, TR&D has been awarded more than 90 contracts, of which 10 have been long-term projects. TR&D has planned, designed, implemented, and evaluated projects in resource management, aquaculture and agriculture, rural, and regional development, aquaculture, and in natural resource management. The projects have taken place in Africa, Asia, Latin America, and the Caribbean.

Project Duties and Responsibilities:

TR&D will bring its extensive experience administering and coordinating international development efforts to the Paseo Pantera team. Therefore, TR&D will coordinate and execute the logistic, procurement, and operational components essential to the project. TR&D experience coordinating, implementing, and backstopping development efforts ranges from projects with budgets as small as \$20,000 to those with budgets that exceed 3 million. TR&D will apply this experience to the fiscal responsibilities of Paseo Pantera, including costs tracking, accounting and audits, and invoices and payments.

TR&D will draw on its database of experienced professionals to provide short term technical assistance to the Paseo Pantera Project as needed. TR&D's database is coded according to discipline, country experience, language competency, and more than 100 areas technical expertise to ensure that each short term position is filled by an individual meeting the precise requirements of the position. TR&D's backstopping capabilities are well known to consultants worldwide; therefore, the company can secure highly qualified professionals often with little advance notice.

TR&D's extensive experience in buffer zone management makes it uniquely qualified to manage the buffer zone management component of the park-specific activities. For example, in Bolivia TR&D developed master management plan for the professor Kempff Mercado National Park, the biological reserve, and the park buffer zone. In Costa Rica, TR&D assisted in the design of the FORESTA Project, the purpose of which was to develop economically and ecologically appropriate land uses for forestry and agroforestry in the buffer zones around Brauillo Carillo, Poas, and Irazú National Parks. From these experiences, TR&D gained valuable skills, particularly in the Mayarema buffer zone which would be invaluable to the Paseo Pantera Project.

3.2.4 Water and Air Research, Inc.

Corporate Capabilities:

Water and Air Research, Inc. (WAR) provides professional services to industry and government in environmental engineering, resource management, environmental monitoring and permit preparation/impact analysis. WAR applies proven expertise in these areas to the development and evaluation of ecotourism potential worldwide.

The professional staff at WAR includes experienced ecotourism program developers with years of professional work in natural history tourism, biological field research, conservation, and sustainable wilderness development. Mr. Ray Ashton, the manager of WAR's Ecotourism and Environmental Education Division, provides extensive experience and proven expertise in ecotourism development throughout Latin America.

Project Duties and Responsibilities:

WAR's expertise in ecotourism reflects years of dedication to the principle that conservation of the world's wildlife areas can work hand-in-hand with well planned ecotourism to provide an economic base for such preserves, the people who live within and around them, and the country as a whole. WAR has brought together a team of leading experts in ecology, international ecotourism, conservation biology, planning and economics for surveying natural areas, identifying conservation and tourism potential, and developing ecotourism programs which conserve natural resources and enhance economic potential.

Therefore, WAR is ultimately responsible for a comprehensive examination of ecotourism. Such an examination will include assessment of potential and constraints, as well as a detailed action plan.

3.2.5 University of Florida

Program Capabilities:

The University of Florida's Program for Studies in Tropical Conservation, under the Department of Wildlife and Rangelands, provides valuable education and training for managers, researchers, and scientists, especially those from tropical countries. Participants are exposed to integrated, multidisciplinary, approaches to natural resource management and wildlife conservation.

The Program's Assistant Director, Susan Jacobson, has designed and conducted education and information programs in several Latin American countries aimed at increasing general awareness of effective conservation methods and improving the effectiveness of natural resource projects worldwide. Target audiences for UF/PSTC's programs have included primary and secondary school children, university students, and rural populations, using both extension and non-formal systems of education and information.

UF/PSTC will apply its success providing unique approaches to environmental education to the Paseo Pantera project to assist the participating countries make a regional investment in preserving their tropical ecosystems.

Project Duties and Responsibilities:

Given its expertise designing effective education and information programs, UF/PSTC will take the lead in designing, coordinating, and conducting the environmental education

activities. UF/PSTC will draw from the expertise of the other consortium participants to give innovative educational activities a regional perspective.

UF/PSTC will utilize its experience with a variety of target groups to tailor a regional program which will incorporate all levels of education, from primary school children to senior scientists.

As part of its in-park responsibilities, UF/PSTC will initiate an environmental and interpretive program that will educate the visitors to the parks as well as the residents of the adjoining land. The baseline research activities and material from the books will offer UF/PSTC with valuable tools to develop park education and interpretation.

Providing educational programs for the public beyond park boundaries paramount to long-term resource conservation; therefore, UF/PSTC will coordinate crucial ex-park education and information programs. As part of ex-park programs, UF/PSTC will identify and analyze the needs, goals, objectives, target audiences, and program content; create a regional and park-specific model for the development, implementation, and evaluation of programs; and prepare a reference manual on ex-park education and information to be used by park personnel, NGO staff, teachers, and others.

4.0 PERSONNEL

Collectively, the Paseo Pantera Consortium provides an exhausting list of highly skilled professionals in wildlife conservation and natural resources management. The general duties required of the Paseo Pantera Project have been organized according to each consortium members areas of strength and experience. Therefore, each Consortium member provides technical experts, both in-house and consultants, to perform project tasks within their particular expertise (See Organizational and Personnel Flow Chart, Figure 4).

Individual members will draw on the Consortium's extensive reservoir of professional contacts to provide essential short-term technical assistance required over the life of project. The direction of the project according to broad categories will be provided by a professional under the auspices of the Consortium member responsible for the successful implementation of that particular activity.

The success of the Paseo Pantera Project hinges on strong technical and administrative backstopping from the Consortium members and effective leadership from the Project Manager. The Paseo Pantera proposal provides both. Individuals principally responsible for the general activities of the Paseo Pantera project and their proposed areas of responsibility follow. Curriculum vitae for the principle personnel, as well as those of others named on the organizational chart are attached (this section).

PROJECT MANAGER -- James Barborak

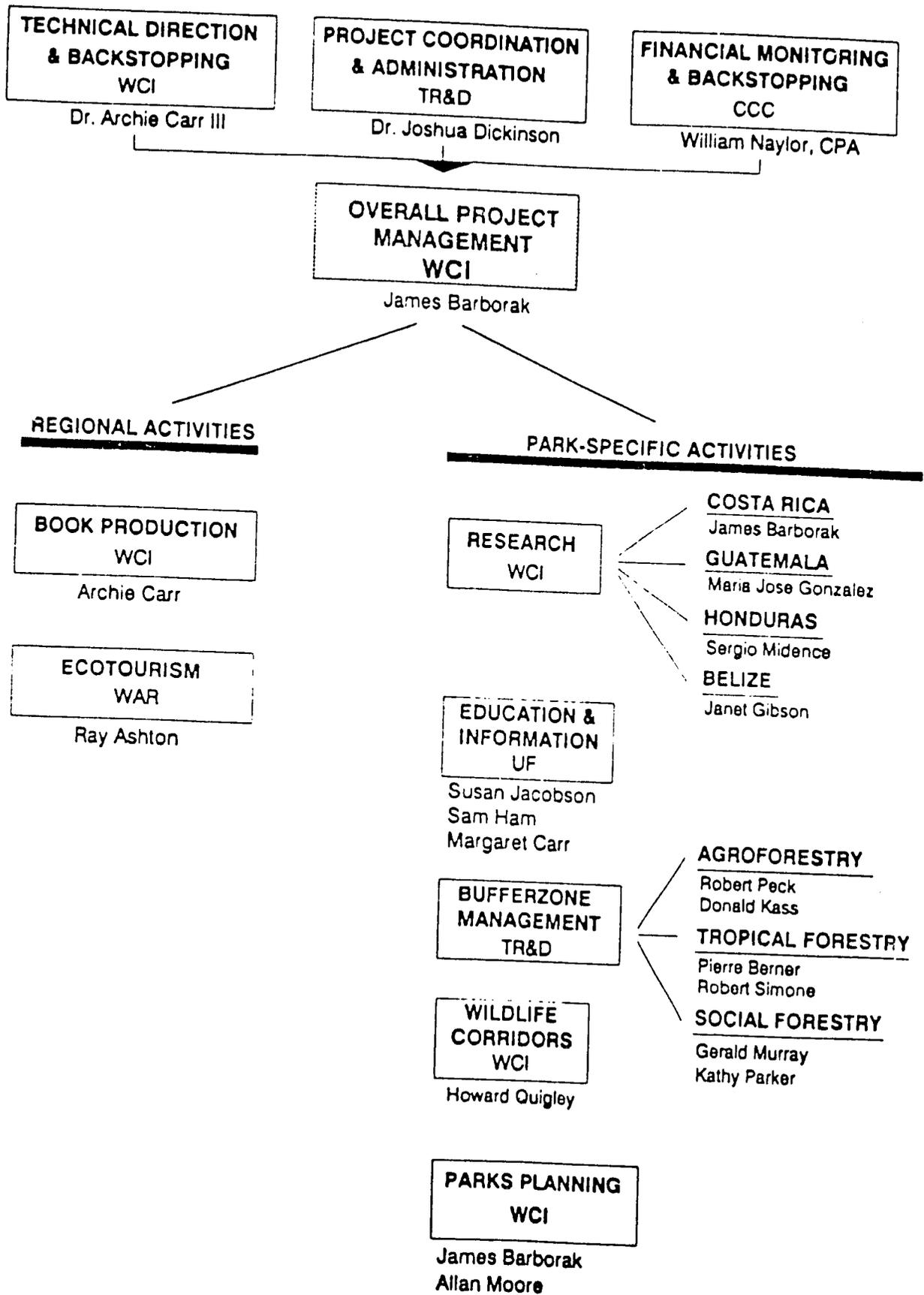
For more than 13 years, Jim Barborak has provided technical assistance for a variety of wildlife conservation projects throughout Latin America. Possessing undisputed skills in project management and coordination, Mr. Barborak worked as Project Coordinator to the largest international training and technical assistance program on wildlands management based in Latin America. He has vast experience working with a variety of different agencies, including A.I.D., IUCN, WWF, and CATIE and is well accustomed to coordinating specific project activities with more general organizational goals.

Mr. Barborak has top rate education and training (Yale School of Forestry and Environmental Studies and Ohio State School of Natural Resources) and extensive international experience. Many of the projects he coordinated or participated on transcend disciplines (i.e., planning of a 200,000 hectare frontier national park and buffer zone in Costa Rica) and involve multi-national cooperation (determining the impact and potential role of conservation data centers throughout Central America).

As early as 1977, Mr. Barborak was working with local counterparts in Honduras to prepare a wildlands inventory and master plan for the first Honduras National Park. He also served as a member of the planning team which successfully promoted the creation of Rio Platano Biosphere Reserve.

In addition to being a Professor at CATIE, Mr. Barborak is a research fellow for Wildlife Conservation International and speaks five languages, including Spanish.

Figure 4. Organizational and Personnel Flow Chart



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TECHNICAL DIRECTION AND BACKSTOPPING -- Dr. Archie Carr III

Dr. Carr began his highly respected career in wildlife management more than 30 years ago as a field assistant and supervisor at CCC's Green Turtle Station at Tortuguero. Since then he has built a successful career promoting sound wildlife conservation and management techniques. Dr. Carr currently holds the post of Regional Coordinator for MesoAmerica and the Caribbean for Wildlife Conservation International, a Division of the New York Zoological Society. Under his direction, WCI conducts projects in 14 Latin American countries, including Belize, Costa Rica, Guatemala, Honduras, Panama, and Mexico.

Dr. Carr has served as a delegate to various NGO conferences worldwide and has been a key figure in formulating a national strategy for conservation in Belize over the last six years. Also fluent in Spanish, Dr. Carr has a long-time reputation for negotiating, lobbying, and cooperating with host country institutions, scientists, researchers, and rural and indigenous populations.

FINANCIAL MONITORING AND BACKSTOPPING -- Mr. William Naylor

Mr. Naylor has applied his accounting and business degrees to administering large scale conservation projects for the Caribbean Conservation Corporation. For nearly 25 years Mr. Naylor has provided a full range of financial management activities for international projects. His vast experience includes developing policy guidance and recommendations for the Office of Regional Affairs of the Bureau of Africa; designing and implementing a standard cost accounting system for participants worldwide; conducting financial management seminars and training courses in project design, financial analysis training, and system design.

Mr. Naylor's Latin America experience includes Panama and Honduras, and he speaks Spanish.

PROJECT COORDINATION AND ADMINISTRATION -- Dr. Joshua Dickinson

The Paseo Pantera Consortium would be hard pressed to find an organization and individual with the combination of successful project coordination and administration and extensive natural resource management experience in Latin America as that of Tropical Research and Development, Inc. and TR&D's Vice President Joshua Dickinson. Before founding TR&D in 1985, Dr. Dickinson worked as an independent environmental consultant throughout Latin America for nearly 20 years.

Under Dr. Dickinson's direction, TR&D has conducted more than 90 projects worldwide with budgets that range from as little as \$20,000 to three million. Dr. Dickinson has helped shape TR&D into an internationally respected organization with a core staff of senior scientists and trained professionals in a variety of disciplines. TR&D's success is built on its reputation for effective, thorough, and timely project backstopping -- a reputation Dr. Dickinson helped establish. Dr. Dickinson is also fluent in Spanish.

ECOTOURISM -- Mr. Ray Ashton, Jr.

Mr. Ashton combines strong training and education in zoology and biology with more than 13 years of experience on ecotourism projects worldwide. Most recently, he developed one of the largest non-profit ecotourism programs in the United States; formed the Audubon Alliance for Travel-group, organized to cooperate on international travel programs; and organized policy for non-profit institutions to consider proper ecotourism ethics.

Mr. Ashton's impressive international experience includes directing workshops on inbound operator needs, marketing, and infrastructure needs of ecotourists for the Yucatan Ecotourism International Conference and Regional Workshop on Ecotourism in Mexico. Mr. Ashton's project-relevant experience includes developing and operating volunteer research programs for the Carribean Conservation at Tortuguero, and developing the first fully-organized program and infrastructure for ongoing wildlife tourism in the natural areas of Belize.

As director of the Ecotourism and Environmental Education Division of Water and Air Research, Inc., Mr. Ashton heads a team of leading experts with years of professional experience in many of the world's ecosystems: rainforests, coral reefs and coastal regions, savannah, mountaine, desert, and tundra.

EDUCATION AND INFORMATION -- Ms. Susan Jacobson

As Assistant Director of the University of Florida's Program for Studies in Tropical Conservation, Ms. Jacobson administers a \$2 million development project and coordinates tropical conservation studies at the University of Florida. Ms. Jacobson applies an interpretive approach to environmental education utilizing a variety a teaching methods.

Ms. Jacobson's experience designing materials that target a variety of audiences, from primary school children to senior scientists, will be essential to the Paseo Pantera Project. Ms. Jacobson also brings to the Project valuable expertise conducting training programs and materials for managers, researchers, and scientist.