

Work Plan for the El Dorado County Integrated Natural Resources Management Plan

The El Dorado County Board of Supervisors (Board) directed SAIC to prepare a work plan for the development of an Integrated Natural Resources Management Plan (INRMP) as mandated under the 2004 El Dorado County General Plan. The Board directed that the INRMP include all components necessary to meet the requirements of a Habitat Conservation Plan (HCP) under the Federal Endangered Species Act (ESA) and a Natural Community Conservation Plan (NCCP) under the California Natural Community Conservation Planning Act (NCCP Act). The General Plan (Policy 7.4.2.8) requires that the INRMP be developed and implemented within 5 years and include a habitat inventory, habitat protection strategy, mitigation assistance, habitat acquisition, habitat management, monitoring, public participation, and funding components.

The following describes SAIC's proposed scope of work to prepare the INRMP.

TASK 1. PROJECT MANAGEMENT

Subtask 1.1 Project Administration and Coordination

The SAIC project manager and principal will meet with the County's INRMP Management Team within 10 business days of our receipt of a signed contract and authorization to begin work. The Management Team consists of County staff responsible for the development of the INRMP document and supporting documents and staff from other agencies that the County may decide to include in the process. The purpose of this meeting will be to identify a framework for managing implementation of the scope of work, roles and responsibilities, and decision making processes. We will provide the Management Team with a management plan that reflects the management framework identified at the meeting within 10 business days. The management plan will address methods of project communication, facilitation, and decision making; describe roles and responsibilities of the Management Team, Interagency Advisory Committee, Stakeholder Committee, and Science Advisory Panel; and describe processes for information management and quality control. The management plan will also include a project schedule and contact list. We will update the schedule and contact list as needed, to reflect changes in schedule that may result over the term of the project and membership in the advisory bodies. Based on our experience, we recommend that the Management Team identify a Point of Contact (POC) that will provide SAIC with direction on behalf of the Management Team and with whom the SAIC project manager will work directly to manage day-to-day implementation of the work. Under this task, SAIC's project manager will maintain regular contact via email and telephone with the POC to ensure the proper implementation of this scope of work and the contract.

SAIC will help the Management Team in the identification of sources of grant funding to support development of the INRMP and California Environmental Quality Act (CEQA)/National Environmental Policy Act (NEPA) compliance. There are various sources to pursue grant funding including ESA Section 6 grant funds from U.S. Fish and Wildlife Service (USFWS) via Department of Fish and Game (DFG); Environmental Protection Agency (EPA) grants for wetlands and watershed protection; California Water Resources Control Board Grants for water quality protection, and CALFED funds for habitat restoration in support of the Ecosystem Restoration Program. The Northern California consortium of counties preparing HCPs (including Contra Costa, Yolo, Solano, Santa Clara, Placer, and Sacramento) have pooled their resources and political clout to lobby the California legislature and Congress to receive special appropriations that would be shared. El Dorado County could join this group

of counties in this effort. SAIC will provide up to 40 hours of staff time in support of identifying funding sources and writing grant proposals with the Management Team.

Subtask 1.2 Project Monitoring and Status Reports

SAIC's project manager will monitor expenditures by task bi-weekly relative to task budgets, progress, and schedules. We will prepare project status reports with invoices on a monthly basis to document deliverables provided and accomplishments during the previous month. Progress reports will also document any issues arising during the reporting period that could affect the scope, budget, or schedule. To maintain the project schedule, we will provide the POC with possible options for addressing issues identified in monthly reports to facilitate rapid decision making.

Subtask 1.3 Meetings

The project manager or principle will attend regularly scheduled and, as needed, specially called meetings with the Management Team and POC. These meetings would focus on project progress reporting, decision making and providing direction to SAIC, and resolution of issues that could affect project scope, schedule, or budget. Based on a 40-month schedule for project completion (see Section 2.5 *Schedule*), we propose attending up to 41 meetings, including the initial meeting under Subtask 1.1, with the Management Team or the POC. We anticipate these meetings will occur monthly on average, but may occur more or less frequently over the project term, depending on the need for management direction. We will also attend up to 12 meetings that may be requested by the Management Team or POC that may be required to address project management issues in addition to the regularly scheduled meetings. On average, meetings will be attended by two SAIC staff (the project manager, project principal, or task managers as necessary). Our cost estimate for Task 1 meetings assumes that the bi-monthly meetings with the Interagency Advisory Committee (described under Subtask 2.1 below) will be held as joint sessions with Management Team meetings.

Deliverables:

- Management plan (1)
- Monthly project status reports (40)

Assumptions:

SAIC assumes that support of this task will not exceed 1287 hours of SAIC labor.

TASK 2. PUBLIC INVOLVEMENT PROGRAM

Subtask 2.1 Regional/Local Partnerships

SAIC will provide the Management Team with assistance establishing the Interagency Advisory Committee, Stakeholder Committee, Plant and Wildlife Technical Advisory Committee, and Science Advisory Panel. We propose to initiate the work necessary to establish these groups immediately following contract approval to ensure their availability at early decision making junctures in the INRMP development process.

Organize the Interagency Advisory Committee

We recommend that the Interagency Advisory Committee be comprised of one representative each from the County and the INRMP permitting agencies, which are expected to include DFG and USFWS. If the INRMP will also address Clean Water Act compliance, the Interagency Team would also include U.S. Army Corps of Engineers (USACE), the Central Valley Regional Water Quality Board (CVRWQB) and possibly the EPA (see Optional Task 12 below). We propose that the County chair and the SAIC project manager facilitate the committee meetings. SAIC will work with these regulatory agencies on behalf of the Management Team to have them assign individuals to serve as representatives of their respective

agencies on the committee. DFG and USFWS will likely assign representatives before a consultant contract is signed. Because USACE and CVRWCB typically do not participate in HCP/NCCP planning processes, we anticipate that most of the effort under this task will focus on securing the participation of these agencies (and possibly EPA). Representatives of these agencies would typically only attend committee meetings for which Clean Water Act issues are on the agenda.

The primary responsibilities of the Interagency Advisory Committee will be to provide the Management Team with recommendations for developing the INRMP in accordance with the requirements of their agency's laws, regulations, policies, and guidelines and to review and provide comments to the INRMP draft deliverables. We recommend that the Interagency Advisory Committee representatives also attend meetings of the Stakeholder Committee. To minimize costs, we propose that Interagency Advisory Committee meetings be regularly convened on a bi-monthly basis as joint sessions with the corresponding monthly Management Team meetings described under Task 1. The first scheduled meeting of the Interagency Advisory Committee would be coordinated by SAIC and would be held as soon as practicable. This initial meeting will focus on discussing the committee's roles and responsibilities and the roles and responsibilities of the Management Team and the Stakeholder Committee, and the INRMP development process and schedule.

Organize Stakeholder Committee

The role of the Stakeholder Committee will be to review draft deliverables and provide recommendations regarding Management Team decisions that will drive the INRMP development process. SAIC will incorporate Stakeholder Committee recommendations as approved by the Management Team into the draft documents. Under this task, SAIC will work with the Management Team to identify stakeholder groups and potential representatives for those groups. Organizations and interest groups that may want to be represented on the Stakeholder Committee include the following:

- Building Industry Association
- California Department of Forestry and Fire Protection
- City of Placerville
- El Dorado Irrigation District
- El Dorado County Water Agency
- Farm Bureau
- Cattleman's Association
- El Dorado County Agricultural Commission
- American River Conservancy
- Environmental groups
- Outdoor recreational groups (e.g., hiking, mountain biking, rafting, horseback riding, OHV riders)
- Sierra Pacific Industries
- Other relevant stakeholder groups identified by the Management Team

Once the Management Team has identified the stakeholder interests that should be represented on the committee, we will develop a list of several individuals that would be qualified to represent the interests of each stakeholder group. We will focus on identifying candidates that are committed to effectively relaying information related to INRMP development and decision making to their constituents and represent their constituents interests throughout the INRMP development process. Following acceptance of the list of potential candidates, we will contact the individuals on behalf of the Management Team to identify those that are willing to serve as Stakeholder Committee members.

We propose that Stakeholder Committee meet quarterly through the INRMP development process and that the SAIC project manager facilitate the Stakeholder Committee meetings.

Plant and Wildlife Technical Advisory Committee

The Board of Supervisors has requested that the Management Team establish the Plant and Wildlife Technical Advisory Committee (PAWTAC). SAIC will work with the Management Team to identify

candidates for membership on the PAWTAC. Members of the PAWTAC would be individuals with local expertise in botany, wildlife biology, ecology, and natural resources management. The PAWTAC would serve as an ad hoc group providing input, as needed, to the Management Team periodically during development of the INRMP.

Assist with Science Advisory Panel Establishment

SAIC will provide the Management Team with assistance establishing a Science Advisory Panel. DFG and USFWS require that the Science Advisory Panel maintain independence from the Plan consultants. Accordingly, we do not propose to assist the County with oversight of the panel. SAIC will assist the Management Team in identifying an independent facilitator to establish and manage the Science Advisory Panel and their products. SAIC will provide the Management Team with recommendations for potential panel facilitators. We will also recommend panel members with specific expertise that should be represented on the panel. SAIC will develop a list of qualified candidates for each area of expertise. We anticipate that the Science Advisory Panel will need to include individuals with expertise in the following areas:

- oak woodland ecology and management;
 - special-status plants and plant communities endemic to the County, particularly those associated with Gabbro and serpentine soils;
 - ecology and management of vernal pools, wetlands, and associated species;
 - ecology and management of riparian communities along the east side of the Central Valley;
 - ecology and management of large mammals (e.g., regional deer herds);
 - ecology and management of the California red-legged frog; and
 - wildlife associated with Planning Area habitats.
- SAIC will also assist the County in preparing the scope of work for contracting the facilitator and panel members.

SAIC will attend the initial meeting of Science Advisory Panel to present information necessary to familiarize the panel with the scope, purpose, and context of INRMP.

Coordinate with Regional/Local Partnerships

In addition to the participants in the Stakeholder Committee, there are other local and regional partners that may be approached by the County to provide benefits to the INRMP. SAIC will work with the Management Team to coordinate with the potential partners described in this task.

The other local agencies within the County may wish to participate on the Stakeholder Committee or to work as separate partners with the County. These agencies include the City of Placerville, El Dorado Irrigation District, El Dorado Water Agency, and Georgetown Public Utility District. SAIC will assist the County in communication and coordination with these local agencies to determine their interest in participation in the INRMP.

The U.S. Forest Service and Bureau of Land Management (BLM) own land within and at the edge of the proposed INRMP Planning Area. BLM also manages several preserves in the County. SAIC will coordinate with land managers from these federal agencies to determine opportunities they may provide for the INRMP conservation strategy; such opportunities may include land management techniques with which they are experienced that could be implemented on new preserves; potential use of federal land as conservation areas under the INRMP; and potential for land swaps to achieve a better distribution of protected resources.

California Department of Forestry and Fire Protection (CDFFP) has tremendous expertise in fire safety and fuel management and SAIC will coordinate with their staff in the development of those components of the INRMP. CDFFP also regulates forest practices on private lands and SAIC will coordinate with

their staff regarding Best Management Practices (BMPs) and consistency of the INRMP with the California Forest Practice Act and the California Forest Practice Rules.

El Dorado County shares boundaries with two other counties that are developing HCP/NCCPs: the Placer County HCP/NCCP and the South Sacramento County HCP/NCCP. Coordination with these other counties regarding their proposed mitigation approaches to the same natural communities and species (e.g. vernal pools, oak woodlands, endangered vernal pool crustaceans) would streamline the development of the INRMP. In addition, habitat corridors at the county boundaries should be considered in developing a conservation strategy that is regionally effective. SAIC will review these plans and work with the plan preparers (some are on the SAIC Team) to determine which conservation measures would translate well to our plan.

California Department of Parks and Recreation (CDPR) manages a number of park and recreation areas in the INRMP Planning Area including Folsom Lake State Recreation Area (SRA), Auburn SRA, Marshall Gold Discovery State Historic Park. As land managers, CDPR have expertise in woodland and grassland management relevant to the INRMP. In addition, as the County looks forward to INRMP implementation it will be necessary to identify long-term land managers for acquired protected lands. SAIC will coordinate with CDPR on land management techniques and possible involvement in future INRMP implementation.

Subtask 2.2 Public Participation Program

The development of the INRMP is a significant undertaking, requiring substantial collaboration, community involvement, scientific work, and effort on behalf of the project team. The manner in which the community is involved can be the difference between a successful, locally supported INRMP and an effort that is beset with public challenges from stakeholders. SAIC Team member, Kearns & West will lead the development and implementation of the Public Participation Program. Kearns & West proposes to create a Public Participation Program to inform the local community of INRMP developments, solicit ideas and information regarding the relevant issues, address local community concerns and build support for the INRMP. This Program will involve several public outreach workshops and will convey pertinent INRMP information to the community through newsletters, press releases, and a website.

The Public Participation Program will support the development of the INRMP by:

- keeping the local community informed about process, schedule, and developments, and assuring dissemination of accurate and easily digestible information;
- creating a knowledgeable and involved local community to support a well-rounded INRMP that includes valuable local input; and
- encouraging public support of the INRMP based on the local sense of understanding, ownership, and some degree of participation in the development process.

Kearns & West and SAIC will collaborate with the Management Team to design a customized Public Participation Program. We anticipate the following tasks in support of the INRMP development.

Public Participation Plan Preparation

In collaboration with the Management Team, Kearns & West will define the public involvement process to clarify objectives, scope, schedule, methods, and deliverables. During these discussions, Kearns & West and SAIC will work with the Management Team to identify specific community organizations and stakeholders to target for the public involvement component and to refine the proposed approaches. Kearns & West will prepare a draft and, following Management Team review, a final Public Participation Plan.

Public Outreach Support

The dissemination of public information is crucial to the success of the Public Participation Program. Throughout the INRMP development, Kearns & West will prepare bi-annual newsletters, develop and update a project website with timely content and public documents, publish and update the events

calendar, and prepare periodic press releases. Website updates would be quarterly (if necessary) through the completion of the INRMP. In partnership with the Management Team, Kearns & West will work to define the content and messages and will design the materials in an accurate and captivating manner.

Public Outreach Workshops

Public workshops will be conducted to help ensure community support of the INRMP. We propose two public outreach workshops that use creative approaches to attract people from communities directly affected by the INRMP in order to inform, solicit input, and build support. We plan to make these workshops fun community events. Prior to the workshops, Kearns & West will conduct outreach to draw attendees, provide schedule notification, and explain the format and objectives of the workshops.

Public Outreach Workshop #1: INRMP Process Introduction. The first workshop will introduce the INRMP development process and will provide a broad overview of the process, including the rationale for preparing an INRMP and the objectives, scope, and schedule. This workshop will serve to educate and involve the public in the process by helping residents understand what information resources are available to them and how they can most effectively participate in the INRMP process. The workshop will provide an opportunity for residents to learn about the local habitat and environmental issues. The structure of the workshop will be informative and educational, with an emphasis placed on experiential learning through interactive exhibits, site tours, and hikes.

Public Outreach Workshop #2: INRMP Progress Update. The primary purpose of the second workshop will be to update the community on the INRMP process. This workshop will be held after substantial progress has been made on the INRMP and before the official public draft INRMP is complete. Using a mixture of interactive and informational presentation formats, the progress to date and future process information will be shared. Questions will be discussed and stakeholder ideas and comments will be recorded. The comments and ideas identified will be input into an issue-tracking matrix and provided to the Management Team for use in further development of the INRMP.

Subtask 2.3 Stakeholder Committee Workshop

SAIC will facilitate a workshop to orient the Stakeholder Committee to the INRMP development process. The workshop would be scheduled as soon as practicable following formation of the Stakeholder Committee. The workshop would focus on describing the objectives of the INRMP process, the approach to INRMP development, the anticipated INRMP schedule, compliance requirements of ESA Section 10 (i.e., HCP), NCCPA, Clean Water Act, and Porter-Cologne Act (if applicable), and the role of Stakeholder Committee, Management Team, and Interagency Advisory Committee in the INRMP development process. Participants in the workshop would include the Stakeholder Committee and Interagency Advisory Committee members, the Management Team and other County staff involved in the project, and key members of SAIC project team. We will coordinate preparation of the workshop agenda with the POC and propose that the County arrange for meeting space and distribute the agenda. SAIC will prepare all workshop materials and will facilitate and present information.

Subtask 2.4 Meetings

Under this task, the project manager or principal and technical staff, as appropriate, will prepare for and attend three (3) meetings to provide orientation to the Interagency Advisory Committee, the Stakeholder Committee, and the Science Advisory Panel. We anticipate that meetings with the Management Team or POC to establish these groups will occur as part of the project management meetings under Task 1.

Deliverables:

- List of recommended interest groups to be represented on the Stakeholder Committee and a list of candidate individuals representing each group to serve as committee members (MS Word file via email to the POC)
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- List of areas of expertise to be represented on the Science Advisory Panel, list of individuals qualified to chair and facilitate the panel, and list of qualified individuals to serve on the panel (MS Word file via email to the POC)
- Draft and Final Public Participation Plan (MS Word file via email to the POC)
- Bi-annual Newsletters (PDF format ready for publication)
- Project website and updates through Final INRMP
- Public outreach work shop presentation materials
- Stakeholder Committee workshop presentation materials (MS PowerPoint presentation, handouts, Planning Area wall maps)

Assumptions:

SAIC assumes that support of this task will not exceed 709 hours of SAIC labor.

TASK 3. DETERMINE PLANNING AREA

Subtask 3.1 Identify Planning Area Options

SAIC will work the Management Team to identify the appropriate extent of the INRMP Planning Area. SAIC will develop up to three Planning Area options for review by the Management Team. These options will be based on the following considerations:

- The geographic scope of activities expected to be proposed for coverage under the INRMP by Plan participants;
- Distribution of vegetation communities in the County;
- Relative costs that would be associated with development of the INRMP at different geographic scales;
- The known or potential occurrence of listed species or species that are likely to become listed over the term of the INRMP and that could be affected by covered activities; and
- Opportunities and constraints for conserving covered species at each of the geographic scales.

SAIC will prepare a draft and final technical memorandum describing three possible Planning Areas and the advantages and disadvantages that would be associated with each of the Planning Areas. This memorandum will provide the information necessary for the Management Team to select a final Planning Area that will provide the basis for development of the INRMP.

To develop this Work Plan and cost estimate we have assumed that the Planning Area encompasses the western slope of the County up to 4,000 feet in elevation. All tasks described in this work plan are based on this assumption. Adoption of a Planning Area that encompasses additional area would require modification of the scope and costs of the Work Plan.

Subtask 3.2 Meetings

SAIC will meet with the Management Team to develop the information necessary to prepare the Planning Area Options Memorandum (e.g., likely Plan participants and covered activities). Meetings with the Management Team related to this task are provided for under Task 1 meetings. Deliverables:

Deliverables:

- Draft Planning Area Options Memorandum (Adobe PDF format via email to the Management Team)
- Final Planning Area Options Memorandum (Adobe PDF format via email to the Management Team)

Assumptions:

SAIC assumes that support of this task will not exceed 54 hours of SAIC labor.

TASK 4. PLANNING AGREEMENT

Subtask 4.1 Draft and Final Planning Agreement

The County has retained the law firm of Ebbin Moser + Skaggs to prepare the Planning Agreement as required under the NCCP Act. Ebbin Moser + Skaggs attorneys will negotiate and prepare a Planning Agreement with USFWS and CDFG to memorialize basic understandings regarding the INRMP process which may be desirable to comply with the NCCP Act requirements. The Planning Agreement will document the scope of the INRMP's Planning Area, covered activities, and covered species. Additionally, the Planning Agreement would provide interim assurances and would specify the regulatory process for development activities proceeding in advance of completion of the INRMP. SAIC will serve in a review role on the Planning Agreement. SAIC will review the Draft Planning Agreement and provide comments and recommendations to the County and Ebbin Moser + Skaggs.

Subtask 4.2 Meetings

Under Task 4, SAIC will attend up to three meetings of the Management Team and Interagency Advisory Committee to work through language for the Planning Agreement.

Deliverables:

- None

Assumptions:

SAIC assumes that support of this task will not exceed 28 hours of SAIC labor.

TASK 5. BASELINE RESOURCE/DATA INVENTORY

We anticipate initiating this task as soon as practicable following contract approval and anticipate requiring approximately 6 months to complete the inventory, assuming all necessary materials are available.

Subtask 5.1 Resource Inventory

SAIC will review existing information on the biological and physical resources in the INRMP planning area. This subtask will be conducted concurrent with the resource mapping that will be conducted under Subtask 5.3. We propose to use information developed by the County to prepare the General Plan EIR and will update or augment that information from other sources. Information sources for biological resources in the Planning Area will include:

- DFG Natural Diversity Database (NDDDB);
- Rare Find Geographic Information System (GIS);
- relevant state and federal resource agency documents, including USFWS recovery plans for gabbro soils plants and the California red-legged frog;
- relevant scientific literature describing the biological resources within the Planning Area;
- County and state agriculture reports;
- Information prepared for the County's Oak Woodland Management Plan (OWMP) and
- environmental studies and reports that address resources of the Planning Area.

Information sources for the physical resources of the Planning Area will be obtained from existing descriptions of the soils, climate, topography, hydrology and other physical aspects of the Planning Area available from multiple sources (e.g., Natural Resource Conservation Service [NRCS] soils reports) and will include:

- Natural Resources Conservation Service (NRCS) STATSGO and SSURGO GIS data for soils;
- U.S. Geographic Service (USGS) DEMS GIS data for topography;

- USGS and California Department of Conservation (CDC) GIS data for geomorphic surfaces; and
- USGS and CALWATER GIS data for surface hydrology.

These GIS data sets will also be used to map physical resources of the Planning Area under Subtask 5.3.

Information obtained through the review of existing information will be used to prepare species status accounts for covered species, describe land cover and vegetation types (including wetlands and aquatic habitats), special-status communities, watersheds, topography, soils, streams, and floodplains. Key species in the Planning Area include plants, invertebrates, and amphibians associated with vernal pools and Gabbro and serpentine soils and the California red-legged frog (associated with ponds and streams). We will describe high value biological resources for which incidental take authorizations are not required but affect large-scale preserve and corridor design, including deer migration corridors, fawning grounds, and winter and summer ranges.

We will work with the Management Team, Interagency Advisory Committee, Science Advisory Panel, and Stakeholder Committee to develop criteria for identifying a preliminary list of species to be covered and addressed in the INRMP. We anticipate that key criteria will be the following:

- species is listed or has the potential to be listed during the term of the permit;
- species is present or could be present in the INRMP Planning Area;
- species may be affected by covered activities; and
- scientific information and data are available and sufficient to assess impacts and address the species' biological requirements and conservation needs.

Based on these criteria, SAIC has developed a preliminary estimate that 22 of the special-status species addressed in the General Plan EIR (see Table 1) may be recommended for coverage under the INRMP. Because results of the biological inventory could indicate that additional species may warrant coverage, we have assumed for cost estimating purposes that up to 25 species may be covered under the INRMP.

Following identification of potential covered species and review of existing information, we will assess the information to determine if there are any data gaps relative to the INRMP serving as an HCP and NCCP. If such data gaps are identified, we will provide the County with a report describing the data gaps and proposed methods for addressing the data needs. If the tasks required to address the data gaps are outside of our approved scope of work and the data is deemed critical by the County and resource agencies for completion of the INRMP, then SAIC will propose, for consideration by the Management Team, means by which these data could be obtained.

We will prepare a draft Ecological Baseline Assessment Report for review by the Management Team, Stakeholder Committee, Interagency Advisory Committee, and Science Advisory Panel and a final report based on comments received. The report will present information gathered under Subtasks 5.1-5.3 and will describe the methods used for the land cover mapping, descriptions of the natural communities and the physical environment, covered species list, covered species accounts, and a description of other high value biological resources (e.g., deer habitats). Text, tables, and graphics of the baseline report will be in a format suitable for incorporation into the INRMP as a chapter or technical appendix. We will provide the POC with 10 paper bound copies and 10 CD copies of the draft and final reports and will provide the report electronically via the SAIC FTP site in Adobe PDF format.

Table 1. Special-Status Species Evaluated in the General Plan EIR that may be Considered for Coverage under the INRMP

Common Name	Scientific Name	Status (Federal/State/CNPS)
BIRDS		
Bald eagle	<i>Haliaeetus leucocephalus</i>	T/E/--
Little Willow flycatcher	<i>Empidonax traillii brewsteri</i>	--/E/--
Bank swallow	<i>Riparia riparia</i>	--/T/--
Tricolored blackbird	<i>Agelaius tricolor</i>	--/SSC/--
REPTILES AND AMPHIBIANS		
California tiger salamander	<i>Ambystoma californiense (central population)</i>	T/SSC/--
California red-legged frog	<i>Rana aurora draytonii</i>	T/--/--
Foothill yellow-legged frog	<i>Rana boylei</i>	--/SSC/--
INVERTEBRATES		
Vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	T/--/--
Valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>	T/--/--
PLANTS		
Big-scale balsamroot	<i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i>	--/--/1B
Layne's butterweed	<i>Senecio layneae</i>	T/Rare/1B
El Dorado County mule-ears	<i>Wyethia reticulata</i>	--/--/1B
Stebbins's morning-glory	<i>Calystegia stebbinsii</i>	E/E/1B
Nissenan manzanita	<i>Arctostaphylos nissenana</i>	--/--/1B
Stebbins's phacelia	<i>Phacelia stebbinsii</i>	--/--/1B
Brandegees's clarkia	<i>Clarkia biloba</i> ssp. <i>Brandegeae</i>	--/--/1B
Pine Hill ceanothus	<i>Ceanothus roderickii</i>	E/Rare/1B
Parry's horkelia	<i>Horkelia parryi</i>	--/--/1B
El Dorado bedstraw	<i>Galium californicum</i> ssp. <i>Sierrae</i>	E/Rare/1B
Pine Hill flannelbush	<i>Fremontodendron californicum</i> ssp. <i>Decumbens</i>	ERare/1B
Pleasant Valley mariposa lily	<i>Calochortus clavatus</i> var. <i>avius</i>	--/--/1B
Red Hills soaproot	<i>Chlorogalum grandiflorum</i>	--/--/1B
Status Explanations		
Federal:		
E	=	listed as endangered under the federal Endangered Species Act (ESA).
T	=	listed as threatened under the federal ESA.
C	=	candidate for federal listing (Species for which USFWS has on file sufficient information on biological vulnerability and threat(s) to support issuance of a proposed rule to list, but issuance of the proposed rule is precluded).
-	=	no status.
State:		
E	=	listed as endangered under the California ESA.
T	=	listed as threatened under the California ESA.
SSC	=	species of special concern in California.
R	=	listed as rare under the California Native Plant Protection Act.
-	=	no status.
California Native Plant Society (CNPS):		
1B	=	List 1B species: rare, threatened, or endangered in California and elsewhere.

Subtask 5.2 Natural Communities Description and Assessment

SAIC will prepare descriptions of the natural communities within the Planning Area. Descriptions will include an overview of distribution, dominant vegetation, common wildlife, and general ecological determinants (e.g., physical conditions such as soil types, geology, and moisture that affect the community distribution). Descriptions of the natural communities will be presented in the Ecological Baseline Assessment Report to be prepared under Subtask 5.1.

The NCCP Act requires that NCCPs address the conservation of ecosystem functions, biological diversity, environmental gradients, and shifting species distributions. To ensure that NCCP Act requirements are addressed early in the planning process, we will identify and describe the following characteristics of the major natural communities in the Planning Area:

- **Ecosystem Function.** We will generally describe the ecological processes and functions typical of and important to each major community such as watersheds, biomass production, flood flows, and fire.
- **Biological Diversity.** For purposes of describing biological diversity we will assess the vascular plant species and vertebrate animal species native to the inventory area. The biological diversity of vertebrates within each natural community in the Planning Area will be based on the DFG Wildlife Habitat Relationship (WHR) system refined for Butte County. For plants, the Cal Flora database at the University of California, Berkeley, will be used to determine the number of native plants expected to be found in each natural community in the Planning Area.
- **Environmental Gradients.** For purposes of describing environmental gradients, SAIC will describe the transition zones and ecotones between the various natural communities. The amount of habitat “edge” gives an indication of the amount of ecotonal variation in the inventory area. We will describe environmental gradients determined by physical features such as elevation, slope, slope aspect, and geologic and soil variation.
- **Shifting Species Distributions.** For purposes of describing shifting species distributions due to environmental changes, we will consider the potential effects of climate change. Climate change predictions, however, tend to be broad in geographic and taxonomic scope. We will use relevant predictions for local natural communities and species groups, if information is available. Expected changes such as up-slope shifts and north-south shifts would be incorporated into the HCP/NCCP reserve design.

Subtask 5.3 Biological Resource Mapping

SAIC will develop GIS coverages of various biological and physical resources for use in preparing the INRMP. We assume that the Planning Area will encompass the lowland areas and foothills of El Dorado County including agricultural lands, grasslands, vernal pool grasslands, oak woodlands, chaparral, and riparian woodlands, and extend eastward to up to the elevational extent of the montane woodland community (about 4,000 feet) as defined in the General Plan EIR. To prepare resource maps, we propose to use April 2004 digital natural color, orthorectified, aerial photography available from the County. This photography is high resolution (2-foot pixel) and suitable for use in preparing resource maps. We understand that the photography is available for the western portion of the County eastward to Pollock Pines. Although the photography likely provides coverage sufficient to encompass the Planning Area, we will fill any gaps in Planning Area coverage with similar photography taken in July 2003 of the entire County that is also available from the County. We will update the resource mapping to indicate areas that have been developed since April 2004 using more recent available aerial photography of developed areas, planning documents, and other sources.

Major Land Cover Types

SAIC will develop a uniform GIS coverage of land cover types in the Planning Area. Our biologists will delineate polygons of vegetation and other land cover types based on interpretation of aerial photograph

signatures. We will use existing data sets to the fullest extent possible to update data, fill data gaps, and improve resolution (when possible) to create a land cover GIS. During this process, we will determine the classification system for vegetation and land cover types that will meet the specific needs of the INRMP, which will be compatible with the DFG WHR system, DFG's VegCAMP system, and other commonly used classifications. The baseline inventory report will include a table crosswalking INRMP land cover types to these other classification systems. We understand that the County has already begun creating this crosswalk table.

Our focus will be to develop a classification system that is at a resolution that will serve the purpose of identifying potential habitat for covered species. Based on the vegetation communities present in the anticipated Planning Area, we propose that the land cover classification for the Planning Area include those types listed in Table 2.

Table 2. Proposed INRMP Land Cover Type Classification System

Land Cover Types	Minimum Mapping Unit (acres)
GRASSLAND	
Grassland without Vernal Pools	10
Grassland w/Vernal Pools (>1% wetted surface)	10
Grassland w/Vernal Pools (0.1-1% wetted surface)	10
RIPARIAN	
Cottonwood-Willow Riparian Forest	1
Valley Oak Riparian Forest	1
Willow Scrub	
Herbaceous Riparian and River Bar	1
WOODLAND AND SAVANNA	
Blue Oak Woodland (>9% canopy cover)	40
Blue Oak Savanna (≤ 9% canopy cover)	10
Valley Oak Savanna (≤ 9% canopy cover)	10
Blue Oak-Foothill Pine Woodland	40
Interior Live Oak Woodland	40
Mixed Oak Woodland	40
Montane Hardwood	40
Non-Native Woodlands	10
WETLANDS AND OPEN WATER	
Emergent Wetland	1
Open Water (reservoirs)	1
Stock Ponds	Point Data
RIVERS AND STREAMS	
Perennial Streams	Line Data
Intermittent Streams	Line Data
Major Canals	Line Data
SHRUB COMMUNITIES	
Chamise Chaparral	10
Mixed Chaparral	10

Table 2. Proposed INRMP Land Cover Type Classification System (continued)

AGRICULTURE	
Orchards/Vineyards	10
Irrigated Cropland	10
Irrigated Pasture	10
DEVELOPMENT	
Urban (Urban, developed parks, golf course, etc.)	10
Ranchettes – Wooded	10
Ranchettes – Open	10
Disturbed Ground (e.g., graded sites, mining, landfill)	10

Based on our assessment of the vegetation communities and physical conditions present in the Planning Area and mapping needs for the INRMP, we propose to map land cover types at the minimum mapping units shown in Table 2-2. Because much of the terrain occupied by oak woodlands is rugged, conditions that support the woodland land cover types vary greatly over short distances with changes in slope aspect. Consequently, woodlands of a particular type often occur as relatively small patches that are juxtaposed among patches of other woodland types. Consequently, we propose to map the woodland land cover types to a minimum 40-acre mapping unit. This minimum mapping unit will meet the needs of the INRMP and will reduce mapping costs substantially.

We will map other major vegetation and land cover types (e.g., annual grassland, oak savanna, agricultural land) to a 10-acre minimum mapping unit. Minor important land cover types (e.g., wetlands, ponds, and riparian habitat) will be mapped to a 1.0-acre minimum mapping unit. Vernal pool terrain will be mapped as “vernal pool grassland” to a 10-acre minimum mapping unit. This level of resolution is typically sufficient for regional conservation planning efforts and provides a cost-effective method for data capture.

We will use, and update, the existing GIS data of the vegetation communities of the Pine Hill formation from the surveys conducted in 1991 to supplement our land cover mapping within this important area. Additional data sources used to assist with and verify the land cover mapping will include California Department of Water Resources (DWR) land use data and USFWS national wetlands inventory data, and the NRCS Soil Surveys and Soil Survey Geographic Database. The Land Cover GIS Database will be provided to the management team on CD(s). Descriptions of mapping methods and land cover type maps will be included in the Ecological Baseline Assessment Report described under Subtask 5.1. We will also provide six large color paper maps for use in meetings and presentations.

Develop Streams Database

Streams are key ecological features that lace through the major land cover types. We will acquire existing digital data on hydrologic features including streams, watersheds, and floodplains and verify and improve these data with the aerial photography for the Planning Area. Data sources include U.S. Geological Survey digital streams data; CALWATER watershed data; and Federal Emergency Management Agency Q3 digital floodplain data.

The Streams GIS Database will be provided to the management team on CD(s). We will also provide four large color maps showing hydrological features and watersheds in the Planning Area for use in meetings and presentations.

Covered Species and Sensitive Habitats

We will prepare GIS data layers showing the known occurrences of covered species in the Planning Area. In addition to species occurrences, GIS data layers will be prepared for important migratory deer herd habitats, California red-legged frog recovery plan core areas, and sensitive habitats. Data layers for these

resources were created by the County for the General Plan EIR, however, we will update that information to capture any more recent information using GIS data available from NDDDB, Rarefind GIS, DFG, USFWS, and other sources as appropriate. The covered species and sensitive habitat GIS data layers will be provided to the management team on CD(s) and maps will be included in the Ecological Baseline Assessment Report described under Subtask 5.1. We will also provide six large color maps for use in meetings and presentations.

We believe that sufficient information regarding the distribution and ecological requirements of the likely covered species is available for the Planning Area to meet the needs of the INRMP (e.g., the distribution of the Pine Hill rare plant group is well documented). Consequently, we do not propose to conduct field surveys to assess the status of species occurrence and habitats and will rely on existing available information.

Resource inventory maps will be included in the Ecological Baseline Assessment Report described under Subtask 5.1. We will also prepare six draft map copies (3'x 4') of the land cover types and hydrologic features and six draft map copies (3'x 4') of the species occurrences and sensitive habitats for review by the Management Team, Stakeholder Committee, and Interagency Advisory Committee and six final copies of each of the maps based on comments received. Final maps would be available for use in presentations and planning meetings. The final resource inventory GIS database will be provided to the Management Team on CD(s).

Subtask 5.4 Ground-Truthing Resource Inventory Data

SAIC biologists will conduct field driving reconnaissance surveys of road accessible properties in the Planning Area. The purpose of these surveys is to validate the land cover polygon attributions in the GIS database. Under this task, two SAIC biologists will spend up to 10 days in the field driving on accessible roads within the Planning Area. The biologists will view as many polygons as practicable during this period and will focus efforts in areas that are most difficult to interpret from aerial photography and for which ancillary site data does not exist. In the conduct of these surveys, SAIC staff will:

- update boundaries of land cover types for current conditions where conditions have changed (e.g., new development) since aerial photography was taken;
- identify and map additional wetlands/wetland clusters, riparian forest and scrub, and ponds not identified in initial mapping effort due to indistinct signatures on aerial photography;
- seek additional information on key physical features important to covered species and vegetation distributions;
- review the condition of natural communities.

In addition to reconnaissance surveys by the SAIC land cover mapping team, key staff on the SAIC Team will conduct a 1-day reconnaissance drive of the Planning Area to observe future development areas and potential conservation areas. This trip would be most beneficial if County staff accompanied SAIC, and we will work with the POC to schedule it.

Subtask 5.5 Land Use GIS Database

SAIC will prepare a GIS database that displays land uses and land use policies. Elements of the database will be used to prepare the INRMP impact analysis, prepare the conservation strategy, and identify potential conservation areas. This database will be derived from the GIS land use designations database developed by the County for the General Plan and General Plan EIR. The land use GIS dataset will be used in conjunction with the biological resources GIS database with a number of analyses requiring the land use information to be overlain with the distributions of biological resources. Elements of the land use database will include the following existing GIS data: existing land use designations and non-jurisdictional lands in the Planning Area, current land uses including all farmland designated under the Farmland Protection Policy Act; known and

potential hazardous waste, historic, and archeological sites; floodplain zones; use restrictions, including important biological corridor, ecological preserve, and mineral resources overlays; and future development based on projected growth. SAIC will prepare six 3' x 4' draft land use maps for review by the Management Team, Stakeholder Committee, and Interagency Advisory Committee and six final maps based on comments received. Final maps would be available for use in presentations and planning meetings. The final land use GIS database will be provided to the Management Team on CD(s).

Subtask 5.6 Meetings

To complete this Task, up to four SAIC Team members will attend three meetings of the Stakeholder Committee to develop and present results of the resource inventory and up to three SAIC Team members will attend one meeting of the Science Advisory Panel (provided for under Subtask 2.4) to present resource inventory results. Management Team and Interagency Advisory Committee meetings related to this task are provided for under Task 1 meetings.

Deliverables:

- Report of data gaps, if needed (MSWord format via email to the Management Team)
- Draft Ecological Baseline Assessment Report (10 paper bound copies, 10 CD copies, Adobe PDF format via the SAIC FTP site)
- Final Ecological Baseline Assessment Report (10 paper bound copies, 10 CD copies, Adobe PDF format via the SAIC FTP site)
- Draft map of land cover types and hydrologic features (6 copies in 3' x 4' format)
- Final map of land cover types and hydrologic features (6 copies in 3' x 4' format)
- Draft map of species occurrences and sensitive habitats (6 copies in 3' x 4' format)
- Final map of species occurrences and sensitive habitats (6 copies in 3' x 4' format)
- Draft land use map (6 copies in 3' x 4' format)
- Final land use map (6 copies in 3' x 4' format)
- Final GIS resource inventory and land use coverages on CD ROM

Assumptions:

SAIC assumes that support of this task will not exceed 2124 hours of SAIC labor.

TASK 6. COVERED ACTIVITIES

We will initiate the task of identifying and describing covered activities as soon as practicable following contract approval. We anticipate that this task could take up to 8 months to complete, depending on when all the INRMP participating entities have been identified and how soon they submit lists of requested covered activities.

Subtask 6.1 Describe Covered Activities

SAIC will work with the County and other entities identified under Task 2 that wish to have their activities covered under the INRMP. The description of covered activities will form the basis for conducting the impact analysis under Task 7. We will review County planning documents and policies (e.g., specific plans, the General Plan) and coordinate with the County to identify planned and potential future development, infrastructure improvement and maintenance activities, and other types of planned activities that could affect covered species and natural communities. We will similarly communicate with and review relevant planning documents of other participating entities and coordinate with those entities to describe the activities they propose to cover under the INRMP. Descriptions of covered activities will include the purpose, location, and extent of disturbance that could be associated with the activity; actions that will be implemented to undertake the activity that could result in impacts on biological resources (i.e., impact mechanisms); and the anticipated

implementation schedule and duration of the activity. Once identified, SAIC will create a GIS data layer of the projected area of disturbance associated with the covered activities. We assume that the majority of covered activities will come from the GIS coverage of land use designations in the General Plan.

We will prepare a draft and final Description of Covered Activities report for review by the Management Team, participating INRMP entities, the Stakeholder Committee, and the Interagency Advisory Committee. The report will describe each participating entity's covered activities. The review by the Management Team and the participating entities would be directed primarily towards ensuring that the descriptions of covered activities are complete and accurate. The review by the Interagency Advisory Committee would be directed primarily towards ensuring that the covered activities are described in sufficient detail to meet agency needs for issuing permits under the federal and California laws and regulations. Text, tables, and graphics will be in a format suitable for incorporation into the INRMP as a chapter. We will provide the POC with 10 paper bound copies and 10 CD copies of the draft and final reports and will provide them electronically via the SAIC FTP site in Adobe PDF format.

Subtask 6.2 Meetings

Up to two SAIC staff will attend up to five meetings with entities participating in INRMP development to prepare descriptions of their covered activities and one meeting of the Stakeholder Committee to receive comments to the draft report. Management Team and Interagency Advisory Committee meetings related to this task are provided for under Task 1 meetings.

Deliverables:

- Draft Description of Covered Activities report (10 bound paper copies, 10 CD copies, Adobe PDF format via the SAIC FTP site)
- Final Description of Covered Activities report (10 bound paper copies, 10 CD copies, Adobe PDF format via the SAIC FTP site)

Assumptions:

SAIC assumes that support of this task will not exceed 322 hours of SAIC labor.

TASK 7. IMPACT ANALYSIS

Subtask 7.1 Draft Impact Analysis

SAIC will conduct an analysis of impacts on covered species and natural communities that could result with implementation of the covered activities identified in Task 6. Results of the impact analysis will be used to help guide development of conservation measures that are proportional to the associated impacts. The analysis will identify the likely direct, indirect, and cumulative impacts of the covered activities on covered species and natural communities and estimated levels of species take.

We propose to use two approaches to conduct the analysis of direct impacts on covered species:

1. Assessing impacts based on the location of known occupied covered species habitat relative to the projected area that could be affected by covered activities. This approach would apply to covered species for which occupied habitats have been documented.
2. Assessing impacts based on application of species habitat models. This approach would apply to covered species for which the extent of occupied habitats are not well documented in the Planning Area, but for which their habitat requirements are known. Species habitat models would be developed based on the land cover types that support species habitat and species behaviors. Potential impacts would be identified by overlaying covered activity areas with habitat areas identified based on application of the models.

Direct impacts on natural communities would be determined by overlaying the projected footprints of the covered activities with the land cover type GIS data layer. Direct impacts on jurisdictional wetlands and waters of the U.S. would be determined by overlaying the projected footprints of the covered activities with the wetland and aquatic land cover types and with the streams GIS data layer.

We will prepare a draft and final Impact Assessment Report for review by the Management Team, Stakeholder Committee, Interagency Advisory Committee, and Science Advisory Panel. The report will describe methods used to conduct the analysis and a description of direct, indirect, and cumulative impacts and estimated levels of species take. Text, tables, and graphics will be in a format suitable for incorporation into the INRMP as a chapter. We will provide the POC with 10 paper bound copies and 10 CD copies of the draft and final reports and will provide them electronically via the SAIC FTP site in Adobe PDF format.

Subtask 7.2 Meetings

To complete this Task, up to SAIC team two (2) members will attend one meeting of the Stakeholder Committee and one meeting of the Science Advisory Panel to present results of the draft impact analysis. Management Team and Interagency Advisory Committee meetings related to this task are provided for under Task 1 meetings.

Deliverables:

- Draft Impact Assessment Report (10 bound paper copies, 10 CD copies, Adobe PDF format via the SAIC FTP site)
- Final Impact Assessment Report (10 bound paper copies, 10 CD copies, Adobe PDF format via the SAIC FTP site, posted to the INRMP web page)

Assumptions:

SAIC assumes that support of this task will not exceed 397 hours of SAIC labor.

TASK 8. CONSERVATION STRATEGY

We will initiate development of the alternative conservation strategies following development of the covered activities descriptions. We anticipate that it will require 8 months to complete this task.

Subtask 8.1 Coordinate with Oak Woodland Management Plan

The County desires to implement Option B of General Plan Policy 7.4.4.4 and, therefore, needs to have the OWMP completed well prior to completion of the INRMP. The OWMP is being prepared for the County by another contractor independent of the INRMP development on an accelerated schedule. The timing as well as the content of the OWMP is critical because it will affect how the INRMP conservation strategy will be formulated. SAIC will coordinate with the OWMP contractor to incorporate Oak Woodland conservation measures into the INRMP and to ensure consistency between the INRMP and the OWMP.

Subtask 8.2 Alternative Conservation Strategies

Based on information in the Ecological Baseline Assessment Report and the results of the impact analysis under Tasks 5 and 7, SAIC will begin the formulation of approaches to conservation. SAIC will formulate quantitative conservation goals and objectives (e.g., acres of conserved covered species habitat) for covered species and natural communities. To formulate alternative conservation strategies, we will work with the Management Team and Stakeholder Committee to identify criteria for evaluating possible conservation strategies that will achieve the conservation goals and objectives. Each stakeholder will place expectations and limitations on the conservation approach and SAIC will work to find common criteria that would result in a feasible conservation strategy. Once these criteria have been identified, SAIC will develop up to three alternative conservation strategies that will address federal and California ESA, and Clean Water Act (if applicable – see optional Task 12) compliance needs. Each of the conservation alternatives will be

developed in broad terms but with sufficient detail to apply the evaluation criteria. We will develop a draft alternative conservation strategies report for review by the Management Team, Interagency Advisory Committee, and Stakeholder Committee and will provide a final report based on comments received.

To facilitate selection of the proposed conservation strategy, the alternative conservation strategies evaluation report will describe each conservation alternative and compare them based on the evaluation criteria adopted by the Stakeholder Committee. The report will also include a general analysis of the relative costs that could be associated with implementing each of the conservation alternatives. The report will be presented to the Stakeholder Committee, Interagency Advisory Committee, and Science Advisory Panel for discussion and comment. As an option, public comment could be solicited through public workshops and other venues to be identified in the Public Participation Plan prepared under Task 2. Following completion of the review period, SAIC will prepare a report describing comments and recommendations received. We will also describe options for the Management Team to consider in selecting an alternative that will be developed as the proposed conservation strategy for the INRMP. The proposed conservation strategy may be one of the alternatives or a combination of components from two or more alternatives.

Subtask 8.3 Prepare Conservation Strategy

Following the Management Team's selection of a proposed conservation strategy, SAIC prepare a detailed description of the strategy that will serve as the draft conservation strategy chapter for the INRMP. The proposed conservation strategy will describe measurable goals and objectives for each of the covered species and natural communities and will be consistent with guidance provided under the USFWS's Five-Point Policy for HCPs and the requirements of the NCCP Act. Key elements of the conservation strategy are the conservation measures, monitoring plan, and adaptive management plan. The strategy will address conservation measures at the landscape, natural community, and species-specific level.

Working with the recommendations of the Science Advisory Panel, SAIC will develop principles and guidelines for establishing the INRMP preserves (i.e., lands that will be conserved and managed under the INRMP). The preserve system design guidelines will provide landscape-level conservation. These preserve system design guidelines will address such parameters as the appropriate size, locations, and landscape position relative to other habitats for the establishment of preserves. To help establish these guidelines, we will identify species whose key habitat parameters (e.g., minimum patches of preserved lands that can serve as functional habitat) encompass the habitat of a much larger number of species. Thus, designing preserves that meet the needs of these broad ranging species will also meet the needs of covered species that use similar habitats. Other parameters for preserve design will focus on preserving a sufficient extent of specific habitats or habitat components that are exceptionally rare or fragile such as the Gabbro soils or vernal pool terrain. In formulating conservation measures, we will look for opportunities, consistent with achieving the biological goals and objectives, to design the preserves to complement and augment the values provided by existing preserved lands (e.g., the Pine Hill rare plant preserves, Spivey Pond management area) and sensitive habitat areas (e.g., designated critical habitat for California red-legged frog, deer habitats and migration corridors).

Conservation measures will be developed to conserve each of the covered natural communities. These community-level conservation measures will address ecosystem functions necessary to sustain each natural community and will also provide for the protection, enhancement, and restoration of habitats for the covered species associated with each of the communities. Community-level conservation measures will include provisions for management actions that may need to be periodically implemented to maintain desired vegetative structure and compositions and reduce the risk of wildfire. The conservation strategy will identify species-specific conservation measures for those covered species for which their conservation needs cannot be wholly achieved through implementation of landscape- and natural community-level measures. Examples of species-specific measures would include measures that would

be implemented in conjunction with covered activities that would avoid and minimize direct effects on covered species or that provide for protecting specified habitat areas necessary to conserve one or more covered species. These elements of the conservation strategy will be designed to be consistent and compatible with existing General Plan policies and land use designations.

The Oak Woodland Management Plan is being developed independently and ahead of the INRMP. SAIC will draw relevant landscape-level and oak woodland community-level conservation measures from the Oak Woodland Management Plan and will incorporate them into the proposed conservation strategy.

It is anticipated that the Rare Plant Management Plan for the Pine Hill Preserve will be developed by BLM concurrent with INRMP development. SAIC will incorporate relevant information and conservation measures from that planning effort into the conservation strategy.

The USFWS recovery plan for Gabbro soils endemics will be used as a source of information for development of conservation measures for these species. USFWS may be revising this recovery plan during INRMP development and SAIC will coordinate with USFWS to determine appropriate new measures to incorporate into the INRMP conservation strategy.

SAIC will coordinate with federal landholding agencies (e.g. BLM, USFS) to assess the extent to which federal lands may be incorporated into the conservation of covered species and covered natural communities and will include such lands in the INRMP conservation strategy as appropriate.

The monitoring plan and adaptive management elements of the conservation strategy will be designed to meet the guidance provided in the USFWS's Five-Point Policy for HCPs and the requirements of the NCCP Act. The monitoring plan will identify monitoring goals and objectives, monitoring protocols and schedules, and reporting requirements. The plan will provide for effects monitoring (if needed), implementation monitoring, and effectiveness monitoring. Effects monitoring will only be identified for covered activities for which there are uncertainties about the extent of likely impacts and mitigation needs. The potential need for effects monitoring would be identified based on the results of the impact analysis (Task 7). Implementation monitoring will describe the monitoring to be undertaken to document the implementation of conservation measures and compliance with terms and conditions of the permits. Effectiveness monitoring will describe the monitoring that will be undertaken to determine the response of covered species and natural communities to implementation of conservation measures. Effectiveness monitoring will be directed towards providing the Implementing Entity with the information necessary to adaptively implement the strategy over the term of the INRMP. The adaptive management plan will address processes and procedures for adjusting INRMP implementation based on new information learned through results of effectiveness monitoring and research conducted under the INRMP and by others over the term of the INRMP. The adaptive management plan will also identify changed circumstances and remedial measures that would be implemented in the event of changed circumstances and will identify procedures for addressing unforeseen circumstances.

We will provide the Management Team, Stakeholder Committee, Interagency Advisory Committee, and Science Advisory Panel with a draft Proposed Conservation Strategy for review. Based on comments received, we will provide the Management Team and Interagency Advisory Committee with a revised draft based on comments received.

Subtask 8.4 Implementation Cost

SAIC has included ENTRIX on our Team for expertise in economic analysis for HCP/NCCPs. ENTRIX economists would lead the preparation of the implementation cost analysis. Implementation costs for a long-term INRMP will involve four primary categories of activities:

- Land acquisition
- Restoration and enhancement of habitat
- Long-term monitoring and management
- Plan administration

Each of these cost categories are discussed in the sections below.

Conduct Land Value Analysis

A comprehensive understanding of the costs associated with land acquisition for development of habitat preserves is a fundamental component of the economic analysis. ENTRIX would conduct research on current land values (and associated transaction costs) and would compile land value data across a spectrum of unique land/habitat types. Data sources may include local realtors, the California Association of Realtors, experienced appraisers with working knowledge of the Planning Area, the California Chapter of the American Society of Farm Managers and Rural Appraisers, and private companies which collect and distribute property data (including sales transactions). Because actual property sales represent the most accurate source for land values, ENTRIX would rely extensively on “over-the-counter” property transaction data, such as those available from CD-Data via their ParcelQuest product. Land use values, including parcel-level sales transactions (to the extent they are available), would be linked to land use and habitat types based on available land use/habitat mapping prepared for the INRMP and parcel maps using GIS techniques. Using the data sources described above, historic trends in land values would be identified and charted.

Successful implementation of the INRMP will require accounting for future changes in land values in the proposed funding program to ensure that funds are available for future land protection needs. The information collected as part of this subtask would be used to help determine the most appropriate method for periodic adjustments to the funding program.

Analyze Costs of Restoration and Enhancement Activities

We anticipate that under the conservation plan some of the land that is included in the preserve system under the INRMP program would be restored and enhanced to meet the needs of covered species and natural communities. As part of this subtask, SAIC habitat restoration experts would assess the costs of restoration and enhancement of different habitat types. We will develop an average cost per acre for restoration of different habitats under different initial site conditions. In this way we will be able to estimate differential costs of habitat restoration of varying extent and location under different conservation alternatives.

Analyze Costs of Monitoring, Management and Adaptive Management Program

It is expected that INRMP preserve lands will require long-term monitoring and management to ensure that biological and ecological goals are met over time. The INRMP will include a comprehensive monitoring, management, and adaptive management program that will be the responsibility of the Implementing Entity. Such a program will require ongoing expenditures over the life of the program and these costs need to be considered as part of the cost of INRMP implementation.

SAIC resource experts and ENTRIX economists will work in close coordination to develop cost estimates for the long-term monitoring, management, and adaptive management of preserve lands.

Analyze Costs of Plan Administration

SAIC and ENTRIX staff develop an assessment of the cost of initial and ongoing INRMP implementation administration. These costs may include staffing, facilities and materials; regulatory compliance; database management; conservation easement monitoring; accounting; insurance; overhead; legal costs; and contingency.

Subtask 8.5 Meetings

Under this task, the project manager or principal and, on average, up to two technical staff will prepare for and attend up to two meetings of the Stakeholder Committee and one meeting of the Science Advisory Panel. Management Team and Interagency Advisory Committee meetings related to this task are provided for under Task 1 meetings.

Deliverables:

- Draft Alternative Conservation Strategies Report (10 bound paper copies, 10 CD copies, Adobe pdf file via the SAIC FTP site)
- Final Alternative Conservation Strategies Report (10 bound paper copies, 10 CD copies, Adobe pdf file via the SAIC FTP site)
- Alternative Conservation Strategies Evaluation Report (10 bound paper copies, 10 CD copies, Adobe pdf file via the SAIC FTP site, posted on the INRMP web page)
- Alternative Conservation Strategies Evaluation Summary Report (10 bound paper copies, 10 CD copies, Adobe pdf file via the SAIC FTP site, posted on the INRMP web page)
- Draft Proposed Conservation Strategy (10 bound paper copies, 10 CD copies, Adobe pdf file via the SAIC FTP site, posted on the INRMP web page)
- Revised draft Proposed Conservation Strategy (10 bound paper copies, 10 CD copies, Adobe pdf file via the SAIC FTP site, posted on the INRMP web page)
- Draft and Final Land Values Technical Memoranda (pdf file via email to POC).
- Draft and Final Restoration and Enhancement Costs Technical Memoranda (pdf file via email to POC).
- Draft and Final Monitoring and Adaptive Management Costs Technical Memoranda (pdf file via email to POC)
- Draft and Final Administrative Costs Technical Memoranda (pdf file via email to POC)

Assumptions:

SAIC assumes that support of this task will not exceed 1,258 hours of SAIC labor.

TASK 9. CONSERVATION FUNDING

The SAIC Team would provide El Dorado County with an analysis of the funding alternatives that can be used to meet the implementation costs. ENTRIX economists will lead this task. A successful HCP/NCCP resource conservation strategy must not only conserve natural resources, but also be financially viable. For an economically-viable INRMP, adequate funding will be required to offset plan costs. Funding would likely come from numerous sources. The reliability of such sources is critical to ensure the long-run sustainability of the plan.

Subtask 9.1 Conservation Funding Sources and Strategies

Identify Funding Requirements and Sources

This subtask would summarize funding requirements based on the cost analysis completed in Task 8.4. The requirements would include funding for initial and ongoing preserve land acquisition, restoration and enhancement measures, monitoring and management, and plan administration. These costs would then be aggregated to estimate total plan costs over time based on the estimated extent of future development and related habitat protection needs established by the INRMP. Acquisition costs would reflect the assumed composition of fee title, conservation easement, and other anticipated transactions.

Based on total estimated costs, funding sources would be identified and evaluated in the context of their applicability to the INRMP. The analysis would evaluate the appropriate cost allocation among available funding sources.

Under this task, ENTRIX economists will prepare a Potential Funding Sources technical memoranda containing text and tables that illustrate and describe potential funding approaches for INRMP implementation. Following a decision by the County of the preferred approach to funding, ENTRIX economists will prepare a first draft description of the funding sources that will be formatted as the

funding sources chapter to the INMRP. Following review of the first draft funding sources chapter, ENTRIX will prepare a second draft funding sources chapter for the INRMP.

Subtask 9.4 Meetings

It is assumed that ENTRIX economists would be involved in up to eight meetings with the Management Team and Stakeholder Committee over the 3-year period.

Deliverables:

- Potential Funding Sources Technical Memoranda (pdf document)
- First Draft Funding Sources Chapter (pdf document)
- Second Draft Funding Sources Chapter (pdf document)

Assumptions:

SAIC assumes that support of this task will not exceed 206 hours of SAIC labor.

TASK 10. DRAFT AND FINAL INRMP

Under this task, the SAIC Team will prepare draft and final versions of the INRMP and Section 10 permit application, and Section 404 permit application. Under separate contract with the County, attorneys with Ebbin Moser + Skaggs will prepare the implementing agreement (IA). The timing for preparation of the final INRMP, IA, and Section 10 permit application will depend on the timing of the CEQA/NEPA process. USFWS will not begin formal processing of the INRMP as an HCP until a complete Section 10 permit application package is submitted, including the EIR/EIS.

Subtask 10.1 Draft INRMP

Following completion of a proposed conservation strategy and cost and funding analyses, SAIC will complete the full INRMP document including all components required of a joint NCCP/HCP document. The draft INRMP will include:

- Description of purpose and need
- Geographic scope of plan, duration of plan, covered species
- Description of the covered activities
- Ecological baseline conditions
- Analysis of impacts
- Proposed conservation strategy
- Monitoring and adaptive management plan
- Expected Outcomes with Conservation Measures
- Identification of the implementing entity
- Implementation plan
- Implementation cost and funding sources
- Regulatory assurances requested by applicants
- Alternatives to take considered and rejected

Attorneys with Ebbin Moser + Skaggs will work with the County, USFWS, and DFG to prepare the draft Implementing Agreement (IA), described in more detail below.

The SAIC Team will prepare up to three administrative drafts of the INRMP for review. The first draft INRMP will be provided for review and comment to the Management Team, Stakeholder Committee, Interagency Advisory Committee, and Science Advisory Panel. Based on comments received SAIC will prepare a second draft for review by the Management Team, Stakeholder Committee, and the Interagency Advisory Committee. The third administrative draft INRMP will be provided for review by the Management Team and Interagency Advisory Committee. Comments received on the third administrative draft will be used to prepare the public draft INRMP. The public draft INRMP will be

released with the public draft EIR/EIS (see Task 11). SAIC will provide the POC with 10 paper bound copies and 10 CD copies of each version of the draft documents and will provide them electronically via the SAIC FTP site in Adobe PDF format.

Ebbin Moser + Skaggs would take the lead in working with the County, and other local, state, and federal agencies in the drafting, negotiation, and development of the IA for the INRMP. Ebbin Moser + Skaggs attorneys and the SAIC project manager will work on incorporating provisions either into the INRMP or the IA, as may be appropriate, that are related to mitigation assistance, habitat acquisition, habitat management and monitoring, and funding as set forth in General Plan Policy 7.4.2.8. SAIC will support Ebbin Moser + Skaggs in IA preparation by reviewing draft documents and providing recommendations on content.

Subtask 10.2 Public Review Draft

Based on comments received on the third administrative draft INRMP and IA, SAIC will prepare the public review draft INRMP and Ebbin Moser + Skaggs will prepare the public review draft IA to be released by the County with the EIR/EIS. We will provide the POC with a total of 80 paper bound copies of the public review draft INRMP and IA, 100 CD copies, and will provide these documents electronically via the SAIC FTP site in Adobe PDF format. The public review draft INRMP and IA would also be posted on the web page.

Subtask 10.3 Final INRMP

Under this task SAIC will revise the INRMP and Ebbin Moser + Skaggs will revise the IA as necessary to reflect changes required by the approving agencies. Following review of a draft final INRMP and IA by the Management Team, we would produce 80 bound paper copies, 100 copies on CD, and post the documents on the web page.

Subtask 10.4 Meetings

To complete Task 10, SAIC Team members will attend one meeting of the Stakeholder Committee and one meeting of the Science Advisory Panel to present the draft INRMP. Management Team and Interagency Advisory Committee meetings related to this task are provided for under Task 1 meetings.

Deliverables:

- First administrative draft INRMP (10 bound paper copies, 10 CD copies, Adobe PDF format via the SAIC FTP site)
- Second administrative draft INRMP (10 bound paper copies, 10 CD copies, Adobe PDF format via the SAIC FTP site)
- Third administrative draft INRMP (10 bound paper copies, 10 CD copies, Adobe PDF format via the SAIC FTP site)
- Public review draft INRMP (80 bound paper copies, 100 CD copies, Adobe PDF format via the SAIC FTP site)
- Draft final INRMP (10 bound paper copies, 10 CD copies, Adobe PDF format via the SAIC FTP site)
- Final INRMP (80 bound paper copies, 100 CD copies, Adobe PDF format via the SAIC FTP site)

Assumptions:

SAIC assumes that support of this task will not exceed 1277 hours of SAIC labor.

TASK 11. DRAFT AND FINAL EIR AND EIS

SAIC will provide compliance documentation to satisfy the County's and USFWS's obligations under the CEQA and NEPA. The ensuing joint EIR/EIS will efficiently address state and federal specifications. The County's project under CEQA is the development and implementation of the INRMP. USFWS's action under NEPA is the issuance of the Section 10(a)(1)(B) incidental take permit. The EIR/EIS on the INRMP will address the project/action and will not revisit the issues already addressed in the General Plan EIR. Setting, impact analysis, and mitigation from the General Plan EIR will be incorporated by reference into the INRMP EIR/EIS.

USFWS Sacramento Field Office requires that the technical team preparing the EIS for a HCP be separate from the team that prepares the HCP. To meet this requirement, SAIC has established a technical EIR/EIS team separate from the INRMP technical team. David Stone of SAIC would be the EIR/EIS manager working in parallel with SAIC's INRMP manager, Pete Rawlings. The internal "firewall" created by SAIC allows for independent review and analysis by the EIR/EIS team of the effects on the human environment of the approval and implementation of the HCP.

Subtask 11.1 Notice of Preparation/Notice of Intent (NOP/NOI)

SAIC will prepare an NOP incorporating all required components defined by CEQA Guidelines Section 15082. SAIC will also prepare an NOI incorporating all required components defined by 40 C.F.R. 1508.22. The SAIC Team will refine the scope of the EIR/EIS based on our experience with other EIR/EISs on HCPs and NCCPs. Importantly, the EIR/EIS will evaluate those specific actions resulting from the INRMP and Oak Woodland Management Plan that would affect environmental resources in the Planning Area; the EIR/EIS will not assess the way in which buildout of the General Plan would be affected. This is consistent with the guidance provided by the CEQA Guidelines Section 15125(d), identifying that the proposed actions of a regional plan be compared to the existing setting at the time the Notice of Preparation is prepared.

The EIR/EIS scope of analysis will be crafted by completing an Environmental Checklist, as recommended in CEQA Guidelines Appendix G. The Checklist will follow accepted El Dorado County format, and/or revised as appropriate in consultation with County staff. The completed checklist will provide a summary of the proposed project, and preliminary analyses justifying project impacts as potentially significant, less than significant with mitigation, less than significant, or no impact. The completed checklist will be circulated with the NOP/NOI, providing several advantages to El Dorado County:

- It will demonstrate why the scope of the EIR/EIS can be narrowed to potentially significant impacts and those that would be less than significant with mitigation, as required under CEQA Guidelines Section 15126.2.
- It can be included in the EIR/EIS as an appendix that satisfies discussion of all project impacts that would be less than significant, or would have no impact.
- It can define the potential EIR work plan, highlighting how the EIR/EIS will assess potentially significant impacts, and propose preliminary mitigation measures.
- It will provide the public a preliminary opportunity to evaluate the potential adequacy of the EIR/EIS. Public input on the NOP/NOI can be focused on issues/concerns that have not been considered in the checklist, minimizing the potential for extensive responses that may provide little constructive dialog.
- It will demonstrate El Dorado County's intent to provide a full disclosure of the proposed project's impacts, and illustrate the proactive, solution-oriented nature of the proposed project's environmental assessment.

The environmental checklist will be attached to the NOP. Based on a distribution list provided by El Dorado County, SAIC will send the NOP and NOI via email to appropriate elected officials, agencies, stakeholders groups, and individuals.

El Dorado County will be responsible for forwarding the NOP to the State Clearinghouse, and the NOI to the Department of Interior for publication in the Federal Register.

Subtask 11.2 Scoping Meeting

SAIC will assist the County in undertaking public scoping meeting during the NOP/NOI review period. One scoping meeting will be held. The location and time of the scoping meeting will be determined in consultation with the County. At the scoping meeting, SAIC will provide a power point presentation summarizing the proposed project and the findings of the Environmental Checklist. Scoping meeting sign-up sheets will be prepared to assist the County in developing a distribution list for the EIR/EIS notification list. Hard cover copies of the power point presentation will be provided to meeting participants, including a page for the listener to identify their issues and comments responding to the materials discussed. The comment page will then be collected at the end of the meeting for consolidation with subsequent formal NOP/NOI comments into a Draft Scoping Report that will summarize the primary issues raised by the public. Following review by the County and USFWS, SAIC will prepare the Final Scoping Report.

Subtask 11.3 Draft EIR/EIS

SAIC will prepare the Draft EIR/EIS for review by the public. The County and USFWS would be the lead agencies and would review all drafts of the document. To receive full input from the Management Team, Interagency Advisory Committee, and Stakeholder Committee, SAIC anticipates preparing two administrative drafts of the EIR/EIS prior to the public review Draft EIR/EIS.

The EIR/EIS will include analysis of the following resources topics:

- Land Use
- Public Services
- Transportation and Circulation
- Noise
- Socioeconomics and Environmental Justice
- Recreation
- Aesthetics and Visual Resources
- Air Quality
- Cultural Resources
- Agricultural Resources
- Biological Resources
- Hydrology and Water Quality
- Geology, Soils, and Hazards

Each of the environmental resource sections will contain the following information.

- **Environmental Setting.** The environmental setting for each issue area will be described, incorporating by reference information provided in the El Dorado County General Plan EIR.
- **Significance criteria.** Clear significance criteria and thresholds for significance will be developed for each resource topic based on standards used by the County and where necessary the CEQA Guidelines Appendix G, Environmental Checklist. Any significance criteria precedents in previous County environmental documents will be consulted and used as directed by County staff.
- **Impact Assessment.** Direct and indirect effects on each environmental resource will be analyzed relative to a long-term, programmatic level scenario. Adverse and beneficial impacts will be summarized in a Summary Impact Table and included at the end of the Executive Summary.
- **Mitigation Measures.** Mitigation measures will be developed for significant, adverse impacts. Mitigation measures will be designed to be consistent in form, design, and intent with EIRs previously prepared by the County, and revised as appropriate based on the SAIC Team's experience. Where "standard" mitigation measures appear to require substantial modification to address project-specific characteristics, Mr. Stone, SAIC project manager, will confer with County staff regarding the intended direction.

SAIC will prepare the Mitigation Monitoring and Reporting Plan (MMRP) consistent with County staff direction, in either a table or narrative format. At a minimum, the MMRP components will be listed after each required mitigation measure as follows:

- Plan Requirements for presenting measure compliance and when the plan would be prepared and presented;
- Timing for plan preparation and review/approval, including the agency responsible for reviewing and approving the plan; and
- Monitoring of the plan's implementation, including the agency responsible, the timing and duration (i.e., during project construction and/or operation).

Cumulative impacts will be assessed for each resource area consistent with CEQA Guidelines Section 15333, using a list of reasonably probable (i.e., pending, and approved but not built) projects provided by the County staff. The project's contribution to regional cumulative impacts will be emphasized, and mitigation identified where necessary to address a substantial contribution to a significant cumulative impact. Cumulative impacts will be summarized in a separate impact table to be included at the end of the Executive Summary of the EIR/EIS.

The alternative conservation strategies identified during the development of the INRMP will be used as alternatives in the EIR/EIS for comparison to the effects of the proposed INRMP conservation strategy. The EIR/EIS will include the analysis of a no project/action alternative (i.e., no regional INRMP and no regional permits) which will describe the environmental outcome of continued project-by-project biological resources mitigation and permitting. In the EIR/EIS, SAIC will assess the effects of the proposed project, the no-project alternative, and two conservation strategy alternatives.

SAIC will prepare a discussion of the proposed INRMP's potential consistency with all relevant County General Plan policies. SAIC staff will confer with County staff to identify the list of relevant policies for discussion.

The EIR/EIS will include a section that addresses "other CEQA and NEPA requirements." This section will include other analyses required by CEQA and NEPA including: Significant and Unavoidable Impacts (CEQA); Short-Term Uses of the Environment versus Maintenance and Enhancement of Long-Term Productivity (NEPA); Irreversible and Irrecoverable Commitments of Resources (NEPA)/Significant Irreversible Environmental Changes (CEQA); Growth Inducement (CEQA); and Environmentally Preferable (NEPA)/Superior Alternative (CEQA).

Subtask 11.4 Final EIR/EIS

Following the close of the public comment period on the Draft INRMP and Draft EIR/EIS, SAIC will prepare an Administrative Final EIR/EIS for County and USFWS review. SAIC assumes that the Final EIR/EIS will include integration of the Draft EIR/EIS text with any changes resulting from response to public comment. A Response to Comments appendix to the Final EIR/EIS will include all letters, e-mail, personal records, and meeting minutes of public comments. Each individual comment will be numbered for reference. The Response to Comments appendix is assumed would be a maximum of 500 pages. SAIC assumes that the conduct of this task would require response to no more than a total of 500 individual, non-redundant public comments in the Final EIR/EIS Response to Comments appendix. Following review of the administrative final EIR/EIS, SAIC will prepare the Final EIR/EIS for public distribution (100 CDs, 80 hard copies; estimated maximum of 250 pages).

Subtask 11.5 Meetings

The SAIC EIR/EIS manager will support the County and USFWS during preparation of the EIR/EIS by attending the following meetings:

- Up to four working meetings with County and USFWS staff (assume maximum of 4 hours each):

- ▶ EIR/EIS Kick-off; discussion of key issues, existing materials to be used in developing Environmental Setting, protocols, etc.
- ▶ Review of Administrative Draft EIR/EIS: discuss major issues and appropriate procedures for addressing comments.
- ▶ Review of Public Comments and Preparation of Overall Response Strategies
- ▶ Review of Administrative Final EIR/EIS: discuss major issues and appropriate procedures for addressing comments.
- Public Meetings:
 - ▶ Meeting on Public Draft EIR/EIS to take public comment.
 - ▶ Two Public Hearings (e.g., with Planning Commission and Board of Supervisors)

SAIC EIR/EIS manager will at regular intervals during the preparation of the EIR/EIS conduct teleconferences with County and USFWS staff to discuss progress and identify any issues.

Deliverables:

- Draft Scoping Meeting Presentation (Power Point file provided electronically)
- Final Scoping Meeting Presentation (Power Point file provided electronically; 200 hard copies of the presentation for distribution at the scoping meeting.
- Draft NOP, NOI, and Environmental Checklist (10 bound paper copies, 10 CD copies, Adobe PDF format via the SAIC FTP site)
- Final NOP, NOI, and Environmental Checklist (10 bound paper copies, 10 CD copies, Adobe PDF format via the SAIC FTP site)
- Draft and Final Scoping Report (10 bound paper copies, 10 CD copies, PDF file via email)
- First Administrative Draft EIR/EIS (10 hard copies; estimated maximum of 250 pages).
- Second Administrative Draft EIR/EIS (10 hard copies; estimated maximum of 250 pages).
- Draft EIR/EIS for public review (100 CDs, 80 hard copies; estimated maximum of 250 pages)
- Administrative Final EIR/EIS (10 hard copies; estimated maximum of 250 pages with maximum 500-page Response to Comments appendix).
- Final EIR/EIS (100 CDs, 80 hard copies; estimated maximum of 250 pages with maximum 500-page Response to Comments appendix)

Assumptions:

SAIC assumes that support of this task will not exceed 2,400 hours of SAIC labor.

OPTIONAL TASK 12. SECTION 404/401 AND SECTION 1602 COMPLIANCE

Task 12 is an optional task that will be implemented only if funded by the County. Under Optional Task 12, SAIC will coordinate with USACE, CVRWQB, EPA, DFG and the County to prepare a Clean Water Act Section 404 permit application and Section 401 certification request and a Fish and Game Code Section 1602 Master Streambed Alteration Agreement based on the INRMP.

Subtask 12.1 Prepare Section 404 Permit Application and Section 401 Certification Request

SAIC will coordinate with USACE, CVRWQB, and EPA, if necessary, to secure their participation in the INRMP development process to the extent necessary to ensure that the INRMP contains the information required to provide regional compliance with the Clean Water Act compliance. Under this optional task, USACE, CVRWQB, and EPA would participate as members of the Interagency Advisory Committee.

The Section 404 permit application process would be conducted with USACE on a parallel but separate track from the ESA/NCCP permitting process with USFWS and DFG. Because of substantial regulatory and institutional differences, USACE and USFWS do not combine their permitting processes under Section 404 CWA and Section 10 ESA.

There are various types of permits and formats for issuing permits under Section 404 regulations. SAIC will work with the Management Team and the USACE to determine the preferred approach to Section 404 compliance for the Planning Area. SAIC will prepare a technical memoranda describing various ways to achieve regional Section 404 compliance. SAIC will work with the Management Team and USACE, CVRWQCB, and EPA (if participating) to prepare the draft Section 404 permit application and Section 401 certification request. We will prepare a first draft of the Section 404 permit application for review by the Management Team. SAIC will incorporate Management Team comments into a second draft Section 404 permit application. Comments on the second draft application will be solicited from the USACE, CVRWQCB, and EPA. SAIC will prepare a third draft and provide to the same agencies for comment. Following comments on the third draft and completion of the final INRMP and IA, SAIC will prepare the final Section 404 permit application and 401 certification request form. SAIC assumes that this task will not include specific delineation of waters of the United States beyond the data collected as described above in Task 5; that the alternatives screening and effects analysis in the INRMP EIR/EIS will be sufficient to meet and Section 404 Alternatives Analysis; and that USACE will prepare their own NEPA compliance documents.

Subtask 12.2 Prepare Section 1602 Master Streambed Alteration Agreement

SAIC will work with the Management Team and DFG to develop a Master Streambed Alteration Agreement (MSAA) under Section 1602 of the California Fish and Game Codes that uses the conservation measures in the INRMP for streams and lakes to address compliance with this code section. We will prepare a first draft of the MSAA for review by the Management Team. SAIC will incorporate Management Team comments into a second draft MSAA. Comments on the second draft application will be solicited from DFG. SAIC will prepare a third draft and provide to DFG for comment. Following comments on the third draft and completion of the final INRMP and IA, SAIC will prepare the final MSAA. SAIC assumes that this task will not include specific delineation of streams and lakes under DFG jurisdiction beyond the data collected for the baseline ecological assessment; and that the EIR/EIS for the INMRP will be sufficient to meet the CEQA requirements for DFG it issue the MSAA.

12.3 Meetings

SAIC will attend up to four coordination meetings with USACE Sacramento District in their offices or SAIC offices in Sacramento. These meetings with USACE may include CVRWQCB and EPA representatives. It is assumed that other meetings needed with USACE will occur when USACE representatives attend Interagency Advisory Committee meetings under Task 1. Master Streambed Alteration Agreement discussions with DFG are also assumed to occur during Interagency Advisory Committee meetings under Task 1.

Deliverables:

- Section 404 Compliance Approaches Technical Memoranda
- First draft Section 404 permit application (10 bound paper copies, 10 CD copies, Adobe PDF format via the SAIC FTP site)
- Second draft Section 404 permit application (10 bound paper copies, 10 CD copies, Adobe PDF format via the SAIC FTP site)
- Third draft Section 404 permit application (10 bound paper copies, 10 CD copies, Adobe PDF format via the SAIC FTP site)

- Final Section 404 permit application and Section 41 certification request (10 bound paper copies, 10 CD copies, Adobe PDF format via the SAIC FTP site)
- First draft Master Streambed Alteration Agreement (10 bound paper copies, 10 CD copies, Adobe PDF format via the SAIC FTP site)
- Second draft Master Streambed Alteration Agreement (10 bound paper copies, 10 CD copies, Adobe PDF format via the SAIC FTP site)
- Third draft Master Streambed Alteration Agreement (10 bound paper copies, 10 CD copies, Adobe PDF format via the SAIC FTP site)
- Final Master Streambed Alteration Agreement (10 bound paper copies, 10 CD copies, Adobe PDF format via the SAIC FTP site)

Assumptions:

SAIC assumes that support of this task will not exceed 687 hours of SAIC labor.

General Assumptions

In addition to assumptions described for each scope task, for all tasks described in the above scope of work, SAIC makes the following general assumptions:

- Comments provided by the County and all participating agencies will be consolidated and conflicting comments resolved before submittal to SAIC. Comments from all participating agencies will be provided to SAIC by the County within 2 weeks of receipt of draft documents.
- For each deliverable listed that includes a review, there will be only a single comment cycle and any additional revisions would be considered to be for the subsequent deliverable (if there is a subsequent deliverable in the scope of the task). In the event of several comment cycles, a contract revision will be requested to increase funding for the additional scope.
- SAIC is not responsible for the accuracy or completeness of data and information provided to SAIC by the County or other parties that is used on any aspect of this project.

Schedule

The MSProject chart shown in Exhibit 1 provides a detailed proposed schedule for the development of the INRMP and EIR/EIS. This schedule is based on a number of assumptions about the time required for agencies outside of SAIC's control to perform various actions such as meetings dates, document review, and permit processing.

This schedule is based on the following assumptions:

- County will provide SAIC with contract and notice to proceed on or prior to April 2, 2007. Should the notice to proceed occur after April 2, 2007, there will be a day-for-day slip in SAIC's responsibility as to schedule.
- USFWS, DFG, USACE, CVRWQCB, and the County will respond to all scheduled actions.
- Document review times, other than public reviews mandated under NEPA and CEQA, by the County and all federal and state agencies and other participating entities involved will be no more than 2 weeks.

Changes in Regulatory Approach

The County Board of Supervisors directed SAIC to prepare this work plan under the assumption that the INRMP development process would follow the requirements of federal ESA, California NCCPA, and County General Plan policy. The Board also indicated that they may decide at some future date to change the regulatory approach and purpose of the INRMP by changing the process from a combined federal, state, and local regulatory compliance document to a strictly local General Plan compliance document. Such a decision would affect the scope of SAIC's effort with the timing of such a decision, or what has been referred to as an "off-ramp", determining the level of change in SAIC's scope of work and cost as presented in this work plan. A decision by the Board of Supervisors to take an off-ramp would require SAIC to re-scope the remaining work tasks. Taking an early off-ramp would have the largest affect on the scope and cost and a late off-ramp the least effect. Examples of tasks that would be most effected by the a decision not to included federal and state permitting processes are: preparing the planning agreement under Task 4, describing NCCPA ecological baseline requirements under Task 5, coordinating with the science advisory panel under Task 2, identifying and describing covered activities under Task 6, conducting an impact analysis appropriate for take authorization under Task 7, preparing the implementing agreement under Task 10, and preparing the permit applications under Task 10.

Cost Estimate

The estimated costs for implementing Tasks 1-11 and Optional Task 12 described above are presented in Exhibit 2 and the SAIC labor rate schedule for years 2007-2010 are presented in Exhibit 3.

The costs estimates provided are predicated on the following assumptions:

- Tasks will be performed as per the timing of the schedule as presented in Exhibit 1 *Schedule* and will not slip to later times. Schedule slippage that results in performance of tasks in later years than anticipated by SAIC's schedule would require contract amendment.
- There will not be repeated stoppage and restarting of work by SAIC due to gaps in funding, County staff availability, or other reasons outside of SAIC's direct control.
- SAIC will have complete flexibility to use funds, within the total funded amount, for whichever tasks necessary and will be able to take advantage of efficiency in completing some tasks to fund work in other tasks needing additional effort on a time and materials basis.
- Work will be billed at the applicable labor rate, following the rate schedule provided in this section, for the year in which the work is conducted.

Additional details on costs by task and subtask and subcontractor costs can be provided upon request.