

PIMA COUNTY NOTICE OF REQUEST FOR PROPOSALS



NUMBER AND TITLE: RFP #539 - BIOLOGICAL CONSULTANT SERVICES FOR SONORAN DESERT CONSERVATION PLAN.

PRE-PROPOSAL CONFERENCE: DECEMBER 1, 1999 AT 10:00 AM MST
IN THE 6TH FLOOR CONFERENCE ROOM
130 WEST CONGRESS, 6TH FLOOR
TUCSON, ARIZONA

DUE IN: DECEMBER 16, 1999 AT 2:00 PM MST

RETURN TO: PIMA COUNTY PROCUREMENT DEPARTMENT
130 WEST CONGRESS, 6TH FLOOR, RECEPTIONIST
TUCSON, ARIZONA 85701

OPENS: DECEMBER 16, 1999 AT 2:00 PM MST
IN THE 6TH FLOOR CONFERENCE ROOM
130 WEST CONGRESS, 6TH FLOOR
TUCSON, ARIZONA 85701

DESCRIPTION: TO PROVIDE PIMA COUNTY WITH BIOLOGICAL CONSULTANT SERVICES FOR THE SONORAN DESERT CONSERVATION PLAN, PER SPECIFICATIONS LISTED HEREIN.

A PRE-PROPOSAL CONFERENCE WILL BE HELD FOR THE PURPOSE OF CLARIFYING ANY POINTS OR ANSWERING ANY QUESTIONS THAT PROSPECTIVE RESPONDENTS MAY HAVE WITH THE INVITATION. IT IS THE RESPONSIBILITY OF THE PROSPECTIVE RESPONDENTS TO REVIEW THIS RFP AND BE PREPARED TO ADDRESS ANY AND ALL ISSUES AT THE CONFERENCE.

PROPOSALS MUST BE SUBMITTED IN A SEALED ENVELOPE CLEARLY MARKED ON THE OUTSIDE WITH THE PROPOSAL NUMBER, TITLE, DUE DATE AND TIME, AND RESPONDENT'S NAME.

PROPOSALS MUST BE RECEIVED AND TIME STAMPED AT THE PIMA COUNTY PROCUREMENT DEPARTMENT, RECEPTIONIST, ON OR BEFORE THE ABOVE SPECIFIED DATE AND TIME. IT IS THE RESPONDENTS' RESPONSIBILITY TO ASSURE PROPOSALS ARE RECEIVED AT THE ABOVE LOCATION BY THE SPECIFIED TIME. LATE PROPOSALS WILL BE RETURNED. PROPOSALS RECEIVED WILL BE OPENED AND RESPONDENTS' NAME WILL BE ANNOUNCED. ALL INTERESTED PARTIES ARE INVITED TO ATTEND.

RESPONDENT MUST COMPLETE AND RETURN THE FOLLOWING PAGES: 9-15

PROPOSALS MAY NOT BE WITHDRAWN FOR 120 DAYS AFTER OPENING TO ALLOW ADEQUATE TIME FOR EVALUATION AND AWARD.

BOND(S) REQUIRED: YES NO

THE RECOMMENDATION FOR AWARD SHALL BE MADE TO THE RESPONDENT(S) WHOSE BID/PROPOSAL IS THE MOST ADVANTAGEOUS TO PIMA COUNTY IN THE FOLLOWING MANNER: SINGLE AWARD ITEM BY ITEM BY GROUP

QUESTIONS CONCERNING THIS INVITATION SHOULD BE DIRECTED TO DAN DEERING AT (520)740-8161.

RESPONDENTS ARE STRONGLY ENCOURAGED TO CAREFULLY READ THE ENTIRE INVITATION.

DANIEL T. DEERING
CHIEF CONTRACTS AND PROCUREMENT OFFICER

PUBLISH: THE DAILY TERRITORIAL, NOVEMBER 12, 15, 16 AND 17, 1999.

SPECIFIC TERMS AND CONDITIONS

INTRODUCTION:

Pima County intends to establish a contract to provide biological consultant services for the Sonoran Desert Conservation Plan (SDCP), per specifications listed herein.

Location and Purpose of Project

The Sonoran Desert Conservation Plan (SDCP) is a county-wide planning tool. The purpose of this contract is to provide a sound biological basis for the plan. The biological goals of the SDCP are stated on Table 1. The area for which the plan is being developed is Eastern Pima County, exclusive of the San Xavier District, and Western Pima County, excluding the Goldwater Gunnery Range (Figure 1). Pima County reserves the right to reduce the extent of the plan area during the term of the contract. Areas outside of the planning area may be locally and regionally important to the biological elements of the planning area and will be considered according to the biological significance of the lands involved and agency participation.

SAMPLE CONTRACT:

A sample copy of the Contract the successful respondent will enter into with Pima County is included for your review. Each respondent, by submitting a proposal, will be certifying that the Contract is acceptable as written, unless exceptions are taken and specific alternate language is proposed. Exceptions which include language unacceptable to Pima County may be cause for disqualification. (It is not necessary to return the sample contract.) **THE SCOPE OF SERVICES, FIGURES AND TABLES ARE DESCRIBED IN THE SAMPLE CONTRACT AND ATTACHMENT "A" TO SAMPLE CONTRACT, NOT IN THE RFP.** County reserves the right to negotiate certain terms and conditions of the Contract as necessary to reach a mutually satisfactory agreement.

BACKGROUND:

On October 27, 1998, the Board of Supervisors launched a major conservation planning effort -- the Sonoran Desert Conservation Plan -- that will: (1) define urban form and prevent urban sprawl through the protection of natural and cultural resources; (2) provide the basis for natural resource protection and an environmental element of the Comprehensive Plan; (3) lead to the recovery of the endangered cactus ferruginous pygmy-owl and other listed species; (4) stabilize the ecosystem and plant communities which support indigenous plants and animals and thereby prevent the need for future listings under the Endangered Species Act (ESA); and (5) lead to issuance of a Section 10 (a)(1)(B) permit under the ESA for a regional multi-species conservation plan.

Following a three-month public comment period on the draft concept plan, in March 2, 1999, the Board adopted the Sonoran Desert Conservation Concept Plan, accepting the 189 comments from the public and inviting over 80 individuals to participate in the development of the Plan.

Figure 2 shows the entire process at a glance, with the Steering Committee, public and intergovernmental process running parallel to the technical, information gathering and assessment process. **The timing of completion of the Sonoran Desert Conservation Plan depends on Congressional funding availability.** This biological services contract will be funded by pending federal grants awarded to Pima County. **Award of this Contract is dependent on Pima County's receipt of these grant monies, and the Pima County Board of Supervisor's approval of the budget for this project.**

The SDCP will include an application for an ESA Section 10(a)(1)(B) permit, which will be submitted by Pima County to USFWS on behalf of the County and its partners. Pima County and its partners may also choose to enter into pre-listing agreements for unlisted species and modifications of federal management plans. Potential partners include federal land managing agencies, local jurisdictions, the State of Arizona, and the Tohono O'Odham Nation. Activities that may result in incidental take of listed species may include grazing, flood control, transportation, parks and recreation, residential and commercial development, solid waste facilities, sewage treatment facilities, water treatment facilities, and recharge projects. Pima County is the lead local agency and will be responsible to USFWS for plan implementation and monitoring .

The issuance of a Section 10 (a.) permit is a federal agency action subject to the National Environmental Policy Act (NEPA) process. Pima County is responsible for preparing NEPA documents.

QUESTIONS:

Respondents having questions regarding the RFP shall contact Dan Deering, Chief Contracts and Procurement Officer, Procurement Department, Telephone (520) 740-8161.

MINIMUM REQUIREMENTS:

Team-specific expertise will be highly ranked in evaluating proposals. Minimum team qualifications:

1. Lead biologist botanist or ecologist: extensive experience in the southwest United States, and experience with Arizona Endangered Species. A Master of Science or Ph.D. in biology, botany, ecology or related field, and experience in the field of biological science. Demonstrated experience with conservation planning, population biology, and habitat conservation plans. Project management experience and communication abilities in a variety of media is a must.
2. GIS Analyst: Extensive experience with county-wide or larger planning area. Ability to analyze and evaluate data accuracy and gaps. Familiarity with county, state, and federal GIS capabilities and programs.
3. Support Biologists/Ecologists: Extensive experience and expertise with the habitats and species included in the SDGP; familiar with Arizona biotic communities and management issues. Higher education preferred. Experience and education complementary to lead biologists.
4. Regulatory Specialist: The team should include individual(s) with extensive experience with Endangered Species Act and related federal regulations. Prefer familiarity with local and regional office of the USFWS.
5. Availability: the project team is expected to work very closely with Pima County in Tucson, Arizona. The project team must maintain an office in Tucson for the duration of the service.

PRICING:

Respondents shall submit pricing in the manner requested on the Pricing Pages.

PROPOSAL REQUIREMENTS:

Proposals shall contain the following information:

1. Pages 9 - 15 (pricing and certification) fully completed as requested.
2. No more than 2 pages describing firm(s) including experience of firm, location of Tucson office, size and services provided, including computer hardware and software available for this project.
3. Describe five examples of recent (last 10 years) experience with similar large scale planning efforts. List experience in order of recency. Provide eight copies of one deliverable from any of the five projects. Describe the team members' roles in working with the client including: responsiveness to a diverse management team, a single project manager or an advisory committee, and the public. Describe team members experience with information compilation and analysis including data gap analysis, population viability analysis, population modeling, plant and animal community description and classification, remote sensing applications for natural resources, community classification accuracy assessments (error estimation), statistical sampling and analysis, development of land management plans, communication of technical information, and similar or related experience. Provide references for project clients (include name and phone number, start and completion date estimated if not yet completed), address, and cost of contract. For completed projects, reference any contract extensions and why they were needed.
4. Technical qualifications, availability expressed as a percentage of time, and experience of project team members. This must include those whose primary duties will include fieldwork, data analysis, classification and imagery interpretation. Describe the staff experience in these disciplines necessary for project execution:
 - a. Conservation biology, species conservation and planning. Extensive knowledge of population biology, population viability assessments, species-habitat relationships, Sonoran Desert ecosystems, southwestern riparian communities, and the relationship of human activities to plant and animal community conservation.
 - b. Endangered Species Act and related regulation. Extensive practice in preparing biological assessments and familiarity with Endangered Species Act consultations. Working relationships with the Arizona Ecological Services office and staff, in addition to Region II USFWS staff.

- c. Geographic Information System (GIS) use and limitations. Experience with computerized GIS, diverse data management, and accuracy assessment. Skill in using GIS as one of several planning tools.
 - d. Educational and information transfer. Skills in presenting technical information to a broad public. Clear, concise, and understandable communication is essential.
5. Organization chart for project team (including sub-consultants, if applicable).
 6. Proposed approach to the project tasks, proposed deliverables and description of personnel involved in tasks.
 7. Proposed project schedule showing anticipated completion data for each task and deliverable.
 8. Percentage of project cost to be performed by employees who live in Pima County.
 9. Electronic mail address or fax number where messages may be sent to facilitate communications related to the interview or award.
 10. 254 form if applicable (including sub-consultants if applicable).

Proposals not containing the above information may be considered “non - responsive” and may not be considered or evaluated.

PROPOSAL SUBMITTAL:

One original proposal, and eight (8) complete copies shall be submitted. Original shall be clearly marked “Original”.

CERTIFICATION:

The certification must be completed and signed by the respondent. Failure to complete and sign this may cause the proposal to be rejected. In the event “No” is checked for meeting specifications, terms and/or conditions, failure to fully explain exceptions taken may cause the proposal to be rejected.

EVALUATION CRITERIA:

Pima County shall evaluate proposals after Pima County determines that the proposals are responsive. Proposals must contain all required information to be considered “responsive”. Price, minimum requirements, project team, organization, availability, approach, schedule and all other requirements in this RFP will be considered in the evaluation. Pima County reserves the right to request additional information and/or clarification.

The following will be used by the County in the evaluation of responsive proposals and selection of Contractor.

Project Team

- Qualifications and experience of project manager in conservation biology, regulatory issues, GIS-based investigations, knowledge of the region, project management and communication skills. 15 points possible
- Qualifications and experience of team members in conservation biology, regulatory issues, GIS-based investigations, knowledge of the region and communication skills. 15 points possible
- Demonstrated capability on similar/related projects. 15 points possible

Organization

- Team organization chart – efficiency; clear lines of authority/responsibility; how well the team is organized; appropriateness; quality control responsibility 5 points possible

Availability

Time commitment of *key* project team members and availability of team members to the project site and community resources. 10 points possible

Approach

Proposed approach of the firm towards completion of the project, including reasonableness of hours estimate. 20 points possible

Schedule

Schedule; includes measures to progress in an efficient manner. 10 points possible

Cost

Lowest cost. 10 points possible

Total ***100 points possible***

EVALUATION CRITERIA (CONT.):

The proposals will be evaluated by Pima County Procurement, the Project Manager (PM), U. S. Fish and Wildlife Service, and the members of the STAT. Interviews of the top candidates may be held at a time and place to be determined.

Recommendation for award will be item by item. The respondent who has submitted the proposal most advantageous to the County considering price, conformity to the RFP requirements and the evaluation scores shall be recommended for award.

PRICING PAGE

COMPANY NAME: _____

Respondent shall complete the following pricing in the precise manner requested. All prices must be completely explained on the pricing pages. Pima County will not pay any costs not disclosed on the Pricing Page.

Total cost to perform ALL consultant services described herein:

Total project cost*: \$ _____

Pima County may request additional services, including but not limited to those specified in the Sample Contract. Please list an all inclusive hourly rate for additional services: \$ _____ /Hr.

PRICES LISTED ABOVE MUST INCLUDE ALL COSTS, INCLUDING BUT NOT LIMITED TO OVERHEAD, LABOR, SUPPLIES, TRAVEL, EQUIPMENT, REPORTS, ETC.

*Pricing Detail:

Respondent shall breakdown and itemize total project cost estimate by task as set forth below. Personnel (including job title and hourly rate), benefits, supplies, equipment, travel, subcontractors, other (describe), and indirect costs (if applicable). Cost breakdowns for subcontractors shall be included in similar detail.

I. Project Management

Labor costs:	Job Title:	Hourly Rate:	Total Hours:
(each employee, include ERE)			

Supplies:

Equipment:

Travel:

Subcontractors:	Job Title:	Hourly Rate:	Total Hours:
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Indirect Costs:

Other Costs:

Total Cost for Item I: _____

II. Threats Assessment Based on Existing Plans

Labor costs: (each employee, include ERE)	Job Title:	Hourly Rate:	Total Hours:
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Supplies:

Equipment:

Travel:

Subcontractors:	Job Title:	Hourly Rate:	Total Hours:
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Indirect Costs:

Other Costs:

Total Cost for Item II: _____

III. Review of Vulnerable Species List

Labor costs: (each employee, include ERE)	Job Title:	Hourly Rate:	Total Hours:
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Supplies:

Equipment:

Travel:

Subcontractors:	Job Title:	Hourly Rate:	Total Hours:
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Indirect Costs:

Other Costs:

Total Cost for Item III: _____

IV. Data Compilation and Synthesis for Vulnerable Species

Labor costs: (each employee, include ERE)	Job Title:	Hourly Rate:	Total Hours:
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Supplies:

Equipment:

Travel:

Subcontractors:	Job Title:	Hourly Rate:	Total Hours:
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Indirect Costs:

Other Costs:

Total Cost for Item IV: _____

V. Vulnerable Species Goals

Labor costs: (each employee, include ERE)	Job Title:	Hourly Rate:	Total Hours:
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Supplies:

Equipment:

Travel:

Subcontractors:	Job Title:	Hourly Rate:	Total Hours:
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Indirect Costs:

Other Costs:

Total Cost for Item V: _____

VI. Vulnerable Species Habitat Data Analysis

Labor costs: (each employee, include ERE)	Job Title:	Hourly Rate:	Total Hours:
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Supplies:

Equipment:

Travel:

Subcontractors:	Job Title:	Hourly Rate:	Total Hours:
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Indirect Costs:

Other Costs:

Total Cost for Item VI: _____

VII. Riparian Vegetation Mapping

Labor costs: (each employee, include ERE)	Job Title:	Hourly Rate:	Total Hours:
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Supplies:

Equipment:

Travel:

Subcontractors:	Job Title:	Hourly Rate:	Total Hours:
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Indirect Costs:

Other Costs:

Total Cost for Item VII: _____

VIII. Land Cover Community Inventory

Labor costs: (each employee, include ERE)	Job Title:	Hourly Rate:	Total Hours:
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Supplies:

Equipment:

Travel:

Subcontractors:	Job Title:	Hourly Rate:	Total Hours:
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Indirect Costs:

Other Costs:

Total Cost for Item VIII: _____

IX. Preserve Design and Management Recommendations

Labor costs: (each employee, include ERE)	Job Title:	Hourly Rate:	Total Hours:
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Supplies:

Equipment:

Travel:

Subcontractors:	Job Title:	Hourly Rate:	Total Hours:
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Indirect Costs:

Other Costs:

Total Cost for Item IX: _____

X. Habitat Suitability Modeling

Labor costs: (each employee, include ERE)	Job Title:	Hourly Rate:	Total Hours:
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Supplies:

Equipment:

Travel:

Subcontractors:	Job Title:	Hourly Rate:	Total Hours:
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Indirect Costs:

Other Costs:

Total Cost for Item X: _____

XI. Pest Species Data Summary

Labor costs: (each employee, include ERE)	Job Title:	Hourly Rate:	Total Hours:
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Supplies:

Equipment:

Travel:

Subcontractors:	Job Title:	Hourly Rate:	Total Hours:
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Indirect Costs:

Other Costs:

Total Cost for Item XI: _____

XII. Adaptive Management Plan Recommendations and Manual

Labor costs: (each employee, include ERE)	Job Title:	Hourly Rate:	Total Hours:
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Supplies:

Equipment:

Travel:

Subcontractors:	Job Title:	Hourly Rate:	Total Hours:
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Indirect Costs:

Other Costs:

Total Cost for Item XII: _____

XIII. Evaluate Plan Impact on Federally Listed and Candidate Species

Labor costs: (each employee, include ERE)	Job Title:	Hourly Rate:	Total Hours:
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Supplies:

Equipment:

Travel:

Subcontractors:	Job Title:	Hourly Rate:	Total Hours:
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Indirect Costs:

Other Costs:

Total Cost for Item XIII: _____

XIV. Assistance with Preparation of NEPA Documents

Labor costs: (each employee, include ERE)	Job Title:	Hourly Rate:	Total Hours:
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Supplies:

Equipment:

Travel:

Subcontractors:	Job Title:	Hourly Rate:	Total Hours:
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Indirect Costs:

Other Costs:

Total Cost for Item XIV: _____

CERTIFICATION PAGE

RESPONDENTS TO FILL IN THE FOLLOWING INFORMATION AND SUBMIT AS A PART OF THEIR PROPOSAL:

**This firm certifies that it meets all specifications, terms and conditions contained in this RFP
Yes _____ No _____ If no, respondent must explain all deviations in writing and attach to this proposal.**

PROPOSAL MUST BE SIGNED BY AN AUTHORIZED VENDOR REPRESENTATIVE

COMPANY NAME: _____

SIGNATURE: _____

NAME & TITLE: _____

(PLEASE PRINT/TYPE)

ADDRESS: _____

CITY, STATE, ZIP: _____

TELEPHONE: _____

FAX NUMBER: _____

CONTACT PERSON: _____

CONTACT PERSON TELEPHONE: _____

FEDERAL TAX IDENTIFICATION NUMBER: _____

CORPORATE HEADQUARTERS LOCATION:

ADDRESS: _____

CITY, STATE, ZIP: _____

OPTIONAL INFORMATION

Pima County has a Minority Women Business Enterprise (MWBE) Program. Please provide information as appropriate.

Are you a? Women-Owned Business

 Minority-Owned Business

Are you currently certified by any Agency? Yes No

Agency Name: _____

SAMPLE CONTRACT

BIOLOGICAL CONSULTANT SERVICES FOR SONORAN DESERT CONSERVATION PLAN

THIS CONTRACT entered into between Pima County, a body politic and corporate of the State of Arizona, hereinafter called COUNTY; and _____ hereinafter called CONSULTANT.

WITNESSETH

WHEREAS, COUNTY requires the services of a CONSULTANT qualified to provide biological consultant services for the Sonoran Desert Conservation Plan; and

WHEREAS, CONSULTANT is qualified and willing to provide such services; and

WHEREAS, pursuant to RFP #539 CONSULTANT submitted the proposal most advantageous to COUNTY.

NOW, THEREFORE, the parties hereto agree as follows:

ARTICLE I - TERM

This Contract shall commence on the _____ day of _____, 1999, and shall terminate on the _____ day of _____, 2000, unless sooner terminated or further extended pursuant to this Contract.

ARTICLE II - SCOPE

CONSULTANT shall provide biological consultant services pursuant to RFP #539 and as described below.

Organization and Definitions

The organization of the SDCP is shown on Figure 2. The Technical Reports listed have been or are being prepared by staff. The technical report entitled "Determining Species of Concern in Pima County, Arizona" is incorporated into this document by reference. This contract is represented by the box labeled "biological evaluation" in Figure 2.

Definitions of terms used in the scope of work are as follows:

Scientific and Technical Advisory Team (STAT): a team of scientific and technical staff appointed by the County Administrator who advise the County on technical issues. The team reviews and approves the work of the Biological Consultant through the Project Manager.

Project Manager (PM): A Pima County staff member who implements decisions of the STAT, and oversees the contract.

Steering Committee: Advisory body to the Pima County Board of Supervisors.

Pima County GIS: Pima County will perform GIS-based evaluations as requested by the PM. Biological consultant will produce GIS-compatible information layers for these evaluations. Biological consultant works with STAT to develop the biological assumptions, constraints and weights for use in GIS-based reserve design.

GIS Decision Support Model: The biological consultant shall collaborate with a team of conservation biologists and geographic information scientists to create a decision support model for conservation planning. The principal investigators in this effort are: Dr. Michael Gilpin, Dr. Ross Gerrard, Dr. Peter Stine, and Dr. Richard Church. The components of proposed decision support model can be condensed into four main categories:

- (a) incorporation of expert biological data and opinion derived in part from the biology contract deliverables;
- (b) computer-based processing to determine relative habitat suitability and socio-economic suitability in the region of interest;
- (c) modeling viable territories for basic demographic units of the vulnerable species; and
- (d) optimizing the selection of species territories to balance the conflicting goals of environmental and human needs

Independent Peer Reviewers: Pima County will contract with scientists outside the STAT to provide independent peer review of selected deliverables produced by the biological consultant. Two independent peer reviewers have been selected by the Science Advisory Team, and both Dr. Reed Noss and Ms. Laura Hood have accepted invitations to serve in this role. Other peer reviewers will be selected as the planning process continues.

Focal Species: plant or animal species (taxa) that are considered for conservation within the plan, as described in the Determining Species of Concern report.

Vulnerable species: species in categories 1 and 2, whose existence is considered to be at risk in Pima County within the planning period. Described within the Determining Species of Concern Report.

Pest Species: primarily non-native species of plants or animals that pose a threat to focal species or native animal or plant communities in the planning area. Further description is contained within the Determining Species of Concern report.

Professional Services Provided.

The biological consultant contract will create a program of work needed to achieve the biological goals of conserving Pima County's indigenous plants and animals. The work will incorporate three approaches (Figure 3). The contract will have several parts, with services including the following:

- a. Compile, document and synthesize existing information on vulnerable species, and high priority biotic communities as recommended by the STAT. Produce or synthesize new GIS-based data layers on selected biotic communities. Identify data gaps and prioritize data needs. Produce a threats assessment.
- b. Recommend species/habitat goals. Review remaining focal species and special habitats or plant communities to devise conservation strategies. Investigate pest species important to the planning area and SDCP goals.
- c. Prepare and recommend reserve designs with specific management recommendations that meet the goals of the plan for selected species, habitats and plant communities as approved by the STAT.

Work done under this contract must be consistent with the Endangered Species Act, the implementing regulations under Title 50 of the Code of Federal Regulations, and the Habitat Conservation Planning Handbook.

During the term of this contract, a number of draft, interim and final products will be developed for review and approval of the STAT. The following deliverables must be received by Pima County on or before June 30, 2000:

- 1) Threats assessment (Task II.A)
- 2) Recommendations on adjustments to vulnerable species list (Task III)
- 3) Draft vulnerable species data summaries, including distribution maps (Task IV)
- 4) Draft data analysis (Task VI.B)

- 5) Pilot vegetation mapping exercise (Task VII. B1 and B2)
- 6) Draft land cover community map (Task VIII.A)
- 7) Draft reserve design guidelines (Task IX.A)

The consultant is expected to act in an advisory capacity to the PM on scientific matters relating to the plan and its development. Frequent and open communication with the PM is essential, as is a collaborative, problem-solving approach.

The consultant will be responsible for developing recommendations for review by the STAT who act in an advisory capacity to Pima County. The consultant will lend their expertise to the STAT where needed, as directed by the PM. The consultant may be asked to present information to the STAT, and occasionally the Steering Committees or Sub-area Committees, regarding work products and progress. The Project Manager will coordinate the format of information presentations.

I. Project Management

This shall include all meetings with the STAT, coordination with the project manager, Pima County Technical Services, and the decision support model team, preparation of biweekly status reports, internal coordination among the consultant team members, quality control measures, and monthly invoicing.

II. Threats Assessment based on Existing Plans

- A. Identify key biological threats based on review of existing and proposed land or water uses described by the technical reports prepared by Pima County (Figure 2), existing land use plans prepared by federal, local, state and tribal jurisdictions, incidental take permits and approved development plans and subdivision plats. Emphasis shall be placed on identifying the specific components of existing and proposed land or water uses, by sub-area, which pose the greatest biological threats over the next 30 years to focal species and special habitats, plant associations, and communities identified by the STAT.
- B. Attend subarea panel meetings. Provide biological information to subarea panels via oral presentations.

III. Review of Vulnerable Species List

The consultant shall review categories 1 and 2 of the vulnerable species list and identify, to the STAT, those species which are not recommended for further evaluation because:

- a. Species conservation can be accomplished as a result of other species, habitat or plant community protection afforded by the SDCP.
- b. Insignificant or non-viable numbers of the species occur in the planning area and conservation is best accomplished elsewhere (accidentals, range peripherals, etc.).
- c. The species does not occur in the study area, nor is it likely to occur in the study area within the planning horizon, or
- d. The species is too broadly distributed to help differentiate among a range of plan alternatives.

The consultant may recommend to the STAT that other species be added to the categories 1 and 2 of the Vulnerable Species list, with supporting documentation.

IV. Data Compilation and Synthesis for Vulnerable Species

- A. For vulnerable species (categories 1 and 2) affirmed in Task III, the consultant shall compile existing biological and management information. All sources of data must be documented. Consultant will review, at a minimum: AGFD HDMS records, State and Federal government reports and data compilations, AGFD species Abstracts and BISON-M compilations, as well as the relevant scientific literature. Consultant will secure review of each compilation by qualified species experts. For each vulnerable species the consultant shall provide a written summary of information in manual format including

- B.
 1. Federal status.
 2. State and federal recovery goals.
 3. Other status (global rankings, state lists, other lists).
 4. Taxonomy, especially of Pima County populations.
 5. Past and present distribution
 6. Habitat requirements, including home range requirements and ability to utilize major human land use categories.
 7. Life history.
 8. All available demographic (population density, status, trend, survival rates, reproductive rates, sex and age ratios etc.) and distributional information within Pima County and range-wide. Define population or (sub-population) basis in the planning area, and identify any areas of special significance to the Pima County populations.
 9. Habitat trends within the planning area, if known.
 10. Current and potential threats to species or populations in Pima County, considering the location, amount, and quality of habitat already protected, as well as existing and potential pest species. Identify the mechanism of threats.
 11. Management needs, including sensitivity to human activity and densities, corridor needs, key relationships, migratory requirements, etc.
 12. Results of past mitigation activities.
 13. Existing monitoring and research programs.

B. Maps will be prepared depicting distribution of species within Pima County and, where appropriate, range-wide.

V. Vulnerable Species Goals

- A. For all vulnerable species (categories 1 and 2), the consultant shall recommend County-level conservation goals and objectives to the STAT. County-level goals must be consistent with SDCP goals (Table 1) and recovery plan (USFWS) goals. Conservation goals and objectives may be expressed in terms of demographic or population units (numbers of populations, density, age-class, etc.) or in terms of habitat units, depending on information available. The scientific basis for choosing a demographic or habitat-based objective should be described.
- B. The STAT will review and comment on the consultant recommendations for a prioritized list of vulnerable species with conservation goals and objectives, including new candidate vulnerable species. The consultant will revise the list as directed by the PM.

VI. Vulnerable Species Habitat Data Analysis

- A. Once data compilation, synthesis and evaluation (including expert review) is completed for each vulnerable species (categories 1 and 2), the consultant shall identify data gaps relative to essential information for conservation planning. The consultant shall make recommendations on data gathering priority to the STAT.

Data gathering priorities shall be identified in the context of preserve design and species management. The consultant shall recommend studies, research, or suitable surrogates (ecological equivalents) to fill data gaps. Sources of error or uncertainty which can be expected to affect subsequent analyses which would be generated based on the data will be described. The biological basis for using other species as surrogates for vulnerable species shall be described in detail. An estimate of the time and resources needed to fill data gaps shall be provided. A description of the specific consequences to the process of not obtaining those data shall be included.

- B. Evaluate the feasibility of using existing and developed GIS covers to model species habitat, distributions, or habitat potential for focal species and pest species. Evaluation of GIS modeling capabilities in this context will be conducted in close cooperation with the Project Manager and County GIS staff. The consultant will clearly indicate the GIS covers, or combinations of covers, may serve to represent particular habitats or communities used by a species.

As part of this evaluation, the consultant will construct a matrix showing presence or absence of vulnerable species (rows) as they relate to environmental characteristics depicted in various GIS layers (columns). These characteristics would primarily be related to land cover. The consultant will base the matrix on the species data summaries as well as expert opinion. The consultant will quantify the representation of each species' habitat within the existing reserve network, and summarize species richness by land-cover type.

VII. Riparian Vegetation Mapping

A. The consultant shall produce the following deliverables:

1. Vegetation maps and a map showing field verification locations shall be delivered as Arc/Info vector coverages or in a format pre-approved by Pima County DOT Technical Services GIS Section.
2. A complete reproducible set of mylars registered to 7.5 minute USGS quadrangle maps shall be prepared. Each mylar shall contain a legend, scale, index map and title block.

Each map shall portray the locations of boundaries and the geographic extent of vegetative communities. Each polygon shall be labeled numerically with the vegetation classification. In addition, one mylar index map shall be provided.

3. A report shall be prepared describing the methods, the scale and source of base information used, assumptions made, the nature of any interim products, and a non-statistical assessment of reliability in the mapping in terms of 1) positional accuracy and 2) classification accuracy as it varies by geographic area and by classification category.

To the extent thought reliable, existing sources of information shall be used. Information to be reviewed which will be provided by Pima County include but are not limited to the following:

- a. PAG maps of perennial, intermittent, and ephemeral streams and shallow groundwater zones (digital)
- b. Digital USGS orthophotoquadrangles for portions of Pima County
- c. Unincorporated Pima County riparian habitat maps (digital)
- d. Gap Analysis Program vegetation maps (digital)
- e. NDVI map for portions of Pima County (digital)
- f. PAG 208 maps for non-urban Pima County (paper)
- g. Wildlife Habitat Inventory maps for metropolitan Tucson (digital)
- h. Organ Pipe Cactus National Monument vegetation map (digital)
- i. PAG 208 vegetation and soils data cards (paper)
- j. Cienega Creek Natural Preserve vegetation map (paper)
- k. USGS and Pima County stream centerlines (digital)
- l. USFWS wetland inventory maps (mostly paper)

Emphasis shall be placed on classifying the existing riparian areas as delineated on Pima County's riparian habitat maps, delineating additional riparian areas where no data currently exists, and addressing specific mapping requirements below. Work shall emphasize areas outside existing public reserves. Applicants may further assume that ground-truthing will not be conducted on tribal lands or on private lands aside from visual inspection from public thoroughfares. Fieldwork to provide statistical measures of accuracy is not requested. The consulting team is encouraged to describe additional existing data which it proposes to bring to bear on the project for the purpose of increasing efficiency and accuracy. The cost of any additional data acquisition should be included in the budget for this task.

VEGETATION MAPPING REQUIREMENTS

1. Discriminate the location of riparian vegetation versus upland vegetation with a minimum map area of 5 acres.
2. Identify physiognomy and dominance, discriminating among leguminous tree forests, broadleaf deciduous forest, tamarisk forest, other riparian forest, emergent marsh, tobosa or sacaton grassland, and riparian scrub. Units should be mappable on 7 ½ minute scale — i.e. 5 acres minimum unit.
3. Map unit classifications should be compatible with the National Vegetation Classification System. The hierarchical classification system used by Brown, Lowe and Pase is acceptable.

B. Procedure

1. In consultation with the project manager, refine and develop a mapping protocol to meet the STAT vegetation mapping requirements, budget, and schedule.
2. Design and conduct a pilot vegetation mapping exercise covering several nonadjacent USGS 7.5 minute quadrangles, including field verification. The pilot study areas need to represent the range of vegetation types present in the study area, as well as the variation in available data sources. Design of the pilot study shall be developed in consultation with project manager. Evaluate and refine the mapping protocol and classification scheme to meet the schedule and budget.
3. Complete draft deliverables for the rest of the study area.
4. Revise and finalize deliverables according to review comments.

VIII. Land Cover Community Inventory

- A. Produce a consolidated land cover map which represents the best available information for the study area. Document data sources, accuracy of data sources and the decision-making process for producing the land cover map.
- B. Considering the needs of focal species, and the range of ecological processes needed to sustain these biotic communities, identify and prioritize additional survey, mapping, and protection, and management needs. Priority ranking shall consider the plan goals, objectives, community integrity, historic loss, and relative degree of threat or vulnerability of each of the special habitats or plant associations within these biotic communities. Conservation opportunities within each community shall be identified.

IX. Preserve Design and Management Recommendations:

- A. The biological consultant shall work with the STAT to develop detailed reserve design guidelines comparable to, but more specific than, the *Southern California Coastal Sage Scrub Natural Community Conservation Planning Conservation Guidelines* (Table 2) for use in the GIS-based reserve design. Design guidelines will address corridors for selected focal species.
- B. Following the data synthesis phase, the consultant shall make reserve design recommendations based on the best available scientific information for all remaining focal species, special habitats, species associations and plant communities. The reserve (plan) shall be designed to obtain the goals and objectives of the plan (Table 1), integrating conservation of focal species, special habitats, plant associations and plant communities according to a priority ranking developed above. The reserve design shall clearly indicate priority areas that identify the most vulnerable components of the preserve design for quick action. The reserve design and management recommendations from the biological consultant shall be based upon conservation biology principles, including long-term population viability (for species which might be listed or considered for listing), focal species ecology and behavior, community ecology, and relevant biological considerations.

1. **Focal Species:** The consultant shall make reserve design and management recommendations that accomplish the goals of the plan for focal species, considering:
 - a. Desired effective population size and long-term population viability.
 - b. Habitat area and configuration requirements to sustain an effective population
 - c. Buffer habitat or space requirements.
 - d. Imminent and foreseeable threats.
 - e. Ecosystem function: ecosystem functions that support habitat or communities shall be considered and made part of the reserve design.
 - f. Management recommendations shall apply to focal species, habitats or communities and will state the desired conditions.

2. **Special Habitats, Plant Associations, and Communities:** The reserve design and management recommendations shall address stated conservation goals for these features. Recommendations shall consider and address:
 - a. Relative community condition regarding compromising invasion or colonization by pest species. Representative community or association examples free from pest species shall be given higher priority ranking.
 - b. Target area or function goals for the habitats, communities or associations.
 - c. Ecosystem functions and processes sufficient to support the desired community or habitat.
 - d. Community inter-relationships in the landscape, as it may affect community integrity.
 - e. Potential and foreseeable threats to community function.
 - f. Biotic and abiotic components of communities and habitats and the necessary conditions to support communities (e.g. hydrology for riparian).
 - g. Desired habitat or community condition, including species composition and range of variation, cover values, functions, recruitment conditions, configuration, degree of buffer, absence of pest species, and others.

X. Habitat Suitability Modeling

The consultant shall work collaboratively with County GIS and the decision support model team to refine the habitat suitability models by identifying and consulting appropriate experts, identifying literature sources, identifying limitations of data sources, and providing technical opinions related these products. The habitat suitability models produced by the decision support model team will be iterative products.

XI. Pest Species Data Summary

- A. The consultant shall, in close consultation with PM and STAT, evaluate pest species (plant and animal) which have the potential to expand into the planning area. The evaluation shall consider the vulnerable species literature review, consultation with experts, and an evaluation of the potential variable in climatic and ecological conditions likely to occur in the planning area within the next 30 to 50 years. The list of potential pest species shall be ranked according to likelihood of occurrence within the planning window and by potential threat to elements of the conservation plan.

- B. For up to ten **pest species** recommended by consultant and approved by STAT, the consultant shall summarize existing data and identify data gaps for :
 - a. Taxonomy.
 - b. Habitat, affected native species, communities or habitats.
 - c. Effects on host or vulnerable species, including specific mechanisms, if known.
 - d. Rate of invasion, spread, or date of introduction.

- e. Population trend.
- f. Factors affecting spread and distribution: hosts, etc.
- g. Legal status.
- h. Management methods, efficacy and sensitivity.
- i. Research ongoing and planned.
- j. Potential future status in the planning area.

- C. The consultant shall map the range of up to ten selected pest species within the planning area, to produce GIS maps to aid with the reserve design. The selection of pest species to be mapped shall be made in consultation with the PM and STAT. The consultant shall verify pest species mapping by ground-truthing using a sampling method and analysis approved by the PM and STAT.

XII. Adaptive Management Plan Recommendations and Manual

The consultant shall prepare a management plan that includes:

1. Species and community-specific management recommendations and practices.
2. Clear statements of desired future conditions for each management subject.
3. A plan for assessing progress toward desired project goals including assessment and adjustment of management actions. The process should detect surprises, and generate improved decision-making over time.
4. Management recommendations and long-term monitoring plans for assessing continuing and developing threats, including pest species. Monitoring must be able to detect population trends and habitat quality changes.
5. Establishing a process for reviewing, analyzing, and disseminating data gathered.
6. Recommend acceptable levels of deviation of species populations and communities that accounts for natural environmental variability, including disease and catastrophic events; determine action levels for increased monitoring or intervention.
7. Consideration for incidental take that is phased with achievement of specified population levels as determined through monitoring.
8. Procedures for changed circumstances, defined as listing of new species, modifications in activities described by the original HCP, or modifications in the monitoring program.
9. Procedures for dealing with unforeseen circumstances (which shall not include natural variation, such as catastrophic flooding, disease).
10. Review by species and community experts and the STAT, with incorporation of changes as recommended by the Project Manager.
11. Prioritized research recommendations consistent with the plan goals, and classed as short-term, mid-term, and long-term.
12. Mitigation requirements that consider species' habitat requirements and conservation of core habitats and linkages, as well as the efficacy of the mitigation method used. Avoiding and minimizing impacts should be the first option considered to limit impacts to vulnerable species.
13. Provisions for independent scientific review of research and monitoring results.

XIII. EVALUATE PLAN IMPACT ON FEDERALLY LISTED AND CANDIDATE SPECIES

- A. Issuance of a Section 10 (a)(1)(B) Endangered Species Act Permit is a federal action and must be evaluated under the Endangered Species Act for effects on listed species and species proposed for listing. The consultant will prepare an assessment of the impacts on federally listed threatened and endangered species, species proposed for listing, and designated and proposed critical habitat within the planning area for four plan alternatives. Three alternatives must meet the SDCP biological and species goals. The fourth alternative shall be the no-action alternative. The consultant shall estimate the amount of take for each listed species for each alternative, the effects on the species population, and the impacts on the recovery of each species.

- B. Biological assessments shall include all threatened, endangered, and candidate species, species proposed for listing, and proposed and designated critical habitat in the planning area, regardless of inclusion in the SDCP. Each Alternative Assessment shall estimate local population effects and effects of the action (plan) on the entire species, as required under the Endangered Species Act. The assessment shall follow USFWS guidelines regarding Section 10 (a)(1)(B) permits and Biological Assessments. Each assessment will include:
1. A description of the planned action.
 2. Description of the project area biological resources and condition.
 3. A list of federally listed species and critical habitat in the project area.
 4. Descriptions of the kinds of effects expected from the plan alternatives.
 5. A summary of population levels and trends for each listed, or proposed, species in the project area and range-wide.
 6. Assessment of direct, indirect, and cumulative impacts based on the proposed action (the SDCP).

XIV. ASSISTANCE WITH PREPARATION OF NEPA DOCUMENTS

- A. The consultant shall assist Pima County and their National Environmental Policy Act (NEPA) consultant, if any, with preparation of technical studies and analysis in support of the plans NEPA process and documents. This will be limited to include descriptions of the project areas' biological resources, impacts of the plan on these resources (see V. A. above) including Threatened and Endangered Species, and evaluation of impacts on common biological components and plant communities.
- B. The consultant shall provide technical information and assistance to the NEPA consultant in a cooperative working relationship emphasizing meeting PM goals, objectives and quality standards. The biological consultant may be asked to provide review and editorial suggestions on the NEPA document, through the PM. NEPA documentation assistance is secondary to the primary goal of developing the Reserve Design and Management Plan.

XV. ADDITIONAL SERVICES

Additional services may include but are not limited to the following:

- Additional data summaries for selected species;
- Mapping of vegetative communities or other resource conditions
- Field verification of resource conditions;
- Preparation of GIS covers to represent species habitat;
- Biological inventory or surveys for species occurrence and diversity;
- Population viability analysis;
- Biological guidelines for management of individual preserves;
- Identification or evaluation of interim conservation measures intended to address the needs of endangered species;
- Additional alternative evaluations for ESA and NEPA compliance;
- Technical review or evaluation of SDCP products prepared by others;
- Presentations to Steering Committee, or other technical committees.

ARTICLE III - COMPENSATION

For the performance of its services CONSULTANT shall be paid by COUNTY, in the manner and at the rates hereinafter specified below

(To be modified as necessary)

CONSULTANT shall provide detailed documentation in support of requested payment. These expenses will be protested or paid within thirty days of receipt. A payment under this Article shall not prevent the COUNTY from objecting to charges after payment therefor in appropriate cases, or from seeking reimbursement for any such charges.

Total contract amount is \$_____ .

ARTICLE IV - CONTRACT EXTENSION

COUNTY shall have the option to extend this Contract for additional periods up to a maximum of five additional one-year periods. Any modification, or extension shall be by formal written amendment and executed by the parties hereto. In the event economic conditions are such that price increases become necessary, the CONSULTANT must submit to COUNTY supporting documents justifying such increases. COUNTY will review the proposed pricing and determine if it is in the best interest of COUNTY to extend or initiate a new contract.

ARTICLE V - TERMINATION

COUNTY reserves the right to terminate this Contract at any time and without cause by serving upon CONSULTANT 30 days advance written notice of such intent to terminate. In the event of such termination, the COUNTY'S only obligation to CONSULTANT shall be payment for services rendered prior to the date of termination.

This Contract may be terminated at any time without advance notice and without further obligation to the COUNTY when the CONSULTANT is found by County to be in default of any provision of this Contract.

ARTICLE VI - CONFLICT OF INTEREST

This contract is subject to the provisions of A.R.S. 38-511 which provides in pertinent part: "The state, its political subdivisions or any department of either may, within three years after its execution, cancel any contract, without penalty or further obligation, made by the state, its political subdivisions, or any of the departments or agencies of either if any person significantly involved in initiating, negotiating, securing, drafting or creating the contract on behalf of the state, its political subdivisions or any of the departments or agencies of either is, at any time, while the contract or any extension of the contract is in effect, an employee or agent of any other party to the contract in any capacity or a consultant to any other party to the contract with respect to the subject matter of the contract."

ARTICLE VII - STATUS OF CONSULTANT

The status of the CONSULTANT shall be that of an independent CONSULTANT and CONSULTANT shall not be considered an employee of Pima County and shall not be entitled to receive any of the fringe benefits associated with employment, and will not be subject to the provisions of the merit system. CONSULTANT will be responsible for payment of all Federal, State and Local taxes associated with the compensation received by CONSULTANT from COUNTY. CONSULTANT shall be responsible for program development and operation without supervision by COUNTY.

ARTICLE VIII - SUCCESSORS AND ASSIGNS

CONSULTANT shall not assign its rights to this Contract in whole or in part, without prior written approval of the COUNTY. Assignment may be withheld at the sole discretion of the COUNTY, provided that such approval shall not be unreasonably withheld. This Contract shall be binding upon and inure to the benefit of the parties to this Contract and their respective successors and assigns.

ARTICLE IX - OWNERSHIP OF DOCUMENTS

All original drawings, boring logs, field data, estimates, field notes, plans, specifications, documents, reports, calculations, maps and models, and other information provided by COUNTY or developed by CONSULTANT under this Contract shall vest in and become the property of the COUNTY and shall be delivered to COUNTY upon completion or termination of the services. CONSULTANT may neither use for other purposes nor retain record copies, except as specifically approved by COUNTY.

ARTICLE X - NON-DISCRIMINATION

CONSULTANT will not discriminate against any COUNTY employee, client or any other individual in any way involved with the COUNTY, because of race, age, creed, color, religion, sex, disability or national origin in the course of carrying out CONSULTANT'S duties pursuant to this Contract. CONSULTANT agrees to comply with the provisions of Arizona Executive Order 99-4, which are incorporated into this Contract by reference as if set forth in full. All sub-contractors associated with this Contract shall adhere to the same standards as set forth in this Article.

ARTICLE XI - CONSULTANT'S PERFORMANCE

CONSULTANT shall perform the work in accordance with the terms of the contract and to the best of CONSULTANT'S ability. CONSULTANT shall employ suitably trained and skilled professional personnel to perform all consultant services under this Contract. Prior to changing any key personnel, especially those key personnel COUNTY relied upon in making this contract, CONSULTANT shall obtain the approval of COUNTY. The key personnel are:_____

ARTICLE XII - AMERICANS WITH DISABILITIES ACT

CONSULTANT shall comply with all applicable provisions of the Americans with Disabilities Act (Public Law 101-336, 42 U.S.C. 12101-12213) and all applicable federal regulations under the Act, including 28 CFR Parts 35 and 36.

ARTICLE XIII - NON-WAIVER

The failure of COUNTY to insist in any one or more instances upon the full complete performance of any of the terms and conditions of this Contract to be performed on the part of the other, or to take any action permitted as a result thereof, shall not be construed as a waiver or relinquishment of the right to insist upon full and complete performance of the same, or any other covenant or condition, either in the past or in the future. The acceptance by either party of sums less than may be due and owing it at any time shall not be construed as an accord and satisfaction.

ARTICLE XIV - COMPLIANCE WITH LAWS

CONSULTANT shall comply with all federal, state, and local laws, rules, regulations, standards and Executive Orders, without limitation to those designated within this contract. The laws and regulations of the State of Arizona shall govern the rights of the parties, the performance of this contract, and any disputes hereunder. Any action relating to this contract shall be brought in a court of the State of Arizona in Pima County. Any changes in the governing laws, rules, and regulations during the terms of this contract shall apply, but do not require an amendment.

ARTICLE XV - INSURANCE

CONSULTANT shall obtain and maintain at its own expense, during the entire term of this Contract the following type(s) and minimum amounts of insurance:

General Liability - \$1,000,000.00

Commercial/Business Automobile Liability (for vehicles used in the performance of actual work, not for commuting) - \$1,000,000.00

Workers' Compensation - Statutory (if required by law)

Insurance must be from carriers acceptable to COUNTY. CONSULTANT shall provide COUNTY with certificates of insurance. Commercial General Liability shall name Pima County as an "Additional Insured". All certificates must provide for a 30 day advance notice of any modification, material change, non-renewal or cancellation.

ARTICLE XVI - NON-APPROPRIATIONS OF FUNDS

Notwithstanding any other provision in this Contract, this Contract may be terminated for any reason the Pima County Board of Supervisors does not appropriate funds for the purpose of maintaining this Contract. In the event of such termination, COUNTY shall have no further obligation to CONSULTANT, other than for services rendered prior to termination.

ARTICLE XVII - INDEMNIFICATION

CONSULTANT shall perform the services hereunder in accordance with generally accepted methods and standards. CONSULTANT shall indemnify, defend, and hold harmless COUNTY, its officers, departments, employees and agents from and against any and all suits, actions, legal administrative proceedings, claims or demands or damages of any kind or nature arising out of this Contract which are attributed to any act or omission of CONSULTANT, its agents, employees, or anyone acting under its direction, control or on its behalf unless such actions are due solely to the negligence of COUNTY.

ARTICLE XVIII - SEVERABILITY

Each provision of this Contract stands alone, and any provision of this Contract found to be prohibited by law shall be ineffective to the extent of such prohibition without invalidating the remainder of this Contract.

ARTICLE XIX - OTHER DOCUMENTS

CONSULTANT and COUNTY in entering into this Contract have relied upon information provided in RFP #539 and on information provided in the CONSULTANT'S response to said RFP. These documents are hereby incorporated into and made a part of this Contract as if set forth in full herein, to the extent not inconsistent with the provisions of this Contract.

ARTICLE XX - NON-WARRANTY

The parties do not warrant their respective right or power to enter into this Contract and if the same is declared null and void by court action initiated by third persons, there shall be no liability to the other party by reason of such action, or by reason of this Contract.

ARTICLE XXI - NON-EXCLUSIVE

CONSULTANT understands that this Contract is Non-Exclusive and is for the sole convenience of the COUNTY. The COUNTY reserves the right to obtain like services from other sources for any reason.

ARTICLE XXII - REMEDIES

Either party may pursue any remedies provided by law for the breach of this Contract. No right or remedy is intended to be exclusive of any other right or remedy and each shall be cumulative and in addition to any other right or remedy existing at law or at equity or by virtue of this Contract.

ARTICLE XXIII - YEAR 2000 COMPLIANCE (Y2K)

CONSULTANT warrants that all hardware and software products offered to COUNTY or delivered per any resultant Contract shall be able to accurately process date/time data (including, but not limited to, calculating, comparing, and sequencing) from, into, and between the twentieth and twenty-first centuries, and the years 1999 and 2000 and leap year calculations. In addition, all contractors who are awarded any type of open or annual contract for goods or services shall have in house systems Y2K compliant. It is COUNTY'S intention to have NO INTERRUPTIONS in the delivery/performance of goods or services because of non-compliance.

ARTICLE XXIV - NOTICES

Any notice required or permitted to be given under this Contract shall be in writing and shall be served by delivery or by certified mail upon the other party as follows:

COUNTY:
Pima County Administrator

CONSULTANT:

ARTICLE XXV - ENTIRE CONTRACT

This document constitutes the entire Contract between the parties and shall not be modified, amended, altered or changed except through a written amendment and signed by the parties.

IN WITNESS THEREOF, the parties have affixed their signatures to this Contract the date first written above.

PIMA COUNTY

CONSULTANT

Chair, Board of Supervisors

Name Here

Date

Name and Title (please Print)

ATTEST:

Clerk of the Board

APPROVED AS TO FORM:

Deputy County Attorney

APPROVED AS TO CONTENT:

Department Head

Attachment "A"
FIGURES AND TABLES

BIOLOGICAL CONSULTANT SERVICES FOR SONORAN DESERT CONSERVATION PLAN

Figure 1 - Location Map

Figure 2 - Sonoran Desert Conservation Concept Plan

Figure 3 - Three Tracks of Conservation Planning

Table 1 - Goals and Objectives for the Biological Element of the Sonoran Desert Conservation Plan

Table 2 -Southern California Coastal Sage Scrub Natural Community Conservation Planning Conservation Guidelines

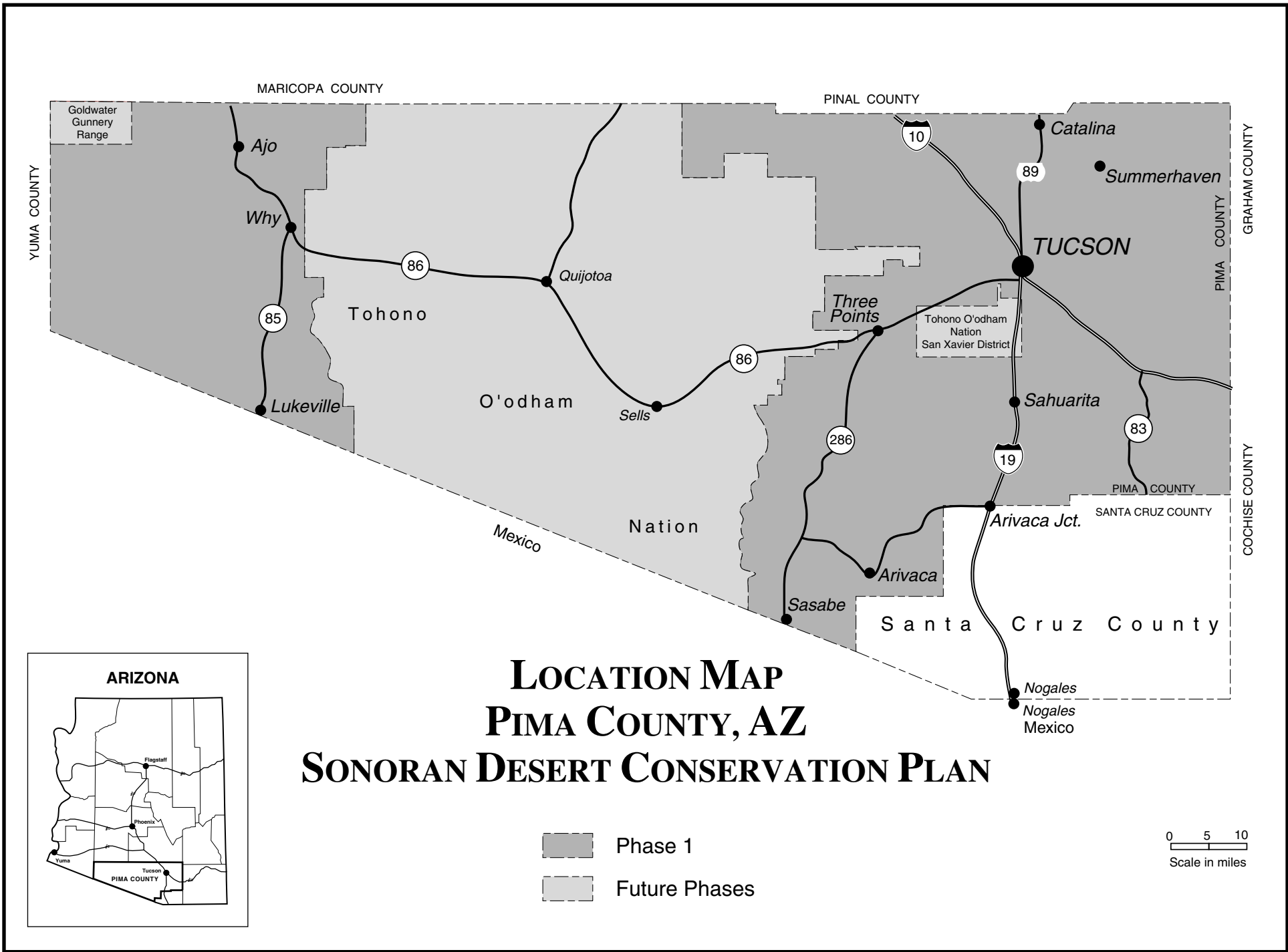
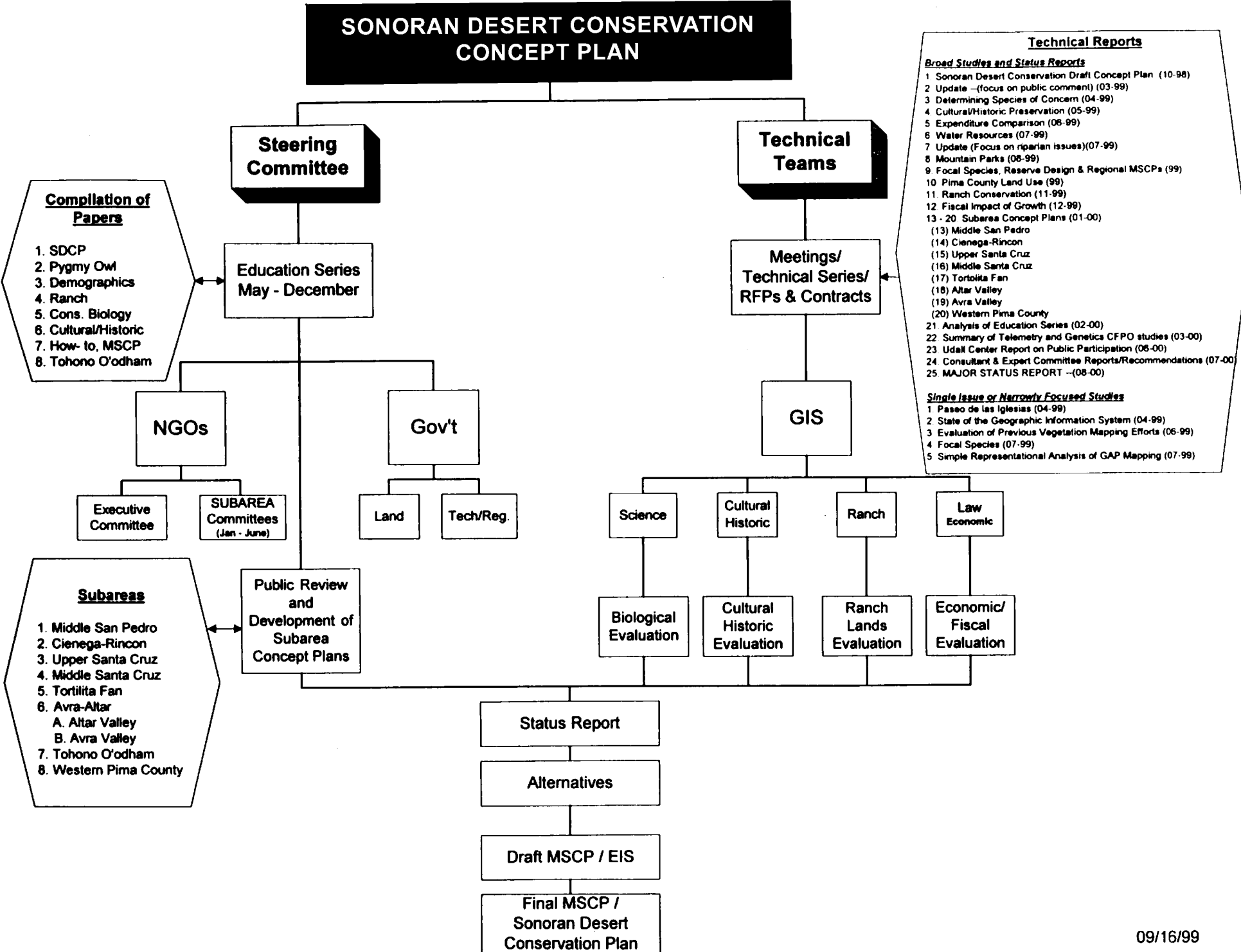


Figure 1

SONORAN DESERT CONSERVATION CONCEPT PLAN



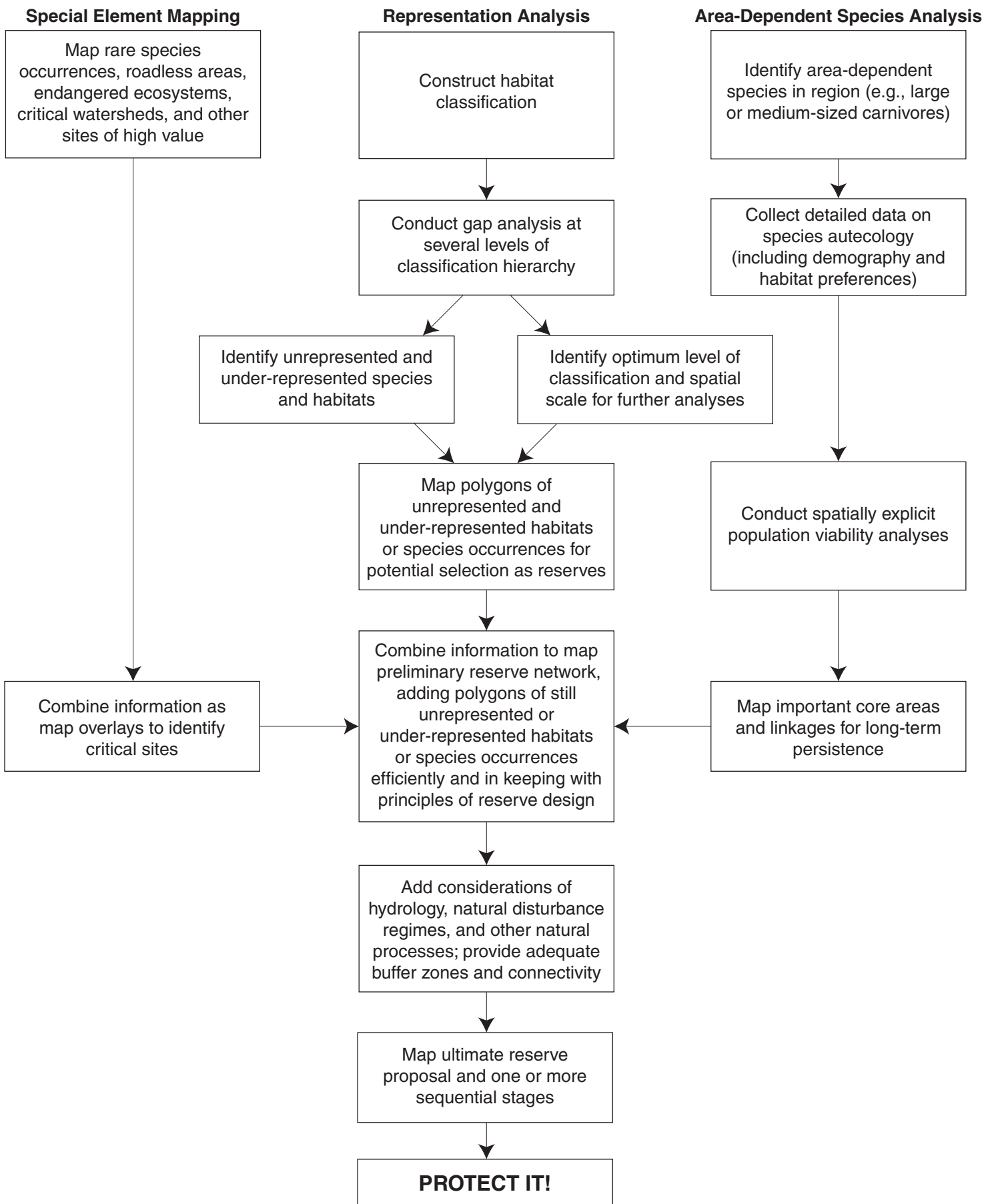


FIGURE 3. Three tracks of reserve selection and design, which converge in a defensible reserve system. These three tracks have rarely been combined in practice, as researchers usually pursue their specialized interests independently. Adapted from Noss (1996b).

TABLE 1

**GOAL AND OBJECTIVES FOR THE BIOLOGICAL ELEMENT OF THE
SONORAN DESERT CONSERVATION PLAN**

The biological goal of the Sonoran Desert Conservation Plan is to ensure the long-term survival of the full spectrum of plants and animals that are indigenous to Pima County through maintaining or improving the habitat conditions and ecosystem functions necessary for their survival.

Inherent within this broad goal are several objectives:

1. Promote recovery of federally listed and candidate species to the point where their continued existence is no longer at risk.
2. Where feasible and appropriate, re-introduce and recover species that have been extirpated from this region.
3. Maintain or improve the status of unlisted species whose existence in Pima County is vulnerable.
4. Identify biological threats to the region's biodiversity posed by exotic and native species of plants and animals, and develop strategies to reduce these threats and avoid additional invasive exotics in the future.
5. Identify compromises to ecosystem functions within target plant communities selected for their biological significance and develop strategies to mitigate them.
6. Promote long-term viability for species, environments and biotic communities that have special significance to people in this region because of their aesthetic or cultural values, regional uniqueness, or economic significance.

In the broadest sense, this conservation element of the SDCP will be the framework for integrating biological conservation into Pima County's development process. If the plan effectively addresses the objectives above, it will also lead to Section 10 Permits under the Endangered Species Act, for those species where it is justified by scientific evidence and by the implementation of a defensible habitat conservation plan.

TABLE 2

Southern California Coastal Sage Scrub Natural Community Conservation Planning Conservation Guidelines

Conserve target species throughout the planning area: Species that are well-distributed across their native ranges are less susceptible to extinction than are species confined to small portions of their ranges (species distributions relative to plan area and heterogeneity).

Larger reserves are better: Large blocks of habitat containing large populations of the target species are superior to small blocks of habitat containing small populations.

Keep reserve areas close: Blocks of habitat that are close to one another are better than blocks of habitat far apart.

Keep habitat contiguous: Habitat that occurs in less fragmented, contiguous blocks is preferable to habitat that is fragmented or isolated by urban lands.

Link reserves with corridors: Interconnected blocks of habitat serve conservation purposes better than do isolated blocks of habitat. Corridors or linkage function better when the habitat within them resembles habitat that is preferred by target species.

Reserves should be diverse: Blocks of habitat should contain a diverse representation of physical and environmental conditions.

Protect reserves from encroachment: Blocks of habitat that are roadless or otherwise inaccessible to human disturbance serve to better conserve target species than do accessible habitat blocks.