

WORK PLAN GUIDANCE

INTRODUCTION

The work plan should describe specific actions to be performed to complete all project milestones and deliverables. In addition, the plan should highlight specific roles of individuals, and detail project coordination, methods, and resources necessary for successful project completion. The work plan is intended to be a guide for operation and should reflect current status of work.

NOTE: Activities, staffing, and supplies discussed in the work plan should reflect the scope of work as awarded in your Purchase Order, contract, or interlocal agreement. Any proposed changes to the scope of work must be presented through an amendment request form. A work plan that alters the scope of work will not be accepted.

1. Project Staffing, Roles and Responsibilities

- Who will be working on the project and what are their positions? Who will be project lead, analyst, GIS, etc.?
- What regular duties, roles and responsibilities are assigned to each staff person associated with this project?

EXAMPLE

Project Management and Support Services

John Doe will serve as the Project Manager and primary point of contact between the Agency and Clark County. He will be responsible for coordinating the scientific input, advice, analysis and review of materials requested by the County's Project Manager.

Dolly Madison will coordinate all project meetings including the bi-weekly meeting and in conjunction with John Doe ensure that the necessary participants are present at each meeting. She will be responsible for note taking during the meetings and the subsequent dissemination of notes to all parties.

Work Plan and Data Management Plan

Scott Brown will write the data management plan for the project in the Clark County specified format. He will also construct the first annual work plan which comprises this document. He will not be working on the project after July 31, 2024.

Marie Calendar will undertake annual work plan updates for the term of the project.

2. Coordination

- How will you coordinate with Clark County and other entities such as subcontractors?
- Are there any deliverables/milestones for your project that are dependent on receiving information or data from another entity? How will you manage this situation?
- How will you obtain permits or ensure permits are in place for the activities being conducted, if applicable?

3. Essential Equipment, Supplies, Software, and Facilities

- What equipment, supplies, software, and facilities are essential for the completion of the project?
- When do they need to be acquired and in place?

4. Project Activities and Methods

- List the project's objectives as stated in the Scope of Work.
- What are the activities/methods that will be required to meet the project's objectives?

EXAMPLE

Objectives:

- Complete 70 full-coverage ground surveys three times each monitoring season at pre-determined locations on the BCCE.
- Record all instances of active burrows, desert tortoise, and tagged carcasses found during the surveys.

Approach:

Occupancy Surveys:

Occupancy surveys will be conducted between March 30 and May 20. Prior to initiating fieldwork, all personnel will complete a mandatory one-day training covering standardized survey protocols, desert tortoise handling procedures, biosecurity requirements, and data recording procedures. Training will include both classroom instruction and a field component to review survey implementation.

Two field crews will conduct surveys. Each crew will consist of one USFWS-approved Authorized Biologist permitted to handle tortoises and one Biological Monitor. Crews will survey seventy (70) 4-hectare plots three times during the field season, resulting in a total of 210 surveys. Each complete round of 70 plot surveys will be completed prior to initiating the subsequent round. Surveys will only be conducted when ambient air temperatures range between 18°C and 35°C (64°F–95°F). Surveys will not be initiated once ambient air temperature reaches 35°C.

Survey Design and Implementation:

Each 4-ha plot will be surveyed using 10-meter-wide belt transects systematically walked back and forth across the entire plot, beginning at the nearest plot corner. The primary surveyor will track transect alignment and plot boundaries to ensure complete spatial coverage.

Surveyors may temporarily deviate from transect lines as necessary to thoroughly inspect shrubs, bushes, suspected burrows, and other potential refugia to achieve full coverage of the sample unit. After inspection and data collection, surveyors will return to the established transect line and resume systematic coverage. Within a survey round, transects will be oriented along a consistent cardinal direction. In subsequent rounds, transects will be oriented along a different cardinal direction from the previous round to reduce directional detection bias.

Tortoise Handling and Data Collection:

All desert tortoises will be handled in accordance with the most current version of the U.S. Fish and Wildlife Service Desert Tortoise (Mojave Population) Field Manual. All live tortoises encountered within survey plots will be recorded. Live tortoises observed between plots will be documented as incidental observations. Handling time will be minimized, and all required biosecurity protocols will be implemented.

Sex Determination:

Midline carapace length (MCL) will be measured using calipers to the nearest millimeter. Tortoises with MCL > 180 mm will be sexed based on secondary sexual characteristics, with males generally having the following:

- Concave plastron
- Elongated and curved gular scutes
- Enlarged chin glands
- Longer, broader, conical tail
- Shorter, thicker toenails

Tortoises with MCL ≤ 180 mm will be recorded as sex unknown.

Marking and Tagging:

Unmarked tortoises will be fitted with a uniquely numbered COUNTY identification tag. Tags will be affixed to the fourth costal scute (right or left side) to maximize visibility when individuals occupy burrows. Quick-drying epoxy will be used to secure tags. Epoxy will not contact scute margins to avoid interfering with shell growth. Additional care will be taken when tagging juveniles. If epoxy placement cannot avoid scute margins, the individual will not be tagged. Tag numbers will be recorded on both the GPS unit and standardized paper datasheets.

Tortoise Burrows:

Active tortoise burrows ≥ 150 mm in width will be recorded. Burrows will be classified as active if a tortoise is present or if recent evidence of use is observed (e.g., scat, tracks). All active burrows within sample units will be mapped and documented. Potential burrows and caliche dens will be inspected using a hand mirror or high-powered flashlight (particularly under low-light conditions) to assess tortoise presence. Detection of a tortoise within a burrow will constitute both live tortoise detection and confirmation of an active burrow.

Tortoise Carcasses:

Tortoise carcasses will be recorded only if a previously affixed identification tag is present and readable.