# GOPHER TORTOISE PERMITTING GUIDELINES

*Gopherus polyphemus*

**April 2008 / Revisions Effective April 2023 Incorporated by Reference in Rule 68A-27.003, F.A.C.**

**FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION**
**620 South Meridian Street**
**Tallahassee, Florida 32399-1600**

# PERMITTING GUIDELINES REVISIONS HISTORY

Sept 2008 Authorized Gopher Tortoise Agent requirements were revised (pages 10 - 13); Revisions to the following sections have been made: definition of "gopher tortoise habitat" added to the glossary; Table 1, Mitigation Contributions, clarified, options for payment revised to delay acceptance of letters of credit; Recipient Site Permits; Appendix 3; Appendix 4; 100% surveying (various sections); 10 or Fewer Burrows Permit criteria addressed in new Appendix 11; clarification of permit duration criteria; revision to when proof of local government approval is required; Improved Methods for Baseline Vegetation Sampling and Follow-up Monitoring on Recipient Sites in Appendix 7; Revised Indigo Snake handling and relocation guidance consistent with the U.S. Fish & Wildlife Service.

Apr 2009 Revisions to the following sections have been made: clarification on permitting phased projects in Permit Duration; clarification on when FWC can provide notice to the permittee to do an on-site inspection of a 100% survey prior capture activities, and what the procedure is if more burrows are discovered Burrow Surveys on Development Sites and in Appendix 4; clarification on when the 100- mile north/south relocation would be waived under Holding and Transport; clarification on permit duration for 5-year permits.

Upon approval of the revision to these guidelines, all guidelines will be implemented with the exception of Settlement Permits. Guidelines in this document that address the issuance of Settlement Permits (Permit for Authorized Relocation Post-Settlement of Law Enforcement Cases) are shaded because proposed revisions are still in draft form and full stakeholder input has not yet been solicited. Until the Settlement Permit has been approved, the "after-the-fact" permit process continues to be in effect.

June 2010 Revisions to the following sections have been made: added clarification on impacts that occur within 25 feet of a burrow; added mitigation contributions for temporary exclusion permit; replaced "Settlement" Permit with "Disturbed Site" Permit; revised marking scheme; added "Authorized Agent" permit activity for "trainer;" included the option for the on-site relocation of tortoises whose burrows compromise existing structures; revised financial assurance requirements; added Appendix 13: "Criteria for Gopher Tortoise Recipient Sites to Qualify as Research Sites."

June 2011 Revised the monitoring and reporting requirements for long-term protected recipient sites; added new criteria for the relocation of gopher tortoises from public projects to contiguous public conservation lands; added pre-application opportunity for potential recipient sites; added new definitions in the glossary, updated Florida Rule numbers, and editorial and punctuation revisions on pages 11, 12, 16, 24, 25, 40, 41, 42, and 53.

Nov 2011 Added Appendix 12: "Guidelines for Restocking Public Conservation Lands;" revised criteria and mitigation associated with the disturbed site permit; updated FWC contact information; clarified that the $200 mitigation only applies to a project

one time; clarified about listing assistants to authorized agents on after action reports; editorial and punctuation revisions on pages ii, ix, 1, 11, 13, 16, 17, 21, 23 and 40.

Sept 2012 Replaced Appendix 9: "Handling of Commensal Species during Relocations" with "Interim FWC Policy on the Relocation of Priority Commensals."

Apr 2013 Updates to relevant sections to be consistent with the *Gopher Tortoise Management Plan* approved in September 2012; added that refunds will be issued to the permittee less a 3% administrative service charge assessed by the Wildlife Foundation of Florida (WFF); added an option for FWC to request an updated survey for renewal of relocation permits; added guidance regarding categorical exclusion for military installations and large, landscape-scale conservation agreements; included new guidelines for capture activities using mechanical excavation; added suggestion for projects to fence the project boundary to prevent tortoises from re-entering the site; revised Appendix 3 and added Appendix 3-1 that outlines financial assurance guidelines; updated FWC Conservation Easement template (Appendix 8); added guidelines for waif tortoises (Appendix 14); added criteria for Suspension, Revocation, or Nonrenewal of Authorized Gopher Tortoise Agent Permits and Registered Agent Authorization (Appendix 15).

Feb 2015 Revised definition for "abandoned burrow"; added new definition for "improved pasture"; added exemption for county animal control officers to remove domesticated animals; added language regarding the Wildlife BMPs and the Gopher Tortoise Enforcement Policy; clarified the refund request timeframe applies to withdrawn or voided permits; increased duration of 10 or Fewer Burrow Permits to 1 year; eliminated the need to mitigate for hatchlings (≤ 60 mm); updated permit mitigation per 2013 CPI; clarified acceptable forms of local government approvals required to commence relocation activities; added that qualifications documented to obtain an Authorized Gopher Tortoise Agent (AA) Permit must be post-April 2009; added a 2-year time limit for training courses used to satisfy AA qualifications; added new online quiz requirement to renew an AA Permit; reduced requirements to qualify for some capture methods as an AA; eliminated the distance limitation for adjacent public projects to public lands permit; eliminated the 1,000 acre limit for a recipient site application; limited the percentage (< 40%) of improved pasture on a recipient site; added a shade requirement for improved pasture on recipient sites; removed eligibility for "stocking density bonuses" for improved pasture on recipient sites; added criteria for livestock grazing on recipient sites; clarified financial assurance requirements for trusts; added mortality checklist and protocol for recipient sites (and reporting requirements); added requirement recipient site follow-up surveys to include burrow size and class; clarified cause and result of infractions that put tortoises at risk.

Jan 2017 Added authorization to transport gopher tortoises to a recipient site when capture is authorized on the agent's permit; eliminated the $25 mitigation requirement for Burrow or Structure Protection Permit; revised the land lease requirement for public lands as recipient/restocking site (per the Department of Environmental Protection's

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| | letter to FWC dated March 7, 2016); clarified "title search/commitment" to "title search (not older than 180 days)" for recipient sites; revised how nonnative species, especially certain conditional reptiles, found and captured from gopher tortoise burrows are handled;" added a website reference to guidance regarding acceptable forms of local government approval; added a requirement that if tortoises are captured and relocated but land development or clearing does not commence within 90 days of most recent 100% gopher tortoise survey or capture activities, a re-survey of the project site must be conducted prior to site clearing to ensure no tortoises have moved in. |
| July 2020 | Clarified definitions for abandoned burrows, survey methods, registered agent, unimproved pasture, depth to water table, phased relocation, interim after actions reports; eliminated mitigation requirements for all recipient site permit applications and made the additional per tortoise contribution that is added to the standard mitigation consistent across disturbed site permits; changed text to allow refunds for juvenile tortoises under disturbed site permits; clarified that renewal requests must be submitted prior to permit expiration; changed After Action Reporting timeframe from 30 days from release to 45 days from date of capture; clarified that 90 day survey timeframe relates to *start of* capture activities; clarified that failure to report tortoise injuries/mortalities meets infraction issuance criteria; added maximum time of 120 hours for notification of capture activities; clarified that cold weather restrictions include day of release; added new activities for which authorized agents may become authorized; added criteria for renewing Authorized Gopher Tortoise Agent Permits; extended duration of Authorized Gopher Tortoise Agent Permits from 2 years to 4 years; revised permit application limit for Registered Agents to two permits per12-month period; revised the presentation of calculations for determining stocking rates on recipient sites; clarified that burrow surveys conducted on donor (development) sites should be pedestrian surveys, but may be ATV surveys if FWC is notified in advance; changed land-use classification and depth to water table data requirements for permit applications; added ponding frequency to recipient site criteria; eliminated maximum transect length and clarified transect width; clarified stocking density for soft release enclosure pens; limited recipient site capacity reservations to 75% burrow occupancy rate for donor site for more than 10 burrow reservations; clarified that FWC reserves the right to undertake its own investigation into mortalities on recipient sites; updated Appendix 1 to include new rule language; added text that if supported by science, other survey methods may be considered by FWC (Appendix 4); revised marking scheme to account for > 3999 tortoises released at recipient sites (Appendix 5); revised methods and reporting requirements, including duration, for monitoring recipient sites (Appendix 7); updated guidance when encountering commensals during permitted activities (Appendix 9); updated FWC contact information (Appendix 10); revised habitat suitability criteria for relocating gopher tortoises on-site under 10 or Fewer Burrows Permits (Appendix 11); added criteria for Scientific Collecting Permits for proposed research, waif tortoises and educational activities that involve gopher tortoises (Appendix 14); revised infraction process (Appendix 15). |

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| Dec 2022 | Added definitions for single-family property owner and suitable habitat; added Executive Summary and clarified roles and responsibilities of permittees, agents, and assistants of agents; removed emergency take mitigation, increased disturbed site permit mitigation for non-single-family property owners, tiered short-term protected and long-term protected recipient sites and set mitigation by tiers; clarified extension and renewal requirements; separated mark, transport, and release authorizations--such that release is no longer authorized on off-site relocation permits, mark is optional on off-site relocation permits, and transport, holding and handling are authorized on an Authorized Gopher Tortoise Agent Permit; added e-Learning requirement for Authorized Gopher Tortoise Agent Permit renewal/issuance for transport, holding, and handling, mark, and release; defined mark and release responsibilities; clarified that 25% of experience requirements must be from actions conducted within the past 4 years from date of Authorized Gopher Tortoise Agent Permit application; clarified content of burrow scoping letter for scoping authorization on Authorized Gopher Tortoise Agent Permit; clarified on-site Conservation Permit requirements; defined enforceable protection commitment for Short-Term Protected Recipient Sites; clarified native upland plant community language for Enhanced Conservation Value stocking bonus; expanded soft release requirements and added soft release recommendations; added unprotected and short-term protected recipient site renewal criteria; added amendment criteria for additional acreage to a previously permitted recipient site unit; updated figures and appendices to be consistent with revisions in main text; clarified shapefiles requirements for recipient site permits; added recommended mitigation steps for linear sources of high risk mortality; added Mortality Report Form requirement; clarified trust agreement language; clarified survey methods/requirements ; clarified marking requirements; expanded application of temporary exclusion permit; title commitment required for recording a FWC easement; removed ATV data collection. |

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# GLOSSARY

**abandoned burrow –** burrow lacks the classic half-moon shaped entrance and/or no longer consists of a tunnel with a cross-section that closely approximates the shape of a gopher tortoise. The burrow appears unused and dilapidated with an entrance that is partially or completely collapsed; the burrow can be partially or completely filled with leaves or soil. Recent rains, or recent activity by livestock or humans, do not appear to be the primary reason for burrow collapse.

**active burrow –** burrow is in good repair, has the classic half-moon shaped entrance, and appears to be in use by a tortoise. These burrows generally have tortoise tracks or plastron scrapes clearly visible on the burrow floor or on the mound. The burrow floor often contains loose soil caused by tortoise activity. The burrow mound is usually clear of vegetation, and it may contain recently excavated soil. For burrow surveys and tortoise density determination, active burrows are combined with inactive burrows to create the *potentially occupied* classification.

**asters –** plants in the sunflower family.

**baseline density –** the estimated density (tortoises per acre) of resident gopher tortoises on a recipient site before relocated tortoises are released.

**belt transect –** a long, thin plot of specific or variable length and width (observation area). Burrows are counted within each transect to provide an estimate of the number of burrows, and tortoises, on a given site.

**bucket trap –** a plastic bucket (generally five gallons or 19 liters but may be larger or smaller depending on burrow size) that is sunk directly in front of a burrow opening and covered with paper or cloth and soil (for camouflage) to create a pitfall trap for a gopher tortoise. Bucket traps may capture tortoises leaving or entering a burrow.

**caliper –** a device used to measure straight-line distance between two points of an object or animal. In this case, a caliper with two long metal "jaws" is used to measure the length of the top (carapace) and bottom (plastron) shells of gopher tortoises.

**canopy cover –** layer of vegetation extending above head height, usually composed of tree branches.

**carapace –** the top (upper) shell of a tortoise.

**carrying capacity –** the maximum number of individuals of a species that an area can support, given the amount and quality of food, water, and cover.

**clinical signs –** veterinary term referring to visible signs or symptoms of disease, illness, or lack of well-being in animals. Nasal discharge is a clinical sign that may be observed when tortoises have upper respiratory tract disease (URTD).

**commensal –** living in a relationship in which one derives food, refuge, or other benefits from another animal without hurting or helping the other animal. The Eastern indigo snake, Florida pine snake, and Florida mouse are listed commensal species of the gopher tortoise.

**compromised burrow –** gopher tortoise burrow that compromises the integrity or utility of an existing structure (e.g., under a propane tank), or the safety of the resident gopher tortoise (e.g., burrows in a grass parking lot, dirt driveway, etc.).

**conjunctiva –** the mucous membrane that covers the exposed portion of the eyeball and the inner surface of the eye.

**conservation easement –** a voluntary legal agreement between a landowner and a land trust or government agency that limits the type or amount of development on the landowner's property, thus protecting the land's conservation value while retaining private ownership.

**contiguous public conservation land relocation –** one type of on-site relocation where a public project occurs next to or within public conservation lands and where the native population of tortoises can remain intact. Public projects and public conservation lands are considered contiguous if two or more upland communities occur within a distance of 1,000 feet, and there is no physical obstacle (e.g., road greater than 2 lanes, curb and gutter or other physical barriers, or a speed limit >30mph, railroad bed, impenetrable fence, river, and lake) that prevents tortoise movement to other upland areas within the relocation and recipient site.

**correction factor –** also known as a burrow occupancy rate; the percentage of gopher tortoise burrows on a particular site that are occupied at a given time (tortoises generally use more than one burrow over time).

**densiometer –** a forestry device used to determine canopy cover for a given area.

**depth to water table (DWT)** – a soil suitability criterion referring to a saturated zone in the soil. Values provided in the Natural Resources Conservation Service (NRCS) website database are representative values (neither the highest nor lowest) for a particular soil type. The midpoint value of the upper limit water table range that is provided for each soil type in the NRCS database should be used when determining whether a soil type meets the acceptable or desirable soils criteria.

**disturbed site (area) –** a site where disturbance to the ground or vegetation has occurred.

**donor site –** the property, usually a development, from which tortoises are removed during relocations.

**enclosure –** a temporary, specified area of a recipient site that is surrounded by approved fencing or hay/pine straw bales to initially contain relocated tortoises and to help them acclimate to their new surroundings. See "soft release."

**endemic –** exclusively native to a particular geographic area.

**final stocking rate –** the density of tortoises that can be to a recipient site after considering the baseline density of the resident population. The final stocking rate is calculated by determining the maximum stocking rate (also known as the site evaluation stocking rate) and subtracting the baseline density.

**filter fabric fencing** – see "silt fencing."

**forage –** plant material, such as grasses, legumes, and other flowering plants, eaten by grazing animals.

**global positioning system (GPS) –** a satellite-based navigational system; the receiver provides latitude and longitude data for specific applications (in this case, burrow locations).

**gopher tortoise habitat –** gopher tortoises use a variety of generally upland habitats including, but not restricted to, sandhill, scrub, xeric hammock, mixed hardwood-pine, pine flatwoods, dry prairies, coastal grasslands and dunes, and disturbed habitats (e.g., old fields, pastures).

**ground cover –** herbaceous plants and the lowest shrubs occupying an area; a generic term used to describe the mat of plants found on the forest floor.

**herbaceous –** nonwoody plants, generally green and leafy in appearance and texture.

**impact –** for the purposes of these Permitting Guidelines, unless otherwise noted as a "positive impact," an impact includes any act outcome as defined in Rule 68A-27.003 F.A.C., that may adversely affect any gopher tortoise or gopher tortoise burrow.

**improved pasture –** land which has been cleared, tilled, and is dominated by planted non-native or domesticated native forage species and evidence of current or recent cultural treatments (mowing, grazing, burning, fertilizing), with less than 10% canopy cover.

**inactive burrow –** burrow is in good repair but does not show recent tortoise use. The lack of tortoise activity may be due to weather or season. These burrows have the classic half- moon shaped entrance, but the soil on the burrow floor is usually hard-packed, as is the burrow mound. There are no tortoise tracks or recently excavated soil, either on the burrow floor or on the mound. The burrow mound may have vegetation growing on it or be partially covered with fallen leaves. For burrow surveys and tortoise density determination, inactive burrows are combined with active burrows to create the *potentially occupied* classification.

**infraction –** Any act or omission that does not comply with statutes or rules related to

gopher tortoises, FWC-approved guidelines, or permit conditions.

**infrastructure –** structural elements that provide the framework supporting a development (e.g., roads, bridges, water resources, wastewater management, electric power transmission, and telecommunications).

**keystone species** - a plant or animal that increases or decreases the diversity of an ecosystem, depending on its abundance or rarity. The gopher tortoise is a keystone species in upland habitats in Florida.

**legumes –** plants in the bean family.

**line transect distance sampling –** a statistically robust method of estimating gopher tortoise population size and density (recipient sites); this method relies on counting occupied gopher tortoise burrows observed on transects and measuring their perpendicular distance from the transect.

**live trap –** a mesh wire cage trap, either homemade (e.g., flap trap) or commercially available (e.g., Havahart) that is set directly in front of a burrow to capture the resident tortoise.

**local government approval –** a permit, agreement, development order, or other authorization issued or granted in writing by the local city, county or state government having jurisdiction over the property.

**long-term protection (habitat)** – either privately or publicly owned lands placed under a perpetual (i.e., endless duration) conservation easement.

**mesic (habitat) –** having a moderate or well-balanced supply of moisture.

**midstory –** the middle layer, generally 3-9 feet in height, of trees and shrubs (in a multi-layered forest) shaded by taller trees.

**mitigation contribution –** compensation, usually either in the form of monetary contributions or protected habitat donations, to offset the ill effects of human-related land change (e.g., development) on gopher tortoise populations.

**mycoplasma –** an infectious agent (bacterium) that has been associated with upper respiratory tract disease in gopher tortoises.

**nares –** external openings of the nostrils.

**off-site (relocation) –** a FWC-permitted recipient site that does not lie within the same boundaries (as defined in the legal description or as identified by the county parcel identification number) of the development area from which tortoises are to be removed and that may be under either the same or different ownership.

**on-site (relocation) –** a FWC-approved or permitted recipient site that is located within the same boundaries (as defined in the legal description or as identified by the county parcel identification number) of the development area from which tortoises or commensals are to be removed and which is under the same ownership as the development area or is contiguous to public conservation lands.

**PIT tags –** passive integrated transponder (PIT) tags are small microchips (about the size of a grain of rice) that are injected into a tortoise's hind leg using a hand-held applicator. A hand-held scanner reads the tag's electromagnetic code and displays the tag's number. PIT tags provide an alternative method for permanently and uniquely marking individual tortoises.

**plastron –** the bottom (lower) shell of a tortoise.

**plat –** a map of land made by a surveyor showing boundary lines, buildings, and other improvements on the land.

**ponding –** standing water in a closed depression. The water is removed only by deep percolation, transpiration, or evaporation or by a combination of these processes. Ponding frequency classes are based on the number of times that ponding occurs over a given period. Frequency is expressed as none, rare, occasional, and frequent. "None" means that ponding is not probable. The chance of ponding is nearly 0 percent in any year.

**population –** a group of individuals of the same species that occur in a defined area at the same time and regularly interact or interbreed.

**potential tortoise habitat –** those land cover types and soil associations that are known to support the life history requirements of the gopher tortoise. These habitats include, but are not limited to, sandhill, scrub, scrubby flatwoods, pine flatwoods, dry prairie, coastal strand, xeric hammock, mixed pine-hardwoods, and disturbed habitats on suitably drained soils. Designation of an area as potential gopher tortoise habitat does not indicate that the area is currently inhabited by gopher tortoises.

**potentially occupied burrow –** this classification combines the active and inactive categories and, therefore, includes burrows with obvious signs of use and those with minimal or no obvious signs of use. A potentially occupied burrow is in good repair and has the classic half-moon shaped entrance. These burrows may have tortoise tracks or plastron scrapes clearly visible on the burrow floor or on the mound or may have subtle or no tortoise signs. The lack of observable tortoise signs may be due to weather or season. The burrow floor may contain loose soil caused by tortoise activity, or it may be hard packed. The burrow mound may or may not have vegetation growing on it, and it may be partially covered by fallen leaves.

**prescribed fire (controlled burning)** – a planned fire applied within a particular land area under the right weather conditions to accomplish specific, well-defined management objectives.

**protected lands (habitat)** - Public or private lands that provide significant conservation and protection for imperiled wildlife, in this case the gopher tortoise, and are protected from imminent development or alteration, thereby ensuring present and future generations' access to important wildlife resources. Habitat protection can be accomplished through fee simple ownership, acquisition of less-than-fee interests, or other agreements associated with landowner incentive programs.

**public conservation lands –** publicly owned lands that are currently managed for conservation and are designated as conservation lands by Chapter 253.034, Florida Statutes, purchased for conservation purposes using funds from bonds or other monies dedicated specifically for conservation lands acquisition (e.g., Florida Forever, Preservation 2000, local bond initiatives, etc.), or afforded protection under federal law.

**public project –** a project on publicly owned land or land on which the government agency or entity has an easement and in which the public agency or entity is the applicant and subsequent permittee. Examples include public roads, schools, and government facilities.

**recipient site –** the property where relocated tortoises are released.

**recommendation –** preferred protocol or technique that permit applicants or permittees should follow, but that is not required (i.e., other viable methods are allowed). In the context of these guidelines, a recommendation is generally indicated by use of the verbs "should" or "may."

**registered agent –** an individual that has submitted a Registered Agent profile in the FWC online permitting system. Once submitted, this automatically issued status allows the Registered Agent to apply on behalf of the property owner for a 10 or Fewer Burrows Permit with on-site relocation of tortoises captured using bucket trapping, hand shovel excavation or live trapping. However, registered agents may obtain no more than two 10 or Fewer Burrows Permits in a 12-month period.

**relocation –** deliberately moving wild gopher tortoises or commensal species.

**requirement –** action or protocol that must be followed before FWC will issue a permit. A requirement also includes actions that must be undertaken to avoid violating FWC permit conditions and rules. In the text of these guidelines, a requirement is generally indicated by use of the verbs "must" or "shall," or if an action is prohibited, by use of "do not."

**rescue relocation –** deliberately moving individuals or groups of tortoises to areas that

are typically unprotected and may be relatively small, disturbed, or inadequately managed to support long-term population viability. Rescue relocation is conducted primarily to remove wild gopher tortoises from human-caused harm.

**responsible relocation –** deliberately moving wild gopher tortoises into protected, managed, suitable habitat where their future survival and population viability are very likely.

**restocking –** deliberately moving wild gopher tortoises into protected, managed, suitable habitat where resident densities are extremely low and where the tortoises' future survival and long-term population viability are very likely.

**restocking site –** an area of protected, managed, suitable habitat where gopher tortoise populations have been severely depleted or eliminated.

**roller chopping –** a forestry method for preparing sites for planting pine trees; also used as a land management tool to reduce the height and density of understory vegetation. A bulldozer pulls a heavy cylindrical drum with cutting blades that chop vegetation.

**scute –** a bony external plate or scale, as on the shell of a tortoise.

**seropositive –** positive blood test indicating an immune response (exposure) to the bacteria that cause upper respiratory tract disease in gopher tortoises.

**shaded –** reducing or eliminating sunlight and excessive heat when using bucket traps or live traps or when transporting tortoises. Shade may be provided by man-made materials (e.g., plywood, plastic, cloth) or by vegetation (noting that vegetation dries with time and may fail to provide proper shade for more than a few days).

**short-term protection (habitat) –** either privately or publicly owned lands that have some enforceable protection commitment, but those commitments do not meet the definition of "long-term protection" or "public conservation lands."

**shrub –** a woody or herbaceous plant smaller in height than a tree and approximately 3 to 6 feet above the ground, often formed by a number of vertical or semi-upright branches or stems arising close to the ground.

**silt fencing (Belton Industries, #1935) –** a durable type of silt fencing (36 in x 75 ft; pre-assembled, double-stapled, with oak stakes) that has been field-tested as an enclosure material for gopher tortoises. The manufacturer is Belton Industries, PO Box 127, Belton, SC; 800-845-8743; https://beltonindustries.com/products/%e2%80%8bbeltech-1935. Distributors include Pallen Enterprises, Conyers, GA (770-922-1812) and Certified Slings, Ft. Myers, FL (239-334-1343).

**silt fencing (filter fabric) –** temporary sediment barrier consisting of a filter fabric stretched across and attached to supporting posts and entrenched. There are two

types: 1) the silt fence is a temporary linear filter barrier constructed of synthetic filter fabric, posts, and, depending upon the strength of the fabric used, wire fence for support; 2) the filter barrier is constructed of stakes and burlap or synthetic filter fabric. These types of silt fencing are useful for temporary exclusion but are generally not durable enough for six-month enclosures on recipient sites.

**silviculture –** the art and science of establishing and growing healthy, high-quality forests to meet human needs.

**single-family property owner** – The owner of a home or property that is built or will be developed as the residence for one family, person, or household, whose owner has an undivided interest in the home or property.

**site evaluation stocking rate (maximum stocking rate)** – the maximum allowable density on a particular recipient site, determined by evaluating habitat conditions such as canopy cover, soils, etc. Generally, maximum stocking rates range from two to four tortoises per acre.

**site fidelity –** remaining within a particular area.

**soft release (relocation) –** those releases where relocated animals are contained in a temporary enclosure at the recipient site for some period of time before being allowed to roam freely; this differs from hard releases where animals are turned loose without any period to acclimate to their new surroundings.

**Strategic Habitat Conservation Area (SHCA) –** an area not within existing publicly owned conservation lands that FWC has identified as needing protection to meet minimum conservation goals and provide greater security for rare native plants, animals, and habitats.

**Suitable Habitat** – In the permitting context, suitable habitat refers to areas with at least 30% herbaceous groundcover and less than 60% canopy cover, with a midpoint of the upper limit of the water table value of 45 centimeters (18 inches) or greater, or a 31 centimeter (12 inch) upper limit of the water table value provided that the proposed site contains augmentation features or is drained by ditches, evidence of past or current use by tortoises, and no frequency of ponding.

**take –** to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in such conduct. The term "harm" in the definition of take means an act which actually kills or injures fish or wildlife. Such acts may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering. The term "harass" in the definition of take means an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding or

sheltering (Chapter 68A-27 F.A.C.).

**understory –** the lowest vegetative layer in a forest, consisting of woody and herbaceous growth less than 3 feet in height.

**unimproved pasture –** cleared or forest land with major stands of trees and brush where native grasses have been allowed to develop. This land is not typically managed with brush control and/or fertilizer application.

**unprotected site (relocation) –** lands that do not have any enforceable protection commitments or use restrictions that would prevent them from being modified and made unsuitable for tortoises.

**upland (habitat) –** high, generally dry lands that are not wetlands or surface waters.

**upper respiratory tract disease (URTD)** – a disease that occurs in gopher tortoises, where infected individuals may show a discharge from the nasal passages or eyes, swelling of the eyelids or area around the eyes, or reddened third eyelid. These so-called clinical signs (i.e., symptoms) come and go over time.

**viable population –** a stable, self-sustaining population with a high likelihood (e.g., more than 95%) of surviving for a long-term period (e.g., 100 years).

**waif tortoise –** a gopher tortoise that has been removed from the wild but is not associated with a permitted relocation effort and is generally from an unknown location.

**xeric (habitat) –** very dry, in this case due to soil characteristics.

# I. INTRODUCTION

The following gopher tortoise (*Gopherus polyphemus*) permitting guidelines have been produced by the Florida Fish and Wildlife Conservation Commission (FWC), with input from stakeholders, to provide a comprehensive overview of FWC's gopher tortoise permitting system. The gopher tortoise permitting system has been developed as one tool in accomplishing the goals and objectives set forth in FWC's *Gopher Tortoise Management Plan*, approved in September 2012.

The overall goal of the management plan is to restore and maintain secure, viable populations of gopher tortoises throughout Florida so the species no longer warrants listing. Objectives under this goal include the following: 1) minimize the loss of gopher tortoises; 2) increase and improve gopher tortoise habitat; 3) enhance and restore gopher tortoise populations; and 4) maintain the gopher tortoise's function as a keystone species.

This permit system has been designed to help accomplish all four of these objectives by providing incentives to landowners to manage their habitat for gopher tortoises, tortoise commensals, and other native wildlife species; providing incentives to responsibly relocate and restock tortoises to protected, managed lands rather than unprotected sites; providing a new permitting system that does not allow entombment of tortoises; and providing a permitting system with regulation and enforcement sufficient to ensure compliance with FWC guidelines and rules.

The *Gopher Tortoise Permitting Guidelines* is a document that may be edited and updated as needed in the future. Proposed changes to these guidelines will be reviewed annually by an FWC standing team and a public stakeholder assistance group. All changes will require approval from the FWC Executive Director. The FWC Executive Director will also coordinate with the FWC Chairman to determine when changes to these guidelines are substantive and warrant full review by the FWC Commissioners.

These guidelines do not address technical details or aspects of the permit application process associated with the gopher tortoise permitting website. The online permitting system allows individuals to register and submit permit applications, electronically submit required mitigation, and receive official FWC communications, including permits. It also allows the public to search for and view permit applications and issued permits. Additional information, instructions and frequently asked questions on the online permitting system is available at MyFWC.com/GopherTortoise.

These guidelines include specific requirements and recommendations for various elements of the gopher tortoise permitting system. *Requirements* include actions or protocols that must be followed before FWC will issue a permit. They also include actions that must be undertaken to avoid violating FWC permit conditions and rules. The terms "shall" or "must" in this document denote guideline requirements. *Recommendations* include preferred protocols or techniques that applicants or permittees should follow, but that are not required (i.e., other viable methods are allowed). The terms "should" and "may" in this document denote guideline recommendations. These guidelines are intended to be a single source for all policy and protocols associated with FWC's gopher tortoise permitting system. As such, they are written primarily for an audience

seeking such in-depth knowledge. Other publications and online materials have been developed to address the informational needs of groups that do not require an in-depth understanding of the entire system.

# II. EXECUTIVE SUMMARY

The gopher tortoise (*Gopherus polyphemus*) is a Threatened species in Florida and shall be afforded protection under Commission rules and Florida Statutes (See Appendix 1). No person shall take, possess, or sell gopher tortoises, or parts thereof or their nests or eggs except as allowed by specific state permit or authorization. FWC law enforcement investigates reports of unpermitted take, harassment, molestation, damage, or destruction of gopher tortoises or their burrows and enforce any potential criminal violations.

Examples of unpermitted actions that violate Rule 68A- 27.003, F.A.C. include the following:

- Killing, harassing, or causing direct harm to gopher tortoises
- Collapsing gopher tortoise burrow entrances or other parts of tortoise burrows
- Blocking, covering, or filling in gopher tortoise burrow entrances
- Placing substances or devices inside gopher tortoise burrows
- Penning gopher tortoises or otherwise restricting their movement
- Altering gopher tortoise habitat to such an extent that resident tortoises are taken by such activities (see *Glossary* for the definition of take)
- Excluding tortoises from their burrows
- Relocating or possessing gopher tortoises
- Clearing, grading, paving, bulldozing, digging, building construction, and site preparation for development (i.e., an activity conducted in preparation for development that disturbs vegetation or the ground) within 25 feet of a gopher tortoise burrow

## Permits

The requirements and recommendations included in these guidelines apply to permits that authorize capture, handling, transport, marking, scientific collection, research, on-site or off-site relocation, and receipt of gopher tortoises at permitted recipient sites (see Table 1 and Appendix 2). Entombment of tortoises is not allowed under the conditions of any permit, with the exception of Emergency Take Permits. The majority of permit options pertain to the relocation process, which typically involves capturing and then releasing tortoise(s) to either another authorized location within the same property (on-site relocation) or to a recipient site permitted on a different property (off-site relocation) when development-related activities are planned within 25 feet of a gopher tortoise burrow. Landowners are required to obtain a permit to relocate gopher tortoises prior to commencing land clearing and development activities that fall within 25 feet of a potentially occupied gopher tortoise burrow.

In cases where development-related activities commence prior to relocation permit issuance or before gopher tortoise relocation is completed under an issued relocation permit, a relocation permit known as the disturbed site permit may be required and work shall stop on-site until all gopher tortoises have been relocated. The disturbed site permit process may result in the denial of an existing permit application or revocation of an issued gopher tortoise relocation permit. A FWC law enforcement investigation may also be conducted to determine if gopher tortoises or

gopher tortoise burrows have been impacted. Regardless of the outcome of investigations, the disturbed site permit requires that gopher tortoises potentially buried in disturbed portions of the project site are given adequate time to dig out (a minimum of 28 days without further site disturbance, comparable to that required during tortoise trapping efforts; however, longer periods may be warranted during cold weather when tortoises are less active.)

Table 1. Summary of Gopher Tortoise Permit Options.

| Permit Type | Description |
|---|---|
| 10 or Fewer Burrows (on-site relocation) | Permits capture of tortoises within a specified area where development-related activities will take place within 25 feet of a burrow; permits relocation of tortoises to another authorized location within the same property; project boundary must be silt fenced; take is limited to < 11 burrows; survey, specific capture methods, and release are required authorizations on this permit; mark is an optional authorization on this permit; authorized agent does not have to be named on permit. |
| 10 or Fewer Burrows (off-site relocation) | Permits capture of tortoises within a specified area where development-related activities will take place within 25 feet of a burrow; permits relocation of tortoise(s) to permitted recipient site(s) on a different property(ies); take is limited to < 11 burrows; survey, specific capture methods, and release are required authorizations on this permit; mark is an optional authorization on this permit; authorized agent must be named on permit. |
| Conservation (on-site relocation) | Permits capture of tortoises within a specified area where development-related activities will take place within 25 feet of a burrow; permits relocation of tortoises to either an authorized, unprotected recipient area within the same property or a permitted recipient site on the same property; belt transect with scoping population survey is required for this application; project boundary should be silt fenced; vegetation survey and soft release may be required for recipient areas > 25 acres; permits take of > 10 burrows, or if a previous 10 or Fewer Burrows Permit has been issued, any burrows in addition to those originally permitted; survey, specific capture methods, mark, and release are required authorizations on this permit; authorized agent must be named on permit. |
| Conservation (off-site relocation) | Permits capture of tortoises within a specified area where development-related activities will take place within 25 feet of a burrow; permits relocation of tortoise(s) to permitted recipient site(s) on a different property(ies); permits take of > 10 burrows, or if a previous 10 or Fewer Burrows Permit has been issued, any burrows in addition to those originally permitted; survey and specific capture methods are required authorizations on this permit; mark is an optional authorization on this permit; authorized agent must be named on permit. |

| Permit Type | Description |
|---|---|
| Temporary Exclusion (on-site relocation) | Permits capture of tortoises within a specified area where installation or maintenance of major linear utility transmission lines will take place within 25 feet of a burrow (or other projects, as approved); permits temporary exclusion of tortoises from the utility construction corridor for up to 6 months, and where habitats within the corridor will be restored to provide suitable habitat for tortoises following completion of the utility installation; survey, specific capture methods, mark, and release are required authorizations on this permit; authorized agent must be named on permit. |
| Disturbed Site (Includes Disturbed Site 10 or Fewer (on-site/off-site relocation); Disturbed Site Conservation (on-site/off-site relocation); and Disturbed Site Temporary Exclusion (on-site relocation)) | Permits capture/relocation of tortoises from within disturbed portions of the project area after completing special survey requirements. Required in situations where premature disturbance to the vegetation or ground has occurred before gopher tortoise burrow surveys are complete or before gopher tortoise capture and relocation activities have been completed; mark is a required authorization on Disturbed Site Conservation Permits with on-site relocation but optional for Disturbed Site 10 or Fewer Permits (on-site relocation); survey, specific capture methods, and release are required authorizations on all disturbed site permits; authorized agent must be named on permit. |
| Burrow or Structure Protection (on-site relocation) | Permits capture of tortoises from burrows that jeopardize the integrity or utility of an existing structure and therefore pose a safety concern for the public and/or tortoises; permits relocation of tortoises to another authorized location within the same property; mark is an optional authorization on this permit if an authorized agent is named; specific capture methods and release are required authorizations on this permit; take is limited to < 3 burrows; authorized agent does not have to be named on permit. |
| Emergency Take | Permits entombment of tortoises and take of burrows. Available only in extreme circumstances where there is an immediate danger to public health and safety or in direct response to an official declaration of emergency by the Governor or local government authority. |
| Unprotected Recipient Site | Permits receipt of up to 2 tortoises/acre on lands that meet recipient site permitting criteria but do not have any enforceable protection commitments or use restrictions that would prevent them from being modified and made unsuitable for tortoises; survey, scope, mark, and release are required authorizations on this permit; issuance also requires a Gopher Tortoise Management Plan; authorized agent must be named on permit. |
| Short-term Protected Recipient Site | Permits receipt of up to 2 tortoises/acre on lands that meet recipient site permitting criteria and have at least 50 years of enforceable protection commitment or use restrictions that would prevent them from being modified and made unsuitable for tortoises; survey, scope, mark, and release are required authorizations on this permit; issuance also requires a Gopher Tortoise Management Plan; authorized agent must be named on permit. |
| Long-term Protected Recipient Site | Permits receipt of up to 4 tortoises/acre on lands that meet recipient site permitting criteria and have FWC enforceable protection commitments or use restrictions that would prevent them from being modified and made unsuitable for tortoises; survey, scope, mark, and |

| Permit Type | Description |
|---|---|
| | release are required authorizations on this permit; issuance also requires long-term monitoring, and financial assurance mechanism in addition to a Gopher Tortoise Management Plan; authorized agent must be named on permit; stocking bonus eligible for up to a maximum density of 4 tortoises per acre, including resident tortoises. |
| Contiguous Public Conservation Land Recipient Site | Permits receipt of up to 2 tortoises/acre on public lands that meet recipient site permitting criteria and are contiguous with a project location permitted for capture of tortoises due to planned development-related activities; survey, scope, mark, and release are required authorizations on this permit; issuance also requires MOA, long-term monitoring, and financial assurance mechanism in addition to a Gopher Tortoise Management Plan; authorized agent must be named on permit; stocking bonus eligible for up to a maximum density of 2 tortoises per acre, including resident tortoises. |
| Long-term Protected Restocking Site | Permits receipt of up to 2 tortoises/acre on public lands with a depleted population (< 1 burrow/acre) that meet restocking site permitting criteria; survey, scope, mark, and release are required authorizations on this permit; issuance also requires MOA, long-term monitoring, and financial assurance mechanism in addition to a Gopher Tortoise Management Plan; authorized agent must be named on permit; stocking bonus eligible for up to a maximum density of 2 tortoises per acre, including resident tortoises. |
| Research Recipient Site | Permits receipt (including mark and release responsibilities) of up to 4 tortoises/acre on lands that meet recipient site permitting criteria but may not have any enforceable protection commitments or use restrictions that would prevent them from being modified and made unsuitable for tortoises after proposed research is completed; survey, scope, mark, and release are required authorizations on this permit; issuance also requires long-term monitoring in addition to a Gopher Tortoise Management Plan and must be permitted with a previous or concurrent Scientific Collecting Permit issued for research that requires relocations to an unpermitted recipient area; authorized agent must be named on permit; stocking bonus eligible for up to a maximum density of 4 tortoises per acre, including resident tortoises. |
| Scientific Collecting (Including Waif Recipient Sites) | Permits research, educational use of tortoises, eggs, or parts thereof, or receipt of up to 2 tortoises/acre on lands that meet waif recipient site permitting criteria. |
| Authorized Gopher Tortoise Agent | Permits the permittee, referred to as an authorized agent, to undertake activities, such as surveying, capturing, marking, transporting, relocating tortoises and tortoise commensals (e.g., gopher frog, pine snake, Florida mouse) following the provisions specified in a relocation/recipient site permit. |

## Roles and Responsibilities

It is the responsibility of the Permittee and authorized gopher tortoise agents (hereafter authorized agent) and their assistants to comply with permit conditions and all applicable guidelines requirements. Permit noncompliance is grounds for enforcement action; for permit termination, revocation, suspension, or modification; or denial of a permit renewal application (68-1.010 F.A.C.; see also Appendix 15). Failure of the permittee and/or authorized gopher

tortoise agent to fulfill the responsibilities outlined in these guidelines puts tortoises at risk for take under 68A-27.003 F.A.C.

An individual permitted as an authorized agent can be authorized to conduct the following activities:

- Survey under a relocation or recipient site permit
- Scope under a recipient site permit or for a proposed recipient site
- Capture under a relocation permit
- Supervise backhoe excavation under a relocation permit
- Mark under a recipient site permit, an on-site relocation permit, or off-site relocation permit
- Transport, holding, and handling
- Release (on-site under a relocation permit or off-site under a recipient site permit)
- Training
- Collect blood samples under a relocation or recipient site permit

The specific activities that an authorized agent is granted permission to perform will be listed on the Authorized Gopher Tortoise Agent Permit; the relocation and recipient site permits specify the location for which specific activities are authorized. These three permit types - the authorized agent permit and the relocation and recipient site permits (when off-site relocation is permitted)- are all necessary and work together to identify the specific agent's permitted activities and the location(s) where those activities can occur. With the exceptions of 10 or Fewer Burrows Permit with on-site relocation, Burrow or Structure Protection Permits, and Scientific Collecting Permits, a single authorized agent shall be named on a gopher tortoise permit. The named agent must be authorized on his/her Authorized Gopher Tortoise Agent Permit to perform all authorized activities required by the relocation/recipient site permit for which he or she is named. For example, issuance of a recipient site permit requires that the named agent is authorized on his/her Authorized Gopher Tortoise Agent Permit to survey, scope, mark, and release (see Table 1).

Named authorized agents shall be held accountable for the correct completion of responsibilities related to each activity authorized on the relocation or recipient site permit. Responsibilities for each authorized activity are detailed in these guidelines. For example, release responsibilities for off-site relocation to a permitted recipient site include following soft release requirements (e.g., ensure proper installation, ensure maintenance/repairs, and ensure regular monitoring of the soft release enclosure), but also tracking release of tortoises, maintaining records of soft release enclosure locations/maintenance timeframe, and providing shapefiles with attribute tables to the FWC and/or the permittee upon request. This accountability, however, does not require the named agent to personally complete the authorized activity. Instead, assistants may work under the supervision of an agent named on a relocation or recipient site permit if these assistants are registered with the FWC and listed under the named agent’s Authorized Gopher Tortoise Agent Permit. Assistants shall only conduct the activities authorized on the named agent’s Authorized Gopher Tortoise Agent Permit. Both the named agent and assistants may be held accountable for noncompliance with permit conditions and guidelines requirements, as the named agent is responsible for any such activities performed by an assistant to the same extent as if he/she had personally carried out those activities under the designated permit. The named agent or his/her

assistants shall not perform authorized activities under a permit when the permit conditions and guidelines requirements are not met but the permit status is active (e.g., tortoises shall not be released at a recipient site when the structural integrity of the soft release enclosure is compromised, or the habitat management components of the management plan are not met).

Only the named agent or assistants of a named agent shall conduct work authorized on a relocation or recipient site permit, except for the two cases when an Authorized Gopher Tortoise Agent Permit is not required to conduct an activity. Specifically, authorization under an Authorized Gopher Tortoise Agent Permit is not required to conduct (1) the belt transect surveys needed for relocation permit applications or (2) the vegetation surveys required for recipient site permit applications and long-term monitoring. However, the full legal name of the individual who conducted a survey for a relocation or recipient site permit must be included in data files and survey maps submitted to the FWC for reference (See Appendix 3). The named agents on the permit and the assistants of named agents will be held responsible for survey data submitted for a permit application or monitoring activities required under the permit, even if the individual collecting the survey data is not the named agent or an assistant. Survey accuracy can be used to inform future permitting decisions.

In some instances, the named agent for the relocation permit is responsible for a permitted activity and the named agent for the recipient site is responsible for verifying that activity was done correctly, prior to release of tortoises at the recipient site. For example, when the donor site authorized agent marks tortoises prior to transport to a permitted recipient site (off-site relocation), the named agent for the donor site shall be responsible for ensuring marking of tortoises has been completed in accordance with Appendix 5 of the Gopher Tortoise Permitting Guidelines and the marking scheme required by the recipient site at which the tortoises will be placed; the named agent for the recipient site at which the tortoises are placed is responsible for confirming that the marking has been completed correctly and in accordance with Appendix 5, prior to release of tortoises.

The permittee may also be held responsible for the work that the named agent and assistants of the named agent complete under the relocation or recipient site permit. In addition, the permittee shall be held responsible for providing property access to the named agent and his/her assistants working under the permit, such that they are able to complete the authorized activity in accordance with permit conditions and guidelines requirements. Permittees of recipient site and relocation permits with on-site relocation are responsible for the habitat management commitments written in the Gopher Tortoise Management Plan approved by the FWC for the recipient site and on-site recipient site requirements, respectively. Temporary exclusion permittees, as well as the named agents and the assistants of the named agents, are responsible for regularly monitoring and maintaining the structural integrity of the temporary exclusion fencing and removing the fence following completion of construction activities. If approved under a temporary exclusion permit or 10 or Fewer Burrows Permit with on-site relocation, the permittee and the named agent and the assistants of the named agents (if applicable) will be responsible for permit conditions related to temporary enclosures and penning for the respective permits. Both the recipient site permittee and named agent are responsible for providing reservation letters, tracking reservations, and keeping accurate written records of management activities and providing reservation and management information to the FWC upon request (and

when applicable per permit requirements). Both the recipient site permittee and named agent will be held accountable for not submitting a complete and accurate monitoring report by the report deadline when required by the recipient site permit. Lastly, either the named agent or permittee may request an amendment to change which individual is listed as the named agent on the relocation/recipient site permit; however, authorization for activities under the permit shall be suspended unless there is an authorized agent listed. The permittee must be the current property owner/lessee of the property permitted as a recipient site and the point of contact listed on the permit must be kept up-to-date in the online permit system.

## Activities That Do Not Require a Permit

Agricultural, silvicultural, and wildlife management activities are addressed in the attached Gopher Tortoise Enforcement Policy (Appendix 1), which is a part of these guidelines. These activities include tilling, planting, harvesting, prescribed burning, mowing, disking, roller chopping, and tree cutting. For additional guidance on activities that do not require a permit, refer to the *Gopher Tortoise Enforcement Policy* in Appendix 1.

Recognizing the need to remove impediments to land management activities that benefit wildlife, 68A-27.007(2)(c) authorizes these activities when "not inconsistent with Management Plans for species" without need for a permit.

Recognizing that agricultural lands provide a valuable benefit to the conservation of fish and wildlife, agricultural activities have not required a permit. To further enhance agriculture's contribution to the conservation of these species, the Legislature authorized the development of best management practices and rule 68A- 27.007(2)(d), F.A.C. which provides that agriculture conducted in accordance with these voluntary Wildlife Best Management Practices (BMPs) adopted by the Department of Agriculture and Consumer Service does not require an incidental take permit from the FWC.

The *Gopher Tortoise Management Plan* identifies the replacement of the Enforcement Policy with Wildlife BMPs. FWC is working with the Florida Department of Agriculture and Consumer Services (DACS), landowners, and other stakeholders to legislatively authorize, develop, and adopt BMPs to protect wildlife species. Based on this work, DACS adopted Silviculture Wildlife BMPs into Chapter 5I-8, F.A.C.; the collaborative work continues towards finalizing Agriculture Wildlife BMPs. Once the Agriculture Wildlife BMPs are adopted by DACS, 68A-27.007(2)(d), F.A.C. will again be amended to refer to those additional BMPs. The *Gopher Tortoise Enforcement Policy* will remain in place and be re-evaluated within one (1) year after full implementation of the Wildlife BMPs for Silviculture and Agriculture.

Linear utility and highway right-of-way vegetation maintenance activities that may impact gopher tortoises or gopher tortoise burrows do not require a permit. These activities include mowing and tree cutting.

Routine yard and vegetation maintenance and landscaping activities that do not harm gopher tortoises or collapse tortoise burrows do not require a permit. Site preparation activities such as hand trimming vegetation and other minor determinations of suitability of property for development do not require a permit. These low-impact activities are allowed without a permit if

they do not harm gopher tortoise burrows, harm gopher tortoises, or disturb the ground or vegetation so that accurate tortoise burrow surveys or FWC site checks cannot be conducted.

**Note:** Agricultural, silvicultural, wildlife management, and linear utility and highway right-of-way vegetation maintenance activities have not been shown to routinely result in significant gopher tortoise deaths (i.e., beyond the infrequent, accidental death of individual tortoises). Therefore, FWC will investigate reports of the death of significant numbers of tortoises to determine if these deaths resulted from activities that did not constitute bona fide agricultural, silvicultural, wildlife management, or linear utility and highway right-of-way vegetation maintenance activities. The FWC may pursue such activities as a violation of Rule 68A-27.003, Florida Administrative Code (F.A.C.), which is included in Appendix 1.

**Note:** Activities that are intended to prepare land for development are not considered bona fide agricultural, silvicultural, and wildlife management, linear utility, or highway right-of-way vegetation maintenance activities. A permit is required for land development activities (including site preparation for such activities) that result in impacts to gopher tortoises or their burrows. See Site Preparation Activities for Development below.

A FWC permit is not required if development activity on a project site avoids impacts to tortoise burrows by 25 feet in all directions from the mouth of all burrows. Development activity must not harm gopher tortoises nor violate rules protecting them. Leaving a 50-foot diameter (25-foot radius) circle of habitat around each burrow (e.g., undisturbed "islands" or "crop circles") and developing the rest of a project site does not qualify and requires a permit to ensure that gopher tortoises are not harmed.

A FWC permit is not required for animal control officers to safely remove a domesticated animal from inside a gopher tortoise burrow. A copy of the officer's final report is required to be sent to FWC (via email to GTPermits@MyFWC.com) after each case is closed. The FWC reserves the right to revoke this exemption if necessary. This exemption only applies to animal control officers acting in their official capacity, not the general public, animal trappers, or pet owners.

# III. PERMITTING GUIDELINES

## Mitigation Contributions

A mitigation contribution is required for all relocation permits. A flat mitigation contribution from each applicant applies to the first 10 burrows (up to 5 tortoises for Conservation Permits) impacted on each project site authorized under a 10 or Fewer Burrows or Conservation Permit. This flat mitigation contribution of $234 is only applied one time for each project site. Additional mitigation for sites supporting more than 10 tortoise burrows is required. Mitigation contributions are assessed by determining the estimated number of tortoises impacted (the number of potentially occupied tortoise burrows to be impacted, divided by 2). A variable scale for additional contributions is based on the overall conservation value of the action being permitted and the estimated number of gopher tortoises being impacted by the project. Preferred conservation actions, such as responsibly relocating tortoises to long-term protected lands, require a lower contribution per tortoise than relocations to short-term protected or unprotected lands or relocations associated with disturbed site permits. All mitigation contributions support gopher tortoise conservation actions as specified in the FWC-approved *Gopher Tortoise*

*Management Plan*.

Other costs may be incurred by applicants obtaining permits or conducting activities related to gopher tortoises. Examples of such costs include fees paid to consultants, fees paid for on-site preparation for gopher tortoise related activities, fees paid to owners of recipient areas, and fees associated with establishing conservation easements. These fees are not paid to FWC nor controlled by FWC.

All mitigation contributions must be submitted to FWC as specified in these guidelines. Gopher tortoise mitigation contributions for a 10 or Fewer Burrows Permit, Authorized Gopher Tortoise Agent Permit, recipient site permits, temporary exclusion permit, or disturbed site permit must be submitted to FWC before the permit is issued. Mitigation contributions for Conservation Permits representing 100% of the estimated total amount due will be submitted prior to issuance of the permit. Online submission of mitigation contributions is provided in order to expedite permit processing and issuance.

If the actual number of gopher tortoises relocated is less than the number estimated, a refund of any excess funds paid will be made to the permittee, less the 3% administrative service charge assessed by the Wildlife Foundation of Florida (WFF) applied only to the refunded amount. Permittees seeking a refund must submit a refund request form to FWC within 60 days of the date that the final after action report is accepted. Disturbed site permits follow a different refund process (see Section IV, pages 40-41). If a gopher tortoise relocation permit is acted upon in attempt to capture a gopher tortoise(s) but no gopher tortoise is captured, or if a permit expires with no burrows impacted and no tortoises captured, the minimum mitigation amount required to obtain that type of relocation permit (e.g., $234 for 10 or Fewer Burrows Permits or Conservation Permits, or $117 for temporary exclusion permits with tortoises excluded for two months or less) less the 3% administrative service charge assessed by the WFF, will not be refunded to the permittee because the issued permit authorized both the capture of gopher tortoises, and the damage, collapse or covering of gopher tortoise burrow(s). If a refund is requested for a withdrawn permit application or voided permit (with no action taken), the refund request form must be submitted to the FWC within 60 days from the date the application was withdrawn or permit voided.

If the number of tortoises encountered during relocation exceeds the number permitted (with exception to hatchlings ≤ 60 mm), then the permittee or agent must stop all attempts to capture any gopher tortoise in excess of the permitted number and call the FWC Gopher Tortoise Permit Office as soon as possible. The permittee or agent must submit an application to amend the relocation permit, submit the associated mitigation contribution for additional tortoises, and be in possession of the issued amended permit before attempting to capture or relocate any gopher tortoise in excess of the original number permitted. The recipient site representative must not accept any gopher tortoise(s) in excess of the number authorized on a relocation permit (with exception to hatchlings ≤ 60 mm).

Juvenile tortoises that are less than 130 mm [5 inches] carapace length must be included on the burrow surveys and permitted for relocation. However, refunds (less the 3% administrative service charge assessed by the WFF) will be provided for relocated juvenile tortoises captured under Conservation, temporary exclusion, and disturbed site permits after the final after action

report is submitted and approved, and a refund request form is submitted by the permittee or his/her agent. Burrows of gopher tortoise hatchlings that are equal to or less than 60 mm must be included on burrow surveys, however; mitigation contributions are not required. All hatchling gopher tortoises ≤ 60 mm will be authorized for relocation by permit condition on Conservation, 10 or Fewer Burrows, and temporary exclusion permits and must be included in the after action report. Gopher tortoise eggs and nests are not included when calculating the mitigation contribution. All eggs and juvenile tortoises must be relocated.

In cases where the number of burrows impacted can be accurately determined because of pre-existing on-site surveys, mitigation contributions will be calculated by multiplying this number by 0.5. This adjusted number will be used to calculate mitigation contributions as prescribed in Table 2. In cases where the total number of burrows impacted cannot be accurately estimated from prior surveys, mitigation contributions will be based on actual documented burrow evidence. Such evidence may include, but is not limited to, exit holes from old burrows, partial remains of burrows, and the density of gopher tortoise burrows (per acre) that occur within surrounding areas that contain similar vegetation and soil characteristics.

When an Emergency Take Permit includes requirements for trapping or excavating burrows within an area that has been disturbed by clearing, grading, disking or other ground disturbance activities, no refunds will be made if the actual number of tortoises relocated is less than the number estimated, since gopher tortoises may have left the area during the disturbance.

The FWC realizes that all sites are unique and that circumstances influencing gopher tortoise populations are dynamic. For that reason, the initial permitting mitigation contribution is based on estimates from site surveys and a general application of a statewide correction factor. Estimating the total amount due is accomplished by calculating the number of potentially occupied burrows (based on surveys of not less than 15% of the project site areas where potential gopher tortoise habitat is found), dividing by 2, and then applying the mitigation contribution amounts shown for the various permit types described in Table 2.

The mitigation contribution amounts will be adjusted over time to keep pace with inflation. Tying these changes to the Consumer Price Index will ensure mitigation contributions are adjusted relative to actual price increases or decreases. The FWC will use the "All Urban Consumers Price Index" (CPI-U), which is a reflection of the highest percentage of the population, and the CPI-U for the Southeast region. Information on the Consumer Price Index is available online at www.bls.gov/cpi.

In subsequent years, mitigation contributions will change by an amount equal to the annual CPI-U for the Southeast region and will be based on changes during the CPU calendar year (January 1– December 31). However, the minimum threshold for mitigation is set at the contribution levels outlined in the original approved version of the Gopher Tortoise Permitting Guidelines (April 2008). Adjustments to the contribution amount will take effect on July 1 of each year. The contribution will be calculated based on the date that a completed application is received by FWC. Mitigation contribution amounts will be published at MyFWC.com/GopherTortoise and sent out to all permittees.

Table 2. Permit Type, Duration, and Corresponding Mitigation Contribution (adjusted for 2022 CPI. For current mitigation amounts, refer to MyFWC.com/GopherTortoise). See IV. Types of Permits for more information about permits and tiers.

| PERMIT | TIER | DURATION | MITIGATION CONTRIBUTION |
|---|---|---|---|
| Authorized Agent | | 4 years | $585 (one-time contribution) |
| Recipient Site | | Varies | No mitigation required |
| 10 or Fewer Burrows<br>*Tortoises are relocated on-site or off- site** | | 1 year | $234 |
| Conservation<br>*>10 burrows relocated to long-term protected area* | 1 | 1 year or 60 months | $234 for first group of 10 burrows (up to five gopher tortoises)<br>$351 each additional tortoise |
| | 2 | | $702 each additional tortoise (after first five tortoises) |
| Conservation<br>*>10 burrows relocated to public conservation lands or to contiguous public conservation land* | | 1 year or 60 months | $234 for first group of 10 burrows (up to five gopher tortoises)<br>$351 each additional tortoise |
| *Conservation*<br>*>10 burrows relocated to short- term protected area* | 1 | 1 year | $234 for first group of 10 burrows (up to five gopher tortoises)<br>$1,053 each additional tortoise (after first five tortoises) |
| | 2 | | $2,106 each additional tortoise (after first five tortoises) |
| | 3 | | $3,511 each additional tortoise (after first five tortoises) |
| Conservation<br>*Tortoises relocated to unprotected recipient site or areas* | | 1 year | $6,318 per tortoise |
| Temporary Exclusion<br>*Exclusions for longer than 6 months must apply for a Conservation Permit* | | 1 year or 60 months | $117 per tortoise (exclusions < 2 months)<br>$234 per tortoise (exclusions 2 to 4 months)<br>$351 per tortoise (exclusions 4 to 6 months) |
| Burrow or Structure Protection<br>*Up to 2 burrows on-site* | | 6 months | No mitigation required |
| Disturbed Site<br>*See Section IV* | | 1 year | $5,000** additional per tortoise added to the standard mitigation except for project sites owned by a single-family property owner that require a mitigation contribution of $1,755 additional per tortoise. |

*Gopher tortoises relocated off-site under a 10 or Fewer Burrows Permit cannot be placed at an unprotected recipient site.

**Additional per tortoise mitigation is not required for each tortoise authorized for relocation that is in excess of the number estimated (see Appendix 4) to occur within a disturbed site.

## Documentation for Permit Applications and Issuance

In accordance with the requirements of Rules 68A-27.007 and 68A-27.003 (F.A.C.), a permit for a gopher tortoise capture/relocation/release activity must be secured from FWC before initiating any relocation work. Permit applications must include tortoise surveys of the entire development, not just infrastructure components. Permits will not be issued solely for proposed infrastructure (e.g., roads and utilities) that are part of a larger common development plan, project, plat, or subdivision. Issued permits must address all burrows to be impacted on the entire project, development, plat, or subdivision site plan (the development footprint). For example, if the entire development footprint impacts more than 10 burrows, such sites will not be eligible (i.e., meet the criteria) for issuance of a 10 or Fewer Burrows Permit, even if the infrastructure itself impacts 10 or fewer burrows. However, large projects that are subdivided into development phases where each phase is approved by the local government under a separate development order may be permitted separately, but reduced mitigation will only apply to one permit of a multi-phased project. Permits issued for separate local government approved development phases will have conditions that specify the gopher tortoise relocation activities that must be conducted for those specifically permitted phases of development. Applicants submitting permit applications for projects with site plans that include lots or space for residential, industrial, institutional, commercial, or other development must consider all burrows within such areas to be impacted by the development footprint. Only those tortoises residing in burrows that are located within either designated preserves or other areas that will not be impacted by any activity associated with the ultimate build-out of the proposed development site do not have to be relocated. Required information for applications is outlined in Appendix 3, Informational Needs for Relocation Permit Applications and Recipient Site Permit Applications. Checklists are provided at MyFWC.com to assist applicants with the required information for each permit type.

As of April 2009, all but Temporary Exclusion Disturbed Site and Burrow or Structure Protection Permits can be applied for online at MyFWC.com/GopherTortoise. The online permitting system allows individuals to register, submit permit applications, electronically submit required mitigation, and receive official communications including permits from FWC. Paper applications are also available for all permits and can be submitted to gtpermits@myfwc.com, but applicants are encouraged to apply online to expedite the review process. Additional information, instructions and frequently asked questions regarding the online permitting system are available online at MyFWC.com/GopherTortoise. Paper applications are available online at MyFWC.com/GopherTortoise or from the Gopher Tortoise Permit Office, Florida Fish and Wildlife Conservation Commission, 620 South Meridian Street, Mail Station 2A, Tallahassee, FL 32399-1600; (850)921-1031. For those opting to submit paper applications, the complete application should be submitted to the Gopher Tortoise Permit Office at the above address at least 90 days prior to the time needed, although most applications will be processed in 45 days or less. Timely issuance of permits is dependent on receipt of required documentation.

Demonstration of need for a permit will require submittal of a development plan or proof of local government approval for the activity proposed (in the form of preliminary or final subdivision plat, or master planned unit development approval; Development of Regional Impact [DRI] development order; or authorization to commence clearing, grading, or construction activities). The actual capture and relocation authorized by the permit shall be conditioned upon the permittee submitting proof of local government approvals for clearing, grading or construction

activities (if required at the local government level) to the FWC prior to commencing capture and relocation activities.

Local governments may have requirements that an applicant demonstrate that FWC permits have been issued, or even that FWC permit requirements have been met, before issuing their final local government approval. Only in these situations, the FWC will accept a letter or email from the local government development review staff that indicates local government approval is pending but won't be issued until after gopher tortoises are relocated; or the FWC will provide letters of intent or special conditions to permits, if necessary, that can be used to demonstrate agency concurrence with a proposed project. For projects that do not require local government approval, the FWC will accept a valid authorization or permit (e.g., environmental resource permit, dredge and fill permit) from an entity or agency that allows commencement of clearing, grading or construction of the project. Refer to our website (http://myfwc.com/license/wildlife/gopher-tortoise-permits/) for guidance regarding acceptable forms of local government approval for Gopher Tortoise Conservation and 10 or Fewer Burrows (off-site) relocation permits.

Note that approval of development phases by the local government does not equate to FWC approval of phased relocation, whereby tortoise relocation and development activities for the same development project may overlap in time but not space. Phased relocation under a single permit may be approved by FWC if: (1) a request for phased relocation is specified clearly in the comments section of the permit application, and (2) areas within a project site that are proposed for phased relocation are clearly indicated in the development plan and survey maps submitted with the permitting application (see Appendix 3 for information needed for relocation permit applications). It is at the discretion of FWC to approve phased relocation; however, phased relocation should not be approved when it is requested for areas within a project site that are contiguous and not separated by a manmade or natural barrier that impedes gopher tortoise movement (e.g., silt fence or water body, respectively). Phased relocation is not restricted to projects with development phases approved by the local government, nor is phased relocation required to align spatially with development phases approved by the local government.

Relocating gopher tortoises from a development site should be the final action taken prior to commencement of clearing, grading, or building activities. This is to minimize tortoises from recruiting back to the development site if relocated prematurely, and to prevent unnecessarily relocating tortoises should the development project not occur. Therefore, if site clearing for construction is delayed for any reason, FWC recommends that the named agent, or permittee in instances where a permit does not require a named agent (i.e., 10 or Fewer Burrows Permit) submit an interim after action report instead of the final after action report to delay voiding the relocation permit until clearing commences and they have ensured no tortoises have moved onto the site (see page 13 for more information on after action reports). If site construction does not commence within 90 days from the date of the most recent 100% gopher tortoise survey or capture activities, a new gopher tortoise burrow survey must be completed to ensure gopher tortoises have not moved in and, if found, a valid permit must be obtained, amended, or acted on to capture and relocate all tortoises prior to commencing any site clearing. Silt fencing should be installed and maintained for the duration of the project in order to prevent tortoises from moving onto the development site. Permits are not issued to move tortoises off a property where no

development activity is planned.

## Permit Duration, Renewal and Extension

The duration of each type of permit will be indicated on the permit. Permit amendments, including renewal and a one-time extension request, must be submitted prior to permit expiration or a new application will be required. An extension extends the terms of the current permit, whereas a renewal requires renewal criteria to be met and updates the terms of the permit, including permit conditions, to meet current regulations. Authorized Gopher Tortoise Agent permits are valid for a four-year period and may be renewed without additional payment in four-year increments if renewal criteria are met. Tier 1 Long-term Protected Recipient Site Permits do not expire but will be subject to reporting requirements within the special conditions for that permit. Tier 2 Long-term Protected Recipient Site Permits are valid for 100 years and are subject to the same reporting requirements as Tier 1 Long-term Protected Recipient Site Permits. Tiers 2 and 3 permits for Short-term Protected Recipient Sites are valid for a two-year period, whereas Tier 1 Short-term Protected Recipient Sites require a twenty-five-year permit to ensure the monitoring commitment is met. Two-year Short-term Protected Recipient Site Permits and Unprotected Recipient Site Permits may be renewed every two years if renewal criteria are met. Short-term Protected and Unprotected Recipient Sites are not eligible for an extension. Permits for 10 or Fewer Burrows will be valid for one year from the date of issuance and may be amended by the permittee to extend the permit duration for up to 6 months. Burrow or Structure Protection Permits will be valid for six months from the date of issuance. Conservation and temporary exclusion permits will be valid for either 12 months or 60 months and may be amended by the permittee to extend the permit duration once for up to 12 months. Emergency Take Permits will be handled on a case-by-case basis, considering the circumstances of the development and the conditions present. Disturbed site permits will be valid for one year from the date of issuance. Disturbed site permits are not eligible for extensions. Disturbed site permit renewal requests will be considered on a case-by-case basis. Any request for permit amendments (including renewal and extension) should be submitted at least 45 days prior to the expiration date of the existing permit. Permit renewal amendments are issued based on the permitting guidelines and specific permit conditions in effect at the time the complete application for a permit amendment is received by the FWC. A comment must be included in the permit application that explains the purpose of the amendment request.

## Permit Posting

Either the original permit or a complete copy must be clearly posted at the affected site at all times while engaged in the permitted gopher tortoise relocation activities and should remain posted until construction activities are completed. Permits do not authorize access to any public or private properties. Any required permission must be secured from the appropriate landowners prior to undertaking any work on such properties.

## Post-Relocation Reporting

Within 45 days of capture of a relocated tortoise, the named agent (or permittee if there is not a named agent on a 10 or Fewer Burrows Permit), shall submit an after action report detailing the capture/relocation actions. After action reports are submitted as either final or interim reports and can be submitted using the FWC online permit system. An after action report form will be provided by FWC for permits that were not issued via the FWC online permit system, which

must be submitted in accordance with the timeframe above to GTPermits@MyFWC.com. Final after action reports are required for all permits except Burrow or Structure Protection Permits. Submission of a final after action report indicates that all permitted activities are complete. FWC acceptance of a submitted final after action report voids the permit and nullifies recipient site reservation(s), allowing customers to request refunds if the actual number of gopher tortoises relocated is less than the number estimated. An interim after action report does not void the permit or nullify recipient site reservations but allows the permittee (or authorized agent if applicable) to report tortoise relocation within 45 days of capture. Like final after action reports, an interim after action report can include multiple capture dates. There is no limit to the number of interim after action reports that may be submitted, meaning multiple interim after action reports can be submitted under a single permit. This ensures that permittees/agents are able to meet the 45-day reporting timeframe requirement for every capture. If site clearing for construction is delayed for any reason, FWC recommends that the permittee submit the interim after action report to delay voiding the relocation permit until clearing commences and they have ensured no tortoises have moved onto the site. If the permittee or agent submits an interim after action report, or if no tortoise is captured, a final after action report must be submitted for that permit no later than 30 days after the permit expires.

## Burrow Surveys on the Development Site

A burrow survey covering a minimum of 15% of the potential gopher tortoise habitat to be impacted by development activities (including staging areas for heavy equipment) is required in order to apply for a relocation permit. These 15% surveys must be conducted no more than 90 days before an application is submitted to FWC. If a permit amendment application has been submitted requesting permit renewal, an updated burrow survey may be requested based on site-specific attributes (e.g., 10 potentially occupied burrows on a project site for a 10 or Fewer Burrows Permit). Burrow survey methods are outlined in Appendix 4, *Methods for Burrow Surveys on Development (Donor) and Recipient Sites.* Additional survey requirements for disturbed site permit applications are also listed in Appendix 4.

*No more* than 90 days prior to, and *no fewer* than 72 hours before (excluding weekends and holidays) commencing gopher tortoise capture and relocation activities, the authorized agent shall:

- complete the 100% gopher tortoise survey of the donor site and burrow location map; and
- deliver to the FWC the 100% survey and burrow location map.

If FWC determines that an on-site survey inspection is necessary prior to commencing capture activities, FWC will provide notification to the permittee or authorized agent within 48 hours (excluding weekends and holidays) of receipt of the 100% survey and burrow location map.

All surveys completed by authorized agents are subject to field verification by FWC. If FWC determines from the on-site survey inspection that the number of gopher tortoise burrows on site causes the total to exceed the number authorized for capture and relocation under the existing gopher tortoise permit, the permittee must apply for an amendment and obtain a permit for the additional burrows from FWC before initiating any capture and relocation activities for the additional burrows.

Site preparation for development (such as land clearing) may commence on the project site, or for permitted development phases of the project site, for which gopher tortoise capture and relocation activities have been completed (see Section II for details, page 5.) However, if site construction does not commence within 90 days from the date of the most recent 100% gopher tortoise survey or start of capture activities, a new gopher tortoise burrow survey must be completed to ensure gopher tortoises have not moved in and, if found, a valid permit must be obtained, amended, or acted on to capture and relocate all tortoises prior to commencing any site clearing.

## Categorical Exclusion for Military Installations

As outlined in the *Gopher Tortoise Management Plan* (September 2012), FWC acknowledges military actions on U.S. Department of Defense (DoD) military service installations are exempt from state authorizations typically required for impacts to gopher tortoises. Additionally, FWC has also approved to categorically exclude the Florida National Guard Camp Blanding Military Reservation from state authorizations otherwise required for gopher tortoises. Therefore, the FWC may execute a memorandum of agreement (MOA) with each DoD military service branch that operates and maintains military installations in Florida. The FWC will execute a MOA, if the MOA does the following: identify the military installation(s) to be included in the agreement; the activities included under the agreement; and the rights, requirements, and obligations of each signatory entity. Actions covered under MOAs may include a variety of military training and other operational activities (e.g., troop maneuvers, ordinance and weapons testing and live fire operations, and equipment transport and maintenance) that are mission critical. The MOA will help to ensure all tortoises are relocated out of harm's way by qualified personnel to approved recipient sites utilizing humane methods and scientifically supported techniques that help to ensure successful relocations. Supporting documentation (i.e., location map, soils map, vegetative communities map, acreage of suitable tortoise habitat, tortoise burrow survey results/baseline tortoise population estimates and available capacity [based on a maximum final tortoise density not to exceed 2/acre], habitat baseline vegetation conditions, and a habitat management plan) will be included for each recipient site proposed for inclusion in the MOA. Schedules for recipient site monitoring reports and relocation summaries will also be included in the MOA. For qualifying lands, a Candidate Conservation Agreement with Assurances (CCAA) for gopher tortoises may be used in lieu of a separate MOA.

Only gopher tortoises proposed to be relocated on-site within the same contiguous military facility will be considered in the MOA. Gopher tortoises proposed to be relocated off-site (do not occur within the same contiguous military installation) to FWC-permitted recipient sites will be permitted through the normal FWC gopher tortoise permit process.

When the INRMP is revised for each of the included military installations, specific gopher tortoise related conditions and commitments included in the MOA should also be included in the INRMP.

## Large, Landscape-scale Conservation Agreements

The Gopher Tortoise Permitting Guidelines have been developed to provide options based on project size, timeframe, and type of impact and accommodate most project-based permitting needs. However, these guidelines may not address permitting needs of all larger, landscape-scale

projects that affect gopher tortoises. Landowners with real estate holdings of significant regional impact and with the potential for extensive gopher tortoise impacts may contact FWC to discuss options for agreements tailored to the specific needs of those holdings. FWC's consideration of entering into such agreements will include the landowner's commitment to provide additional conservation lift for the gopher tortoise that meets or exceeds the standard requirements outlined in these guidelines. These agreements are intended to be long-term (30 years or longer) in nature unless specific circumstances warrant otherwise. Separate FWC permits may need to be obtained in addition to the agreement. These types of agreements can be approved by the FWC Executive Director.

## Capture, Handling, and Transport of Relocated Tortoises

Captures/relocations may be conducted only if written local government approvals have been obtained for land clearing or grading, or construction activities and provided to the Gopher Tortoise Permit Office via email (GTPermits@MyFWC.com) prior to commencing relocation activities. The FWC must be notified no more than 120 hours, and at least 24 hours (excluding weekends and holidays) prior to the start of the relocation effort. If relocation activities are delayed beyond the notification timeframe above, notification must be resubmitted with the revised commencement date.

### *Capture Methods*

Tortoises may be captured via bucket traps, live traps, hand capture outside burrows, pulling rod, and excavation by hand shovel or backhoe. Due to the undeveloped and soft carapace associated with juvenile tortoises, a pulling rod shall not be used to capture juvenile tortoises in burrows 5 inches wide or smaller.

Capturing gopher tortoises using mechanical excavation (backhoe) is often preferred among permittees and authorized agents because it typically is quicker than other capture methods and often leads to lower costs. This method, however, comes with an increased level of risk to the tortoises and authorized agent and the persons assisting with mechanical excavation activities. Authorized Gopher Tortoise Agents should be familiar with the U.S. Occupational Safety and Health Administration's (OSHA) Rules and Regulations for Construction (http://www.osha.gov), which includes locating utilities prior to digging, maintaining appropriate pit width and depth ratios and having safety equipment on-site. Backhoe excavation of gopher tortoise burrows must be conducted by at least two individuals at all times; the backhoe operator and another person on the ground at the gopher tortoise burrow.

To prevent impalement of tortoises during backhoe excavation, the backhoe bucket must have a smooth cutting edge that lacks teeth (long prongs). Typically, a flat blade is welded or bolted across the digging surface of the bucket. A flexible pipe or hose must be used to follow the tunnel of the burrow during excavation. Burrow excavation is not complete until the burrow terminus is reached, and all side chambers are found and completely excavated. If the end of a burrow is reached without capturing a tortoise, the agent must thoroughly probe the soil in all directions to locate a tortoise that may dig beyond the end to escape capture. Burrow excavations should not be attempted that cannot be completed to the fullest extent and without interruption (e.g., weather that may halt capture activities, backhoe operators' work schedules and hours, burrows heading toward immovable structures). If the excavation of a burrow is interrupted for

any reason before the tortoise is captured and excavation cannot resume that day (and/or is terminated altogether), an open burrow tunnel path must be left so the tortoise can exit the trench or a bucket or live trap must be set at the entrance to the burrow at the bottom of the trench. The excavation should be resumed as soon as safely possible to lessen the possibility of a newly created burrow or a roaming tortoise. Note that because of seasonally fluctuating water levels, tortoises may seek higher ground by burrowing upward past the water table or branch off with a secondary tunnel at a higher elevation. If there is no sign of the end chamber or tortoise, and/or if the burrow tunnel was lost during the excavation, the excavated trench shall be left open for at least 72 hours to allow the tortoise to dig out (take safety precautions and erect temporary fencing or install flagging around the open trench as necessary or as required by OSHA). If there is no sign of the tortoise after 72 hours, all side chambers must be found and excavated. If the tortoise re-opens the burrow, the excavation must continue to the fullest extent.

Use of a pulling rod with a blunted tip to prevent injury to a tortoise will be allowed when the authorized gopher tortoise agent is permitted to utilize this method as authorized in the relocation permit. Only agents permitted to use this method of capture are authorized to capture tortoises using a modified pulling rod.

If bucket or live traps are used, the traps must be shaded, they must be checked at least once per day (preferably twice per day—once in the morning and once in the late afternoon), and they must remain in place for at least 28 consecutive days or until the resident tortoise is captured, whichever occurs first. In cases where traps are set during colder months in northern Florida (November – March) and no tortoise is captured after 28 consecutive days, burrows must be excavated to determine if they are occupied. All traps must be closed if at any time during the 28 consecutive days trapping period the forecasted low temperature is 50˚ Fahrenheit or lower at the donor site. The 28 consecutive day trapping period shall restart at day 1 when a trap is closed for any reason. Bucket traps must be covered with paper, foil or similar material, and disguised with sand from the burrow apron. Drainage holes must be drilled into the bottom and lower sides of bucket traps and must be sufficient in size and number to prevent rainwater from accumulating in the bucket. Bucket traps and live traps are not effective in capturing tortoises during cold weather, particularly in northern Florida (north of State Road 50), because tortoises may remain inactive for extended periods of time. Therefore, bucket traps may not be a viable option from November through March in northern Florida. If the 28-day trapping period has passed without a capture and property boundary constraints make excavation impossible, FWC should be contacted to discuss alternatives.

Burrow scoping is not an acceptable method of confirming vacancy or determining occupancy for capture purposes because not all potentially occupied burrows can be successfully scoped due to curves or obstructions. However, burrow scopes may be used to enhance capture success for tortoises and their commensals. Capturing a tortoise outside a burrow is not sufficient reason to assume the burrow is vacant. Although all burrows on the donor site must be flagged or otherwise marked, only potentially occupied burrows must be trapped or excavated (see Appendix 4).

All relocated tortoises must be individually marked, measured, and weighed (see exceptions in Appendix 11). Techniques for measuring shells and for uniquely marking individual tortoises (i.e., assigning them a permanent identification number) are provided in Appendix 5. When

marking of tortoises is conducted by the named agent listed on a relocation permit (donor site), the named agent is responsible for marking tortoises in accordance with Appendix 5 of the Guidelines, and according to the marking scheme of the recipient site at which tortoises shall be placed. Marking responsibilities of a recipient site authorized agent include overseeing marking by assistants and ensuring the marking scheme is followed and all juvenile and adult tortoises are marked. The named agent for the recipient site is also responsible for ensuring any marking conducted by the named agent for the relocation permit has been done in accordance with Appendix 5 of the Guidelines, and according to the marking scheme of the recipient site, prior to release of tortoises. The named agent must also report resultant injuries or mortalities to gtpermits@myfwc.com.

Burrow aprons should be probed for nests during nesting season (e.g., Epperson and Heise 2003; Smith et al. 1995). If gopher tortoise eggs are encountered, the following procedure should be followed:

- make note of approximate depth of nest in original burrow location, and;
- place sand from around the eggs into a container;
- remove soil from around the eggs carefully (eggs are fragile, please handle with care);
- use a pencil to place a small "x" on top of each egg;
- make an egg-sized depression with your finger in the sand in the container;
- place each egg in a depression with "x" facing up;
- during transport, cover the eggs with sand, and minimize sun exposure and agitation;
- at the recipient site, locate an existing burrow apron or other sandy area in an open, sunlit area and excavate to the approximate depth of original nest, place eggs "x" up in the new nest in approximately the same orientation as they were originally located, and mark the new nest with a ring of fencing or flagging.

Any injury or fatality associated with the capture or relocation of gopher tortoises must be reported to the FWC Gopher Tortoise Permit Office within 48 hours. Failure to report injuries or mortalities will result in issuance of Risk Category II infraction (see Appendix 15).

***Cold and Hot Weather Handling***

During the colder months, tortoises shall only be relocated when the low temperature at the recipient site is forecasted by the National Weather Service (www.nws.noaa.gov) to be above 50˚ Fahrenheit for three consecutive days [72 hours] after release (including the day of relocation). This three-day window of milder overnight temperatures is required to allow the relocated tortoises to settle into the recipient site and to reduce the chance of cold-related stress or mortality. If release of tortoises cannot be accomplished within 72 hours of capture, then capture activities must not be initiated. Communication with the recipient site representative in advance of commencing capture activities during colder months is recommended to avoid urgent permit amendment requests to FWC for extended holding time authorization.

Because most tortoise relocations occur during the warmer months, overheating is a more common concern. During summer months, releases should not be made during the hottest part of the day at sites where shade is limited. Heat stress on gopher tortoises being captured and transported for relocation can be reduced or eliminated by assuring that captured tortoises and

those tortoises being transported for release are continually in shaded or climate-controlled conditions.

***Holding and Transport***

Gopher tortoises must be held in shaded conditions and individually in separate containers that are well-ventilated and large enough to allow the tortoise to turn around. To help prevent dehydration, especially during times of drought, tortoises should be soaked for 20-30 minutes in just enough water to cover the container bottom and to allow the tortoise to easily drink. Moist soil may be used to cover the bottom of the bin. It is appropriate to use soil from the burrow depths during backhoe excavation. Hay, straw, or shredded paper are other acceptable materials to place in the bin.

Gopher tortoises must not be held more than 72 hours after capture—and preferably not more than 24 hours— unless holding beyond 72 hours is otherwise authorized by FWC permit amendment. Permits issued for on-site relocation of 10 or Fewer Burrows are not authorized to hold or transport gopher tortoises offsite. Tortoises shall be transported within covered, well-ventilated areas of vehicles (not in open trucks, under truck bed covers, or in trailers with no screens or windows that can be opened) and must be kept at moderate temperatures between 70-85˚ Fahrenheit.

Recipient areas may be situated any distance east or west of the donor site, but no more than 100 miles north or south of the donor site unless no such recipient site is available. Some recipient sites conducting research can accept tortoises from any location in the state and may be exempt from the 100-mile limit. If an applicant cannot find adequate capacity for the estimated number of tortoises to be relocated from a donor site on a permitted recipient site within 100 miles, a request for exception will be considered. Such requests must include a list of all recipient sites within 100 miles of the donor site for which no such capacity is available. The request must be in letter format and uploaded to the online permit system and submitted with the permit application to be considered.

***Health Considerations (including testing for mycoplasmal upper respiratory tract disease [URTD] and accommodation of seropositive tortoises or tortoises with clinical signs of disease)***

Most health variables are poorly known for wild gopher tortoises, and even veterinarians with advanced training in animal health can have difficulty detecting subtle clues that a tortoise is ill. Authorized agents may refer to Appendix 6 for detailed outlines of cursory health evaluations, clinical signs and symptoms, and a simple disinfection protocol to help prevent spread of pathogens. Although detailed health exams are not required, authorized agents should observe each tortoise for obvious clinical signs such as nasal discharge. Hands and equipment should be disinfected between handling tortoises within a donor site, but all equipment, particularly bins and bucket traps, must be disinfected between uses on different donor sites. Blood tests to detect exposure to the pathogen that causes mycoplasmal URTD are no longer mandated. However, in cases where recipient site owners require mycoplasmal URTD testing before relocation, Appendix 6 contains information on collection and handling of samples. Appendix 6 also provides guidance for the accommodation of tortoises that show signs of illness, especially respiratory disease, and those that test positive for mycoplasmal URTD or other diseases.

***Release***

Relocated gopher tortoises should be released on the recipient site near existing abandoned burrows or excavated starter burrows. Starter burrows should be excavated to approximately two feet in length at an approximate 30-45° angle to the ground. Release responsibilities of the named authorized agent on a recipient site permit or on-site Conservation Permit with required soft release (stocked at 2 tortoises/acre) include ensuring proper installation, monitoring, maintenance of soft release enclosures (see I. Enclosure Methods) and conducting a health assessment for each tortoise to be released (see Appendix 6). Recipient site agents must also track release of tortoises, maintain records of soft release enclosure locations/maintenance timeframe, and provide shapefiles with attribute tables to the FWC and/or the permittee upon request. For on-site 10 or Fewer Burrow Permits, release responsibilities of the permittee and named agent (if applicable) include ensuring proper installation and maintenance of silt fencing around the project site after all tortoises are captured (see Fencing the Project Boundary below) and penning related duties if applicable (see Appendix 11). Release responsibilities of the named authorized agent on a temporary exclusion permit include ensuring proper installation, maintenance, and removal of exclusion fencing; when applicable, release responsibilities under this permit type also include ensuring proper installation, monitoring, maintenance of soft release enclosures (see I. Enclosure Methods) and conducting a health assessment for each tortoise to be released (see Appendix 6).

## Fencing the Project Boundary

Projects boundaries must be fenced under 10 or Fewer Burrows (on-site) as referenced on page 26. Temporary exclusion permits must follow the fencing requirements referenced on page 36. To prevent gopher tortoises from entering/re-entering the project site during and after relocation activities, or once site development has commenced, it is recommended that temporary silt fencing (buried at least 8” in the ground) around the project site be established and maintained for the duration of the project under all relocation permits. Maintaining silt fencing for the duration of the project will prevent tortoises living nearby from moving into the development area and causing possible project delays. If the permitted number of tortoises has been captured, the permittee must request a permit amendment for any new burrow(s) that occur on the development site in order to excavate the burrow(s) and relocate the additional tortoise(s). Additional information on temporarily penning captured tortoises and excluding tortoises from the project area is included in Appendix 11.

## Literature Cited

Epperson, D. M., Heise C. D. 2003. Nesting and Hatchling Ecology of Gopher Tortoises (Gopherus Polyphemus) in Southern Mississippi. Journal of Herpetology. 37: 315–324.

Smith, L. L. 1995. Nesting ecology, female home range and activity, and population size-class structure of the gopher tortoise, *Gopherus Polyphemus*, on the Katharine Ordway Preserve, Putnam County, Florida. Bulletin Florida Museum Natural History. 37: 97–126.

# IV. TYPES OF PERMITS

## Authorized Gopher Tortoise Agent Permit

**Note:** Authorized agents included under this type of permit are not authorized agents of FWC, but rather individuals authorized to handle gopher tortoises. These permits are not issued for scientific collection or research on gopher tortoises.

This permit authorizes the permittee, referred to as an authorized agent, to undertake those activities specified by the permit, including surveying, capturing, marking, transporting/handling/holding, relocating tortoises and tortoise commensals (e.g., gopher frog, pine snake, Florida mouse). The specific activities that an authorized agent is granted permission to perform will be listed on the permit. Authorized agent permits also allow assistants to work under the authorized agent's supervision if these assistants are registered with the FWC. The Agent is responsible for any such activities performed by an assistant to the same extent as if they had themselves carried out those activities under the designated permit. The permit must be carried at all times by the agent and its assistants when conducting permit-related activities. Authorized Gopher Tortoise Agent Permits shall not allow relocation of tortoises except when accompanied by a 10 or Fewer Burrows Permit, a Conservation Permit, a temporary exclusion permit, a Burrow or Structure Protection Permit, or a disturbed site permit for a specific project.

Authorized Gopher Tortoise Agents applying for a permit to relocate gopher tortoises offsite must be authorized (at a minimum) to conduct gopher tortoise surveys and capture gopher tortoises using at least one approved capture method; marking must also be authorized on the named agent's Authorized Gopher Tortoise Agent Permit and on the relocation permit when tortoises must be marked prior to transport Authorized Gopher Tortoise Agents applying for a Conservation Permit to relocate gopher tortoises on-site must be authorized (at a minimum) to conduct gopher tortoise surveys, scoping, capture gopher tortoises using at least one approved capture method, and release. Authorized Gopher Tortoise Agents applying for a 10 or Fewer Burrows Permit to relocate gopher tortoises on-site must be authorized (at a minimum) to conduct gopher tortoise surveys, capture gopher tortoises using at least one approved capture method, and release. Authorized Gopher Tortoise Agents applying for a temporary exclusion permit to relocate gopher tortoises on-site must be authorized (at a minimum) to conduct gopher tortoise surveys, capture gopher tortoises using at least one approved capture method, mark, and release. Authorized Gopher Tortoise Agents applying for a recipient site permit to receive gopher tortoises must be authorized (at a minimum) to conduct gopher tortoise surveys, scope, mark, and release. See Table 3 for a summary of authorizations required by permit type.

Authorized agents must be well-qualified to perform the gopher tortoise conservation actions for which they are requesting permission. Agents will likely be the first point of contact for citizens when they are advised that gopher tortoises are protected. Agents must accurately represent FWC policies, guidelines, and rules to their clients and to the general public.

***Requirements for Authorized Gopher Tortoise Agents***

Individual people may submit an application to FWC in order to be authorized to perform different activities related to gopher tortoise conservation. Not all agents will have the interest and the required expertise to perform all activities listed below, but all agents authorized for capture, mark, or release and named on relocation and recipient site permits are also authorized

to transport, handle, and hold tortoises according to permit provisions. Each agent permit will clearly state what the agent is allowed to do and will be conditioned accordingly. Agent permits are authorizations to the agents and the assistants under their supervision to conduct the activities specified. The agent permits shall not allow capture, possession, or transport/handling/holding of gopher tortoises unless a relocation permit specific to the development project or activity impacting gopher tortoises or their burrows has also been issued. Table 3 includes authorizations required by permit type for an Authorized Gopher Tortoise Agent to be named on the permit. All experience submitted in support of the application for an Authorized Gopher Tortoise Agent permit must have been from actions conducted after April 2009 in accordance with the FWC gopher tortoise permitting guidelines, and 25% of the experience requirements must be from actions conducted within the past 4 years from date of application. Experience gained during projects under which an infraction, tortoise mortality, or tortoise injury occurred shall not be claimed or accepted as experience on authorized agent permit applications. Applicants may complete an FWC-approved authorized gopher tortoise agent training course in lieu of, or in combination with experience. Training completion certificates can be submitted to document qualifications when applying for an authorized agent permit within two years of the completion date of authorized agent training course.

Table 3 Required (✓), optional, and non-applicable (N/A) authorizations on an Authorized Gopher Tortoise Agent Permit for an authorized agent to be named on a relocation or recipient site permit. Transport, holding, and handling is authorized under authorized agent permits.

| Authorized activities on Authorized agent permit | Recipient site permit | On-site relocation permit | Off-site relocation permit |
|---|---|---|---|
| **Survey** | ✓ | ✓ | ✓ |
| **Scope** | ✓ | ✓ for On-site Conservation, otherwise N/A | N/A |
| **Capture method(s)/supervise backhoe excavation** | N/A | ✓ | ✓ |
| **Mark** | ✓ | ✓ for Temporary Exclusion, otherwise optional | Optional |
| **Release** | ✓ | ✓ | N/A |
| **Training** | N/A | N/A | N/A |
| **Blood collection** | Optional | Optional | Optional |

***Gopher Tortoise Surveys***

*Belt Transect Burrow Surveys* - Applicant must have completed either 1) at least 120 hours conducting pedestrian gopher tortoise surveys over the past year, or 2) a cumulative total of 240 hours conducting pedestrian gopher tortoise surveys. Completion of an FWC-approved training course module in gopher tortoise belt transect surveying may be substituted for the experience requirements.

*Line Transect Distance Sampling (LTDS) (recipient sites)* - Applicant must demonstrate previous training for recipient site-specific LTDS survey implementation; training may include completion of at least one LTDS survey under the supervision of an experienced person or completion of an FWC- approved training course, prior to conducting LTDS surveys and analyses independently for recipient sites. Authorization to conduct LTDS surveys also includes authorization to scope gopher tortoise burrows as part of the survey methodology.

***Gopher Tortoise Capture Using Bucket Trapping or Live Trapping or Hand Shovel Excavation***

Applicant must have captured, with no gopher tortoise injuries or mortality a cumulative total of 20 gopher tortoises captured by a single method. Applicants are to list experience for each method separately in the agent permit application, as applicable. Applicants who meet the qualifications for capture of tortoises using backhoe excavation will also be authorized to capture tortoises using a hand shovel (if requested on the application). Authorization for marking and releasing tortoises must be approved separately (see below).

Completion of an FWC-approved training course module in gopher tortoise capture methods may be substituted for the experience requirements.

***Gopher Tortoise Capture Using a Modified Pulling Rod***

The applicant must have captured**,** with no gopher tortoise injuries or mortality, an average of 10 gopher tortoises per year over a four-year period by safely using a modified pulling rod. Applicants must include references to the permits under which the claimed experience was earned and provide a letter of reference from the Authorized Gopher Tortoise agent the applicant worked under to confirm their qualifications.

This is a very specialized technique for capturing tortoises; therefore, applicants requesting first-time authorization for capture with a pulling rod will be evaluated on a case-by-case basis.

**Note:** Not all tortoises can be captured by pulling. Therefore, pulling cannot be used as a method for verifying that a burrow is unoccupied. Pulling may be used only in combination with trapping or backhoe/hand excavation to assure that every tortoise is relocated from a designated donor site.

Completion of a training course will not be accepted in lieu of the experience requirements listed.

***Marking of Gopher Tortoises***

The applicant must have completed, with no gopher tortoise injuries or mortality, either: 1) an average of 10 gopher tortoises per year marked over a four-year period, or 2) a cumulative total of 40 gopher tortoises marked.

Completion of an FWC-approved training course module in gopher tortoise marking methods may be substituted for the experience requirements.

***Release of Gopher Tortoises***

The applicant must have completed, with no gopher tortoise injuries or mortality, either: 1) an

average of 10 gopher tortoises per year released over a four-year period, or 2) a cumulative total of 40 gopher tortoises released. An e-Learning course provided by the FWC must also be completed and passed to be considered qualified for release.

Completion of an FWC-approved training course module in gopher tortoise release methods may be substituted for the experience requirements.

***Transport, Holding, and Handling of Gopher Tortoises***
Applicants who meet the qualifications for capture, mark, and release of tortoises are also authorized to transport, hold, and handle gopher tortoises when named on relocation and recipient site permits but are required to take and pass an e-Learning course provided by the FWC on transport, holding, and handling for authorized agent permit renewal or issuance.

***Collection of Blood Samples***
The applicant must have completed, under the direct supervision of a qualified veterinarian or other appropriately authorized person, the successful collection of 10 blood samples from gopher tortoises. Completion of a training course will not be accepted in lieu of the experience listed.

***Supervision of Gopher Tortoise Burrow Excavations Using Mechanical Equipment***
The applicant must demonstrate with no gopher tortoise injuries or mortality on-site supervisory experience under the direct supervision of another Authorized Gopher Tortoise Agent of at least 50 gopher tortoise burrows, with the successful extraction of at least 20 gopher tortoises. Only burrows in which the applicant is actively directing the backhoe operator and with the applicant actively participating in the recovery of gopher tortoises from the excavated burrows can count towards the mechanical excavation experience requirement (include the permit numbers under which those occurred).

Completion of an FWC-approved training course module in this activity, combined with experience directing backhoe excavation of 30 gopher tortoise burrows with successful extraction of at least 12 gopher tortoises, may be substituted for the full experience requirements above. Only burrows mechanically excavated during the approved course in which the applicant actively directed excavation efforts without instructor input can count toward the excavation experience requirement; however, excavation must be conducted under the direct on-site supervision of an Authorized Gopher Tortoise Agent permitted in this technique.

It is the agent's responsibility to select operators of mechanical excavating equipment that are appropriately experienced and to direct their activity in a way that minimizes threats to gopher tortoises, commensal species, and persons assisting with the excavation. An authorized agent permitted to supervise mechanical excavation must be on-site at the burrow at all times while mechanical excavation is being performed.

***Burrow Scoping***
Applicant must have experience scoping at least 5 potentially occupied gopher tortoise burrows under the direct supervision of an experienced person (e.g., Authorized Gopher Tortoise Agent or scientific researcher), or completion of an FWC-approved training course, prior to conducting scoping independently at proposed or permitted recipient sites. Scoping experience for the 5

burrows must be supported by a signed letter form the experienced person; the letter must confirm that occupancy was determined for each of the 5 burrows. Applicants who meet the qualifications for capture of tortoises are authorized to conduct burrow scoping to assist with permitted capture activities (i.e., burrow scoping conducted in combination with permitted capture activities does not require additional authorization). A Scientific Collecting Permit is required only when burrow scoping is conducted for research or educational activities (see Appendix 14).

***Authorization to Train***

Authorized gopher tortoise agents may be authorized to train others in the activities and techniques associated with trapping, handling, and relocating tortoises with completion of an FWC-approved training course. Applicants must specify which courses and sections they will be teaching and provide a letter from the approved training entity verifying employment or agreement to train.

***Application Criteria***

All applications for the Authorized Gopher Tortoise Agent Permit must be from an individual, and the appropriate mitigation contribution as established in these guidelines must be paid before issuance of the permit. Applicants for this permit must provide standard contact information, satisfactory proof of knowledge, and specific gopher tortoise related experience in support of each of the activities they are requesting a permit to conduct. Applicants must link the permit numbers under which experience was obtained for each skill listed in the online permit application. All prior experience must be documented and linked to previously issued permits where the experience was gained in the online permit system. For surveys, the applicant may list properties (and the associated gopher tortoise habitat acreages) surveyed, purpose of surveys, and documentation of completion and submittal of survey results where experience was acquired but no FWC permit applications were submitted, instead of listing permit numbers (since permits are not always obtained after surveying efforts). Applicants must swear and affirm that they have committed no wildlife violations in Florida, the information submitted in the application and supporting documents is complete and accurate, any false statement may result in criminal penalties, and agree to abide by all applicable state, federal, and local laws.

Professional certification by any industry body or trade group established for this purpose (gopher tortoise agent authorizations) in the future and approved by FWC may also be provided as supplementary documentation of knowledge and experience.

***Requirements for Authorized Gopher Tortoise Agents Permit Renewal***

Authorized agent permits are valid for a four-year period and may be renewed without additional mitigation contribution in four-year increments. To renew, agents must submit the renewal request *prior* to the expiration of the valid permit and must meet and document at least 25% of the experience requirements listed for each activity above for which they request authorization on their permit. Prior experience that involved a tortoise mortality or injury cannot be included towards demonstrated experience. Similarly, permits where the Agent received an infraction cannot be included towards demonstrated experience. For example, to renew a permit for authorized activities that include surveying, supervised backhoe excavation, capture, and mark/release the agent must have:

- Completed a minimum of 30 hours (25% of 120) of pedestrian surveys
- Supervised at least 13 (25% of 50) burrow excavations using mechanical equipment with at least 5 (25% of 20) gopher tortoises captured
- Successfully captured at least 5 (25% of 20) gopher tortoises for each of the following capture activities for which the agent requests to be authorized: bucket trapping, live trapping, hand shovel, and pulling rod
- Marked and released a minimum of 10 (25% of 40) gopher tortoises

All experience included for the renewal must be obtained within the past 4 years from date of application renewal amendment. Permit renewal/amendment requests must include permit numbers that document the renewal requirements and be listed on the online permit application under the appropriate activity section. The agent must be documented on the corresponding after action reports for each permit listed. Agents submitting renewal requests that do not meet the experience criteria listed above may complete a refresher training course from an FWC-approved training entity on the activity being requested for renewal authorization or gain the necessary experience working as an assistant for an Authorized Gopher Tortoise Agent. Additionally, completion of the FWC e-Learning quiz that demonstrates a good understanding of the permitting guidelines with 100% of the answers correct is required. The quiz completion certificate must be attached to the application for renewal. It is not necessary to document experience or training for the authorized activities the agent does not want to renew. If the agent permit expires before a renewal application can be submitted, the application is processed as a new permit and the full experience or training requirements listed for each activity must be met to obtain a permit.

**Note:** Approval of courses for certification of gopher tortoise agents shall be at the discretion of the FWC Executive Director or his/her delegate.

***Criteria for Suspension, Revocation or Nonrenewal of Authorized Gopher Tortoise Agent Permits and Registered Agent Authorization***

The Authorized Gopher Tortoise Agent Permit is conditional so that it can be suspended, revoked, or not renewed for just cause, as determined by FWC. In cases where agents or their assistants violate FWC rules, policies, or guidelines concerning gopher tortoises; engage in unethical or illegal behavior; falsify gopher tortoise permit applications, or after action or monitoring reports; or violate conditions of any gopher tortoise permit, the agent permit may be immediately suspended pending an investigation. Substantiated violations will result in appropriate action, up to and including revocation, at FWC's discretion. Any person whose Authorized Gopher Tortoise Agent Permit is revoked will be ineligible for any gopher tortoise related permits for some period of time, depending on the severity of the violation.

Appendix 15 of these guidelines outlines specific criteria for the suspension, revocation, or nonrenewal of authorized agent permits and registered agent authorization.

***Assistants to Authorized Agents***

An authorized agent may be assisted by additional persons. Assistants may work under the supervision of an agent named on a relocation or recipient site permit if these assistants are listed in the FWC online permit system under the named agent's Authorized Gopher Tortoise Agent

Permit. Assistants shall only conduct the activities authorized on the named agent's Authorized Gopher Tortoise Agent Permit. These assistants will be under the supervision of the authorized agent and must adhere to all rules, guidelines, and permit conditions when conducting activities relating to gopher tortoises. They must carry a letter from the agent designating them as an assistant and a copy of the authorized agent's permit with them at all times while engaged in activities related to the permit. Such assistants must be directly supervised on-site by the authorized agent during blood collection and/or mechanical excavation of burrows, or they themselves must be an authorized gopher tortoise agent permitted to conduct these activities.

Authorized agents not listed on the relocation permit are considered assistants for the activities conducted under that relocation permit. In order for an assistant to gain credit for experience to meet qualification requirements for an Authorized Gopher Tortoise Agent Permit, the assistant must be listed in the relocation permit after action report within the online permit system. assistants are not authorized to conduct any gopher tortoise related actions without approval of the authorized agent.

## Relocation Permits for Properties with 10 or Fewer Burrows

This type of permit is available when 10 or fewer burrows (and the number of tortoises occupying those burrows) will be impacted on a development site. Application requirements, recipient site criteria, and tortoise handling procedures differ somewhat for this permit type (see Appendix 11.). In cases of phased developments, this permit may be obtained only once for any development on a single identified parcel or within a project under a common plan of development, platting, or subdivision/project name, whichever is largest. As part of the 10 or Fewer Burrows Permit application process, the permit applicant must complete the required e-Learning (available online at MyFWC.com/GopherTortoise) or the approved equivalent written training, if the applicant is not an authorized gopher tortoise agent.

Most typical activities associated with residential lawn and landscape maintenance do not require a permit, provided they do not collapse gopher tortoise burrows or harm gopher tortoises. Activities that do require a permit are listed in Section II, Executive Summary. Contacting an authorized agent or FWC before implementing any construction or major habitat modifications is advised.

Individuals who are not Authorized Gopher Tortoise Agents may apply on behalf of property owners for 10 or Fewer Burrows Permits when all tortoises will be relocated on-site. The individual must complete a Registered Agent profile within the online permitting system and complete the e- Learning curriculum. Once submitted, this automatically issued status allows a Registered Agent to apply on behalf of the property owner for permits that do not otherwise require the use of an Authorized Gopher Tortoise Agent. Only property owners or their designated developer can be listed as permittees. Relocation activities for Registered Agents are limited to on-site relocation only using bucket trapping, hand shovel excavation, and live trapping to capture the gopher tortoises. The Registered Agent is not a permit, nor does it provide any authorizations not included in a separately issued 10 or Fewer Burrows Permit. Authorized Gopher Tortoise Agents may conduct activities specified by their permit and do not need to apply to become Registered Agents. Registered agents may not have assistants and shall not obtain more than two (2) 10 or Fewer Burrows Permits. If a Registered Agent desires to submit

more than two (2) 10 or Fewer Burrows Permits, they must apply and obtain an Authorized Gopher Tortoise Agent Permit that authorizes them to conduct relocation activities.

***10 or Fewer Burrows Permit with On-Site Relocation***
This permit authorizes landowners or other individuals who have completed FWC online e-Learning to capture gopher tortoises (via bucket trapping, hand-shovel excavation, or live trapping) and to relocate tortoises to an on-site location within the property boundaries of the development specified in the application. [**Note:** Only an authorized agent permitted to supervise burrow excavations may capture or attempt to capture gopher tortoises using a backhoe.] On-site recipient area criteria can be found in Appendix 11. Landowners may obtain the assistance of an Authorized Gopher Tortoise Agent for on-site relocations (as described in *Authorized Gopher Tortoise Agent* above).

The actual capture and relocation authorized by this permit type shall be conditioned upon the permittee obtaining local government approval for clearing, grading or construction within the property, but does not need to submit it to FWC prior to commencing relocation activities. Release of tortoises must be accomplished in such a way as to preclude tortoises from returning to their burrows. This permit type requires the temporary installation of filter fabric (silt fencing) or other comparable fencing (buried at least eight inches deep) along the outer edge of the construction right-of-way to block tortoise re-entry into the area of disturbance on the project site during construction activities. The structural integrity of the temporary exclusion fencing must be regularly monitored and repaired as needed by the permittee and/or named agent and removed following completion of construction activities. Penning is allowed only under this permit type, and only under specified circumstances (see Appendix 11).

***10 or Fewer Burrows Permit with Off-Site Relocation***
This permit authorizes gopher tortoises to be relocated off the development property to a permitted recipient area (a long-term protected site, short-term protected site, or unprotected recipient site). An authorized agent must perform this relocation on behalf of the permittee. Authorized agents must have their own permit from FWC for working with gopher tortoises and may assist the landowner or developer in obtaining all permit approvals for this type of action.

## Conservation Permit

Conservation permits for relocation of tortoises on-site or off-site will be issued when more than 10 burrows will be impacted on a development site and for subsequent activity on properties undergoing development of phased projects when a 10 or Fewer Burrows Permit has been previously issued.

This permit authorizes gopher tortoises to be relocated either on-site or off-site of the development property. The permittee must have an authorized gopher tortoise agent perform this relocation. Authorized agents must have their own permit from FWC that authorizes them to conduct the activities required to relocate the gopher tortoises, and they may assist the landowner or developer in obtaining all permit approvals for this type of action.

One of the four objectives of the *Gopher Tortoise Management Plan* is to increase the acres of permanently protected gopher tortoise habitat by providing incentives to landowners who protect

habitat under perpetual conservation easements. These protected acres of habitat provide a net conservation benefit and assurance for long-term protection and management of the species. Restocking lands where populations have been depleted is another important objective which will also help to reach the Plan's goal. Therefore, mitigation contributions for gopher tortoise relocation are scaled based on the length of assurance for protection and management of the species at recipient sites.

The mitigation contribution for Conservation Permits is determined by the level and duration of habitat protection and management provided by the recipient site to sustain gopher tortoises. Conservation Permits issued for gopher tortoises relocated to a Tier 1 long-term protected recipient site, to public conservation lands restocking sites, or from public projects to contiguous public conservation lands will require a $234 mitigation contribution for the first group of ten burrows (up to five tortoises) and a $351 mitigation contribution per tortoise thereafter. Conservation Permits issued for gopher tortoises relocated to a Tier 2 long-term protected recipient site will require a $702 mitigation contribution per tortoise after the first group of ten burrows (up to five tortoises). If the tortoises are being moved to a short-term protected recipient site, a $234 mitigation contribution will be required for the first group of ten burrows (up to five tortoises). Mitigation contributions for each additional tortoise relocated to a short-term protected recipient site thereafter are based on the tier classification assigned to the recipient site. A Tier 1, Tier 2, and Tier 3 short-term protected recipient site will require a mitigation contribution of $1,053, $2,106, and $3,511 per tortoise, respectively, after the first group of ten burrows (up to five tortoises). Tortoises that are relocated to an unprotected recipient site or unprotected recipient areas will require a $6,318 mitigation contribution per tortoise (see Table 2).

Conservation Permits that involve on-site relocation to undeveloped areas that provide suitable tortoise habitat but that are not protected or do not meet the size criteria for a permitted recipient site will require a $6,318 mitigation contribution for each tortoise. Silt fence barriers should be installed around the perimeter of the construction area. If silt fence barriers will not be installed, then a soft release enclosure may be required. A belt transect with scoping population survey that covers a minimum of 15% of the habitat proposed as an unprotected recipient area is required in addition to the standard donor site belt transect survey of the habitat to be impacted by development activities (see Appendix 4). Final stocking density is limited to two per acre (including tortoises already on-site) within the designated recipient area. On-site recipient areas must meet at least acceptable recipient site criteria for soils and vegetation features (Table 5). A vegetation survey may be required for applications that propose a recipient area 25 acres or larger.

On-site relocation may be authorized to areas that meet the criteria for a short-term or long-term protected recipient site, or when tortoises are relocated from public projects to contiguous public conservation lands. A separate Short-term or Long-term Protected Recipient Site Permit must be obtained before gopher tortoises are relocated on-site (see *Recipient Site Permits*). However, if gopher tortoises are relocated from public projects to contiguous public conservation lands, the recipient site must meet the criteria specified below and be authorized as an on-site recipient site unit under the issued Conservation Permit. Mitigation contributions for tortoises relocated to these on-site areas under this permit option qualify for the lower mitigation amount included in Table 2.

# Relocating Gopher Tortoises from Public Projects to Contiguous Public Conservation Lands

The FWC recognizes that keeping tortoises within their native population is an important measure in conserving tortoises. This type of on-site relocation permit option encourages relocation within contiguous public lands by reducing mitigation costs and streamlining the process, thereby facilitating enhanced conservation for tortoises. Under this permit option, gopher tortoises can be retained within their native population instead of being moved off-site or to an on-site short-term or unprotected recipient site.

The intent of this permit option to relocate gopher tortoises from public projects to contiguous public conservation lands is to:

- Encourage relocation of gopher tortoises from public project sites that are contiguous to public conservation lands;
- Maintain local gopher tortoise populations, and their genetic and breeding integrity;
- Minimize stress and other negative impacts to individual gopher tortoises;
- Minimize the potential for disease transmission to new areas; and
- Align with and complement existing gopher tortoise relocation options.

The key component to achieving this intent is to limit contiguous relocations to public conservation lands that gopher tortoises could reasonably access naturally and on their own.

This relocation option is intended for public projects where the donor site is contiguous to public conservation lands (see *Glossary*) and there is no physical obstacle (e.g., road greater than 2 lanes, curb and gutter or other physical barriers, or a speed limit >30mph, railroad bed, impenetrable fence, river, and lake) that would prevent tortoise movement to the recipient site or other upland areas within the relocation/restocking site.

Donor and recipient site parcels or lands that are owned by the same public entity but not part of the contiguous landscape will not be considered contiguous under this option. However, this permit option can be used if the contiguous habitat or land is owned by more than one entity, provided that a letter of acceptance is submitted from the recipient site landowner. If linear right-of-way project sites do not meet the definition of contiguous, or the donor site tortoise burrow(s) is located more than one mile from the designated public conservation land, a Conservation Permit for off-site relocation must be obtained.

### *Criteria for Relocation of Gopher Tortoises from Public Projects to Contiguous Public Conservation Lands*

In order to receive a FWC Conservation Permit for relocation to contiguous public conservation lands, the designated donor and recipient site must meet the following criteria:

A. **Donor Site.**
    a. The donor site must be contiguous to the public conservation land recipient site.
    b. If the recipient site is contiguous but owned by a separate public entity, signed permission from the recipient site landowner must be submitted.
    c. Mitigation for tortoises relocated under this Conservation Permit option is $234 for the first group of 10 burrows (up to 5 tortoises) and $351 for each additional

tortoise.

d. The donor site location within a linear right-of-way project must not be located more than one mile from the public conservation land.

B. **Recipient Site.**

a. The recipient site must be contiguous to the donor.

b. Recipient sites must be designated as public conservation lands *or* public lands protected by a minimum 50-year conservation easement (with FWC included as a grantee). For lands where DEP is the managing agent on behalf of the Board of Trustees of the Internal Improvement Trust Fund ("BOT") for all State-owned lands, the following is required:

i. A letter requesting the acceptance of gopher tortoises from other public lands must be received from the lead conservation land manager.

ii. The land lease will be modified to include a condition recognizing a new lease would be entered into at the time of the current lease expiration, according to 18-2 Florida Administrative Code, as long as all lease terms and conditions were in compliance at the time of expiration.

iii. A letter of request from the lead conservation land manager to add the additional gopher tortoise recipient site to the current Land Management Plan through the Acquisition and Restoration Council negative response process must be received. The Land Management Plan should reference the FWC permit. This process must be complete prior to the execution of a modified lease.

iv. A MOU must be executed between the FWC and the lead land management agency to provide a specified timeframe from date of permit issuance when the above requirements will be submitted to DEP and ARC as applicable.

c. The public conservation lands recipient site must be a minimum of 40 acres and meet the *acceptable* or *desirable* criteria outlined in Table 5 of these guidelines. Smaller sites in highly developed counties, particularly in southern Florida, will be evaluated on a case-by-case basis, and will be allowed if they are instrumental in retaining the local tortoise resource and can be appropriately managed to perpetuate the relocated population.

d. A draft habitat management plan that includes a recipient site management commitment, and proof of financial assurance in the form of a general appropriation or allocation approved by a public governing body for management, or equal to that of a long-term protected recipient site (see Appendix 3) must be submitted.

e. Monitoring reports that conform to the monitoring requirements described in Appendix 7 of the Gopher Tortoise Permitting Guidelines.

f. A contiguous recipient site may be utilized for more than one Conservation Permit that meets the criteria for this permit option, but the number of tortoises relocated to the site shall not exceed the final site evaluation stocking density.

g. The recipient site maximum allowable gopher tortoise density (see Appendix 4) shall not exceed 50% of the maximum stocking density.

Exceptions to some of these criteria may be considered by FWC if the proposed contiguous relocation meets most, but possibly not every requirement outlined in the above criteria, and

alternative mitigation activities are also implemented. Examples of alternative mitigation activities that may be considered include: temporarily enclosing tortoises (soft release) for 12 months instead of the minimum of 6 months; permanent fencing or wildlife underpasses that prevent tortoises from entering roadways to reduce the risk of mortality; reduced speed limits adjacent to recipient sites and installation of wildlife crossing signs; or, a combination of these examples or other proposed alternatives that are consistent with and support the intent of these guidelines.

Note: Other options for on-site relocation (e.g., long-term protected, short-term protected, or unprotected recipient sites/areas) are available if a property does not meet the criteria outlined above for this "contiguous public conservation lands" option.

FWC will review this permit option from time to time and determine if it is still needed and is helping to achieve the management plan goals for the gopher tortoise.

## Offsite Public Lands Option (Public Conservation Lands Restocking)

For public conservation lands to accept tortoises from projects where the donor site is not contiguous or the linear right-of-way project is located more than one mile from the recipient site, refer to Appendix 12 for the conservation lands restocking guidelines.

## Recipient Site Permits

The overall conservation goal of the *Gopher Tortoise Management Plan* is "to restore and maintain secure, viable populations throughout the species' current range in Florida." Property owners play a significant role in helping Florida achieve this goal by providing the highest level of security for the gopher tortoise and its habitat on permitted recipient sites. Elements that are integral to meeting this objective include appropriate habitat management, population monitoring, legal protection, and long-term financial assurance provided by the landowner. Not all recipient sites afford relocated gopher tortoises with the same level of protection, however some sites do provide conservation value by restocking tortoises to managed lands where populations have been depleted, furthering research efforts, preventing the loss of tortoises on development sites, helping to retain local or regional tortoise resources and potentially contributing to the habitat preservation objective if such sites receive long-term protection in the future.

The *Gopher Tortoise Management Plan* contains a series of measurable objectives and conservation actions which include restocking gopher tortoises to protected, managed, suitable habitats where they no longer occur or where densities are low. A team of public conservation land managers has developed guidance regarding the restocking of gopher tortoises on public conservation lands (see Appendix 12). This team includes representatives from the Florida Department of Environmental Protection Florida Park Service, Florida Department of Agriculture and Consumer Services Florida Forest Service, the five Water Management Districts, Florida Communities Trust, and Florida Fish and Wildlife Conservation Commission. Likewise, some of the future research goals outlined in the Gopher Tortoise Management Plan may require the use of sites that receive displaced tortoises to carry out research projects and consequently be designated as research recipient sites. The criteria for research recipient sites are outlined in Appendix 13 and are intended to provide further clarity as to how the agency will

implement conservation actions specified in the Plan.

To receive a FWC recipient site permit, candidate properties must meet site suitability criteria for size, soil, and habitat. Site suitability criteria vary according to the level of conservation value provided by the recipient site. Protected recipient sites are also categorized using a tiered classification system that accounts for the level of conservation value provided by the recipient site. The tier assigned to a recipient site affects the mitigation contribution required to relocate tortoises from a donor site to the property. Long-term protected recipient sites are classified as either Tier 1 or Tier 2 recipient sites, depending on the duration of protections afforded the recipient site through conservation easement. Short-term protected recipient sites are classified as either Tier 1, Tier 2, or Tier 3 recipient sites, based on habitat quality and monitoring commitment. See Table 4 for details.

Landowners who meet the basic criteria in these guidelines are encouraged to contact the FWC Gopher Tortoise Permit Office to schedule a pre-application site visit. A preliminary site visit allows FWC staff to evaluate the suitability of the habitat on proposed site. Staff may provide information on habitat management assistance or other measures that may be undertaken prior to completing an application for a FWC recipient site permit. The pre-application site visit can help identify and address potential issues in advance, so the permit application (once submitted) can be processed more efficiently.

Table 4. Permit Type, Tier, Requirements, and Corresponding Mitigation Contribution (adjusted for 2022 CPI. For current mitigation amounts, refer to MyFWC.com/GopherTortoise).

| Permit Type | Tier | Requirements* | Mitigation |
|---|---|---|---|
| Long-term Protected | 1 | Perpetual conservation easement granted to FWC | $351/tortoise*** |
| Long-term Protected | 2 | 100-year easement granted to FWC | $702/tortoise*** |
| Short-term Protected | 1** | Monitoring commitment (see Appendix 7) and minimum of 40 acres contiguous suitable habitat | $1,053/tortoise*** |
| Short-term Protected | 2** | *Desirable* habitat criteria are met in the majority of the acres permitted as gopher tortoise habitat (see Table 5) | $2,106/tortoise*** |
| Short-term Protected | 3 | Meet minimum criteria of a Short-term Protected Recipient Site | $3,511/tortoise*** |

*Requirements listed in table are specific to mitigation tier classification and do not reflect all site suitability criteria.
**Tiers are cumulative, i.e., a Tier 1 site must meet the requirements of Tier 2 and Tier 3 sites.
***Mitigation contribution per tortoise after the first 10 burrows (5 tortoises).

***Criteria for Relocation of Gopher Tortoises to Recipient Sites***

A. **Conservation Easements or Other Protection:** The conservation value of a permitted project and the required mitigation contribution is determined by the level of protection

afforded to the relocated gopher tortoise at the recipient site. Four levels of conservation have been defined:

a. **Long-term Protected Recipient Sites**: These privately or publicly owned recipient sites must be protected by a conservation easement that conforms to the standard format available from FWC (see Appendix 8). The duration of protection afforded to the property by the conservation easement determines the tier assigned to the recipient site. Tier 1 long-term protected recipient sites must be protected by a perpetual conservation easement. Tier 2 long-term protected sites must be protected by a 100-year conservation easement. Conservation easements that were previously granted by landowners to other regulatory, governmental, or conservation entities may be acceptable to FWC if their conditions and restrictions provide habitat protection and management requirements for gopher tortoises and their habitats that are comparable to those contained within FWC's standard easement. However, those easements would need to be modified to designate FWC as a co-grantee.
b. **Recipient Sites for Restocking Public Conservation Lands**: These recipient sites consist of publicly owned lands that are currently managed for conservation and are either designated as conservation lands by Chapter 253.034, Florida Statutes; purchased for conservation purposes using funds from bonds or other monies dedicated specifically for conservation lands acquisition (*e.g.,* Florida Forever, Preservation 2000, local bond initiatives, etc.); or afforded protection under federal law. These publicly owned lands must provide suitable gopher tortoise habitat and must be actively managed under an approved habitat management plan. The land managing agency and FWC will establish either a Memorandum of Understanding (MOU) or an easement that conforms to the standard format available from FWC. Additionally, existing land leases, covenants, and management plans may need to be amended to provide adequate assurance of management. See Appendix 12 for specific details and requirements for restocking public lands.
c. **Short-term Protected Recipient Sites:** These recipient sites have some enforceable protection commitment, but those commitments do not meet the definition of"long-term." Specifically, the enforceable protection commitment must provide at least a 50 year FWC easement that prohibits development-related activities from occurring within the permitted recipient site, or a perpetual easement recorded with a governmental entity or accredited land trust that prohibits development-related activities from occurring within the permitted recipient site.
d. **Unprotected Recipient Sites**: These recipient sites provide relocated gopher tortoises protection for at least two years.

B. **Size**: Perimeter boundaries of recipient sites should ideally be configured in the form of a block, circle, or similar shape. Uplands are considered contiguous if two or more upland communities occur within a distance of 1,000 feet, and there is no physical obstacle (e.g., road greater than 2 lanes, curb and gutter or other physical barriers or a speed limit of > 30 mph,, railroad bed, impenetrable fence, river, lake) to prevent tortoise movement to other upland areas within the recipient site. Due to the time and resources required to

evaluate the habitat suitability of potential recipient sites with greater than 1,000 acres, interested landowners are strongly encouraged to contact FWC and participate in a pre-application meeting and site review prior to submitting a permit application. This pre-application meeting will help ensure that the habitat is suitable and other requirements have been or can be met once the permit application is submitted, and it can be processed within the statutory application processing time requirements outlined in Chapter 120 Florida Statute. Applicants submitting more than 1,000 acres of gopher tortoise habitat proposed for a unit or site may be requested to submit a waiver of the statutory application processing time requirements outlined in Chapter 120 Florida Statute as part of a request for additional information (RAI). If a recipient site application is submitted and the applicant/landowner does not meet the FWC application requirements, or the habitat is not currently suitable for gopher tortoises, the permit application may be considered incomplete and may be denied by FWC without prejudice.

a. **Long-term Protected Recipient Sites:** Recipient sites must contain a minimum of 40 acres of contiguous suitable upland tortoise habitat that meet the criteria for soil and vegetation. Smaller sites in highly developed counties, particularly in southern Florida, will be evaluated on a case-by-case basis, and will be allowed if they are instrumental in retaining the local tortoise resource and can be appropriately managed to perpetuate the relocated population. Sites containing greater than 250 acres of contiguous suitable upland habitat will satisfy the size threshold for *Desirable* criteria and may be eligible for an additional 0.5 tortoise per acre increase in the site evaluation maximum allowable tortoise density (see below).
b. **Recipient Sites for Restocking Public Conservation Lands and** Contiguous Public Conservation Land recipient sites**:** Recipient sites must contain a minimum of 40 acres of contiguous suitable upland tortoise habitat that meet the criteria for soil and vegetation. Smaller sites in highly developed counties, particularly in southern Florida, will be evaluated on a case-by-case basis, and will be allowed if they are instrumental in retaining the local tortoise resource and can be appropriately managed to perpetuate the relocated population. Sites containing greater than 250 acres of contiguous suitable upland habitat will satisfy the size threshold for *Desirable* criteria and may be eligible for a 0.5 tortoise per acre increase in the site evaluation maximum allowable tortoise density.
c. **Short-term Protected Recipient Sites:** Sites must contain a minimum of 25 acres of contiguous suitable upland tortoise habitat that meet the criteria for soil and vegetation. Tier 1 short-term protected sites must contain a minimum of 40 acres of contiguous suitable upland tortoise habitat that meet the criteria for soil and vegetation.
d. **Unprotected Recipient Sites:** Sites must contain a minimum of 25 acres of contiguous suitable upland tortoise habitat that meet the criteria for soil and vegetation.

C. **Soils**: Soils that meet *acceptable* criteria are moderately well-drained to excessively drained, with a midpoint of the upper limit of the water table (see Depth to Water Table (hereafter DWT) in the Glossary) value of 45 centimeters (18 inches) or greater (see Appendix 3, page 47 for how to find this DWT value). For sites in flatwoods, land cover

shapefiles should be overlain on soils shapefiles to help differentiate hydric areas from more mesic or xeric areas; site visits by FWC may also be required. Poorly drained soils with a midpoint of the upper limit of the water table (DWT) greater than or equal to 31 centimeters (12 inches) may meet the *Acceptable* criteria, provided that the proposed site contains augmentation features or is drained by ditches, etc. Augmentation features should be provided as a shapefile. In these select cases, there must be evidence of past or current use by tortoises with no frequency of ponding. Additionally, stocking densities cannot exceed two per acre on these soil types. Long-term protected recipient sites, Contiguous Public Conservation Land recipient sites, and public conservation lands recipient sites for restocking with a midpoint of the upper limit of the water table (DWT) of 130 centimeters (51.6 inches) or greater meet the *Desirable* criteria threshold and may be eligible for a 0.5 tortoise per acre increase in the site evaluation maximum allowable tortoise density. Site-specific soil information can be obtained by referring to the Natural Resources Conservation Service (NRCS) Web Soil Survey (www.soils.usda.gov) for the appropriate county.

D. **Vegetation Features**: Sites with *Acceptable* habitat features are those that contain both of the following: average herbaceous cover of at least 30% and average canopy cover of 60% or less. Woody vegetation should not comprise more than an average of 20% of the ground cover. Within FWC-approved areas of gopher tortoise habitat in the permitted recipient site, improved pasture cannot exceed 40% of the total recipient site unit and must include a minimum of 10% patchy shrub cover (*e.g.,* saw palmetto, fennel, pines, oaks, blackberry, blueberry, pawpaw, etc.) to provide shade and refuge from predators. Long-term protected recipient sites and public conservation lands recipient sites for restocking with average herbaceous cover greater than 50% and average canopy cover less than 40% meet the *Desirable* criteria threshold and may be eligible for a 0.5 tortoise per acre increase in the site evaluation maximum allowable tortoise density. Short-term protected sites that meet the *Desirable* criteria threshold (Tier 1 and Tier 2) do not qualify for the 0.5 tortoise per acre density bonus. Herbaceous cover (low-growing, soft-stemmed plants) should include broadleaf grasses and, preferably, grass-like asters (sunflower family) and legumes (bean family). Vegetation survey methods are outlined in Appendix 7.

E. **Enhanced Conservation Value**: Proposed long-term protected recipient sites, Contiguous Public Conservation Land recipient sites, and recipient sites for restocking public conservation lands may be awarded a 0.5 tortoise per acre increase in the site evaluation maximum allowable tortoise density if FWC determines that the site has enhanced conservation value by any of the following: 1) adjacency to existing public or private conservation lands that together provide >250 acres of contiguous suitable upland gopher tortoise habitat that satisfy the threshold for *Desirable* criteria; 2) the site boundaries are 100% within a designated Strategic Habitat Conservation Area according to the most recent year's designation; or 3) at least 75% of the recipient site is vegetated with one or more of the following native upland plant communities: sandhill, scrubby flatwoods, or dry prairie (Table 5) as described in the Guide to the Natural Communities of Florida by FNAI. Native upland plant communities are not modified by human influence to such a degree that the physical conformation of the substrate, or the

biological composition of the resident community, or the natural processes that are essential in maintaining the substrate and biological composition is substantially different from what is described for the native upland plant community in the Guide. The presence of pasture grasses (e.g., Bahiagrass) or other grass species not included in the FNAI natural community description indicate absence of that native upland plant community type in the given acreage for which those grasses are present.

F. **Baseline Densities**: Survey techniques to determine the existing (baseline) tortoise population density are provided in Appendices 4 and 7. Supporting information should include potential reasons for low tortoise densities (e.g., past harvest; previous, but now rectified, inadequate habitat management). The burrow survey used to generate this estimate must be performed no more than 90 days before the date the permit application is submitted. A shapefile showing the site boundaries, transect locations, locations of all documented tortoise burrows, and corresponding tortoise densities will serve as the baseline for future monitoring efforts.

G. **Site Evaluation Stocking Rate**: The site evaluation stocking rate is defined as the maximum allowable gopher tortoise density as determined by the scoring process depicted in Table 5, *Acceptable and Desirable Criteria Thresholds for Recipient Site Characteristics*. A site that meets all three *Acceptable* criteria will be assigned an evaluation stocking rate of two tortoises per acre. Evaluation stocking rates for long-term protected recipient sites and recipient sites for restocking public conservation lands may increase in increments of 0.5 individual per acre for each *Desirable* criterion that is met, up to a maximum of two additional individuals (four per acre total). However, long-term protected recipient sites located in highly developed counties that contain less than 40 acres of contiguous gopher tortoise habitat are not eligible for stocking bonuses. Vegetation communities defined as improved pasture are not eligible for stocking bonuses for long-term protected recipient sites.

H. **Determination of Final Stocking Rate**: The final stocking rate for a recipient site equals the site evaluation stocking rate minus the baseline density, i.e., final stocking rate = (site evaluation maximum allowable density) - (baseline density). For all calculations involving stocking rate, consider only tortoises greater than or equal to 130 mm (5 inches) in carapace length. Eggs and juvenile tortoises less than 130 mm are not considered in these calculations because of their low survivorship and minimal effect on the recipient site forage base. Recipient sites for restocking public conservation lands shall be stocked at no more than 50% of the site evaluation stocking rate.

   When assigning the baseline density and calculating the final stocking rates, applicants submitting permit requests for sites that have been previously approved by FWC and used as a recipient site for tortoise standard relocation and/or incidental take permits shall include the number of resident tortoises reported for the site when it was originally approved and all tortoises released at the site under previously issued FWC permits (or authorized for release when no post-relocation reports have been sent to FWC).

I. **Enclosure Methods**: Restraint of tortoises inside an enclosure at the recipient site is required for all relocations as a condition of the relocation permit. This process is called

"soft release." Studies have indicated that site fidelity is enhanced by temporarily enclosing tortoises. As additional studies are completed and information becomes available, these guidelines may be modified to ensure that they achieve the management plan objectives. The following requirements and recommendations include enclosure methods and procedures proven to be effective.

a. **Soft release requirements**:
    i. All tortoises relocated to any recipient site (including unprotected recipient sites) shall be released into a temporary enclosure as described below and retained within the enclosure for a period of not less than six months and no more than twelve months from the time the first tortoise is placed in the enclosure. This means stocking of a soft release enclosure must cease six months after the date that the first tortoise was stocked so that the tortoise(s) released before the six-month mark have at least six months before the enclosure comes down.
    ii. Tortoises shall be released into temporary fenced enclosures such that the maximum number of gopher tortoises approved by FWC for release into the entire recipient site parcel shall not be exceeded. Enclosures within recipient sites with varying approved stocking rates may be stocked at 1.5 times the approved density for the area in which the enclosure is located. If an enclosure encompasses an area with varying approved stocking rates, then the enclosure's approved gopher tortoise density will be proportional to the number of acres in each approved stocking rate area. For example, if a 40-acre recipient site initially containing no gopher tortoises includes a 15-acre enclosure encompassing five acres that are approved for a final density of two gopher tortoises per acre and ten acres that are approved for a final density of three gopher tortoises per acre, then the enclosure can receive up to 60 gopher tortoises 1.5 [(5 x 2) + (10 x 3)].
    iii. Upon approval, temporary enclosures may be of any material that prevents the passage of tortoises of all sizes released to the site. Recommended and cost-effective materials include Belton Industries #1935 pre-assembled silt fence (a more durable type of silt fence; see *Glossary* for purchasing information) Natural or artificial boundaries may be used to restrain tortoises (e.g., coastlines, major rivers or large lakes, existing fencing that prevents the passage of all tortoises released at the site).
    iv. After the soft release period of 6-12 months, the soft release boundary must allow for emigration and immigration of tortoises as approved in the recipient site's Gopher Tortoise Management Plan; a recipient site must not permanently be surrounded by natural or artificial barriers on all sides.
    v. Temporary fencing must be buried at least eight inches into the ground to prevent tortoises pushing beneath the enclosure and must be at least two feet high and of sufficient robustness to prevent tortoises pushing or climbing over.
    vi. Temporary enclosures shall provide gopher tortoises adequate shade and cover from predators (minimum 10% patchy shrub cover).The same area must not be included in a soft release enclosure more than once unless the

area is surveyed for an estimate of gopher tortoises present prior to enclosure reinstallation to inform enclosure stocking rates.

vii. Prior to accepting tortoises for release, the named authorized agents must first confirm that management commitments are met and temporary enclosures are maintained.

viii. Named agents shall notify gtpermits@myfwc.comif the proposed temporary enclosure locations provided in the application change after permit issuance and provide shapefiles of the new locations.

ix. Temporary enclosures must be regularly monitored (at least once monthly) by the named authorized agent and/or assistants. The monthly monitoring event shall include walking the inside perimeter of the enclosure, as well as a North-South transect and an East-West transect that each span the enclosure and intersect at the enclosure centroid. GPS tracks must be recorded for each monitoring event and provided to the FWC and permittee upon request.

x. The named authorized agent and/or assistants that are responsible for release must ensure that damage is repaired and the integrity of the temporary enclosure is maintained. Additional temporary enclosure monitoring is required after natural disaster events (e.g., wildfires, hurricanes, tornados) that threaten the structural integrity so that damage can be repaired as soon as possible.

xi. Recipient sites with active livestock grazing should exclude livestock from the area where the temporary enclosure(s) are installed for the duration of the enclosure timeframe; or if livestock cannot be excluded, an electric fence (or other excluding barrier) shall be installed at least 5-10 ft around the perimeter of the temporary enclosure.

xii. Tortoises observed above ground within the temporary enclosures shall be monitored weekly for the first month and monthly thereafter to document any problems (*e.g.,* illness, mortality, evidence of human poaching, emigration).

xiii. The gtpermits@myfwc.com must be contacted if decreases in tortoise numbers are documented.

xiv. After the soft release period, the artificial temporary enclosure materials must be removed out of the recipient site.

b. **Soft release recommendations**:

i. Prior to releasing relocated tortoises, survey the temporary enclosure for an estimate of resident tortoises present and stock accordingly.

ii. Encourage tortoises to burrow within the temporary enclosure interior by digging starter burrows with tunnels angled towards the enclosure interior and/or installing structural guides (e.g., haybales, stretches of silt fence) that lead away from the enclosure boundary towards the enclosure interior to deflect movement.

iii. Make enclosure sizes as small as is feasible or subdivide enclosures to minimize disease transmission risk and social stress.

iv. Space out enclosure locations to reduce the risk of stressful social

interactions and concentrated dispersal after pen removal.

v. Minimize the timeframe during which new tortoises are released to an enclosure and keep tortoises from the same origin population together.
vi. Install enclosures within the highest quality habitat on your property to encourage tortoises to settle in an area with enough food, shade, and cover; avoid soft releasing in improved pasture.
vii. Avoid releasing in the evening when tortoises are less active and more susceptible to predation.
viii. Install an enclosure without corners, as corners attract tortoises and are prone to tear.

J. **Management Plan:** Gopher tortoise habitat requires active management. A detailed management plan mirroring the length of protection is a vital part of gopher tortoise conservation efforts on all FWC-permitted recipient sites. Management plan requirements are outlined in Appendix 3.

**K. Unprotected and Short-term Recipient Site renewal criteria based on 2-year permit duration:**

a. Resurvey vegetation to confirm permitting thresholds still met
b. No documentation of noncompliance
c. No documentation of mass mortality
d. Renewal does not allow for additional authorizations to receive tortoises within the same acreage (i.e., an increase in the original number of tortoises authorized for the same area)

**L. Amendment criteria to add acreage to a permitted recipient site unit**

Permitted capacity for an existing recipient site unit may be amended to increase the total number of tortoises authorized for receipt within the unit under the following conditions:

a. The amendment involves adding at least 25 contiguous acres to the existing recipient site unit that meet at least the acceptable habitat criteria (see Table 5), and
b. the proposed additional habitat falls adjacent or disjunct but contiguous (i.e., a traversable distance of less than 1000 feet between uplands) to the existing permitted boundary, and
c. a shapefile delineating existing permitted acreage and proposed additional acreage is provided, and
d. at least a 15% population survey with vegetation stations is conducted according to Appendix 7 specifications on the acreage requested in the amendment to be added as gopher tortoise habitat to the permitted unit, and
e. a new 15% population survey design with vegetation stations shall be established in consultation with the Gopher Tortoise Program to monitor the entire area within the amended permit boundary (when monitoring commitment is required by the permit), and
f. the permittee accepts that the permit will be brought up to the current guidelines.

Under these conditions, the increase in permitted capacity is attributable to the additional acreage of gopher tortoise habitat. Stocking bonuses can apply to the new acres requested under the amendment if stocking bonus criteria are met within the new acres, but

previously permitted acreage does not count towards the 250-acre requirement to meet the "size" stocking bonus and must not be considered when evaluating stocking bonus eligibility of the new acres. Under no conditions shall a permit amendment increase permitted capacity specific to acres already included within the permitted unit.

Table 5. Acceptable and Desirable Criteria Thresholds for Gopher Tortoise Habitat Within Recipient Sites.

| SITE CHARACTERISTIC | ACCEPTABLE CRITERIA | DESIRABLE CRITERIA |
|---|---|---|
| Size | > 40 acres | > 250 acres |
| Soil | > 45 cm (18 in) DWT, with land cover verification for flatwoods sites<br>> 31 cm (12 in) (select cases) | > 130 cm (51.6 in) DWT |
| Habitat | > 30% herb cover<br>< 60% canopy cover<br>< 40% improved pasture<br>(minimum 10% shrub cover for improved pasture) | > 50% herb cover<br>< 40% canopy cover<br>No improved pasture |
| Enhanced Conservation Value | Not applicable | Adjacent to protected land, or in Strategic Habitat Conservation Area, or ≥ 75% native upland community (maximum of 0.5 per acre) |
| Maximum Allowable Gopher Tortoise Density | Two per acre<br>(requires all above criteria be satisfied) | 0.5 per acre for each site characteristic that is satisfied, up to a maximum of two additional (four per acre maximum) |

## Temporary Exclusion Permit for Major Linear Utility Corridors

This type of on-site relocation Conservation Permit is specifically reserved for the installation or maintenance of major linear utility transmission lines (e.g., major natural gas or electric transmission lines). This permit applies to situations that require the temporary exclusion of tortoises from the utility construction corridor for up to 6 months, and where habitats within the corridor will be restored to provide suitable habitat for tortoises following completion of the utility installation. These permits require the temporary installation of filter fabric (silt fencing) or other comparable fencing (buried at least eight inches into the ground) along the outer edge of the construction right-of-way to block tortoise re-entry into the corridor during construction activities. Such fencing is only required along those portions of the construction corridor where tortoises are documented and are to be relocated from the construction area. The FWC will also consider other proposed options of keeping gopher tortoises out of harm's way in the immediate area of construction on these types of projects.

Temporary exclusion permits authorize the capture of tortoises from within the utility corridor

right- of-way project area and their immediate release on the other side of the temporary fencing into adjacent suitable habitat. Tortoises must be released outside the project corridor in close proximity relative to where each tortoise was captured. The gopher tortoise density after relocation within the designated recipient area shall not exceed either three tortoises per acre, or 1.5 times the existing gopher tortoise density within the recipient area, whichever is greater. This does not authorize placement of tortoises on properties not under control of the permittee. The permittee must obtain written approval from the adjacent landowner granting permission to the permittee to release the tortoises on the landowner's property. The structural integrity of the temporary fencing must be regularly monitored and repaired as needed by the permittee and named agent, and then removed following completion of the utility project and after the habitat has been restored. Tortoises can then naturally reoccupy restored habitat within the utility corridor. Native forage should be planted to encourage re-occupancy by tortoises after disturbance.

Gopher tortoises may be released by the named agent into an on-site enclosure in conformance with the FWC soft release requirements. Enclosures shall not be located on the opposite side of barriers which deter tortoises from returning to the location where they were originally captured, and photographs must be provided in the permit application for review. It is the responsibility of the named agent and permittee to remove enclosure fencing before expiration of the permitted maximum temporary exclusion time period or upon project completion, whichever comes first. The final gopher tortoise density within the enclosure shall not exceed three gopher tortoises per acre.

The application information requirements for this permit are the same as for conservation permits with on-site relocation of the affected tortoises. This permit is not intended, and will not be issued, for the installation of local utility service lines that are being installed as a precursor to development or to facilitate the development of the adjacent or surrounding area (e.g., infrastructure for specific development projects, planned subdivisions, or multiple projects or subdivisions). Permit applications for those projects must address impacts to all tortoises and tortoise burrows contained within the entire planned project development boundaries. For major linear utility corridor projects that include the construction of permanent structures used to service or maintain the installed utilities (e.g., gas compressor stations, water wells, pumping stations), the areas where permanent structures would be constructed do not qualify for a temporary exclusion permit and must be permitted separately to permanently relocate gopher tortoises.

Other projects (e.g., septic tank/drain fields, board walks, dirt trails, berm restoration) will be considered under this permit option when it is in the best interest of the tortoise(s) to remain on site, and temporary exclusion adjacent to the project footprint is possible (for no more than a six-month period at no more than 3 tortoises per acre).

## Burrow or Structure Protection Permit

Burrow or Structure Protection Permits are available when the integrity or utility of an existing structure is jeopardized by one or two burrows and therefore poses a public safety concern (e.g., burrow under a propane tank), or if the safety of the resident tortoise is compromised (e.g., burrows in a grass parking lot, dirt driveway, etc.). Application requirements and tortoise capture

and handling procedures are similar to those for 10 or Fewer Burrows Permits (See Appendix 11); however, tortoises relocated under a Burrow or Structure Protection Permit shall only be relocated on-site. This type of permit may only be issued for up to 2 burrows, once a year for a contiguous property under the same ownership. As part of the application process, the applicant must complete the required online training (available at MyFWC.com/GopherTortoise) or the approved equivalent written training, unless the relocation activities are conducted by an Authorized Gopher Tortoise Agent.

In most cases, it is best to live with tortoises and their burrows. Relocations are stressful for gopher tortoises. The process takes time, money, and physical labor. Typical activities associated with residential lawn and landscape maintenance do not require a permit, provided the activities do not collapse gopher tortoise burrows or harm gopher tortoises. Activities that require a permit are listed in Section II, Executive Summary. Visit MyFWC.com/GopherTortoise or contact FWC for more information on living with gopher tortoises.

***Relocation Under the Burrow or Structure Protection Permit***

This permit authorizes landowners or other individuals who have completed FWC online training to capture gopher tortoises (via bucket trapping, hand-shovel excavation, or live trapping) and to relocate tortoises to an on-site location within the property boundaries specified in the application. [**Note:** Only an authorized agent whose permit authorizes the supervision of burrow excavations using mechanical equipment may capture or attempt to capture gopher tortoises using a backhoe.] On-site recipient area criteria follow the same criteria as the 10 or Fewer Burrows Permit found in Appendix 11. Landowners may obtain the assistance of an Authorized Gopher Tortoise Agent for on-site relocations.

Release of tortoises must be accomplished in such a way as to preclude tortoises from returning to their burrows. Penning is not allowed under the Burrow or Structure Protection Permit. These permits may require permanent or temporary fencing in an appropriate configuration to exclude tortoises from returning to the compromised burrow. Collapsing or filling those burrows is required upon capture and relocation of the resident tortoises. If fencing is necessary, a brief explanation should be provided in the application addressing why and what methods will be used to restrict tortoise access.

Tortoises cannot be relocated off-site under a Burrow or Structure Protection Permit. If adequate suitable gopher tortoise habitat is not available on-site and tortoises must be moved off-site, applicants may qualify for a 10 or Fewer Burrows Permit.

## Emergency Take Without Relocation Permit

This permit will be issued only under limited and specific circumstances, in cases where there is an immediate danger to the public's health and/or safety or in direct response (e.g., storm debris disposal) to an official declaration of a state of emergency by the Governor of Florida or a local governmental entity. Applications submitted for this permit must include all information that is required from any other applicant seeking a Conservation Permit, along with a copy of the official declaration of a state of emergency. This permit process may be handled after the fact or at least after construction activities have already started. It is preferred that contact with FWC should be made as soon as possible to minimize adverse impacts to gopher tortoises and their

burrows. Local emergency situations that do not rise to the level of an official declaration should be handled by coordinating with FWC's Division of Law Enforcement and seeking assistance in determining steps that must be taken in order to avoid additional take or endangerment of gopher tortoises.

This section does not cover what should happen when a local emergency requiring immediate action to protect human safety and welfare, property, and wildlife and its habitat occurs. Because it is not possible to anticipate every circumstance (*e.g.,* a local oil spill along a highway that contaminates soil adjacent to a gopher tortoise burrow), the best solution would be for anyone encountering an emergency to contact FWC as soon as possible and to request assistance in determining the best course of action to take.

## Disturbed Site Permit

***Criteria for Relocation of Gopher Tortoises from Disturbed Sites***

The disturbed site permit may be required in situations where premature disturbance to the vegetation or ground has occurred before gopher tortoise burrow surveys are complete or before gopher tortoise capture and relocation activities have been completed. This permit provides an option for mitigation and relocation of tortoises within disturbed portions of the project area. These permits are not punitive but will not be issued until any associated FWC law enforcement investigations and legal proceedings have been completed. Survey, capture, and relocation activities must be conducted by an Authorized Gopher Tortoise Agent.

Disturbed site permits are issued when ***all four criteria*** below are met:

A. Evidence of site disturbance to the ground or vegetation must be present on the site and within suitable gopher tortoise habitat
B. Site disturbance either prevents:
    a. Complete and accurate tortoise burrow surveys from being conducted (15% and 100% surveys as described in FWC guidelines), or;
    b. FWC staff from conducting on-site inspections to verify 15% or 100% survey results prior to site disturbance commencing.
C. Any one of the following applies:
    a. Impact is to any part of the project area with documentation of gopher tortoise burrows on site (e.g., a past, valid, tortoise burrow survey of the disturbed area exists, showing burrows were present; physical evidence that burrows were present; or photographs), or;
    b. Evidence of tortoise burrows is visible within the disturbed area, on the property where disturbance occurred, or is within close proximity on adjacent properties, or;
    c. Evidence of impact to any tortoise or tortoise burrow.
D. Disturbance to the project site has occurred within the past 18 months.

The criteria above may be met before a tortoise permit application has been received by FWC, during the permit application process, or after a permit has been issued, depending on when disturbance activities occur.

If the project site meets all criteria before 100% burrow survey reports and maps are submitted to FWC, or before the 72-hour waiting period after which such reports have been received by FWC, or before the completion of gopher tortoise capture and relocation activities, then active relocation permits or permit applications will be revoked or denied so that a disturbed site permit application may be submitted.

In cases where only a portion of the project site is prematurely disturbed and all relocation activities will not be covered under a disturbed site permit, another relocation permit (e.g., Conservation Permit) will be issued for the remainder of the property. This only applies when discrete and contiguous, undisturbed areas of the project site can be identified.

Disturbed sites require different burrow survey protocols for estimating numbers of tortoises present and calculating mitigation contributions. Refer to Appendix 4 for details.

***Mitigation Contributions, Refunds, and Recipient Site Requirements***

All mitigation contributions must be submitted before disturbed site permits are issued. Mitigation contributions for disturbed sites are higher than for other relocation permits to mitigate for tortoises which may be buried underground or have left the project site in response to disturbance activities and cannot be relocated. However, if authorization is requested and granted to relocate more tortoises than is estimated (see Appendix 4) within the disturbed site, the additional per-tortoise mitigation contribution specified in Table 2 for disturbed sites will not be required for each of the additional tortoises. The FWC may provide a refund for each tortoise (less the 3% administrative service charge assessed by the WFF), up to the number estimated to occur within the disturbed site that is successfully captured and relocated as described for each permit type. Refunds for mitigation are provided if no tortoises are relocated only for additional tortoises requested in excess of the number estimated to occur within the disturbed site that is authorized for relocation.

Areas within the project site that were not disturbed will be covered in a separate 10 or Fewer Burrows, Conservation, or temporary exclusion permit. Reduced mitigation for relocation permits for the first five tortoises (10 burrows) will only be allotted for one of the two permits associated with the project. The disturbed site permit and the other associated permit must be applied for concurrently.

All project sites qualify for one of three disturbed site permit types: “10 or Fewer Burrows,” “Conservation,” or “Temporary Exclusion.” The entire project site is considered when determining the permit category, including any undisturbed areas (which are permitted separately). For example, a project site with 10 burrows inside disturbed areas and three burrows outside disturbed area (i.e., a total of 13 burrows) would qualify for a Disturbed Site Conservation Permit. In this case, a Disturbed Site Conservation Permit would authorize gopher tortoise relocation for the disturbed areas and a separate Conservation Permit would authorize gopher tortoise relocation for the undisturbed portion of the project site. Temporary Exclusion Disturbed Site Permits only cover the disturbed portion of the project site.

Recipient site requirements for each type of disturbed site permit are the same as the requirements for each associated non-disturbed site relocation permit. For example, the

requirements for a Disturbed Site 10 or Fewer Burrows Permit are the same as the requirements for a 10 or Fewer Burrows Permit.

***Disturbed Site 10 or Fewer Burrows Permit***
The mitigation contribution for this permit follows that of the standard 10 or Fewer Burrows Permit (outlined in Table 2.) with an additional $5,000 required for each tortoise estimated within the disturbed area. Disturbed Site 10 or Fewer Burrows Permits for projects on properties that are owned by a single-family property owner will require a reduced additional mitigation contribution of $1,755 per tortoise estimated within the disturbed area. FWC may provide a refund of the disturbed site additional mitigation contribution for each tortoise successfully captured and relocated (i.e., $5,000 or $1,755 per tortoise captured and relocated). In instances where additional tortoises greater than the original permitted number are found, a permit amendment must be requested (with additional mitigation) and received prior to continuing relocation activities.

***Disturbed Site Conservation Permit***
The mitigation contribution for this permit follows that of the standard Conservation Permit (outlined in Table 2.) with an additional $5,000 required for each tortoise estimated within the disturbed area. Disturbed Site Conservation Permits for projects on properties that are owned by a single-family property owner will require a reduced additional mitigation contribution of $1,755 per tortoise estimated within the disturbed area. FWC may provide a refund of the disturbed site additional mitigation contribution for each tortoise successfully captured and relocated (i.e., $5,000 or $1,755 per tortoise captured and relocated). In instances where additional tortoises are captured greater than the original permitted number, a permit amendment must be requested (with additional mitigation) and received before additional tortoises are relocated.

***Disturbed Site Temporary Exclusion Permit for Major Linear Utility Corridors***
The mitigation contribution for this permit follows that of the temporary exclusion permit for exclusions of 4-6 months (outlined in Table 2.), with an additional $5,000 required for each tortoise estimated within the disturbed area. FWC may provide a refund of $5,000 for each tortoise successfully captured and relocated. In instances where additional tortoises are captured greater than the original permitted number, a permit amendment must be requested (with additional mitigation) and received before additional tortoises are relocated.

## Due Process for Gopher Tortoise Permit Applicants

The FWC adheres to the time requirements specified in Chapter 120, Florida Statutes, for processing permit applications. Upon submittal of an application, FWC staff will respond within 30 days requesting any additional information from the applicant. Upon receipt of all information necessary to complete an application, FWC staff will prepare and issue a permit within 90 days (but attempt to accomplish this within 45 days). Any person has a right to challenge the action of FWC on a given permit application. Each permittee is provided an “Election of Rights” form with the issued permit that conveys instructions for filing an informal or a formal hearing request.

Any non-permitted person who believes that their substantial interests would be affected by the

action taken by FWC on a gopher tortoise permit application may also petition the agency for a hearing. For information on how to submit such a request, please contact: The Office of General Counsel, Florida Fish and Wildlife Conservation Commission, 620 South Meridian Street, Tallahassee, Florida 32399-1600.

Deviations from permitting requirements shall be granted only when the person subject to the requirements demonstrates a substantial hardship not intended by these guidelines and which violates principles of fairness. The person must also demonstrate the goals of the underlying *Gopher Tortoise Management Plan* will be or have been achieved by other means. For purposes of considering granting a deviation, "substantial hardship" means a demonstrated economic, technological, legal, or other type of hardship to the person requesting the deviation. For purposes of considering granting a deviation, "principles of fairness" are violated when the literal application of rules or guidelines affects a particular person in a manner significantly different from the way it affects other similarly situated persons

# V. HANDLING OF COMMENSAL SPECIES DURING RELOCATIONS

As the keystone species of Florida's uplands, the gopher tortoise provides refuge to more than 350 other species. These commensal species may be intimately tied to tortoise burrows or may be occasional visitors, but the underground microhabitats serve as multi-purpose retreats that are used for feeding, resting, reproduction, and protection from temperature extremes, moisture loss, and predators. Some of the threats to commensal species are similar in nature to those faced by the gopher tortoise and are included in the in the Gopher Tortoise Management Plan. One of the objectives outlined in the Management Plan is to maintain the gopher tortoise's status as a keystone species. Without tortoises creating and maintaining burrows on the landscape many of the commensal species would not occur. The guidelines in Appendix 9 have been created to provide guidance for authorized agents who capture commensal species during gopher tortoise relocations. Emphasis is placed on priority commensal species, with the understanding that these species have habitat needs that generally go beyond those of the gopher tortoise and will, therefore, need to be considered during relocations.

# APPENDIX 1. RULES AND POLICIES PROTECTING GOPHER TORTOISES AND THEIR BURROWS

## RULE

*68A-27.003 Florida Endangered and Threatened Species List; Prohibitions*.

*68A-25.002 General Provisions for Taking Possession and Sale of Reptiles.*

*68A-1.1010 General Regulations Relating to Licenses, Permits and Other Authorizations*

Gopher Tortoise Enforcement Policy

# APPENDIX 2. FWC GOPHER TORTOISE PERMITTING SYSTEM PROCESS MAP

## Relocation Permits

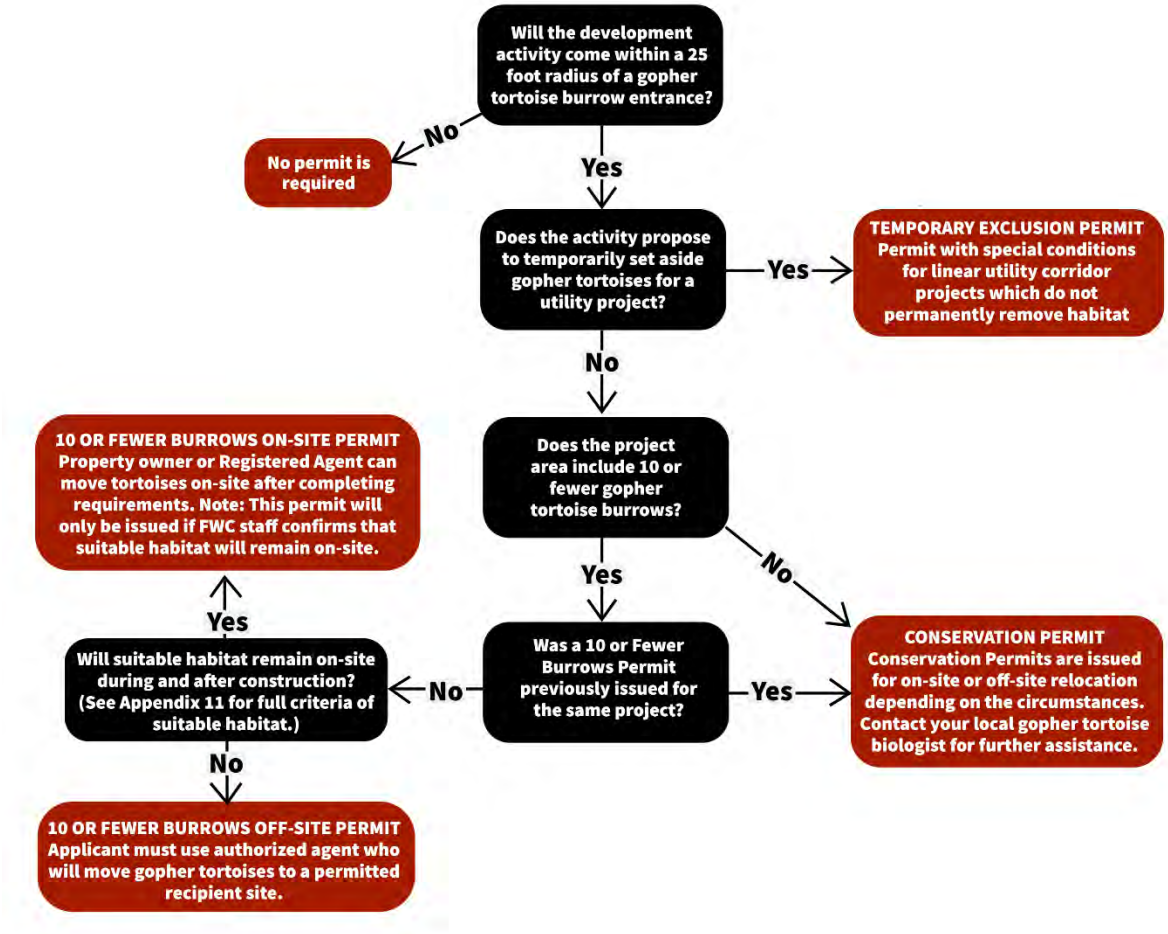
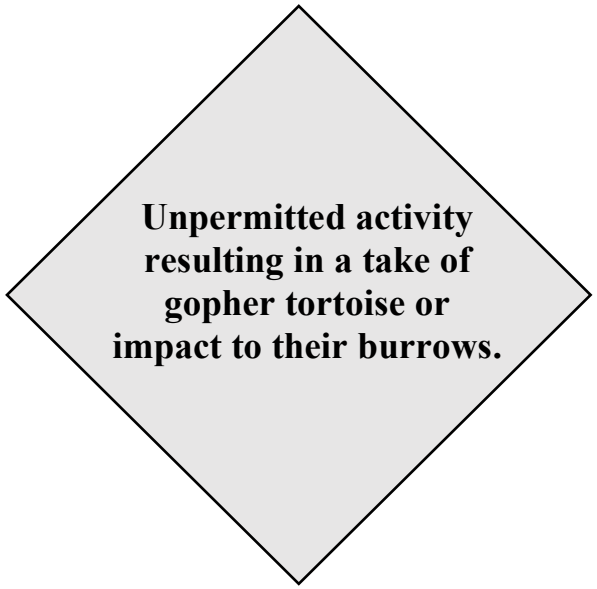



Figure 1. Flowchart for Relocation Permits

## Special Permits

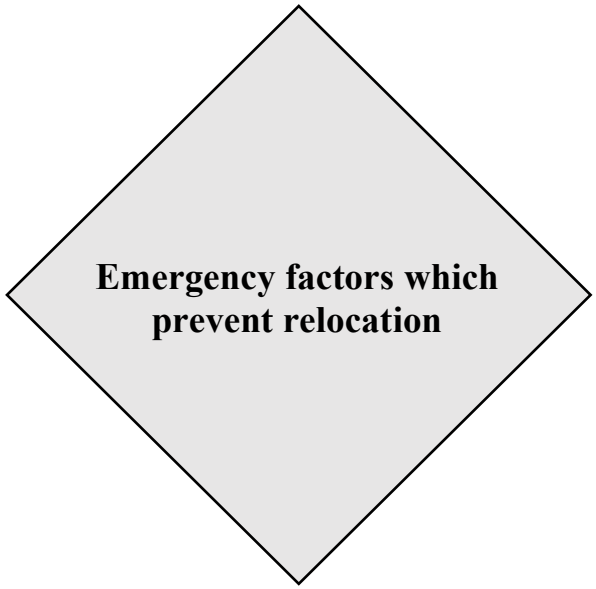
### Disturbed Site Permit




Permit issuance subject to special conditions.

After law enforcement clearance to proceed, required permits must be obtained and mitigation contribution made for site disturbances or gopher tortoises impacted. Criteria for a disturbed site permit may be met before a tortoise permit application has been received by FWC, during the permit application process, or after a permit has been issued, depending on when disturbance activities occur.

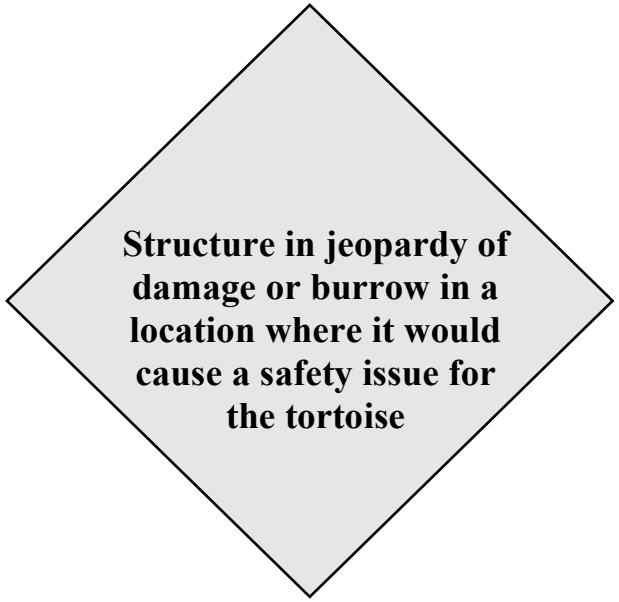
### Emergency Take Permit




Permit issuance subject to special conditions.

Issued when there is an immediate danger to public health or safety or in direct response to an official declaration of a State of Emergency by the governor or local government.

### Burrow and Structure Protection




Permit issuance subject to special conditions.

If tortoise will have sufficient habitat and can be bucket trapped safely, a Burrow and Structure Protection Permit can be issued on a case-by-case basis

Figure 2. Special Permit Descriptions

# APPENDIX 3. INFORMATION NEEDED FOR RELOCATION PERMIT APPLICATIONS AND RECIPIENT SITE PERMIT APPLICATIONS

Although each permit type has additional specific information that will be required on application forms either online or in hard copy, this appendix outlines the primary information that FWC staff will need to process applications for relocation permits and recipient site permits.

## General Information Needed for Relocation Permits and Recipient Site Permits

1. Name and contact information of the authorized agent that will be performing the gopher tortoise activities. Mailing and physical addresses are needed, as well as phone and e-mail addresses.

2. Certification: Applicant must certify by signature that the information and supporting documents submitted are complete and accurate.

3. Name and all contact information for the property owner (for development sites, also provide the developer's name and contact information if different from that of the property owner).

4. Location map and directions to the site**:** Must provide sufficient detail (e.g., identify all adjacent roads, water bodies, and other major physical landmarks) to allow vehicular access for FWC inspection. All maps submitted during the application process should be in a shapefile, with an image file (jpg) or in a Portable Document File (PDF) 8.5x11-inch or 8.5x14- inch in format.

5. Most current digital orthoquad or equivalent one-meter resolution aerial photograph of the site**:** Scale of 1 inch = 800 feet or less.

6. Parcel identification**:** Provide latitude/longitude coordinates; parcel identification number (PID), which can be obtained from the county property appraiser's office; and deed showing proof of ownership if applicant information differs from county property appraiser records. For development sites, also provide the name of the project; for recipient sites, provide the name of the property (if applicable). For temporary exclusion permit applications for major utility corridors, PIDs are not required, and latitude/longitude coordinates must be provided for only the beginning and end points of the utility corridor.

7. Habitat types**:** Provide a table listing existing land uses (i.e., vegetation community types) by acres (along with corresponding land cover maps) for the entire project and for all potential tortoise habitats to be impacted. For temporary exclusion permit applications, completion of the land use table is optional, but the land cover map must be provided. For recipient site applications, provide this habitat information (and maps/corresponding shapefiles) for the entire property and for the specific phase or parcel within the property proposed for relocation/restocking. For each community type on recipient sites, describe

the condition, characteristics, land use history, and other factors that may influence tortoise habitat quality and/or manageability. The Cooperative Land Cover Map (CLC) is the accepted source for land use classifications. The CLC dataset can be downloaded from the FWC GIS and mapping site: https://myfwc.com/research/gis/applications/articles/cooperative-land-cover/. The associated Florida Land Use Classification System document used by the CLC is also accessible on this site.

8. Soils**:** In tabular form, provide a list of soil types, midpoint of the upper limit of the water table (DWT), and acreage for each soil found within the entire project and potential tortoise habitat to be impacted (development sites) and within the specific phase or parcel of the property proposed as a recipient site; also provide corresponding soils maps. The accepted source for soil type classification is the Natural Resources Conservation Service (NRCS) Web Soil Survey database that can be accessed at: http://www.soils.usda.gov/ The upper limit of the water table can be found on this site under the water features section of Soil Reports tab of Soil Data Explorer tab (do not check "include minor soils?" option). For soil types with the upper limit range varying between month groups, use the most limiting water table (highest) for any given month. Data for the upper limit of the water table is not displayed when the soil does not have a seasonal high water table or the map unit is a miscellaneous area (e.g., pits) or Taxon Above Class (Udorthents, etc.). In these cases, the depth to water table data should be entered as "not available". For temporary exclusion permit applications, completion of the soils table is optional, but soils maps must be provided.

9. Current gopher tortoise population size and density (tortoises per acre)**:** Provide a map (or shapefile for recipient site permits) depicting current locations of tortoise burrows and indicate burrow activity (potentially occupied vs. abandoned, see Glossary and Appendix 4). Burrow survey methods are outlined in Appendices 4 and 7. Show all transects, as well as observed burrows and their activity status, overlain on the shapefile of potential tortoise habitat. The full legal name of the surveyor(s) must be included in the application.

## Additional Information Required for Relocation Permits

1. Provide the proposed start date for the development.

2. Indicate whether tortoises are proposed to be located on-site or off-site and provide the necessary location and contact information for the designated off-site recipient area, if known. You may use the online recipient site locator mapping tool (MyFWC.com/GopherTortoise) to find available recipient sites or contact FWC. All applicants must provide proof of reserved capacity at a recipient site(s) to accommodate all gopher tortoises to be relocated from the entire permitted donor site, with the reservations maintained for the duration of the issued permit. Recipient site capacity reservations for more than 10 burrows must not exceed a 75% burrow occupancy rate for the donor site.

3. If the relocation is to occur on-site, provide all the necessary information needed for recipient sites (size of on-site preserve, location within the project, habitat types, soils,

proposed stocking density, etc.). On-site recipient areas may have site-specific requirements imposed as part of the permit to reduce potential harm to tortoises. For temporary exclusion permit applications, completion of the habitat types/land use table and the soils table are not required, but the land use and soils maps must be provided.

4. If the burrow survey is to be partially or fully conducted via ATV instead of on foot, provide data on survey implementation, including survey method implemented (i.e., pedestrian, ATV, both); date survey method conducted; survey coverage (acreage) per method; number of potentially occupied burrows found per survey method; and soil and habitat types within survey boundaries (per method).

5. Submit a development plan or proof of local government approval (in the form of preliminary or final subdivision plat, or master planned unit development approval; Development of Regional Impact [DRI] development order; or authorization to commence clearing, grading, or construction activities) for the proposed development activity.

6. For temporary exclusion permits (major utility corridors), indicate the location of the exclusion fencing on the habitat map.

## Additional Information Required for Recipient Site Permits

1. Calculated stocking rate: As described in the criteria for recipient sites, provide both the number of additional tortoises requested for release on the site and the final, post-relocation tortoise density results. To calculate current tortoise population size, baseline density, and stocking rate, consider only tortoises greater than or equal to 130 mm (5 inches) in carapace length. Eggs and juvenile tortoises are not considered in these calculations because of their low survivorship and minimal effect on the recipient site forage base.

2. Vegetation survey data: Provide vegetation data including transect line/belt shapefiles, and sampling station locations; intervals between sampling stations; measurements at each sampling station; cover classes at each ground cover sampling station; total measurements for canopy, shrub, and herbaceous cover; and percent canopy, shrub, and herbaceous cover (see Appendix 7.). The full legal name of the surveyor(s) must be included in the application.

3. Perimeter: After the recipient site's perimeter boundaries have been permanently established (and approved by FWC), the perimeter must either be clearly marked with boundary posts or have boundary points recorded on a GPS unit, at no less than 500 linear-foot intervals and at boundary turning points, to facilitate boundary identification by FWC.

4. Enclosures: Requirements for using enclosures to temporarily contain the tortoises within the recipient area are described in the guidelines under recipient site permits. The applicant must provide information on enclosure(s) size, location, enclosure materials, and proposed tortoise density within enclosures. The location of the proposed enclosures

must be included on a map of the site and in a shapefile.

5. Draft conservation easement: The conservation easement should conform to the standard format available from FWC (see Appendix 8) and any changes to the standard must be provided in track changes with all proposed additions underlined, all proposed deletions indicated by a strike-through. Explanations for each addition or deletion made must also be included. The easement must also include a survey and legal description, title commitment (not older than 180 days), and draft habitat management plan (described below).

6. Boundary shapefiles: GIS shapefiles of the easement boundary (if applicable) and permitted site boundary are required for all recipient sites to assist FWC with tracking recipient site location data. FWC staff will provide assistance to applicants unable to access the appropriate technology needed to meet this requirement.

7. Habitat management plan: Site management plans shall contain the following: both qualitative and quantitative baseline information that describes existing conditions; goals of future management actions; description of invasive infestations and proposed control program; list and timeline for implementing management activities; quantifiable desired future conditions for canopy cover and herbaceous ground cover; schedule and methods for conducting tortoise population monitoring and habitat monitoring; remedial actions if proposed activities do not achieve desired results; estimate of annual management budget for the site. Below is a list of the major habitat management elements that are required as part of the application package.

    - *Base map***:** Indicate property boundaries, land use cover types, management units, and baseline density transect locations with corresponding density values.
    - *Tree canopy management activities/timelines:* Describe practices and treatment intervals that will be used to maintain canopy cover at 60% or less.
    - *Ground cover management activities/timelines:* Describe practices and treatment intervals that will be used to maintain herbaceous ground cover at 30% or more; if applicable, include treatment practices for problematic invasive nonnative plants. Refer to Florida Invasive Species Council for a list of species.
    - *Compatibility of proposed land uses:* Describe what types of land uses are proposed for the site and how activities related to these land uses would be conducted to foster the open canopy and herbaceous ground cover noted above, while not adversely affecting the ability of gopher tortoises to excavate and maintain their burrows or to otherwise inhabit and utilize the site.
    - *Livestock grazing plan:* If cattle are present within the FWC-approved, suitable gopher tortoise habitat portion of the recipient site, the habitat management plan must include the following grazing parameters or reference a grazing plan that incorporates comparable practices that are compatible with gopher tortoises and minimize any potential adverse effects of some practices normally implemented within cattle grazing operations. Refer to the Florida Department of Agriculture (FDACS) Cow/Calf Manual for more information on the practices.
        i. Areas of FWC-approved, suitable gopher tortoise habitat where cattle will

also be grazed must maintain adequate forage for tortoises, generally maintaining vegetation height between 4" – 12".

ii. To minimize impacts caused by cattle trampling on gopher tortoise burrows and nests, the cattle grazing stocking rate cannot exceed one cow/animal unit per 6 acres within the FWC-approved, suitable gopher tortoise habitat portion of the recipient site.

iii. High intensity areas (i.e., watering or feeding stations) will not be considered as providing suitable gopher tortoise habitat, and therefore not be included within the acreage used to calculate tortoise stocking densities. Following consultation with and approval by FWC, these high intensity areas may be relocated by the landowner within the recipient site if it does not result in a reduction of the total acres of FWC-approved gopher tortoise habitat, and cause impact to burrows on the permitted recipient site.

iv. Activities including flash grazing, pesticide use (other than herbicide use to improve habitat), row cropping, sod production, and upland pond construction shall not be permitted within the FWC-approved, suitable gopher tortoise habitat.

- To demonstrate the foregoing, a grazing plan or its equivalent (i.e., FDACS Notice of Intent with BMP Checklist), or acknowledgement of intent to follow the above grazing parameters for the property should be incorporated by reference or included as an appendix to the recipient site habitat management plan.
- *Other habitat enhancement proposed:* Describe proactive measures that could enhance tortoise site fidelity*, e.g.,* forage plantings, fencing.
- *Tortoise population and habitat monitoring***:** Recipient site permittees and named agents are required to submit a summary of the habitat management conducted and the results of habitat monitoring and tortoise density surveys in a report to FWC every five years in a monitoring report; the monitoring timeline is based on the number of gopher tortoises approved for release at the site and the population survey methodology selected (see Appendix 7); post- baseline survey methodology to be used shall be identified in the management plan, including number of survey observers; guidelines regarding survey methods, and a template for the report, are included upon permit issuance.
- *Tortoise mortality/contingency plan:* The habitat management plan must include a landowner commitment statement to notify the FWC within 48 hours of any observed mortality, injury or sign of disease and if needed, coordinate with them to develop a contingency and/or adaptive management plan to address mortality on the recipient site should evidence of multiple adult tortoise shells and carcasses be observed beyond infrequent mortality (i.e., >3% of the adult tortoise population in any one year, or if more than a few adults are found dead in any small area) seen under natural circumstances (i.e., wildlife predation or disease).

  Information to be provided to FWC upon initial notification of mortality should include the following (as available):
  - date(s) of observation;
  - number of shells or carcasses observed;

- resident or relocated tortoises, if determinable (include marked number of relocated tortoise);
- sex, size, and age class of shells/carcasses, if determinable;
- GPS location of observed shells/carcasses or approximate location;
- photographs of shells/carcasses;
- cause of mortality (if known);
- person(s) who reported/documented the mortality event(s);
- the date of when and who at FWC is notified; and
- the date of any FWC site visit.

Recommended soft release practices and mitigation steps for linear sources of high-risk mortality (e.g., road, train track, etc.) can help minimize risk of mass mortality events and should be incorporated into a recipient site's Gopher Tortoise Management Plan. Soft release recommendations are included under I. Enclosure Methods.

Mitigation steps for linear sources of high risk mortality include:

- Setting a recipient site boundary 1,000 feet back from the source (i.e., noncontiguous), or
- Installing entrenched permanent fencing the length of the permitted boundary that is adjacent to the source, and
  - Entrenched fencing should be at least 8 inches deep and 24 inches tall
  - Entrenched fencing should include fence guides on either end that direct tortoise movement back towards the permitted recipient site for as far as is practical per site conditions
  - Entrenched fencing should impede movement of all gopher tortoises, including hatchlings, across the source
  - Access roads or breaks within the entrenched fencing should have gates with fencing attached that extends to the ground and graveled substrate underneath to discourage burrowing under the gate
- Installing tortoise crossing signs at either end of the entrenched fence regardless of access points, and
- Installing soft release enclosures beyond a 500-foot buffer from the source

Permittees and named agents must fill out a Mortality Report Form when requested by the Gopher Tortoise Program to help inform next steps to determine if a contingency plan is necessary. The contingency plan will be developed in consultation with FWC and/or another technical professional after the initial notification of mortality occurs and should outline the initial steps the landowner took or will take to investigate the possible causes of the mortality, results of the investigation, a brief summary or copy of FWC recommendations, possible solutions to the problem(s), and adaptive management actions that have been or will be taken by the landowner to prevent risk of additional mortality (temporary and/or permanent actions). FWC reserves the right to undertake its own investigation into mortalities.

Additional information that may be useful for landowners on recognizing potential health problems is included in the Handbook on Gopher Tortoise; Health Evaluation Procedures for Use by Land Manager and Researchers (Wendland et al., 2009).

8. Costs estimates: Include a table (see example Table A1 below) that lists the estimated costs of one-time and ongoing long-term habitat and site management.

Table A1. Categories of long-term, ongoing land management costs (If $0.00, indicate so.)

| Upland Activities | Cost/Acre | Cost/Acre/Year | Assumptions/Frequency |
|---|---|---|---|
| Burning | $ | $ | |
| Fencing (temporary or permanent) | $ | $ | |
| Fire lines | $ | $ | |
| Security | $ | $ | |
| Vegetation management | $ | $ | |
| Administrative/Trustee fee | $ | $ | |
| Invasive Plant & Animal Management | $ | $ | |
| Monitoring and reporting | $ | $ | |
| Vegetation monitoring | $ | $ | |
| Equipment (if not already included in other costs above) | $ | $ | |
| Other (add additional categories as needed) | $ | $ | |
| Total | | $ | |

9. Financial assurance: The purpose of the financial assurance instrument is to ensure that adequate funds will be generated and provided for the long-term management of gopher tortoise habitat within the recipient site. When FWC issues a permit for activities that impact species, the permittee may be required, as part of the mitigation, to protect property and habitat. Typically, the permit will require permittees or their successors to actively manage the property in a way that will enhance or maintain the property. In so doing, the applicant must demonstrate sufficient financial assurance to ensure that funding will be available in the timing and amounts necessary to appropriately manage the property for the duration specified in the permit. The applicant must provide supporting documentation to FWC to demonstrate such financial assurances. The FWC will accept the following forms of financial assurance from a recipient site applicant:

    - trust fund
    - performance bond
    - irrevocable letter of credit
    - general appropriation or allocation approved by a public governing body (*e.g.,* Florida Legislature) for habitat management (public conservation lands only)

The above options are designed to balance the levels of financial assurance to FWC and the relative burden on the permittee. Appendix 3-1 sets forth guidelines for the financial assurance underpinning the above-listed financial mechanisms.

In addition to the standard financial assurance guidelines set forth in Appendix 3-1, when a recipient site applicant uses a Trust Fund to satisfy the financial assurance requirement, either of the options described below may be considered by FWC.

- Establish a Habitat Management Trust Fund that is fully funded when the recipient site is established. The per-acre endowment required for recipient sites would be determined on a case-by-case basis and based on the annual cost per-acre required to manage the site (e.g., a 250-acre site requiring $20/acre per year for management would require an endowment of $500/acre, or $125,000 total). In addition to the standard financial assurance guidelines set forth in Appendix 3-1, when a recipient site applicant uses a Trust Fund to satisfy the financial assurance requirement, either of the options described below may be considered by FWC. The investment objective of the Trust Fund is to ensure sufficient investment returns such that the principal endowment is not eroded.
- Establish a Habitat Management Trust Fund that is incrementally funded, such that additional funds are added to the Trust Fund as each relocated gopher tortoise is received at the recipient site. The initial endowment should at least be equal to the amount of money required to implement one complete cycle of habitat management within the permitted phase(s) of the recipient site (e.g., burn or roller chop the permitted recipient site). The applicant is responsible for adding additional funds to the Trust Fund as each relocated gopher tortoise is received at the recipient site, such that the Trust Fund is fully funded by the time all gopher tortoises that are authorized for relocation to the recipient site have been received. The per-acre endowment required for recipient sites would be determined on a case-by-case basis and based on the annual cost per-acre required to manage the site.

As discussed in Section II of Appendix 3-1, the cost estimate supporting the face value of the financial assurance mechanism is contingent on a number of factors, including:

- The dollar amount needed to fund the total habitat management;
- The number of gopher tortoises authorized for relocation to the recipient site; and
- The investment performance of the Trust Fund.

Other forms of financial assurance may be appropriate, e.g., general appropriation or allocation approval by a public governing body (e.g., Florida Legislature) for habitat management as it relates to public conservation lands. This and other forms of financial assurances are acceptable at the sole discretion of FWC, pursuant to the financial assurance guidelines set forth in Appendix 3-1.

# APPENDIX 3-1. FINANCIAL ASSURANCE GUIDELINES FOR LONG-TERM PROTECTED RECIPIENT SITES

This Appendix sets forth guidelines to support the Applicant in securing and maintaining Financial Assurance as required to provide for the long-term habitat management activities detailed in the recipient site's Habitat Management Plan, specifically long-term management of gopher tortoise habitat within the recipient site.

## I. Definitions

Except as otherwise provided in this Appendix, definitions for the terms presented herein shall be incorporated with the FWC Gopher Tortoise Permitting Guidelines. Whenever the terms set forth below are used in this Appendix, the definitions set forth below shall apply.

**Anniversary Date** - the annual anniversary of the date that Financial Assurance is provided unless otherwise stated in this Appendix.

**Applicant** - the name of the Applicant, and as applicable, any Guarantor.

**Cost Estimates** – the estimated cost of conducting management activities delineated in the recipient site's Habitat Management Plan and the recipient site permit, as applicable under the Gopher Tortoise Permitting Guidelines and as approved by FWC.

**Current Dollars** - U.S. dollars in the year actually received or paid, unadjusted for price changes or inflation.

**Financial Assurance** - a written demonstration of financial capability, in compliance with the terms of this Appendix, to meet the obligations associated with implementing the management activities delineated in the recipient site's Habitat Management Plan, as required in the recipient site permit, in an amount at least equal to the approved Cost Estimates.

**Financial Mechanism** - those mechanisms or instruments specified in this Appendix used to secure funding for an obligation under the recipient site permit and Cost Estimates.

**Guarantee** - agreements where a second entity assumes responsibility for the payment of a debt or performance of an obligation if the entity primarily responsible fails to perform. The entity providing the Guarantee is the Guarantor.

**Long-term Care** - activities required pursuant to the recipient site permit and Cost Estimates, including long-term management of gopher tortoise habitat.

**Obligations** - commitments associated with the long-term management of gopher tortoise habitat within the recipient site. These obligations include the management activities set forth in the recipient site's Habitat Management Plan.

**Plan Work** - the work required to implement the recipient site's Habitat Management Plan pursuant to the recipient site permit and the Gopher Tortoise Permitting Guidelines (as applicable

in the context of this Appendix).

**Related Party** - affiliates of the recipient site Permittee; trusts for the benefit of employees, such as pension and profit-sharing trusts managed by the recipient site Permittee; principal owners of the recipient site Permittee's enterprise or its management; members of the immediate families of the principal owners of the recipient site Permittee's enterprise and its management.

**Third-Party Mechanism** - a trust fund (or endowment account), surety bond, or irrevocable letter of credit.

## II. Cost Estimates

As a part of the recipient site permit application, the Applicant shall submit to FWC for approval its initial Cost Estimate submission, which shall include a detailed written Cost Estimate for habitat management activities delineated in the recipient site's Habitat Management Plan. The Trust Fund management fee shall also be included in the Cost Estimates and equal the annual percentage rate or dollar amount charged by the Trustee (*e.g.,* 1% or $1,000 annually). The Applicant shall not include in the Cost Estimates any credit for salvage values. The Applicant must not include any taxes associated with the Trust Fund as taxes must be paid outside corpus of the Trust.

## III. Financial Assurance for Management Activities Set Forth in Recipient Site's Habitat Management Plan

1. As part of the recipient site permit application, pursuant to FWC's approval of Applicant's Cost Estimates, consistent with the monitoring report requirements, the Applicant shall provide to FWC an originally signed certification by Applicant, together with supporting documentation, confirming that it has secured Financial Assurance for management activities in the Applicant's Habitat Management Plan. The Financial Assurance must initially be provided in an amount no less than that needed to implement one complete cycle of habitat management activities in accordance with the Cost Estimates, pursuant to the requirements of the recipient site permit. The long-term Financial Assurance is the amount that is sufficient to generate annually in interest (assuming a 4% rate of return) the money needed for the Cost Estimates required to fund the annual habitat management activities.

2. Once the Applicant establishes Financial Assurance for the management activities in the Habitat Management Plan, it shall maintain such Financial Assurance pursuant to the guidelines established in this Appendix unless FWC approves a request to provide alternate Financial Assurance. If the Applicant wishes to request such a change, Applicant shall submit to FWC for approval: (a) an originally signed certification by Applicant, together with supporting documentation, explaining in detail the reasons for the request; and (b) proposed Financial Assurance, compliant with the applicable guidelines of this Appendix, that can become effective within thirty (30) days of FWC's approval. The Applicant shall not cancel its existing Financial Assurance for management activities detailed in the recipient's Habitat Management Plan until it receives FWC 's

written approval of Applicant's request and the alternate Financial Assurance is in effect (*e.g.,* trust fund is funded).

a. Applicant shall use the Cost Estimates generated pursuant to Section II. Applicant shall provide Financial Assurance in an amount at least equal to the approved Cost Estimate.
b. Applicant shall choose from the following list of Financial Mechanisms, including trust fund (or endowment account) for interim measure and/or long-term care, provided that the Trustee of any Trust Fund shall not be a Related Party to Applicant. An irrevocable Letter of Credit or surety bond may be used solely as an interim measure (not exceeding 6 months) for purposes of financial assurance, provided that the provider of any letter of credit or surety bond shall not be a Related Party to Applicant. Applicant shall word the Financial Mechanism as specified in Attachment B.
    i. For a trust fund, unless otherwise allowed by FWC, Applicant shall fully fund the trust when the recipient site is established.
        1. If Applicant proposes to establish a Habitat Management Trust Fund that is incrementally funded, such that additional funds are added to the Trust Fund as each relocated gopher tortoise is received at the recipient site. The initial endowment should at least be equal to the amount of money required to implement one complete cycle of habitat management within the permitted phase(s) of the recipient site (e.g., burn or roller chop the permitted recipient site). The applicant is responsible for adding additional funds to the Trust Fund, as each relocated gopher tortoise is received at the recipient site, such that the Trust Fund is fully funded by the time all gopher tortoises that are authorized for relocation to the recipient site have been received. The per-acre endowment required for recipient sites would be determined on a case-by-case basis and based on the annual cost per-acre required to manage the site.
        2. Applicant shall use the draft trust agreement template in Attachment B-1 to this Appendix for the trust agreement. The trust agreement must be accompanied by a formal certification of acknowledgment as set forth in Attachment B-1. Applicant shall update Schedule A of the trust agreement within sixty (60) days after a 5% net change in the amount of the Cost Estimates.
        3. The Trustee and any Successor Trustee must be approved in advance by FWC.
        4. The Trustee should invest the Fund in a combination of investment grade corporate securities, investment grade municipal securities, and U.S. Treasuries, or other investments that are secure investments likely to generate a 4% return on interest sufficient to meet the long-term Financial Assurance requirements of the Trust.
    ii. For a surety bond guaranteeing payment or performance of interim measures, Applicant shall use the performance bond template specified in Attachment B-2. In addition:
        1. Applicant shall provide an originally signed certification documenting that

the surety has at least a secured financial strength rating of A by A.M. Best or an equivalent rating by a Nationally Recognized Statistical Rating Organization (or NRSRO).

2. Upon notice to Applicant and the Surety of a determination by FWC that Applicant is out of compliance on the management activities required in the recipient site's Habitat Management Plan as required by the recipient site permit, and following the conclusion of any dispute resolution, the Surety under the terms of the bond will perform the management activities as directed by FWC or will deposit the amount of the penal sum of the surety bond into a standby trust fund.

iii. For a letter of credit, Applicant shall use the irrevocable stand by letter of credit template in Attachment B-3. In addition:

1. Applicant shall provide an originally signed certification by documenting that the provider of the letter of credit is a federally insured financial institution.
2. Upon notice to Applicant of a determination by FWC that Applicant has failed to perform the management activities set forth in the recipient's Habitat Management Plan as required by the recipient site permit, and following the conclusion of any dispute resolution, FWC may draw on the letter of credit.

c. If Applicant seeks to provide:

i. More than one Third-Party Mechanism to demonstrate Financial Assurance for the management activities set for forth in the recipient site's Habitat Management Plan, or for purposes of interim measures, the Applicant shall submit to FWC an originally signed certification verifying that the Third-Party Mechanisms do not incorporate terms subrogating one financial mechanism to another, i.e., designating a prioritization for the release of the funds or the payment of a claim. The FWC, if the need arises, will determine the priority for the release of funds or payment of a claim.

d. A Financial Mechanism ensuring Financial Assurance at more than one site, the Applicant:

i. Shall not provide a single trust fund to cover multiple sites in different States, but shall provide Florida with its own distinct trust; and

ii. May use the same letter of credit or surety bond for multiple sites provided that the following conditions are met: (i) the sites, and the amounts associated with each particular site are clearly specified in the financial mechanism; and (ii) the financial mechanism clearly states that there can be a release of funds for a specified site without requiring the entire obligation covered by the Financial Mechanism to be placed in the associated stand-by trusts.

e. If Applicant is using a Trust Fund, Letter of Credit, or Surety Bond, the corpus of the trust fund, the penal sum of the payment surety bond, or the value of the letter of credit shall not be reduced to reflect reductions in the Cost Estimates until such time as the corpus, penal sum or value of the letter-of-credit is equivalent to the sum of the amount of money required to complete one management cycle under the reduced costs estimates, plus all additional funds that were required to be added to the Financial Mechanism for each relocated gopher tortoise that has been received at the

recipient site.

f. If Financial Assurance is provided by multiple Third-Party Mechanisms pursuant to the guidelines of this Appendix, the individual value of the Third-Party Mechanisms shall not be reduced to reflect any reductions in the Cost Estimates until such time as the annual Cost Estimate is equivalent to the sum of the total obligations covered by the Third-Party Mechanisms.

## IV. Business Transactions

3. No transfer of ownership or operation of the site shall relieve Applicant of its Financial Assurance obligations as established under the recipient site permit, except as provided in Sections 9 and 10, below.

4. At least thirty (30) days prior to any transfer, Applicant shall submit to FWC information explaining the proposed transfer in detail and stating whether Applicant requests the transfer of its Financial Assurance responsibilities to the Transferee pursuant to Gopher Tortoise Permitting Guidelines.

5. In the event of a transfer of site ownership or operation:
   a. If Applicant is to retain its Financial Assurance obligations upon the transfer of the site, Applicant shall establish a trust fund in accordance with this Appendix into which Applicant shall fully fund the present value (PV) of costs associated with conducting the management activities included in the recipient site's Habitat Management Plan.
   b. Applicant shall establish and fund the trust fund, as well as provide FWC the appropriate documentation evidencing the trust fund, by the date of the site transfer. The portion of funds vested in the trust fund that are not required to meet annual withdrawals shall be invested according to the provisions described in Paragraph 2.b. above.

6. If Transferee agrees to assume Applicant's Financial Assurance obligations, Applicant shall submit to FWC for approval an originally signed certification by Transferee, together with supporting documentation, explaining in detail its ability to provide Financial Assurance pursuant to the guidelines of this Appendix and agreeing to provide the Financial Assurance if approved by FWC pursuant to the recipient site permit and Cost Estimates. Applicant shall comply with the guidelines of subparagraph 10.a, above, until: (1) FWC has approved Transferee's proposed Financial Assurance; (2) FWC consents to the transfer of obligations pursuant to the Gopher Tortoise Permitting Guidelines; (3) Transferee has established the approved Financial Assurance; and (4) FWC has given its consent for Applicant to cancel its Financial Assurance.

7. In the event of a business transaction that results, or Applicant determines will result, in an adverse material change to Applicant's financial or corporate structure such that Applicant or its successor has insufficient financial capability operating to meet long-term (greater than one (1) year) financial liabilities as represented on the Applicant's or successor's audited balance sheet and to comply with the Financial Assurance guidelines

of this Appendix, Applicant shall provide notice to FWC within fourteen (14) days of identifying such adverse material change and comply with the guidelines for Financial Assurance in Paragraph 10.a. above.

## V. Reservation of Rights

8. FWC reserves the right to determine at any time that the Financial Assurance provided by Applicant no longer satisfies the guidelines of this Appendix. FWC will base this determination on the Applicant's failure to provide notices or documentation required by this Appendix and/or a failure of the Applicant to maintain the prescribed funding for the Financial Assurance as outlined in the approved Habitat Management Plan. Within thirty (30) days of written notice from FWC that Applicant's Financial Assurance no longer satisfies the guidelines of this Appendix or the referenced Gopher Tortoise Permitting Guidelines, Applicant shall submit to FWC for approval revised or alternate Financial Assurance that satisfies the guidelines of this Appendix. Applicant shall not cancel the existing Financial Assurance until the revised or alternate Financial Assurance has been approved by FWC and FWC has provided written consent permitting Applicant to cancel the existing Financial Assurance.

# ATTACHMENT B-1. DRAFT TRUST AGREEMENT

[NOTE TO PREPARERS: PLEASE USE "TRACK CHANGES' WHEN YOU REVISE THIS FORM FOR SUBMITTAL TO FWC. IF YOU DO NOT USE "TRACK CHANGES" FWC REVIEW OF THE FORM MAY BE SIGNIFICANTLY SLOWED. PLEASE INCLUDE A COMMENT THAT EXPLAINS THE REASON FOR EACH CHANGE.]

*Instructions: The trust agreement for a trust fund or endowment account shall be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted. The Grantor may enter into an addendum to the Trust Agreement ("Addendum") required by the Trustee, provided that: (1) the Addendum supplements and does not contain terms that conflict, supersede, revise or alter the terms of the Trust Agreement, and (2) the Addendum is approved by Florida Fish and Wildlife Conservation Commission ("FWC") in advance, such approval is within FWC's unreviewable discretion.*

**Trust Agreement**

Trust Agreement, the "Agreement," entered into as of [date] by and between [name of the Gopher Tortoise permit recipient], a [name of State] [insert "corporation," "partnership," "association," "individual," or "proprietorship"], the "Grantor," and [name of corporate trustee], [insert "incorporated in the State of " or "a national bank"], the "Trustee."

Whereas, the Grantor has received a permit from the Florida Fish and Wildlife Conservation Commission, "FWC," an agency of the State of Florida, to operate a gopher tortoise recipient site and per the terms of that permit, has placed certain lands it owns under a Conservation Easement for Habitat Management for the purpose of providing protected Florida habitat on private land for the gopher tortoise (hereinafter referred to as the "[name of Recipient Site Unit]"); and.

Whereas, the Grantor has elected to establish a trust to provide all or part of such financial assurance for the facilities identified herein,

Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this agreement, and the Trustee is willing to act as trustee,

Whereas, the Beneficiary, acting through its duly authorized officers, has approved the selection of the Trustee,

Now, Therefore, the Grantor and the Trustee agree as follows:

Section 1. Definitions. As used in this Agreement:

(a) The term "Grantor" means the Gopher Tortoise permit recipient site Permittee who enters into this Agreement and any successors or assigns of the Grantor.

(b) The term "Trustee" means the Trustee who enters into this Agreement and anysuccessor Trustee.

(c) The term "Beneficiary" means FWC and any successor state entity.

Section 2. Identification of Facilities and Cost Estimates. This Agreement pertains to the lands and cost estimates identified on attached Schedule A [on Schedule A, for each land area, list FWC Permit Number, applicant name, address, and the current gopher tortoise habitat management cost estimates, or portions thereof, for which financial assurance is demonstrated by this Agreement].

Section 3. Establishment of Fund. The Grantor and the Trustee hereby establish a trust fund, the "Fund," for the benefit of FWC. The Grantor and the Trustee intend that no third party have access to the Fund except as herein provided. The Fund is established initially as consisting of the initial endowment, which is acceptable to the Trustee, described in Schedule B attached hereto. Such property and any other property subsequently transferred to the Trustee is referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor established by FWC.

Section 4. Payment for Gopher Tortoise Habitat Management. The Trustee shall make payments from the Fund only as directed in writing by FWC's Executive Director or designee in accordance with Section 14 below, to provide for reimbursements to the Grantor or other persons from the Fund for the payment of the costs of Gopher Tortoise Habitat Management at the lands covered by this Agreement. In addition, the Trustee shall refund to the Grantor only such amounts as FWC [Agency Head (or designee)] specifies in writing. However, Gopher Tortoise Habitat Management costs which are equal to or less than the interest accrued in the Trust may be released to the Grantor for costs associated with the gopher tortoise recipient site without written permission of the Agency Head or designee. Any releases of the corpus of the Trust must be approved in advance, in writing by FWC. Upon refund, such funds shall no longer constitute part of the Fund as defined herein. At no time shall the Trustee allow the trust to fall beneath the principal amount. Should it fall beneath that amount, it shall be replaced.

Section 5. Payments Comprising the Fund. Payments made to the Trustee for the Fund shall consist of cash or securities acceptable to the Trustee.

Section 6. Trustee Management. The Trustee shall invest and reinvest the principal and income of the Fund and keep the Fund invested as a single fund, without distinction between principal and income, which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions of this Section and the investment guidelines prescribed in FWC's Gopher Tortoise Permitting Guidelines. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge his/her duties with respect to the trust fund solely in the interest of the Beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:

(a) Securities or other obligations of the Grantor, or any other owner or operator of the facilities, or any of their affiliates as defined in the Investment Company Act of 1940, as

amended, 15 U.S.C. 80a-2.(a), shall not be acquired or held, unless they are securities or other obligations of the Federal or a State government;

(b) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal or State government; and

(c) The Trustee is authorized to hold cash awaiting investment or distribution un-invested for a reasonable time and without liability for the payment of interest thereon.

Section 7. Commingling and Investment. The Trustee is expressly authorized in its discretion:

(a) To transfer from time to time any or all of the assets of the Fund to any common, commingled, or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and

(b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 80a-1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

Section 8. Express powers of Trustee. Without in any way limiting the powers and discretions conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

(a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;

(b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depositary even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depositary with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;

(d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking

institution affiliated with the Trustee, to the extent insured by an agency of the Federal or State government; and

(e) To compromise or otherwise adjust all claims in favor of or against the Fund.

Section 9. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid directly by the Grantor. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee shall be paid directly by the Grantor. To the extent such fees are not paid by the Grantor, and upon the express written approval of the Beneficiary, the Trustee shall be paid from the Fund.

Section 10. Annual Accounting. The Trustee shall, every twelve (12) months from the date of establishment of the Fund, furnish to the Grantor and to the appropriate FWC contact person [Agency Head (or the designee)], a statement confirming the value of the Trust and a cumulative and calendar year accounting of the amount the Trustee has released from the Fund for reimbursement of Gopher Tortoise Habitat Management expenditures. The Trustee shall furnish additional valuation statements and accountings of the released funds to the Grantor and to the appropriate FWC contact person [Agency Head (or designee)], as instructed in writing by FWC [Agency Head (or designee)]. Any securities in the Fund shall be valued at market value as of no more than sixty (60) days prior to the anniversary date of establishment of the Fund. The failure of the Grantor to object in writing to the Trustee within ninety (90) days after the statement has been furnished to the Grantor and FWC [Agency Head (or designee)] shall constitute a conclusively binding assent by the Grantor, barring the Grantor from asserting any claim or liability against the Trustee with respect to matters disclosed in the statement.

Section 11. Advice of Counsel. The Trustee may from time to time consult with counsel, who may be counsel to the Grantor, with respect to any question arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 12. Trustee Compensation. The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing with the Grantor.

Section 13. Successor Trustee. The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee, subject to advance approval by FWC, and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in a writing sent to the Grantor, FWC [Agency Head (or designee)],], and the present Trustee by certified mail 10 days before such change

becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 9.

Section 14. Instructions to the Trustee.

(a) All orders, requests, and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are designated in the attached Exhibit A or such other designees as the Grantor may designate by amendment to Exhibit A. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests, and instructions.

(b) All orders, requests, and instructions by FWC [Agency Head (or designee)] to the Trustee shall be in writing, signed by the appropriate FWC [Agency Head (or designee)], unless otherwise indicated in instructions to the Trustee as signed by FWC [Agency Head (or designee)]. Initial instructions by FWC [Agency Head (or designee)] to the Trustee are attached as Exhibit B. New, revised or amended instructions by FWC [Agency Head (or designee)] to the Trustee will be dated and appended hereto in this Exhibit and shall be designated Exhibit B followed by a numeric designation (e.g., Exhibit B-1, Exhibit B-2). The Trustee shall act and shall be fully protected in acting in accordance with FWC [Agency Head (or designee)] orders, requests, and instructions.

(c) The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor or FWC [Agency Head (or designee)] hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor or FWC [Agency Head (or designee)], except as provided for herein and found in Exhibit B.

Section 15. Notice of Nonpayment. The Trustee shall notify the Grantor and the appropriate FWC [Agency Head (or designee)], by certified mail within ten (10) days following the expiration of the thirty (30)-day period after the anniversary of the establishment of the Trust, if no payment is received from the Grantor during that period. After the pay-in period is completed, the Trustee shall not be required to send a notice of nonpayment.

Section 16. Amendment of Agreement. This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee, and the appropriate FWC [Agency Head (or designee)], or by the Trustee and the appropriate FWC [Agency Head (or designee)] if the Grantor ceases to exist.

Section 17. Irrevocability and Termination. Subject to the right of the parties to amend this Agreement as provided in Section 16, this Trust shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee, and FWC [Agency Head (or designee)], or by the Trustee and FWC [Agency Head (or designee)] if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, shall be delivered to the Grantor.

Section 18. Immunity and Indemnification. The Trustee shall not incur personal liability of any

nature in connection with any act or omission, made in good faith, in the administration of this Trust, or in carrying out any directions by the Grantor and/or FWC [Agency Head (or designee)] issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Trust Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

Section 19. Choice of Law. This Agreement shall be administered, construed, and enforced according to the laws of the State of Florida.

Section 20. Interpretation. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. Whenever the term "[Agency Head (or designee)]" are used, they shall be construed to include the term "or his/her designee". The descriptive headings for each Section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement.

In Witness Whereof the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals to be hereunto affixed and attested as of the date first above written:

[Signature of Grantor]
[Title]

Attest:

[Title]

[Seal]

[Signature of Trustee]

Attest:

[Title]

[Seal]

State of_____County of _____
On this [date], before me personally came [owner or operator] to me known, who, being by me duly sworn, did depose and say that she/he resides at [address], that she/he is [title] of [corporation], the corporation described in and which executed the above instrument; that she/he knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that she/he signed her/his name thereto by like order.

[Signature of Notary Public]

# ATTACHMENT B-2. DRAFT GOPHER TORTOISE FINANCIAL ASSURANCE PERFORMANCE BOND

**Florida Fish and Wildlife Conservation Commission**
**[Letterhead of Bond Issuer]**
**PERFORMANCE BOND**

Surety's Performance Bond Number: _____

Date of Execution of Performance Bond: _____

Effective Date of Performance Bond: _____

Total Dollar Amount of Performance Bond: _____

Principal:

| | |
|---|---|
| Legal Name and Address: | [name and address of Gopher Tortoise Permit Recipient] |
| Type of Organization: | [insert "individual," "partnership," "limited liability company," "corporation," etc.] |
| State of Organization: | |

Surety:

| | |
|---|---|
| Legal Name and Address: | [name and business address of surety providing the bond] |
| Type of Organization: | [insert "individual," "partnership," "limited liability company," "corporation," etc.] |
| State of Organization: | |

Beneficiary:

| | |
|---|---|
| Legal Name and Address: | Florida Fish and Wildlife Conservation Commission<br>Type of Organization: Administrator (or any of his or her designees)<br>620 S. Meridian Street<br>Tallahassee, FL 32399-1600 |

Site Information:

| | |
|---|---|
| Name and Location of Site: | |
| Permit Number: | [Permit Number, if applicable] |
| Agreement Governing Site Work: | [That certain Gopher Tortoise Habitat Management Plan dated_____, 20__ , approved by FWC and [name of Gopher Tortoise Permit Recipient] (the "Agreement") |

**WHEREAS**, said Principal is required, under the above-described Site Management Plan, Interim Measures Plan, or Habitat Management Plan (hereinafter, the "Agreement") entered pursuant to the Florida Fish and Wildlife Conservation Commission (FWC) Gopher Tortoise Permitting Guidelines, to perform the "Work" as defined in such Agreement

(hereinafter, the "Work") and to fulfill its other obligations as set forth therein; and

**WHEREAS**, said Principal is required by the Agreement to provide financial assurance securing its full and final completion of the Work.

**NOW, THEREFORE**, in consideration of the foregoing, and for other good and valuable consideration the receipt of which is hereby acknowledged, the parties hereto agree as follows:

The Principal and Surety hereto are firmly bound to FWC **[in the above Total Dollar Amount,]** for the performance of the Work, which we, the Principal and Surety, bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, subject to and in accordance with the terms and conditions hereof. **[Add proviso if there are multiple sureties: "; provided that, where the Sureties are acting as co-sureties, we, the Sureties, bind ourselves in such [sum and] performance "jointly and severally" for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the performance of the Work only as is set forth in the Habitat Management Plan, but if no bifurcation of the Work is indicated, the limit of liability shall be the full performance of the Principal's Work obligations under the Agreement".]**

1. The conditions of the Surety's obligation hereunder are such that if the Principal shall promptly, faithfully, fully, and finally complete the Work in accordance with the terms of the Agreement, the Surety's obligation hereunder shall be null and void; otherwise it is to remain in full force and effect.

2. The Surety shall become liable on the obligation evidenced hereby only when the Principal fails to perform all or any part of the Work pursuant to and in accordance with the terms of the Agreement. At any time and from time to time upon notification by FWC Administrators (or any of his or her designees) that the Principal has failed to perform all or any part of the Work, the Surety shall promptly (and in any event within fifteen (15) days after receiving such notification):
    a. Commence to complete the Work to be done under the Agreement in accordance with its terms and conditions; or
    b. Pay funds up to the Total Dollar Amount in such amounts and to such person(s), account(s), or otherwise as FWC Administrators (or his or her designees) may direct.

3. If the Surety does not render such performance set forth above within the specified 15-day period, the Surety shall be deemed to be in default of this Performance Bond and FWC shall be entitled to enforce any remedy available to it at law, in equity, or otherwise; provided, however, that if such default is susceptible of cure but cannot reasonably be cured within such fifteen (15) day period and provided further that Surety shall have commenced to cure such default within such fifteen (15) day period and thereafter diligently proceeds to perform the same, such fifteen (15) day period shall be extended for such time as is reasonably necessary for Surety in the exercise of

due diligence to cure such default, such additional period not to exceed ninety (90) days.

4. The liability of the Surety shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the aggregate to the Total Dollar Amount of this Performance Bond, but in no event shall the aggregate obligation of the Surety hereunder exceed the amount of said sum.

5. The Surety may cancel this Performance Bond only by sending notice of cancellation to the Principal and to FWC Administrator, provided, however, that no such cancellation shall be effective during the 120-day period beginning on the date of receipt of the notice of cancellation by both the Principal and FWC Administrator. If after ninety (90) days of such 120-day period, the Principal has not established a replacement financial assurance mechanism pursuant to and in accordance with the terms of the Agreement, FWC shall have the right to enforce performance and/or draw upon the full amount of this Performance Bond.

6. The Principal may terminate this Performance Bond only by sending written notice of termination to the Surety and to FWC Administrator, provided, however, that no such termination shall become effective unless and until the Surety receives written authorization for termination of this Performance Bond by FWC Administrator (or his or her designee).

7. Any modification, revision, or amendment which may be made in the terms of the Agreement or in the Work to be done thereunder, or any extension of the Agreement, or other forbearance on the part of either the Principal or FWC to the other, shall not in any way release the Principal and the Surety, or either of them, or their heirs, executors, administrators, successors or assigns from liability hereunder. The Surety hereby expressly waives notice of any change, revision, or amendment to the Agreement or to any related obligations between the Principal and FWC.

8. The Surety shall immediately notify FWC of any of the following events: (a) the filing by the Surety of a petition seeking to take advantage of any laws relating to bankruptcy, insolvency, reorganization, winding up or composition or adjustment of debts; (b) the Surety's consent to (or failure to contest in a timely manner) any petition filed against it in an involuntary case under such bankruptcy or other laws; (c) the Surety's application for (or consent to or failure to contest in a timely manner) the appointment of, or the taking of possession by, a receiver, custodian, trustee, liquidator, or the like of itself or of all or a substantial part of its assets; (d) the Surety's making a general assignment for the benefit of creditors; or (e) the Surety's taking any corporate action for the purpose of effecting any of the foregoing. The Surety shall also immediately notify FWC if, at any time, the Surety ceases to be listed as an acceptable surety for Federal bonds in Circular 570 of the U.S. Department of the Treasury.

9. Any provision in this Performance Bond that conflicts with any applicable statutory or legal requirement shall be deemed deleted here from and provisions conforming to such

statutory or legal requirement shall be deemed incorporated herein.

10. All notices, consents, approvals and requests required or permitted hereunder shall be given in writing and shall be effective for all purposes if hand delivered or sent by (a) certified or registered United States mail, postage prepaid, return receipt requested or (b) expedited prepaid delivery service, either commercial or United States Postal Service, with proof of attempted delivery, to the address shown on this first page of this Performance Bond.

    All notices, elections, requests and demands under this Performance Bond shall be effective and deemed received upon the earliest of (a) the actual receipt of the same by personal delivery or otherwise, (b) one (1) business day after being deposited with a nationally recognized overnight courier service as required above, or (c) three (3) business days after being deposited in the United States mail as required above. Rejection or other refusal to accept or the inability to deliver because of changed address of which no notice was given as herein required shall be deemed to be receipt of the notice, election, request, or demand sent.

11. The Surety hereby agrees that the obligations of the Surety under this Performance Bond shall be in no way impaired or affected by any winding up, insolvency, bankruptcy or reorganization of the Principal or by any other arrangement or rearrangement of the Principal for the benefit of creditors.

12. No right of action shall accrue on this Performance Bond to or for the use of any person other than FWC or the executors, administrators, successors or assigns of FWC.

**[SIGNATURES ON FOLLOWING PAGE]**

**IN WITNESS WHEREOF**, the Principal and Surety have executed this Performance Bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby represent, warrant, and certify that they are authorized to execute this Performance Bond on behalf of the Principal and Surety, respectively.

PRINCIPAL: [_____], a [corporation/partnership/limited liability company/individual] organized and in good standing in the State of [_____]

Attest: By:_____

Name: Name:_____

Title: _____

SURETY: [_____], a [corporation/partnership/limited liability company] organized and in good standing in the State of [_____]

Attest: By:_____

Name: Name:_____

Title: _____

# ATTACHMENT B-3. DRAFT IRREVOCABLE STANDBY LETTER OF CREDIT

**IRREVOCABLE STANDBY LETTER OF CREDIT**
**Florida Fish and Wildlife Conservation Commission ("FWC")**

Dear Sir or Madam: We hereby establish our Irrevocable Standby Letter of Credit No. _____ in your favor, at the request and for the account of [Gopher Tortoise Recipient Site Permittee's name and address] up to the aggregate amount of [in words] U.S. dollars $_____, available upon presentation of:

(1) your sight draft, bearing reference to this letter of credit No._____, and
(2) your signed statement reading as follows: ''I certify that the amount of the draft is payable because the [Gopher Tortoise Recipient Site Permittee's name] has not complied with the requirements of the Habitat Management Plan approved by FWC (or a management agreement between the managing agency and FWC).''

This letter of credit is effective as of [date] and shall expire on [date at least 1 year later], but such expiration date shall be automatically extended for a period of [at least 1 year] on [date] and on each successive expiration date, unless, at least 120 days before the current expiration date, we notify both you and [Gopher Tortoise Recipient Site Permittee's name]by certified mail that we have decided not to extend this letter of credit beyond the current expiration date. In the event you are so notified, any unused portion of the credit shall be available upon presentation of your sight draft for 120 days after the date of receipt by both you and [Gopher Tortoise Recipient Site Permittee's name], as shown on the signed return receipts.

Whenever this letter of credit is drawn on under and in compliance with the terms of this credit, we shall duly honor such draft upon presentation to us, and we shall deposit the amount of the draft directly into the standby trust fund of [Gopher Tortoise Recipient Site Permittee's name] in accordance with your instructions.

We certify that the wording of this letter of credit is consistent with the Gopher Tortoise Permitting Guidelines as such guidelines were constituted on the date shown immediately below.

[Signature(s) and title(s) of official(s) of issuing institution]
[Date]

This credit is subject to [insert ''the most recent edition of the Uniform Customs and Practice for Documentary Credits, published and copyrighted by the International Chamber of Commerce,'' or ''the Uniform Commercial Code'']. 

# APPENDIX 4. METHODS FOR BURROW SURVEYS ON DEVELOPMENT (DONOR) AND RECIPIENT SITES

## Development (Donor) Site Surveys

A burrow survey covering a minimum of 15% of the potential gopher tortoise habitat to be impacted by development activities (including staging areas for heavy equipment) is required in order to apply for a relocation permit (10 or Fewer Burrows Permits require a 100% survey up-front, see Appendix 11). These surveys must take place no more than 90 days prior to submitting an application. Because gopher tortoises and their burrows are protected from development activities by Florida law, regulatory compliance requires a comprehensive 100% burrow survey of all potential tortoise habitat proposed for development. These 100% surveys must be conducted no more than 90 days prior to, and no fewer than 72 hours before (excluding weekends and holidays) commencing gopher tortoise capture and relocation activities. To effectively locate all potentially occupied tortoise burrows and provide FWC staff the opportunity to check such surveys, 100% surveys and the burrow location map must be received by FWC at least seventy-two (72) hours (excluding weekends and holidays) before gopher tortoise capture and relocation activities begin. All gopher tortoise burrows must be marked with flagging tape. (See details presented below for burrow marking and survey methodology.) Site preparation for development (such as land clearing) may commence on the project site, or for phases of the project site, for which gopher tortoise capture and relocation activities have been completed (see Site Preparation Activities for Development, in Section II, for details). If site construction does not commence within 90 days from the date of the most recent 100% gopher tortoise survey or capture activities, a new gopher tortoise burrow survey must be completed to ensure gopher tortoises have not moved in and, if found, a valid permit must be obtained, amended, or acted on to capture and relocate all tortoises prior to commencing any site clearing. Site preparation which occurs prematurely, or when gopher tortoises or their burrows are on-site, may require issuance of a disturbed site permit.

## Documentation and Reporting Results from Donor and Recipient Site Surveys

1. Land Cover Map: Provide an up-to-date aerial photograph of the development site or recipient site and identify all land cover types. (See acceptable land use classification in Appendix 3.) All maps, including the aerial photograph, should be at a scale of one-inch equals 800 feet or less. List all land cover types and associated acreage either on the map or on an accompanying table.

2. Soils Map: Attach a Natural Resources Conservation Service (NRCS) Web Soil Survey map depicting each soil type. Soil maps should include the midpoint of the upper limit of the water table (DWT) value for each soil type within the project site or recipient site.

3. Gopher Tortoise Habitat Map: Provide a map that delineates potential tortoise habitat on the project site or recipient site and provide an acreage estimate by land cover type.

4. Burrow Location Map: Plot and label the location of each burrow observed during the

burrow survey. Attach a shapefile and a data table that shows the burrow label, activity class (see below), and associated global positioning system (GPS) coordinates.

## Gopher Tortoise Burrow Activity Classification

***Potentially Occupied Burrow***
This classification combines the active and inactive categories and, therefore, includes burrows with obvious sign of use and those with minimal or no obvious sign of use. A potentially occupied burrow is in good repair, with the classic half-moon shaped entrance. These burrows may have tortoise tracks or plastron scrapes clearly visible on the burrow floor or on the mound, or they may have subtle or no tortoise sign. The lack of observable tortoise sign may be due to weather or season. The burrow floor may contain loose soil caused by tortoise activity or it may be hard- packed. The burrow mound may or may not have vegetation growing on it, and it may be partially covered by fallen leaves. Potentially occupied burrows must be recorded on burrow location maps and used to calculate gopher tortoise densities.

***Abandoned Burrow***
An abandoned burrow lacks the classic half-moon shaped entrance and/or no longer consists of a tunnel with a cross-section that closely approximates the shape of a gopher tortoise. The burrow appears unused and dilapidated with an entrance that is partially or completely collapsed; the burrow can be partially or completely filled with leaves or soil. Recent rains, or recent activity by livestock or humans, do not appear to be the primary reason for burrow collapse. Abandoned burrows must be recorded on burrow location maps but **not** included in tortoise density calculations.

All burrows, including those that are < 130 mm (5 inches) in width shall be recorded in burrow survey shapefiles or on maps. Potentially occupied burrows > 60 mm in width must be permitted and shall be included in the estimated gopher tortoise population calculation. Hatchling burrows ≤ 60 mm in width must be documented on burrow location maps and tortoises ≤ 60 mm will be authorized for capture and relocation via permit condition. Mitigation contributions are required for all tortoises found on donor sites that are > 60 mm. Refunds will be provided (less the 3% administrative service charge assessed by the WFF) for relocated juvenile tortoises (less than 130 mm carapace length) after a refund request form is submitted (within the published timeframe) by the permittee or its agent and the final after action report is accepted by the FWC. Hatchling and juvenile gopher tortoises must be relocated to the approved recipient site, but they are not counted against a recipient site's remaining capacity to receive gopher tortoises after the final after action report for a permit is submitted and it is accepted by the FWC.

## Burrow Survey Methods (Minimum of 15%)

1. Using evenly spaced belt transects, distribute these transects across all potential tortoise habitat within the designated donor or recipient site to provide at least 15% coverage. This initial step is a map exercise (see illustration below) and transect locations should be indicated on the gopher tortoise habitat map.

2. In areas with heavy cover, the width (observation area) of each transect must be reduced

to allow for 100% detection of burrows within the transect. See Burrow Survey Methods (100%) below for more information.

3. One or multiple observers may conduct these burrow surveys. When multiple observers are used, sufficient distance must exist between observers to ensure that transects do not overlap. It is essential that observers focus solely on searching for burrows. They should not be performing vegetation sampling (i.e., on recipient sites) concurrently or conducting other activities.

4. Provide a shapefile (for recipient site surveys) and data table with GPS coordinates for all burrows observed within, or partially within, the boundaries of each transect. GPS data taken with sub-meter accuracy in Decimal Degrees using the data settings of North American Datum of 1983 (NAD83 feet) Albers/High Accuracy Reference Network (HARN) is preferred, but not required. Burrows shall be marked with flagging tape indicating the burrow's label and activity class. This will assist field verification of surveys by FWC. The burrow label, status, GPS coordinates, accuracy of data and projection the coordinates shall be recorded and reported to FWC so that the burrow can be identified later.

5. For each transect, report the data in a shapefile and data table (transect dimensions, number of burrows by activity class, number of burrows by size class, and tortoise density per acre) using the following calculations.

***Estimating the Gopher Tortoise Population Within a Donor Site***

$$\frac{(Total\ Potentially\ Occupied\ Burrows)}{(Total\ Acres\ within\ Survey\ Area)} \times (0.50) = \frac{Tortoises}{Acre}$$

$$\frac{(Tortoises)}{(Acre)} \times \begin{pmatrix} Acres\ of\ Potentially\ Occupied \\ Gopher\ Tortoise\ Habitat \end{pmatrix} = Estimated\ Number\ of\ Tortoises\ Present$$

***Calculating the Gopher Tortoise Stocking Rate for a Recipient Site with Homogenous Land Cover and Soil***

$$\frac{(Total\ Occupied\ Burrows)}{(Total\ Acres\ within\ Survey\ Area)} = \frac{Tortoises}{Acre}$$

$$\begin{pmatrix} Site\ Evaluation\ Maximum\ Allowable \\ Gopher\ Tortoise\ Density\ (See\ Table\ 2) \end{pmatrix} - \left(\frac{Tortoises}{Acre}\right) = Final\ Stocking\ Rate$$

***Calculating the Number of Gopher Tortoises That Can Be Released Within a Recipient Site***

$$(Final\ Stocking\ Rate) \times \begin{pmatrix} Acres\ of\ Gopher \\ Tortoise\ Habitat \end{pmatrix} = \begin{pmatrix} Number\ of\ Tortoises \\ Allowed\ to\ Be\ Released \end{pmatrix}$$

## Examples of Burrow Surveys Using Belt Transects

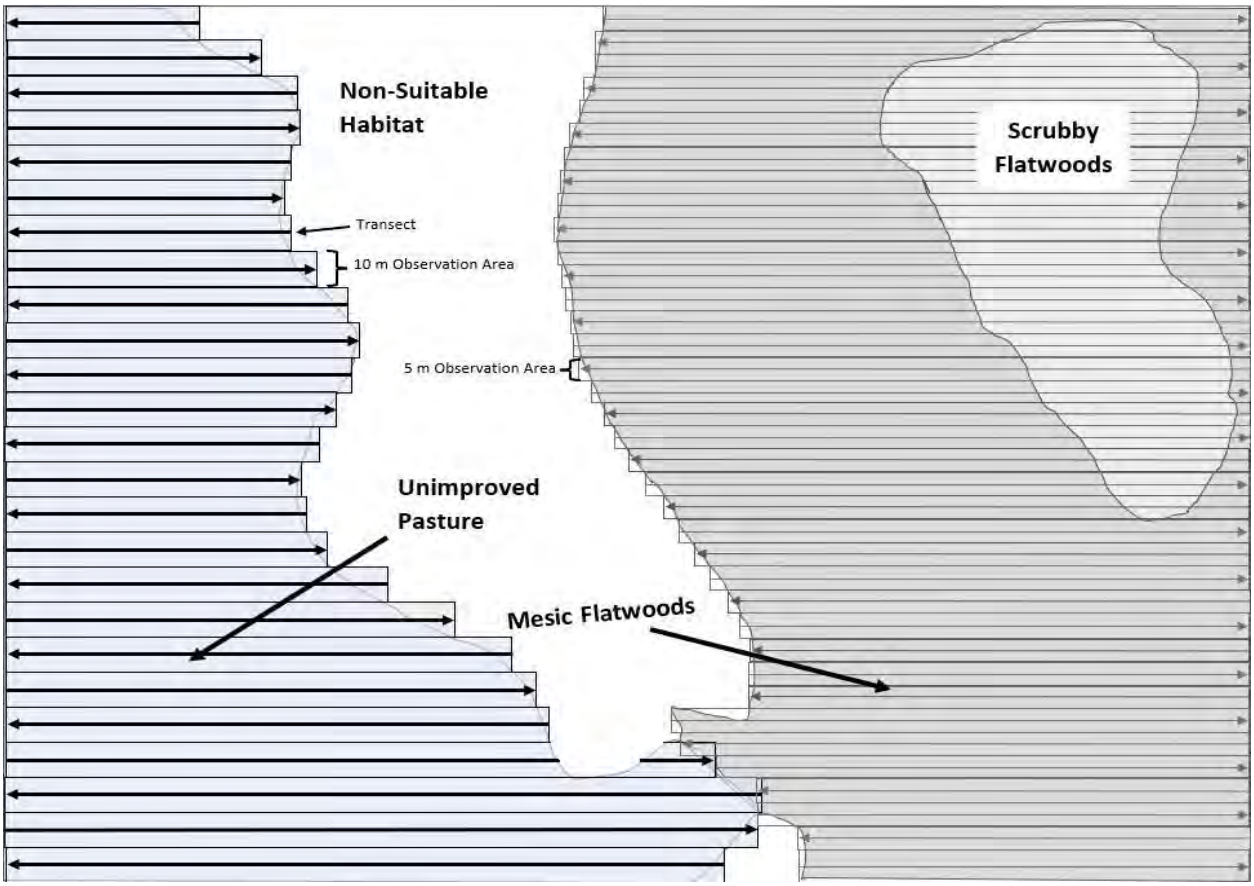



Figure 3. Example of a 100% survey design

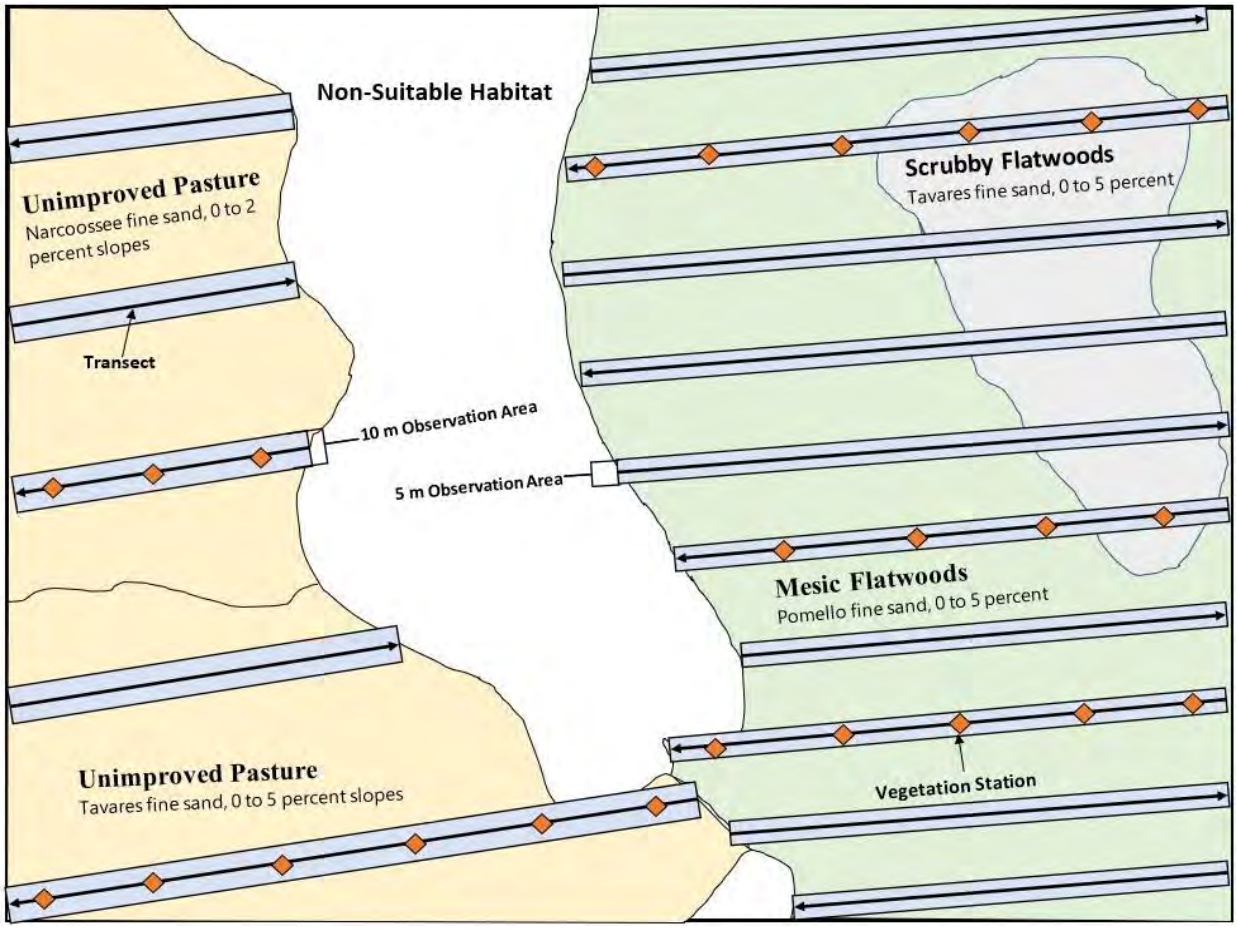


Figure 4. Example of a 15% survey design. Vegetation stations required for recipient site surveys (see Appendix 7).

## Burrow Survey Methods (100%)

1. All potential gopher tortoise habitat that will be impacted by development activities must be surveyed for burrows. Using the belt transect methodology described above, systematically search for burrows along parallel transects spaced appropriately for the habitat conditions (i.e., the length may be consistent or vary with the shape of the site, but the width (observation area) should allow 100% detection of burrows). The search can be conducted by one or more observers. Transect edges should be marked with flagging to ensure complete coverage. In open habitat, such as mowed pasture or natural sandhill, transects should be spaced no more than 10 meters (33 feet) apart. In thicker habitat, such as flatwoods and scrub, transects should be spaced as close as five meters (16 feet) apart. Patches of extremely thick habitat, such as saw palmetto or blackberry patches, should be searched more intensely, with spacing at approximately one meter (three feet) or less.

2. All burrows observed (i.e., potentially occupied and abandoned) must be marked with flagging tape that indicates the burrow's label and activity class. This will assist field verification of survey by FWC. The burrow label, status, and GPS coordinates shall be recorded and reported to FWC so that the burrow can be identified later.

3. Belt transect surveys should be conducted on foot as described above. Although pedestrian surveys are the preferred method, in some situations all-terrain vehicles (ATVs) may be used in accordance with the belt transect methodology as described above. ATVs approved for survey use include a single operator/no passenger motorized off-highway vehicle with four low-pressure or non-pneumatic tires and a single seat designed to be straddled by the operator and handlebars for steering control. However, ATV survey speed must not exceed a maximum speed of 5 mph and surveyors must dismount the vehicle to collect data or to investigate possible burrows seen from the ATV. We recommend limiting ATV use during times when gopher tortoises are more active (early morning/late afternoon from May to October and midday from November to April). ATV survey data will be accepted for donor sites only when following this process.

## Surveys Conducted in Application for a Disturbed Site Permit

In cases of an application for a disturbed site permit, a modified survey protocol is required. It is necessary to estimate both the number of tortoises within the disturbed area and (if applicable) the number of tortoises outside the disturbed area which are still within the boundaries of the project site.

Once site disturbances within the project area cease, a minimum 28-day waiting period without further site disturbance (this may be longer depending on temperature and season) is required before tortoise burrow surveys are conducted within disturbed areas. This gives tortoises time to dig out of collapsed burrows. Following this waiting period, 100% burrow surveys must be conducted throughout the disturbed area to provide an estimated number of tortoises present. All burrows receive the conversion factor of 0.5 (50% burrow occupancy rate). These new 100% survey results must then be compared to one of the following surveys/options:

1. An “older, acceptable survey” of the disturbed area (surveys must not be more than one year old from the time new 100% surveys are completed and must have been conducted in accordance with survey protocols in this document).

2. A 15% survey of remaining undisturbed tortoise habitat within the project site that is similar to the disturbed area (see survey methodology below). Survey area must be large enough to represent 15% of the total acreage of the project site.

3. A 15% survey adjacent to the project site (must be similar habitat to the project site and large enough to represent 15% of the total acreage of the project site).

4. If survey methods above cannot be conducted for some reason, the applicant shall estimate tortoise numbers within the disturbed area using a standard density of 2 gopher tortoises/acre with a minimum population estimate of 1 tortoise.

Results of the 100% survey within the disturbed area are compared with results from one of the four options above. The method which estimates the highest number of tortoises within the

disturbed area will be used to calculate up-front mitigation costs for disturbed site permits.

An estimate of the total number of tortoises for the entire project area must also be calculated. In some cases, the disturbed area already covers the entire project site. In other cases, undisturbed habitat remains within the project site. If a 15% survey has already been conducted (option 2 above), then this survey can be used to estimate the number of tortoises outside the disturbed area. In other cases, a 15% survey must be conducted which is large enough to represent at least 15% of the remaining acreage of undisturbed suitable gopher tortoise habitat left on-site.

# APPENDIX 5. MARKING AND MEASURING GOPHER TORTOISES DURING RELOCATIONS

## Marking

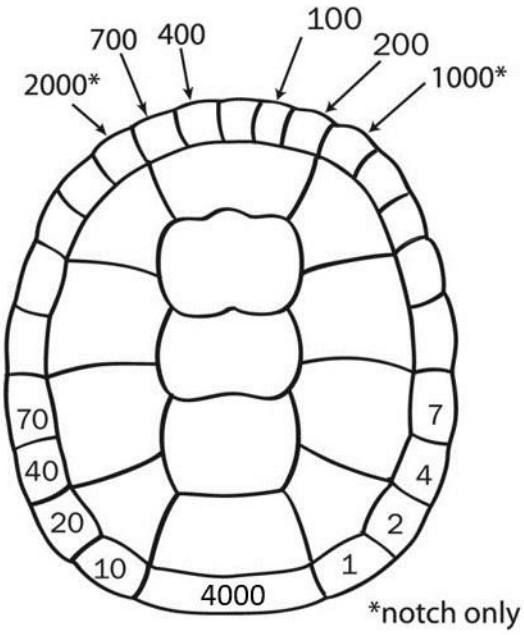
Juvenile and adult gopher tortoises captured under all permits except a 10 or Fewer Burrows Permit with on-site relocation and a Burrow or Structure Protection Permit must be permanently and uniquely marked. Hatchlings shall not be marked. Note that the marking scheme (Figure 5a) is to be used at the recipient site level, not the phase level; contiguous phases must use the same marking scheme to prevent duplicative codes on a recipient site. Mark by drilling holes in, or using a triangular file to notch, one or a combination of the eight rearmost marginal scutes (the four right ones and the four left ones) and the two right and left front marginal scutes. Each scute is assigned a numerical value, as illustrated below. The scheme is additive; e.g., tortoise #14 would require the drilling of the first scute left of the rear marginal and the third scute right of the rear marginal. For indicating numbers 1000-3999, notch (**do not drill**) the third marginal(s) to the right and left of the front central scute (nuchal), as shown in the figure below. For numbers >3999, drill the supracaudal scute (Germano 1993). The size of the drill bit or triangular file should be relative to the size of the tortoise, but no more than 25% the width of the marginal scute. Drilling or notching should be carefully undertaken to avoid injury to the limbs or head. Also, holes should be drilled closer to the marginal edge (without breaking through the edge) rather than higher up on the scute. To avoid injury to tortoises that have pliable shells, juveniles (<130 mm carapace length) cannot be marked using a drill; instead, a triangular file or sharp scissors must be used to notch the appropriate scutes. Tortoises $\geq$130 mm carapace length shall be marked by either drilling or notching scutes. PIT (Passive Integrated Transponder) tags may be used as an alternative to drilling or notching marginal scutes. These microchips are about the size of a grain of rice and are injected into a tortoise's hind leg using a hand-held applicator. A hand-held scanner reads the tag's electromagnetic code and displays the tag's number.

## Measuring

Straight-line carapace length (CL) must be recorded in millimeters. (See below.) Forestry tree calipers are useful for measuring the carapace (Figure 5b). Tortoise weight (in grams) should also be recorded.

## Literature Cited

Germano, D. J. 1993. Shell Morphology of North American Tortoises. The American Midland Naturalist 129: 319–335.




Carapace
(upper shell)

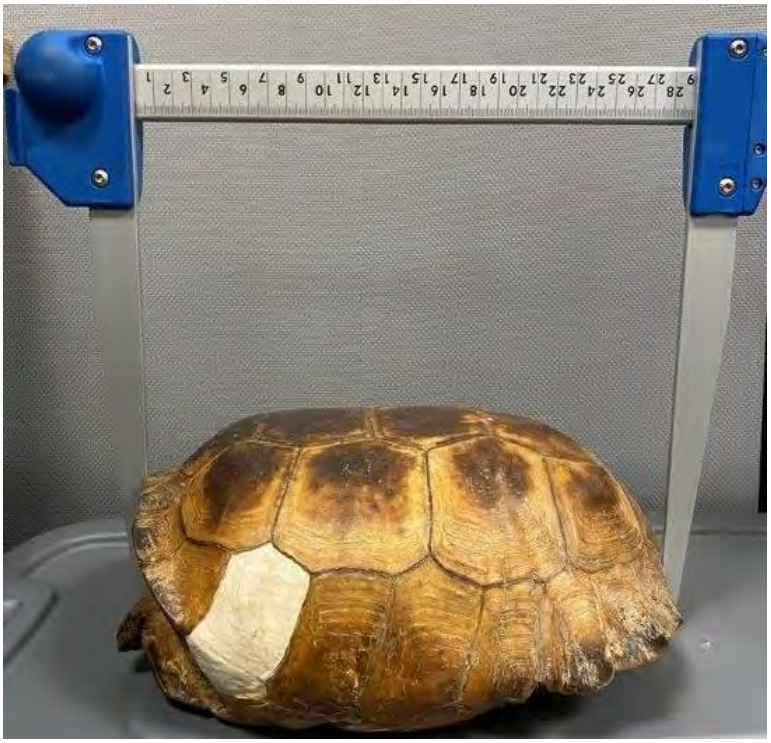


Figure 5a. Tortoise marking scheme.
Figure 5b. Measuring carapace length.

# APPENDIX 6. HEALTH CONSIDERATIONS FOR GOPHER TORTOISES DURING RELOCATIONS

## Making Decisions Regarding Relocations and Tortoise Health Assessments

Although relocation removes individual tortoises from harm on sites proposed for development, the transport of tortoises to new areas carries with it an inherent risk of exposure to infectious diseases for both recipient and donor populations. Determining the degree of risk and, therefore, the need for assessing tortoise health involves consideration of the following: the conservation value of the recipient site; whether tortoises exist within, or adjacent to, the recipient site; and the overall goals of the relocation. (See Table A2 below). Relocations to sites with high conservation value and established or adjacent populations, for example, carry a greater risk of adversely affecting these priority populations and, therefore, would generally warrant a correspondingly greater scrutiny of the relocated tortoises. Health assessments include physical examinations and the collection of biological samples (e.g., blood) for diagnostic tests.

Table A2. Recipient Population Conditions, Goals, Disease Issues, and Suggested Health Assessment Needs.

| Recipient Population | Established or Adjacent Populations | Goals | Is Disease an Issue? | Health Assessment Needs |
|---|---|---|---|---|
| Highest conservation value (relatively large sites with long-term protection and management) | Yes | Healthy populations; minimize risks to adjacent/ existing populations | Yes, can impact both recipient and donor populations | Maximum on both donor and recipient populations. Monitor for success. |
| Highest conservation value | No | Healthy populations | Yes, due to established conservation goal | Maximum. Monitor for success. |
| Moderate conservation value (smaller protected sites or large sites with non-perpetual easements) | Yes | Healthy populations; minimize risks to adjacent/ existing populations | Yes, can impact both recipient and donor populations | Moderate, or based on land manager's guidelines and risk to adjacent populations. |
| Moderate conservation value | No | Site specific | Questionable– depends on goals and site specifics | Based on land manager's guidelines. Monitor for success. |

| Recipient Population | Established or Adjacent Populations | Goals | Is Disease an Issue? | Health Assessment Needs |
|---|---|---|---|---|
| Minimal conservation value (sites with no long-term protection; may also be relatively small) | Yes | Humane or rescue relocation. Minimize risks to adjacent/ existing populations | Yes, can impact recipient and/or adjacent populations | Moderate or based on land manager's guidelines and risk to adjacent populations. |
| Minimal conservation value | No | Humane or rescue relocation. | No | Low. Based on land manager's guidelines. |

## Cursory Health Evaluations

Knowledge of normal gopher tortoise behavior and appearance is necessary when conducting health examinations. If biological samples are going to be collected, appropriate training by (or assistance from) a veterinarian or other person with extensive experience working with tortoises and collecting such specimens is required. The basic components of a physical exam include an overall assessment of the posture/behavior of the tortoise and an examination of the eyes, nostrils, skin, muscle mass, and shell. Shell measurements are not only important in determining the maturity of individual tortoises (e.g., juvenile, subadult, adult male or female) but, especially when correlated with weight, can also be helpful in assessing the overall body condition. The following are components of a cursory physical examination:

1. Overall posture/behavior: As noted above, some knowledge of tortoise behavior is necessary to discern between normal/abnormal.
    a. Alert and responsive or quiet but responsive–these two categories identify behavioral characteristics of normal tortoises. Alert/responsive tortoises paddle their forelimbs (front legs) when held, attempt to escape, and repeatedly retract into shell when handled. Quiet/responsive tortoises are shy and tend to remain withdrawn into their shell when being handled, but they have normal strength.
    b. Depressed and lethargic–these animals may hang forelimbs limp when lifted, may have poor muscle mass, are weak, and do not resist gentle tugging on their limbs.
    c. Walking/moving–normally/abnormally.
    d. Breathing sounds (normal, congestion, distress)–tortoises may normally create a very faint, high-pitched whistle when expelling air out of their nostrils. Wet or gurgling sounds associated with congestion are abnormal.

2. Examine eyes. May need a flashlight or, in some cases, magnification to examine.
    a. Clarity of eye (i.e., is cornea or lens clear or cloudy? Is there any discoloration?); position of eye within orbit *(*i.e., is eye bulging or sunken into orbit?)
    b. Discharges–clear/watery or cloudy; characterize as mild, moderate, or severe.
    c. Examine eyelids, conjunctiva (the mucous membrane that covers the exposed portion of the eyeball and the inner surface of the eye), and area around eyes–look for swelling, redness, or traumatic wounds (e.g., lacerations). Characterize severity as

mild, moderate, or severe.

3. Examine nares (nostril openings).
   a. Discharges–clear/watery or cloudy/thick; describe color of discharge and characterize as mild, moderate, or severe. Note if dirt/material is obstructing nostrils.
   b. Erosion or irregular shape of the nares (evidence of long-term discharge).

4. Examine shell (scutes and seams between scutes).
   a. Flaking, discoloration, defects/erosions, soft areas, fractures, or chew marks.
   b. Note the distribution and severity of lesions.
   c. Photographs and drawings are extremely useful.
   d. Measure carapace (top shell) and record tortoise weight. Note whether tortoise has urinated/defecated, as this waste elimination may significantly affect body weight.

5. Examine skin and muscles
   a. Excessive flaking, discoloration of the skin, wounds, scars, or evidence of prior injuries.
   b. Evaluate muscle mass on head and limbs to look for muscle loss (i.e., wasting away of muscles). Note whether the head has "old man appearance": sunken eyes; skin drawn tightly over skull).
   c. Check to make sure the limbs are symmetric, look for swollen areas or malformations, and check toenails for symmetrical wear patterns.
   d. Note the presence of external parasites (e.g., ticks) and number (< or > 10).

**Note:** Although determining the health of an individual tortoise at a particular moment in time can be difficult (i.e., certain clinical signs or "symptoms" may come and go), there are some tell-tale signs that authorized agents can watch for: nasal discharge; severely eroded nares; "old man appearance" (eyes sunken, skin drawn tightly over skull); eyes/eyelids severely swollen or reddened, with discharge; poor muscle mass and emaciated (abnormally thin) appearance. Options for accommodating individuals that appear ill, or that test positive for mycoplasmal URTD, are indicated below.

## Disinfection Protocol

Caution must be taken during relocations and whenever handling gopher tortoises to ensure that authorized agents do not contribute to the spread of pathogens (germs). It is recommended that hands and equipment be disinfected between handling individual tortoises. Cleaning and disinfecting bins, traps, and other equipment between uses on donor (development) sites is required to reduce the chance of cross-contamination between populations.

***Disinfection Solution***

1:20 dilution of 5% household bleach in water. A stronger 1:10 dilution of 5% household bleach in water is recommended for equipment that is particularly dirty (i.e., stained with soil or feces). Solutions should be stored in dark bins or in opaque bottles and should be made fresh regularly (e.g., weekly, depending on storage conditions). Bleach should be purchased in small bottles or dispensed into small bottles to minimize deterioration from opening/closing the lid.

***Disinfecting Equipment***
Remove dirt and feces by rinsing with water (e.g., from gallon jugs) or by brushing with paper towels. Spray equipment (including drill bits and files) liberally with the bleach solution and allow to dry. Between donor sites, thoroughly scrub bins and buckets with detergent and water before spraying with the bleach solution.

***Disinfecting Hands***
A pump-applicator, plastic bottle of 60% ethyl alcohol is an efficient way to disinfect hands between handling tortoises; smaller pocket-size bottles of hand sanitizers are also useful in the field. If hands are extremely dirty, rinse with water before using the alcohol sanitizer.

## Testing for Mycoplasmal Upper Respiratory Tract Disease (URTD)

Authorized agents or other individuals wishing to collect blood or other samples for mycoplasmal URTD tests shall be appropriately trained by a veterinarian or other person experienced in such sample collection/handling for tortoises. The permit authorizes the following:

1. Blanket authorization to capture, hold, and draw blood from gopher tortoises as needed for collecting blood samples. Tortoises may be held up to 24 hours but shall not be held for more than 72 hours, as stipulated in the FWC permitting guidelines.

2. Blood samples must be identified by the applicant's name, county, and project name. Testing will be conducted by the Mycoplasma Testing Lab, University of Florida, Department of Pathobiology, 1600 South West Archer Road - BSB 350, Gainesville, FL 32610. The Lab may be contacted at (352)294-4068, extension 3986. The applicant is responsible for all fees and costs associated with testing.

3. Test results will be provided by the testing facility to FWC and the applicant.

It should be noted that there is currently no known cure for mycoplasmal URTD, making recovery of truly infected tortoises an unlikely scenario. Recipient site owners/managers reserve the right to request mycoplasmal URTD testing or other diagnostic tests that become available for URTD or other diseases and to refuse any, or all, tortoises from populations that have seropositive and/or symptomatic individuals. Such decisions will depend on the goals and priority of the recipient site (see Table A2 above) and, thus, will reflect the level of risk involved in allowing introduction of potentially ill or infected tortoises. In those cases where several clinically ill tortoises, or tortoises that test positive for URTD or other diseases, are encountered, consultation with FWC and wildlife veterinarians will be necessary to determine how best to accommodate such populations.

## Protocol for Accommodating Gopher Tortoises that Appear Ill

1. Authorized agents capturing gopher tortoises at donor sites must isolate tortoises with obvious health abnormalities as outlined in this Appendix (e.g., markedly lethargic; "old man appearance": sunken eyes, skin drawn tightly over skull; abnormally thin limbs with poor muscle mass; nasal discharge; eyes severely swollen and reddened, with discharge).
2. Call FWC within 24 hours of capturing a tortoise that shows signs of serious illness.

3. Contact a local rehabilitation facility and transport the tortoise to the facility. A list of participating wildlife rehabilitators is provided by FWC. These facilities do not charge for assessment and treatment. Also report any ill tortoises to the FWC regional gopher tortoise conservation biologist and the contact for the targeted recipient site. Tortoises may also be treated at the Zoological Medicine Service at the University of Florida (UF) Veterinary Medical Center in Gainesville, but this service will incur a cost.

4. If an ill tortoise dies (from causes not directly related to excavation or trapping) or if recently dead tortoises are found on the donor site, place the tortoise on ice (do not freeze) and notify the FWC regional gopher tortoise conservation biologist. If representatives for either the donor site or recipient site want to pursue the reason for tortoise mortality, they may deliver dead tortoises to the Pathology Service at the University of Florida Veterinary Medical Center in Gainesville for a postmortem evaluation. This service will incur a cost. Other options may also be available; please contact the FWC Gopher Tortoise Permit Office.

It is not necessary to interrupt capture efforts when ill tortoises are observed; these individuals can be isolated until the end of the burrow excavation or trapping for that day. Because some clinical signs of disease (e.g., nasal discharge) may appear and then disappear over time, it is helpful to photograph observed abnormalities with a digital camera.

Rehabilitation facilities or the UF Veterinary Medical Center will triage tortoises and either treat or euthanize. If the targeted recipient site refuses these tortoises post-treatment, such individuals will be accommodated as waif tortoises and either placed in captivity or in specifically designated waif sites.

# APPENDIX 7. METHODS AND REPORTING REQUIREMENTS FOR VEGETATION AND POPULATION MONITORING ON RECIPIENT SITES

Permitted recipient sites contribute to conservation actions identified in the *Gopher Tortoise Management Plan*, including restocking of tortoises to managed lands where populations have been depleted, preventing the loss of tortoises on development sites, preserving habitat, and retaining local tortoise populations. The monitoring methods and reporting requirements presented in this appendix help to ensure permit compliance and that the habitat is appropriately managed on recipient sites. The compilation of data provided in the required monitoring reports will provide insight into recruitment and survivorship on recipient sites and can inform site fidelity of the relocated population.

Recipient site monitoring involves an initial baseline vegetation and population survey, followed by at least one post-baseline survey (see the "Monitoring and Reporting Requirements" section below for more details). The purpose of the baseline surveys is to provide a standard against which to monitor population density and vegetation quality. The baseline population survey is also used to obtain a density estimate of the existing number of gopher tortoises per acre. The density estimate is used to calculate the number of adult tortoises to be released in the permitted recipient area; this number determines post-baseline survey monitoring and reporting requirements (see Appendix 4 for baseline density and final stocking rate calculations). In addition, the baseline vegetation survey is used to evaluate the habitat suitability criterion (see Table 5). The habitat suitability criterion is based on percent herbaceous ground cover, woody ground cover, shrub cover, canopy cover, and improved pasture. Post-baseline surveys will consist of the transects established during the baseline survey that fall within the bounds of the permitted suitable habitat on recipient sites. Site suitability criteria determine which portion of the area proposed to receive tortoises is included as a permitted recipient site.

## Survey Methods

The vegetation and population survey methodologies described herein pertain to the recipient site baseline survey submitted with the recipient site permit application, as well as continued monitoring efforts post-baseline survey. Note that all surveys are subject to field verification by FWC. If FWC determines that the submitted survey results do not provide an accurate estimation of the resident gopher tortoise population or vegetation quality, either additional surveys or a re-survey may be required.

### *Transect Establishment*

A 15% belt transect survey design must be established for vegetation and population surveys to determine baseline population density and vegetative habitat suitability. The same transects should be used for both population and vegetation surveys; transect spacing and dimension will depend on habitat condition (see Appendix 4). Transects should be distributed across all potentially suitable gopher tortoise habitat within areas proposed to receive relocated tortoises such that they run boundary to boundary of the proposed or permitted recipient site. Line Transect Distance Sampling (LTDS) is another option for documenting baseline population density but requires preliminary consultation with FWC to verify that the population and vegetation survey design provides sufficient and representative coverage within the proposed

recipient area. Within habitat determined to be suitable for release of tortoises, transects should be used for baseline and post- baseline surveys (unless deviation from these transects is approved by FWC for post-baseline Line Transect Distance Sampling). The beginning and end of each transect shall be permanently marked in one of two ways:

1. Use rebar, T-posts or other fire-resistant material at least six feet high. These posts should either be painted with high visibility paint, or the posts should be covered with painted PVC pipes to increase visibility and to provide the option for removal during prescribed burn, or;

2. Use a GPS instrument capable of sub-meter accuracy to take latitude and longitude coordinates at the beginning and end of each transect. GPS data collected in decimal degrees using data type DATUM NAD83 feet Harn Albers is preferred. The data must specify the collection method (i.e., the projection and coordinates) as not all GPS instruments automatically attach a projection file with the data. The data collected must be reported to the FWC.

It is recommended that both methods of transect marking be utilized, as posts may be damaged, lost, or difficult to locate, and GPS instruments may malfunction while collecting data.

***Vegetation Survey Method***

Vegetation and population surveys may be conducted simultaneously by multiple people, or an individual may perform each survey separately. Established population survey transects shall be used for vegetation surveys (see "Transect Establishment" above). Transects selected for vegetation surveys must be located so there is representative coverage within each vegetative community and soil type (survey stratum). For a belt transect population survey design, the vegetation transects must have a combined length of at least 30% of the cumulative population survey length. Equivalent vegetation survey coverage is required for a LTDS population survey design. Post-baseline vegetation surveys are restricted to the gopher tortoise habitat within the permitted recipient site area.

***Vegetation Sampling Stations***

The vegetation survey method involves establishment of vegetation sampling stations to obtain measurements of canopy cover and composition; shrub cover; and woody and herbaceous ground cover and saw palmetto (see subsections below). Each category I and II nonnative species (as classified by the Florida Invasive Species Council (FISC) should also be identified and measured as specified below. In addition, photographs of each sampling station are required to provide qualitative documentation of vegetative change through time. These vegetation sampling stations shall be spaced at a 75-meter interval along selected transects. When the size of the survey stratum would limit the number of quadrats to one because of the 75-meter interval requirement, then consult and request approval from the Gopher Tortoise Program for quadrat placement.

For example, a 15% belt transect population survey with one observer per transect of a 415-acre recipient site of open habitat would require sixty-three evenly spaced 10-meter wide transects running from boundary edge to boundary edge. In this case, the transects are all the same length of 400 meters (each transect covering approximately one acre). Thirty percent of the transects, or 19 transects total, would be randomly selected for vegetation sampling. These 19 transects would

include vegetation sampling stations at the 0-, 75-, 150-, 225-, 300-, and 375-meter points along the transect (114 vegetation sampling stations in total, with each soil by land cover stratum containing at least one vegetation station). A survey conducted using LTDS methodology, regardless of population survey transect length, requires equivalent vegetation survey coverage. For example, a LTDS survey conducted on a 415-acre recipient site also requires a minimum of 114 vegetation sampling stations.

*Canopy Cover and Composition:* Use a concave spherical crown densiometer (manufactured by Forestry Suppliers, Inc., or equivalent). Follow the manufacturer's instructions to collect data and calculate canopy cover estimates of live and dead trees. Take 4 readings at each cardinal direction at the vegetation sampling station and record the mean canopy cover of the 4 readings. Record the dominant canopy cover composition using the spherical densiometer. Estimate the percent canopy cover for each nonnative species.

*Shrub Cover:* Walk 15 meters perpendicular to each side of the vegetation sampling station (a total of 30 meters). At every 1.5-meter increment, center a 2-meter long PVC rod perpendicular to the transect line and hold 1.5 meters off the ground. If the rod strikes shrub plants (shrubs can be woody plants, semi-woody plants, woody vines such as grape, palms/palmettos) that are 1.5 meters off the ground, count that measurement as a plus. If the rod strikes nothing, count that measurement as a zero. For the 20 total measurements: add the pluses, divide by 20 and multiply by 100. This provides an estimate of the percent shrub cover at the station. Percent cover of nonnative shrubs should also be quantified using this methodology. Excludes saw palmetto.

*Herbaceous Ground Cover:* To estimate the relative percent cover in each sampling station, use a one-meter squared quadrat centered at the sampling station. The quadrat can be easily made using PVC pipe. Estimates are to be based on seven cover classes: 0%, >0-5%, >5-30%, >30-50%, >50-75%, >75- 95%, and >95-100%. Record cover class for each of the following: bare ground; debris (e.g., leaf litter); broadleaf grasses and grass-like vegetation (e.g., sedges, rushes); wiregrass; forbs and herbaceous vines that are < 1 meter in height; nonnative woody (< 1 meter in height); and nonnative herbaceous. An overall percent of herbaceous cover must be recorded at each sampling station and comprises broadleaf grasses and grass-like vegetation, wiregrass, and forbs and herbaceous vines cover classes. An overall percent of woody vegetation must also be recorded at each sampling station. Excludes saw palmetto.

*Woody Ground Cover:* Follow the same steps described above for herbaceous ground cover to measure woody ground cover but for woody vines and woody vegetation. Assign a cover class category (0%, >0-5%, >5-30%, >30-50%, >50-75%, >75- 95%, and >95-100%) to woody vines, woody vegetation, and nonnative woody (< 1 meter in height). An overall percent of woody cover that comprises woody vines and woody vegetation must also be recorded at each sampling station. Excludes saw palmetto.

*Saw Palmetto Cover:* Follow the same steps described above for herbaceous and woody ground cover to assign a cover class category (0%, >0-5%, >5-30%, >30-50%, >50-75%, >75- 95%, and >95-100%) to saw palmetto.

*Photographs:* A north-facing photograph shall be taken at each vegetation sampling station. Photos must be in full focus with the horizon line placed one-fifth of the way from the top of the

image. Name the photograph by the vegetation station label that corresponds with the vegetation survey shapefile and data.

***Gopher Tortoise Population Survey Methods***

Belt transect surveys with burrow scoping or Line Transect Distance Sampling (LTDS) surveys with burrow scoping can be approved by FWC as methods to estimate tortoise populations. However, FWC recognizes that participants in the Candidate Conservation Agreement (CCA) for the Gopher Tortoise adopted LTDS with burrow scoping (Smith *et al*. 2009) as the standardized methodology to examine gopher tortoise populations in 2012 (CCA 2012). Before LTDS surveys can be implemented on recipient sites, the development of a recipient site-specific LTDS survey design is necessary to account for potentially confounding variables, such as: spatio-temporal changes in recipient area boundaries as new phases are permitted within the site; the non-random spatial distribution of burrows due to temporary enclosures; and burrow detection probability discrepancies (and thus monitoring data inconsistencies) when the survey method changes from belt transect to LTDS. To incentivize the future implementation of LTDS with burrow scoping on recipient sites, FWC commits to having this population survey method conducted on behalf of interested permittees once a recipient site-specific LTDS survey design is developed and approved by FWC. This commitment places the cost of population monitoring on FWC; however, it is at the discretion of FWC, rather than the permittee, as to whom will conduct the population survey (i.e., FWC or a contracted third party) and to which sites and by when the LTDS survey will be conducted. **Until a recipient site-specific LTDS survey design is developed, belt transect survey with burrow scoping will be the only approved population survey method on recipient sites.** Prior to development of a recipient site-specific LTDS survey design, all applicants should include belt transect with burrow scoping as the proposed monitoring method in their application but indicate in the comment section if they intend to seek FWC approval to amend their permit, management plan, and trust agreement to include a recipient site-specific LTDS survey method (once developed). Upon development, a recipient site-specific LTDS survey design will only be approved if permittees accept that FWC will have the survey conducted on their behalf. This condition ensures LTDS data will be collected and analyzed in accordance with FWC standards.

For either method, gopher tortoise surveying and burrow scoping must be authorized by FWC. Monitoring interval and reporting requirements are scaled based on the number of tortoises relocated and the approved survey methodology (see the "Monitoring and Reporting Requirements" section below for more details). Survey methodology must be identified within the recipient site management plan (see Appendix 3). Deviation from specified survey methodology, such as conversion from belt transect methodology and reporting periods to LTDS, may be approved by FWC.

Both survey methods involve locating, identifying, scoping, and measuring gopher tortoise burrows (see "LTDS Surveys" and "Belt Transect Surveys" sections below for method-specific details). Burrow location is recorded along established population transects (see "Transect Establishment" above). Burrows located along these transects shall be identified as either potentially occupied or abandoned (see Glossary for definitions). Burrow scoping is required in conjunction with belt transect and LTDS survey population monitoring, as burrow occupancy varies significantly among populations (McCoy and Mushinsky 1992, Smith *et al*. 2004). Smith et al. (2009) found that burrow occupancy can be confirmed >90% of the time with a scope

camera; this finding suggests that burrow scoping during population surveys provides more robust population estimates and is sufficient to determine occupancy rates for population survey purposes. Burrow measurement is used to infer the class size of the gopher tortoise occupying the burrow. See "Burrow Scoping" and "Burrow Measurement" below for more details.

## Burrow Scoping

A burrow camera system comprises a camera head attached to a flexible hose and a small video monitor. Example camera system configuration includes: a hi-resolution color camera with a 2-inch diameter camera head attached to a 25-foot hydraulic hose, a cable beyond the hydraulic hose, rechargeable battery system, watertight pelican case, and a 7-inch color monitor. This camera configuration can be used on all subadult and adult-sized burrows; however, burrow cameras with a smaller 1-inch diameter camera head are also commercially available for juvenile burrows. Burrow cameras may be purchased from Environmental Management Systems, (http://www.burrowcam.com/) or equivalent manufacturer.

All potentially occupied burrows encountered on transects must be scoped using a burrow camera. To scope a burrow, select the appropriate scope size (smaller for juvenile burrows such as those <130 cm in width, larger for subadult and adult), then activate the camera and begin threading the scope into the burrow. The surveyor should move the scope deliberately, twisting it clockwise or counterclockwise to match the shape of the burrow and avoid scraping the camera against the burrow wall or any obstruction. Surveyors should watch the display screen carefully to identify any species that are detected. Commensal species may be recorded, if observed. Burrow-scoping will end once the surveyor has identified a tortoise, determined that they have reached the end of the burrow, or encounters a blockage preventing further movement of the scope. If blockages or equipment complications prevent surveyors from determining occupancy (i.e., burrow is flooded, occluded, or extends further than the hose), record the burrow occupancy as "unknown". "Unknown" burrow occupancy shall be treated as occupied when calculating the stocking rate of a recipient site. To minimize risk of spreading pathogens, the burrow camera head and cables should be disinfected using Clorox Disinfecting Wipes™ (or other disinfectant approved by FWC) after a tortoise expressing clinical sign of disease (e.g., nasal discharge, swollen or watery eyes) is encountered, and between sites.

## Burrow Measurement

The size class (in 10 mm increments) of all tortoise burrows encountered during the belt transect or LTDS survey must be recorded in the monitoring report. This measurement is done using calipers inserted approximately 50 cm inside the mouth of each potentially occupied burrow (for methods, see Smith et al., 2009, available at https://apps.dtic.mil/docs/citations/ADA522655).

## LTDS Surveys

LTDS surveys are a statistically robust method of estimating gopher tortoise population size and density as the method relies on tortoise observations along established transects and incorporates detection probability (Smith *et al*. 2009, Smith and Howze 2016). Population survey and monitoring results using LTDS provide population and density estimates and repeat surveys can be conducted to determine population trends or tortoise response to habitat management practices over time. Prior to the first monitoring report deadline (Table A3), a pilot survey must be conducted by FWC within suitable gopher tortoise habitat in the recipient area. The pilot

survey results and proposed full survey design must be submitted to FWC for review at least one year prior to the first monitoring report deadline. Note that LTDS population survey length may be reduced over time if the population significantly increases, but each deviation from approved full survey design must be approved by FWC prior to implementation.

## Belt Transect Surveys

The belt transect method involves up to three observers walking abreast per transect systematically searching for and scoping burrows along parallel transects spaced appropriately for the habitat conditions (i.e., the length may be consistent or vary with the shape of the site, but the width (observation area) should allow 100% detection of burrows). Occupied gopher tortoise burrows encountered within established transects will be used to estimate the gopher tortoise population on a given recipient site. See Appendix 4 for detailed instructions on belt transect survey design and implementation. If soft-release temporary enclosures are still in place and tortoises have not been able to disperse prior to the first monitoring timeframe, consult with FWC to determine if a deviation from approved transects is warranted.

If belt transect surveys are implemented on multiple adjacent recipient site phases, a comprehensive monitoring proposal to complete one belt transect survey across phases may be submitted to FWC for approval.

## Monitoring and Reporting Requirements

***Compliance***

Population and vegetation surveys are required for monitoring purposes and habitat management shall continue as prescribed in the site habitat management plan for the life of the permit and/or conservation easement. The number of observers conducting the baseline population survey must be reported in the recipient site permit application and the same number of observers shall conduct the post-baseline surveys if implementing the belt transect method. Monitoring reports are required and will be used to confirm compliance with permit conditions and Gopher Tortoise Permitting Guidelines. Monitoring reports shall be submitted for review no later than 90 days following the completion of follow-up monitoring surveys (see "Monitoring Timeline" below). Past due written notifications will be sent to the permittee if the report is not received by the due date specified on the permit. If the permittee and named agent fails to submit the monitoring report within the timeframe included on the past due notice, FWC may suspend the recipient site permit until remedied.

Monitoring reports must be deemed acceptable by FWC. A FWC biologist will visit the recipient site on an annual basis to verify the survey(s) and report. Additional information may be requested after the site visit. Annual site visits by FWC may be reduced if the landowner has met monitoring and reporting requirements and all other monitoring/reporting parameters are met. Recipient sites that do not successfully meet monitoring, habitat management, and reporting requirements will be required to perform corrective action. Corrective action shall include, but is not limited to, restarting the monitoring interval and redoing the reporting requirements for that monitoring interval. If habitat management does not meet/maintain the baseline suitability criteria under which the site was permitted as detailed in the site habitat management plan, FWC will notify the permittee in writing that the permit is out of compliance and prescribe the corrective action needed, along with the timeframe in which the action must occur. For example, if the site was permitted at acceptable habitat criteria (see Table 5), but the vegetation is

overgrown and/or no longer meets these criteria, FWC will require a burn or other agreed-upon management action consistent with the approved management plan to be implemented within 90 days. Alternatively, if category I and II species as classified by the Florida Invasive Species Council (FISC) are present in the sample area, management to minimize and control the invasive nonnative species must be implemented as soon as possible and within the timeframe specified by FWC. Left untreated, invasive nonnatives can quickly outcompete native vegetation with implications for species that carry fire or grow so thick as to impede movement of gopher tortoises. Even if invasive species do not fall within categories I or II, the total nonnative cover should equate to less than 5% site-wide with no monoculture to exceed 0.5 acres. In all cases, FWC may suspend the permit if the permittee does not bring the site back into compliance within the specified timeframe.

***Monitoring Timeline***

Monitoring reports are required from the landowner of permitted long-term protected, public conservation land, and Tier 1 short-term protected recipient sites at 5-year intervals. Monitoring timeframe is based on the total number of gopher tortoises approved for release at the site (see Table A3). If a recipient site is approved to receive up to 25 tortoises, then the monitoring timeframe is shorter. Sites authorized to receive more than 25 gopher tortoises have a slightly longer monitoring timeframe. Longer-term monitoring where large number of tortoises have been released helps to document and provide assurance that the population(s) are stable, the habitat is suitable and there is evidence of recruitment over time. Following completion of successfully meeting all monitoring, habitat management and reporting requirements, reports will no longer be required.

Table A3. Recipient site monitoring report expectations per the survey method approved under the recipient site permit. “X” indicates burrow survey and report submission requirement. An asterisk (*) indicates required quantitative vegetation survey/map reporting component. Reporting requirements depend on permit compliance.

| Survey method implemented | Reporting year (post-permit issuance) | Up to 25 tortoises released | > 25 tortoises released |
|---|---|---|---|
| Belt transect with burrow scoping | 5 | X* | X* |
| | 10 | X* | X* |
| | 15 | | X* |
| | 20 | | X* |
| | 25 | | X |
| LTDS with burrow scoping | 5 | X* | X* |
| | 10 | | X* |
| | 15 | | X* |
| | 25 | | X |

***Reporting Requirements***

Reports for baseline vegetation surveys and follow-up monitoring shall include a brief narrative explaining the property location, size, ownership, authorized agent, and reference the FWC recipient site permit number(s). The monitoring report should include the total number of tortoises relocated to each soft release enclosure within each recipient site unit by age class to date , as well as each enclosure location and maintenance timeframe. This introductory

information shall be followed by the qualitative and quantitative data and an overall description of the present conditions within the recipient site. Burrow width data are to be included with the survey information along with the carapace lengths of all size/class of tortoises relocated to the recipient site. Population and vegetation survey data and measurements from the ledger of tortoises released at the recipient site must be submitted in a spreadsheet. Vegetative transect maps, gopher tortoise survey transect maps, and photographic stations are required. All data files must be accompanied by corresponding shapefiles unless a different format is specified and approved by FWC.

Any mortality, injury, or sign of disease observed must be reported to FWC within 48 hours of initial observation. The reported mortality must include information outlined in the *Tortoise Mortality/Contingency Plan* described in the FWC-approved recipient site management plan (see Gopher Tortoise Permitting Guidelines, page 50). Management actions taken (or proposed) as a result of the observed mortality must also be documented and included in the report. The Handbook on Gopher Tortoise; Health Evaluation Procedures for Use by Land Manager and Researchers (Wendland *et al.,* 2009) available at[https://apps.dtic.mil/sti/citations/ADA501295](https://apps.dtic.mil/sti/citations/ADA501295) , is a helpful reference for assessing and addressing potential health problems.

Any changes of the land use and soil conditions shall also be explained and included in the monitoring report, including the effects of any existing site-draining features. A timeline of the habitat management activities conducted since submittal of the previous baseline or monitoring report shall be provided. Major changes in vegetation (e.g., due to forestry clearing, habitat degradation from absence of fire) shall be noted. Additionally, changes to any land management plans or other legal documents shall be attached and described in the report. If applicable, a narrative of any problems, remediation, or exceptional environmental changes that are improving the gopher tortoise habitat shall be reported (note locations). A timeline of habitat management activities proposed to occur over the next site-specific interval according to the monitoring requirements shall also be provided (keeping in mind that burrow surveys should be scheduled as close as possible to the time immediately following habitat management activities to improve burrow detectability).

## Literature Cited


Anonymous. 2008. Candidate Conservation Agreement for the Gopher Tortoise (*Gopherus polyphemus*): Eastern populations. Revised 2012.

McCoy, E. D., and Mushinsky, H. R. 1992. Studying a species in decline: gopher tortoises and the dilemma of "correction factors." Herpetologica 48:402–407.

Smith, L.L. and J.M. Howze. 2016. Gopher tortoise line transect distance sampling workbook. Joseph W. Jones Ecological Research Center.

Smith, L., J. Linehan, J. Stober, M. Elliott, and J. Jensen. 2009. An evaluation of distance sampling for large-scale gopher tortoise surveys in Georgia, USA. Applied Herpetology 6:355-368.

Smith, L.L., J.M. Stober, H.E. Balbach, and W.D. Meyer. 2009. Gopher Tortoise Survey Handbook.

Final report to US Army Corps of Engineers, Engineer Research and Development Center, Construction Engineering Research Laboratory. Report # ERDC/CERL TR-09-7.

Smith, R. B., T. D. Tuberville, A. L. Chambers, K. M. Herpich, and J. E. Berish. 2004. Gopher tortoise burrow surveys: External characteristics, burrow cameras, and truth. Applied Herpetology 2:161–170.

# APPENDIX 8. DRAFT FWC CONSERVATION EASEMENT

[NOTE TO PREPARERS: PLEASE USE "TRACK CHANGES' WHEN YOU REVISE THIS FORM FOR SUMMITAL TO FWC. IF YOU DO NOT USE "TRACK CHANGES" FWC REVIEW OF THE FORM MAY BE SIGNIFICANTLY SLOWED. PLEASE INCLUDE A COMMENT THAT EXPLAINS THE REASON FOR EACH CHANGE.]

This instrument prepared by:

After recording please return the document to Grantee:
Florida Fish and Wildlife Conservation Commission
ATTN: Gopher Tortoise Permit Office
620 South Meridian Street
Tallahassee, Florida 32399-1600

CONSERVATION EASEMENT

THIS DEED OF CONSERVATION EASEMENT is given this_____day of _____ 201_ by_____, a Florida corporation whose mailing address is_____, ("Grantor") to the Florida Fish and Wildlife Conservation Commission, an agency of the State of Florida, with its principal office at 620 South Meridian Street, Tallahassee, FL 32399-1600 ("Grantee").

The parties agree as follows:

WITNESSETH

WHEREAS, the Grantor is the owner of certain lands situated in _____ County, Florida, hereinafter referred to as the "Property", more specifically described in Exhibit A attached hereto and incorporated herein by this reference; and

WHEREAS, the property possesses natural, scenic, open space, wildlife preservation and conservation values (collectively, "conservation values") of great importance to Grantor, and the people of the State of Florida; and

WHEREAS, the specific conservation values of the Property are documented as part of the Habitat Management Plan pertaining to the Property, dated_____ ("Plan"), part of which is entitled the "Baseline Documentation". A copy of the Plan is attached hereto as Exhibit B, and incorporated herein by reference. The Baseline Documentation is an accurate representation of the Property at the time of this grant and is intended to serve as an objective information baseline for monitoring compliance with the terms of this grant; and

WHEREAS, Grantor intends that the conservation values of the Property be preserved and maintained by the continuation of land use patterns existing at the time of this grant, that do not significantly impair or interfere with those values; and

WHEREAS, Grantor further intends, as owner of the Property, to convey to Grantee the right to preserve and protect the conservation values of the Property in perpetuity; and

WHEREAS, Grantee is a state public agency, part of whose mission is the conservation, preservation, protection or enhancement of lands such as the Property; and

NOW THEREFORE, consistent with the issuance of the Permit, Grantor hereby grants, creates, and establishes a perpetual/100-year/50-year conservation easement upon the Property, which is described in Exhibit A, which shall run with the land and be binding upon the Grantor, its heirs, successors and assigns, and remain in full force and effect forever ("Conservation Easement").

1. Recitals. The above "WHEREAS" clauses are true and correct and are incorporated into this Conservation Easement as if set forth at length herein incorporated into this agreement.

2. Purpose. The purpose of this Conservation Easement is to ensure that the Property or part thereof as described in this Conservation Easement shall be protected forever and used as conservation areas, consistent with the Habitat Management Plan ("Plan"). The parties intend that this Conservation Easement will confine the use of the Property to such uses as are consistent with the purpose of this Conservation Easement.

3. Heirs, successors, and assigns. The parties to this Conservation Easement intend the rights and responsibilities to accrue to any and all heirs, successors, personal representatives, or assigns.

4. Rights of Grantee. To accomplish the purpose of this Conservation Easement the following rights are conveyed to Grantee:

a. To preserve and protect the conservation values of the Property as defined in this Conservation Easement;

b. To enter upon the Property at reasonable times and upon reasonable notice to the Grantor in order to engage in activities consistent with this Conservation Easement, to monitor Grantor's compliance with this Conservation Easement, and to otherwise enforce the terms of this Conservation Easement; provided that Grantee shall not unreasonably interfere with Grantor's use and quiet enjoyment of the Property; and

c. To prevent any activity on or use of the Property that is inconsistent with the purpose of this Conservation Easement, and to require the restoration of such areas or features of the Property that may be damaged by any inconsistent activity or use.

5. Grantor's Reserved Rights. Grantor reserves to itself, or assigns all rights as owner of the Property including the right to engage in all uses of the Property that are not expressly prohibited herein and are not inconsistent with the purpose of this Conservation Easement.

6. Prohibited Uses. Unless expressly authorized in accordance with the Plan (Exhibit B), the following are prohibited activities on the Property:

a. Construction or placing of buildings, roads, signs, billboards or other advertising, utilities or other structures above, on, or below the ground.

b. Dumping or placing of soil or other substance or material as landfill or dumping of trash, waste, or unsightly or offensive materials.

c. Removal or destruction of trees, shrubs, or other vegetation.

d. Excavation, dredging, or removal of loam, peat, gravel, soil, rock or other material substance in such manner as to affect the surface.

e. Surface use except for purposes that permit the land or water areas to remain in their existing natural condition.

f. Activities detrimental to drainage, flood control, water conservation, erosion control, soil conservation, or fish and wildlife habitat preservation.

g. Act or uses detrimental to such retention of land or water areas in their existing natural condition.

h. Acts or uses detrimental to the preservation of the structural integrity or physical appearance of sites or properties of historical, architectural, archaeological, or culture significance.

i. Alteration of the Property except in compliance with the Plan.

7. Subdivision. There shall be no subdivision of the Property.

8. No Public Access. No right of access by the general public to any portion of the Property is conveyed by this Conservation Easement.

9. Management; Expenses; Taxes. Grantor shall manage the Property consistent with the Plan. Grantor retains all responsibilities and shall bear all costs and liabilities of any kind related to the ownership, operation, upkeep, and maintenance of the Property, including the maintenance of adequate comprehensive general liability insurance coverage. Such responsibilities and costs shall include those associated with the management activities discussed in the Plan. Grantor shall keep the Property free of any liens arising out of any work performed for, materials furnished to, or obligations incurred by Grantor. Grantor shall pay before delinquency all taxes, assessments, fee, and charges of whatever description levied on or assessed against the Property by competent authority, and shall furnish Grantee with satisfactory evidence of payment upon request.

10. Costs of Enforcement. Any costs incurred by Grantee in successfully enforcing the terms of this Conservation Easement against Grantor, including, without limitation, costs of suit and attorney's fees, and any costs of restoration necessitated by Grantor's violation of the terms of this Conservation Easement, shall be borne by Grantor.

11. Liability. Grantor and its successors shall hold harmless, indemnify and defend. Grantee from and against all liabilities, penalties, costs, losses, damages, expenses causes of action, claims, demands or judgments, including attorneys fees, arising from or in any way connected with: 1) injury to or the death of any person, or physical damage to any property, resulting from any act, omission, condition, or other matter related to or occurring on or about the Property, regardless of cause, 2) costs and liabilities of any kind related to the ownership, operation, upkeep and maintenance of the Property, including but not limited to the maintenance of adequate comprehensive general liability coverage, payment of taxes, and keeping the Property free of liens; and 3) the existence or administration of this Conservation Easement.

12. Remedies. If Grantee determines that Grantor or successors are in violation of the

terms of this Conservation Easement, Grantee may take any of the following actions, after 30 day written notice to Grantor or successors to correct the violation: 1) Grantee may itself correct the violation, including but not limited to restoration of any portion of the Property affected to the condition that existed prior to the violation, and demand payment from Grantor for all costs associated with such action; 2) Grantee may bring an action at law or in equity in a court of competent jurisdiction to enforce the terms of this 0Conservation Easement, for specific performance, to temporarily or permanently enjoin the violation, recover damages for violation of this Conservation Easement, including but not limited to the costs of restoration, and any other damages permitted by law. In any enforcement action Grantee shall not be required to prove either actual damages or the inadequacy of otherwise available remedies. Grantee's remedies shall be cumulative and shall be in addition to all remedies now or hereafter existing at law or in equity. As part of the consideration for this Conservation Easement, the parties hereby waive trial by jury in any action brought by either party pertaining to any matter whatsoever arising out of or in any way connected with this Conservation Easement.

13. Waiver. Grantor intends that enforcement of the terms and provisions of the Conservation Easement and the Plan shall by at the discretion of Grantee and that any forbearance on behalf of Grantee to exercise its rights hereunder in the event of any breach hereof by Grantor, its heirs, successors, personal representatives or assigns shall not be deemed or construed to be a waiver of Grantee's rights hereunder in the event of a subsequent breach. Grantor hereby waives any defense of laches, estoppel, or prescription.

14. Assignment. Grantee agrees that it will hold this Conservation Easement exclusively for conservation purposes and that it will not assign its rights and obligations under this Conservation Easement except to another organization qualified to hold such interests under the applicable state and federal laws and committed to holding this Conservation Easement exclusively for conservation purposes.

15. Transfer of Property. Grantor agrees to incorporate the terms of this Conservation Easement in any deed or other legal instrument by which Grantor divests any interest in all or a portion of the Property, including, without limitation, a leasehold interest. Not later than thirty (30) days after execution of any deed or other legal instrument by which Grantor divests any interest in all or a portion of the Property, including, without limitation, a leasehold interest, Grantor agrees to give written notice to Grantee of such transfer and provide a copy of the instrument. All property owners will need to obtain proper permits for activities on the property.

16. Condemnation. If the Conservation Easement is taken, in whole or in part, by exercise of the power of eminent domain, Grantee shall be entitled to compensation in accordance with applicable law.

17. Severability. If any provision of this Conservation Easement or the application thereof to any person or circumstance is found to be invalid, the remainder of the provisions of this Conservation Easement, and the application of such provision to persons or circumstances other than those as to which it is found to be invalid, shall not be affected thereby.

18. Notices; References. All notices, consents approvals or other communications hereunder shall be in writing and shall be deemed properly given as of the second business day

after mailing if sent by United State certified mail, return receipt requested, or by overnight mail service (e.g., FedEx, UPS), addressed to the appropriate party or successor-in-interest, at the address above set forth or such new addresses as either party may in writing deliver to the other. References in this Conservation Easement to the Grantor or Grantee include their successors-in-interest.

19. Venue; Choice of Law; Waiver of Jury Trial. Any cause of action shall be brought in either the county or counties where the Property is situated or in Leon County. This Conservation Easement has been delivered in the State of Florida and shall be construed in accordance with the laws of Florida. As part of the consideration for this Conservation Easement, the parties hereby waive trial by jury in any action or proceeding brought by any party against any other party pertaining to any matter whatsoever arising out of or in any way connected with this Conservation Easement.

20. Amendment. This Conservation Easement may be amended, altered, released or revoked only by written agreement between the parties hereto, their successors or assigns. No amendment shall be effective until executed with the formality of a deed and recorded in the public records.

21. Subordination of Liens. Grantor agrees that if the Property is subject to a mortgage lien or any other form of lien or security pertaining to the Property, Grantor shall providerecorded or recordable documentation to verify that such lien or security interest is subordinate to this Conservation Easement.

22. Recording. Grantor shall record this Conservation Easement and any amendments in a timely fashion in the same manner as any other instrument asserting title to real property and must re-record it at any time as may be required to preserve the rights in this Conservation Easement.

TO HAVE AND TO HOLD unto grantee, its respective successors and assigns forever. The covenants, terms, conditions, restrictions and purposes imposed with this easement shall not only be binding upon Grantor but also its agents, personal representatives, heirs, assigns and all other successors to it in interest and shall continue as a servitude running in perpetuity with the Property.

IN WITNESS WHEREOF Grantor has set its hand on the day and year first above written.

Signed, sealed and delivered
In our presence as witnesses:

_____

[Corporate name]

_____ By: _____

Name:_____ Name: _____

Title: _____

_____

Name: _____

STATE OF FLORIDA
COUNTY OF _____

The foregoing instrument was acknowledged before me this_____day of _____, 201_ by_____, the_____of, a Florida corporation, on behalf of the corporation. The above-named individual is personally known to me or produced_____as identification.

_____

Notary Public State of Florida
Commission No:
Commission expires:

GRANTEE'S ACCEPTANCE

The Florida Fish and Wildlife Conservation Commission hereby accepts the foregoing Conservation Easement.

FLORIDA FISH AND WILDLIFE
CONSERVATION COMMISSION

By:_____
Title:_____
Date: _____

Approved as to form and legal sufficiency:

_____
FWC Attorney

# APPENDIX 9. FWC POLICY ON THE RELOCATION OF PRIORITY COMMENSALS

## Introduction

The presence of gopher tortoises is important to many Florida species that benefit from the burrows gopher tortoises dig. For some species, survival is directly linked to their interactions with gopher tortoises, whereas other species have a less dependent relationship. By virtue of the burrow it constructs, the gopher tortoise is recognized as a keystone species that provides significant resources for a large set of other wildlife species in Florida. Jackson and Milstrey (1989) listed 60 vertebrate and 302 invertebrate species that have been observed in gopher tortoise burrows (see FWC *Gopher Tortoise Management Plan*, 2012). A large proportion of those species are considered commensals, while others are infrequent visitors to gopher tortoise burrows.

Commensals are species strongly associated with gopher tortoise burrows because of the burrow's relatively constant microhabitat (temperature and moisture) and the protection it offers from changing environmental conditions (e.g., fire, inclement weather). For populations of these commensals to persist in Florida, healthy gopher tortoise populations are needed. Gopher tortoise conservation conserves the biodiversity of commensals in Florida. As gopher tortoise populations declined, so did those of commensals. In the case of the eastern indigo snake, these tortoise declines were a factor in the snake being listed as a federally Threatened species under the Endangered Species Act (ESA).

### *FWC Policy on the Relocation of Priority Commensals*

The FWC has permitted the humane relocation of gopher tortoises since the mid-1980s. Along with the gopher tortoise, a "suite of species," or commensals, was also permitted for relocation. Specifically, state-listed species were authorized for relocation with the gopher tortoises when captured incidentally during authorized gopher tortoise capture methods. These state-listed species included the Florida mouse, gopher frog, and pine snake; and prior to 2009, also included the eastern indigo snake. The Florida mouse and gopher frog are no longer listed as state threatened, although they are still protected from take and possession under F.A.C. 68A-29.002 and 68A- 26.002, respectively. Thus, take and possession of both species still requires a permit. Although the relocation of these animals occurred, follow-up monitoring was not required. Therefore, little information is known about the survival of these relocated animals and their impact on resident individuals or populations.

Furthermore, little is known about how commensal species respond to relocation, in particular the Florida mouse, gopher frog, and pine snake, and little research has been conducted on the best methods for relocating these species. Concerns exist about the potential impacts to resident populations, genetic boundaries, and minimizing the potential spread of disease. For example, recent genetic analysis on the Florida mouse has shown a significant genetic structuring across the statewide Florida mouse population (Austin 2019). As a result, specific requirements are in place to prevent the movement of mice from one unique population segment to another. The genetic work also suggests ecological differences between scrub and sandhill *Florida mice*. Although further investigation is needed, those differences should be considered when identifying prospective recipient sites to which Florida mice might be translocated. For these

reasons, guidelines for limited relocation are provided with the individual Commission-approved Species Conservation Measures and Permitting Guidelines. Changes to this policy will be amended in the future as needed. The FWC works with stakeholders from the Gopher Tortoise Technical Assistance Group (GTTAG) and species experts from the scientific/academic communities to develop guidance that is best for species conservation while ensuring its practicability for the regulated community.

Priority commensal species being relocated may require a permit from FWC depending on current legal status of the species, if the species is expected to be handled during work, and/or if any take is expected to occur. Some species are considered cryptic (difficult to observe or survey) and fall under the Imperiled Species Management Plan's Cryptic Species Policy. Further information on priority commensal species may be found in individual Species Conservation Measures and Permitting Guidelines. The FWC gopher tortoise permits do not authorize release of any animal onto properties not specified in the issued permit. One type of gopher tortoise relocation permit for temporary exclusion does allow gopher tortoises to be temporarily relocated to adjacent sites only with written permission from the landowner. This written permission must be included with the permit application in order to obtain FWC authorizations needed for relocation on adjacent habitat. Species that will be authorized include the Florida mouse, gopher frog, and Florida pine snake. No other species will be authorized for limited relocation under gopher tortoise temporary exclusion permits. Under other gopher tortoise relocation permits, conditions may be included that authorize capture, temporary possession, transport, and in some cases take of commensal species (see specific species information below under "Regulation"). Upon approval of the Gopher Tortoise Permitting Guidelines at the scheduled 2020 FWC Commission meeting, this *FWC Policy on the Relocation of Priority Commensals* will supersede the Interim policy included in Chapter 5 of the *Gopher Tortoise Management Plan* (2012).

## Limited Relocation Guidance

Limited relocation helps remove captured commensals from harms' way while minimizing the threats to individuals and populations, *e.g.,* by lessening potential impacts of competition with resident populations, crossing genetic boundaries, and possible spread of disease. Different permit options are available for the relocation of gopher tortoises depending on the type and extent of impact to the gopher tortoise and habitat on which it depends. Gopher tortoise relocation permits are described in these Gopher Tortoise Permitting Guidelines (April 2008, as amended) available at MyFWC.com/GopherTortoise. The following guidance only applies to listed and other priority commensals that are captured during permitted gopher tortoise relocation activities. Trapping or capturing these species associated with any other activity requires a separate permit from FWC's Protected Species Permitting section.

To accommodate various project types and permit scenarios, FWC has developed guidance (see Table A4 below) for limited relocation of commensals based on post-development site characteristics and species identity. Additional species-specific considerations for relocations are included below in the sections for priority commensal species. The following guidance is provided so that animals encountered during gopher tortoise trapping and relocation efforts are appropriately handled and released. Species-specific regulation and relocation considerations are included after Table A4 below. For additional information on the biology of the following species, please refer to Chapter 5 of the *Gopher Tortoise Management Plan* approved September 2012.

Table A4. Guidance for limited relocation of commensals based on post-development site characteristics and species identity.

| Post-development site characteristics | *If a gopher tortoise burrow will be impacted from development activities and some habitat will remain on-site* | *If a gopher tortoise burrow will be impacted from development activities and adjacent habitat is available off-site* | *If a gopher tortoise burrow will be impacted/destroyed from development activities and no habitat will remain* |
|---|---|---|---|
| Florida Mouse | Any captured Florida mouse may be released on- site, outside of the area to be developed and within the property boundary or allowed to escape unharmed if some habitat will remain post- development activities. | Any captured Florida mouse may be released on-site as close to original habitat as possible. If possible, mice should be released at the mouth of an abandoned gopher tortoise burrow. | Any captured Florida mouse may be allowed to escape unharmed or relocated off-site within the same geologic ridge or ridge system with the same habitat type as the site where the mice were captured. |
| Gopher Frog | Any captured gopher frog may be released on-site within the property boundary, provided that the frog is released outside of a physical barrier (i.e., silt fencing) to the area to be developed Captured frogs should be released near the mouth of a gopher tortoise burrow, other suitable refugia, or in adjacent suitable habitat. Alternatively, frogs may be allowed to escape unharmed. | Any captured gopher frog may be released at the periphery of the area to be developed, provided that the frog is released outside of a physical barrier (i.e., silt fencing). Captured frogs should be released near the mouth of a gopher tortoise burrow or other suitable refugia. Alternatively, frogs may be allowed to escape unharmed. | Any captured gopher frog should be released and allowed to escape unharmed or, upon request of FWC, authorized persons may collect the gopher frog consistent with permit conditions. |
| Florida Pine Snake | Any captured pine snake may be released on-site, outside of the area to be developed and within the property boundary, provided that the snake is released outside of a physical barrier (i.e., silt fencing). Alternatively, snakes may be allowed to escape unharmed. | Any captured pine snake may be released at the periphery of the area to be developed, provided that the snake is released outside of a physical barrier (i.e., silt fencing). Alternatively, snakes may be allowed to escape unharmed. | Any captured pine snake should be allowed to escape unharmed or, upon request of FWC, authorized persons may collect the pine snake consistent with permit conditions. |
| Other commensals, invertebrates, and other common animals encountered | All animals should be released on-site or allowed to escape unharmed. When possible, animals may be released over a physical barrier (i.e., silt-fencing). | All animals should be released on-site or allowed to escape unharmed. When possible, animals may be released over a physical barrier (i.e., silt-fencing). | All animals should be released on-site or allowed to escape unharmed. Captured invertebrates can also be donated to a facility for educational or research purposes. |

| Post-development site characteristics | *If a gopher tortoise burrow will be impacted from development activities and some habitat will remain on-site* | *If a gopher tortoise burrow will be impacted from development activities and adjacent habitat is available* off-site | *If a gopher tortoise burrow will be impacted/destroyed from development activities and no habitat will remain* |
|---|---|---|---|
| Nonnative species | Certain nonnative species removed and captured from gopher tortoise burrows during relocations shall be euthanized unless otherwise authorized by FWC (includes all members of the following families: Pythonidae, Boidae, Varanidae, Iguanidae, and Teiidae.) | Certain nonnative species removed and captured from gopher tortoise burrows during relocations shall be euthanized unless otherwise authorized by FWC (includes all members of the following families: Pythonidae, Boidae, Varanidae, Iguanidae, and Teiidae.) | Certain nonnative species removed and captured from gopher tortoise burrows during relocations shall be euthanized unless otherwise authorized by FWC (includes all members of the following families: Pythonidae, Boidae, Varanidae, Iguanidae, and Teiidae.) |

## Regulations and Considerations for Limited Relocation

### *Gopher Frog (Lithobates capito)*

*Regulation*

The gopher frog was removed from Florida's Endangered and Threatened Species List in 2016 with the approval of the Imperiled Species Management Plan. The gopher frog is currently protected by Florida's Regulations Relating to the Taking of Amphibians (68A-26.002 F.A.C.). No intentional take by any means or possession is allowed for the gopher frog except as authorized by permit from the executive director as provided in Rule 68A-9.002 F.A.C., relating to take wildlife or freshwater fish for justifiable purposes It is illegal to pursue, hunt, molest, capture, kill, attempt any of these acts, transport, or sell gopher frogs or their eggs without a permit issued by FWC. Under certain circumstances, FWC may send out requests for permitted individuals to collect frogs for purposes of meeting specific actions identified in the Species Action Plan. Permits will be conditioned to include authorizations for the purposes of the specific collection request.

*Considerations for Limited Relocation of Gopher Frogs*

Limited relocation may be authorized by FWC as a condition of permitted gopher tortoise relocation activities and specified on the gopher tortoise relocation permit. This is because gopher frogs are most commonly encountered during tortoise capture, either in bucket traps or during burrow excavation. They can also be trapped by placing a funnel trap in the mouth of the burrow or by using drift fences in combination with buckets or funnel traps to intercept their seasonal migrations to breeding ponds. Frogs may be secured in plastic containers (1 frog per container) with a wet paper towel soaked with non-chlorinated water (bottled water, filtered water, or well water). Containers with frogs should be of a length that is at least double the body length, with a width that is equal to the body length, and a height that will permit the animal to sit naturally with head clearance. Containers with frogs should have air holes in the lid and/or sides of the container that are sufficient for ventilation. In general, containers with frogs can be kept under the same conditions as gopher tortoises for transport, but frog containers must be

cleaned, and new wet paper towels replaced daily to prevent desiccation of the animals. Agents who undertake tortoise relocations in central and southern Florida should be aware of three nonnative amphibians (e.g., Cuban treefrog (*Osteopilus septentrionalis*), greenhouse treefrog (*Eleutherodactylus planirostris*), and South American cane toad (*Rhinella marina*)) that may be confused with gopher frogs. These nonnative species cannot be relocated and must be either euthanized or placed with a properly permitted individual or organization.

If limited relocation of gopher frogs is being considered (see Table A4), the animals should not be moved greater than 2 km (1.2 mi) from point of capture and must be relocated to appropriate habitat. When choosing a relocation site, the ideal area should have active gopher tortoise burrows are within 2 km (1.2 mi) of fish-free, isolated wetlands that are not separated by any significant barriers to frog movement (*e.g.*, no major roads or rivers). Recent evidence demonstrates that these frogs also regularly use other refugia besides gopher tortoise burrows. Therefore, a relocation site with sufficient uplands that lacks active gopher tortoise burrows but has the fish-free isolated wetlands as described above is a viable option. The relocation site should be as close to the capture site as possible and major river drainages should not be crossed. Frogs must be released directly into the mouth of the burrow at the recipient site, if a burrow is available, but avoid releasing more than 1 frog into a burrow. Any frog that appears ill, lethargic, has difficulty righting itself, or otherwise appears to be unhealthy it should not be relocated; contact FWC by email at Imperiled@MyFwc.com for guidance under those circumstances. Off-site relocation (i.e., permanently moving the animal away from its home range) of gopher frogs is experimental, and not currently being considered under this policy; a Scientific Collecting Permit would be required for that activity.

### *Florida Mouse (Podomys floridanus)*

*Regulation*
The Florida mouse was removed from Florida's Endangered and Threatened Species List in 2016 with the approval of the Imperiled Species Management Plan. However, protections are provided in rule 68A-29.002 F.A.C. Neither Florida mice not their young, homes, dens or nests shall be taken, transported, stored, served, bought, sold or possesses in any manner without an FWC permit. Information on applying for a permit for the collection or take of Florida mice is available on FWC's Protected Wildlife Permitting webpage.

*Considerations for Limited Relocation of Florida Mice*
Limited relocation may be authorized by FWC in concert with permitted gopher tortoise relocation activities and specified on the gopher tortoise relocation permit. This is because Florida mice can be opportunistically captured by hand during burrow excavation. Mice can be retained and transported in Sherman traps or small, ventilated animal carriers for 24 hrs, as long as they are carefully protected from extremes of heat and cold; sunflower seeds should be provided. Florida mice should not be released at any site with known, existing populations of Florida mice. This is to reduce competition between translocated individuals and the resident population, thus increasing the likelihood of successful translocation. Whenever possible, mice should be released at the mouth of abandoned burrows of adult gopher tortoises at the relocation site. Only 1 mouse should be released per burrow. Florida mice should be released only within their known geologic ridge system and habitat type in which they were captured (White 1970). This helps avoid movement of mice across genetically defined subpopulation boundaries or into

habitats for which they may not be adapted. The preferred maximum dispersal distance for Florida mice is not well known, so suitable patches of xeric upland habitat should not be separated by more than 1 km (0.6 mi) to maximize the probability that Florida mice would be able to move successfully among patches. In areas such as the Atlantic Ridge and Lake Wales Ridge, translocation of individuals to vacant sites that support suitable natural habitat are encouraged to re-establish Florida mouse populations, especially on protected lands that are managed for conservation.

### *Florida Pine Snake (Pituophis melanoleucus mugitus)*

*Regulation*
The Florida pine snake is listed as state Threatened on Florida's Endangered and Threatened Species List (68A-27.004, F.A.C.) by FWC. It is illegal to pursue, hunt, molest, capture, kill, attempt any of these acts, transport, or sell pine snakes or their eggs without an FWC permit; however, possession of 1 Florida pine snake without a permit is allowed (68A-25.002 [10] F.A.C.), although albino or amelanistic (lacking dark skin color) specimens may be possessed without limit. Under certain circumstances, FWC may send out requests for permitted individuals to collect pine snakes for purposes of meeting specific actions identified in the Species Action Plan. Permits will be conditioned to include authorizations for the purposes of the specific collection request. Information on applying for a permit for the collection or incidental take of Florida pine snakes is available in the Florida Pine Snake Conservation Measures and Permitting Guidelines and on FWC's Protected Wildlife Permitting webpage.

*Considerations for Limited Relocation of Pine Snakes*
Limited relocation may be authorized by FWC as a condition of permitted gopher tortoise relocation activities or may require a separate Incidental Take permit. This is because Florida pine snakes may be encountered during site surveys, excavation of gopher tortoise burrows, or capture of tortoises. Snakes should be enclosed in a cloth bag (1 snake per container) such as a pillowcase or similar 'snake bag' constructed for that purpose. Alternatively, snakes may be picked up with a rake or stick and dropped into a plastic garbage can with a secure lid. Snakes in bags can be placed in the same type of container used for a gopher tortoise (without the gopher tortoise) and maintained under the same conditions as the tortoises until release. Snakes should be released according to permit conditions and will make their own way to suitable cover.

Florida pine snakes have relatively large home ranges and use a variety of upland habitats, so they will require large, diverse recipient sites. Males have an average home range of 70.1 ha (173 acres) and females of 37.5 ha (93 acres; Miller 2012). Because of negative impacts from fragmentation (reduction in large, continuous natural areas by roads, cities, rivers, or other barriers), and questions about the survivorship of relocated animals, Florida pine snakes should not be relocated to any potential recipient sites unless as a component of Scientific Benefit to the species (see Florida Pine Snake Conservation Measures and Permitting Guidelines). Off-site relocation (i.e., permanently moving the animal away from its home range) of Florida pine snakes is experimental, and not currently being considered under this policy; a Scientific Collecting Permit would be required for that activity. Recent evidence shows that individual Florida pine snakes show greater site fidelity to refugia sites (e.g., burrows and stumpholes) during winter months compared to summer. All encounters with Florida pine snakes during permitted gopher tortoise relocation activities must be reported on the After Action Report in the

FWC online permit system.

***Eastern Indigo Snake (Drymarchon couperi)***

*Regulation*
The eastern indigo snake is listed as a Threatened species by the USFWS in 50 C.F.R. 17.11 and listed as a Federally-designated Endangered and Threatened species (68A-27.003, F.A.C.) in recognition of its federal classification. For federally listed species like the eastern indigo snake, a federal permit is required to capture, handle, or relocate individuals. Authorized agents should coordinate with the USFWS if they plan to handle eastern indigo snakes. An Eastern Indigo Snake Programmatic Effect Determination Key (USFWS 2010, updated 2017) and Standard Protection Measures for the Eastern Indigo Snake (USFWS 2021) can be found online. Eastern indigo snake sightings can be reported on the FWC Rare Snake Sightings Webpage.

*Considerations for Limited Relocation of Eastern Indigo Snakes*
Currently, relocation of eastern indigo snakes is not authorized by the USFWS or by FWC. If eastern indigo snakes may be affected by habitat modification the Standard Protection Measures for the Eastern Indigo Snake (USFWS 2021) should be implemented. All sightings of eastern indigo snakes should be reported to Imperiled@MyFWC.com; please include GPS coordinates and photos when available so that species of similar appearance can be ruled out.

***Eastern Diamondback Rattlesnake (Crotalus adamanteus)***

*Regulation*
The eastern diamondback rattlesnake is not currently listed by either FWC or the USFWS. The USFWS has received a petition to list the eastern diamondback rattlesnake as Threatened under the Endangered Species Act. In May 2012, the USFWS announced the 90-day finding on that petition, noting that the petition presented substantial scientific or commercial information indicating that listing the eastern diamondback may be warranted. A status review is presently being undertaken, and if the 12-month finding deems that federal listing is warranted, individuals would be required to coordinate with the USFWS if they plan to handle or transport eastern diamondback rattlesnakes. Currently, a venomous reptile permit issued by FWC is required to capture, keep, possess, or transport live eastern diamondback rattlesnakes.

*Considerations for Limited Relocation of Eastern Diamondback Rattlesnakes*
If relocation of individual snakes is considered and authorized in the future, guidelines will be developed to ensure that relocation is undertaken when there is a conservation benefit to the overall population. Currently, a venomous reptile permit issued by FWC is required to handle or transport live eastern diamondback rattlesnakes. Diamondback rattlesnakes are venomous and can strike a distance up to 2/3 of their body length. This species is best left alone when encountered.

***Invertebrate Commensal Species***

*Considerations for Limited Relocation of Invertebrates*
Relocating invertebrate commensals with their hosts over relatively short distances within a contiguous habitat matrix might help them become established with the new tortoise populations

and, in the case of suspected mutualists, might benefit the tortoises also. Research is needed to determine how to keep commensals alive, such as by refrigeration, rearing, or a combination of techniques, until tortoises have established burrows in their new locality.

***Nonnative Species that use Gopher Tortoise Burrows***

Nonnative species and infrequent visitors to gopher tortoise burrows are not considered commensals for the purpose of this plan, but may be addressed herein as needed, particularly when providing guidance when encountered during gopher tortoise relocation efforts. Two high priority nonnative reptiles are known to use gopher tortoise burrows. The Argentine black-and-white tegu (*Tupinambis merianae*), recently established in Florida, is known to occupy gopher tortoise burrows, as are Burmese pythons (*Python molurus*). Certain nonnative species removed and captured from gopher tortoise burrows during relocations shall be euthanized unless otherwise authorized by FWC. These species include all nonnative members of the following families: Pythonidae, Boidae, Varanidae, Iguanidae, and Teiidae. All nonnative species must be euthanized using legal and humane methods such as those listed in the AVMA euthanasia guidelines. If you are unable to euthanize the animal, contact a Nonnative Fish and Wildlife Biologist who can assist with a response at 1-888-IVEGOT1 and leave a message if an operator is not available.

If transporting a conditional species for the purposes of euthanasia, assure that the proper permits are obtained and valid. Conditional reptiles shall be transported only in secured, original trapping devices or after placement in a closely woven, double-seam sewn, cloth sack. This cloth sack shall be placed in a second cloth sack of similar construction, which shall be placed in a secure container. Said containers shall be prominently labeled "Dangerous Reptiles," pursuant to Rule 68-5.001, Florida Administrative Code.

Please report these and any other nonnative species through the toll-free number 1-888-IVEGOT1 (1-888-483-4681), or online at www.EDDMaps.org. Include GPS location and photographs with your report. For a list of conditional and prohibited species and information on how to obtain a Conditional Species Permit or Python Removal Permit, or for more information on nonnative species in Florida, visit the nonnative fish and wildlife section on MyFWC.com.

## Literature Cited


Austin, J. D., A. Marx, and T. J. Doonan. 2019 Assessing the genetic structure of the statewide Florida mouse population for more effective conservation and management.

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Miller, G. J., L. L. Smith, S. A. Johnson, and R. Franz. 2012: Home range size and habitat selection in the Florida pine snake (*Pituophis melanoleucus mugitus*). Copeia 4:706-713.

White, W. A. 1970. The geomorphology of the Florida peninsula. Bureau of Geology, Division of Interior Resources, Florida Department of Natural Resources. Geological Bulletin No. 51. Tallahassee, Florida.

# APPENDIX 10. FWC GOPHER TORTOISE PROGRAM CONTACT INFORMATION

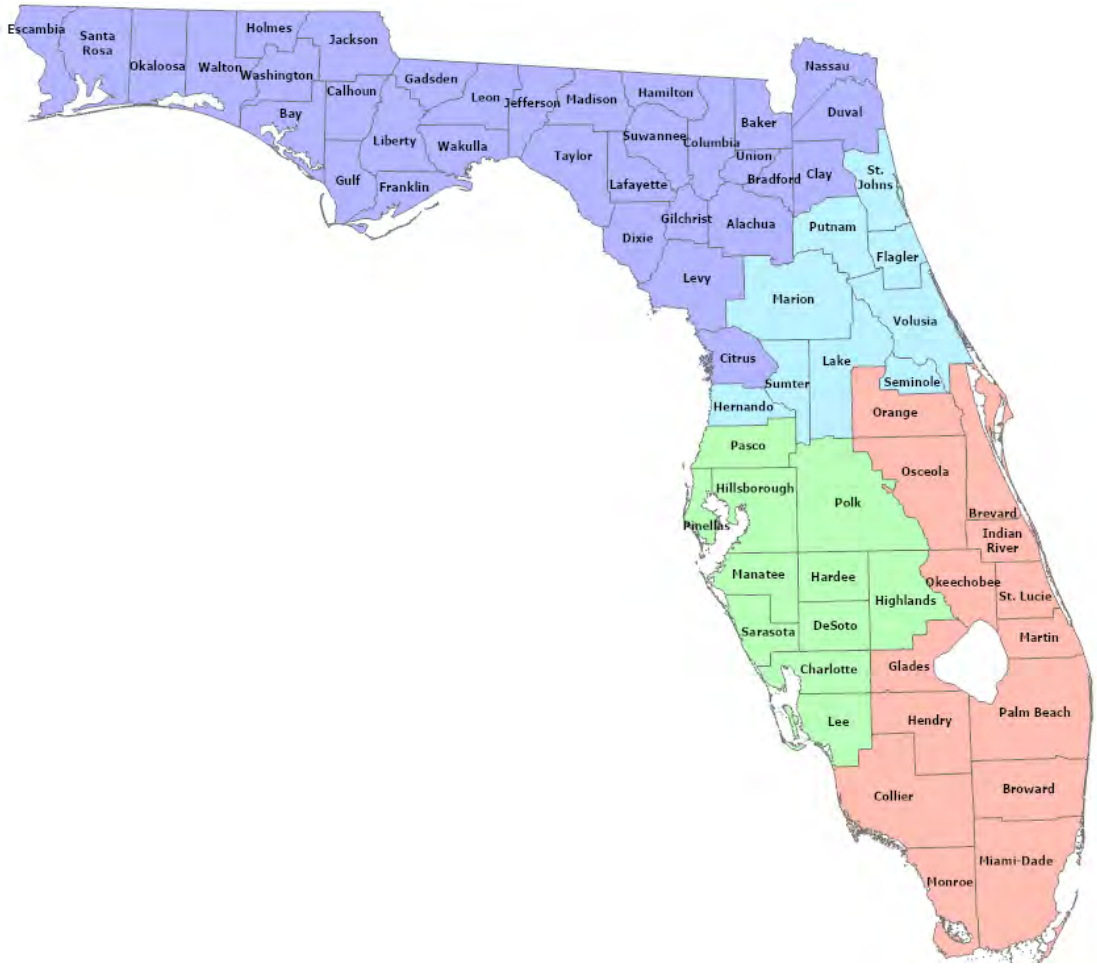



Figure 6. Map showing Florida Gopher Tortoise contacts by county and region. Regions are color-coded as follows: Northwest and North Central counties are colored purple; Northeast counties are colored blue; Southwest counties are colored green; and South counties are colored pink.

**Inquiries Related to the Gopher Tortoise Program:**

Gopher Tortoise Program Coordinator Florida Fish and Wildlife Conservation Commission
Division of Habitat and Species Conservation Species Conservation Planning Section
620 South Meridian Street, Mail Station 2A Tallahassee, Florida 32399-1600

General tortoise inquiries: (850) 921-1030
Permit-specific inquiries: (850) 921-1031

**Regional Gopher Tortoise Conservation Biologists:**
Northwest and North Central Region: (850) 921-1031
Northeast Region including Hernando: (352) 732-1225
Southwest Region: (863) 648-3200
South Region including Brevard, Indian River, Orange, and Osceola: (561) 625-5122
**MyFWC.com/GopherTortoise**

# APPENDIX 11. MODIFIED APPLICATION REQUIREMENTS, RECIPIENT SITE CRITERIA, AND HANDLING PROCEDURES FOR 10 OR FEWER BURROWS AND BURROW OR STRUCTURE PROTECTION PERMITS

The 10 or Fewer Burrows Permit is available when fewer than 10 burrows or tortoises will be impacted on a development site. These permits are intended to provide a streamlined, less expensive, and faster option for applicants impacting smaller numbers of tortoises when the gopher tortoises are relocated to suitable on-site and off-site recipient areas. Therefore, the amount of information required for applications is reduced. Applications may be checked by FWC staff, and additional information or photographs may be required in situations where submitted information is not clear or does not appear to meet criteria for this permit type.

Such permits usually are issued for smaller properties (such as single-family residential lots), but larger properties may also meet the criteria for this permit when development activities are minimal or only small numbers of burrows are present on the property.

Burrow or Structure Protection Permits are available when the integrity or utility of an existing structure is jeopardized by one or two burrows and therefore poses a public safety concern (e.g., burrow under a propane tank), or if the safety of the resident tortoise is compromised (e.g., burrows in a grass parking lot, dirt driveway, etc.).

## Gopher Tortoise Burrow Surveys

In order for applicants to determine if they meet the criteria for the 10 or Fewer Burrows Permit, 100% surveys must be conducted over the entire development footprint and submitted as part of the permit application (rather than after issuance of the permit). The 15% survey protocol for donor sites (Appendix 4) does not apply to this permit type. Survey maps listed in Appendix 4 are *required* for 10 or Fewer Burrows Permits with off-site relocation and are *recommended* for 10 or Fewer Burrows Permits with on-site relocation, unless specifically requested by FWC staff reviewing such applications. Surveys are not required for applications to relocate tortoises for Burrow or Structure Protection Permits.

## On-site Recipient Site Criteria

On-site recipient areas under 10 or Fewer Burrows or Burrow or Structure Protection Permits do not require separate FWC recipient site permits. Therefore, requirements under permitted long-term protected recipient sites and short-term protected or unprotected recipient sites do not apply. However, recipient sites must be suitable set-aside areas that are not disturbed by construction activities and provide a safe environment (e.g., away from roads, canals, dogs, human harassment, etc.) that excludes (through temporary fencing or other means) tortoises from development areas until such development activities have been completed or from the area where the compromised burrow(s) is located. Gopher tortoises need access to the following: 1) sufficient areas of forage (herbaceous and low-growing plants including native broadleaf grasses, legumes [bean/pea family], asters, blackberries and other fruits, prickly pear cactus, and a variety of other non-native grasses, except cogon grass); 2) sandy, well-drained, open (uncanopied), sunny sites for burrows and basking; 3) protection from dogs, cats, other predators, human harassment, roads and canals;4) ability to roam freely, without barriers such as permanent

fencing that precludes access to suitable forage or burrowing habitat**.** Such general conditions must remain after development, outside the built footprint on the site. Small sites typically have gopher tortoises that normally "roam" between adjoining neighboring parcels to forage or burrow, so this may be considered as well. To prevent multiple relocations of the same tortoise, on-site relocation will not be approved when local governments approve multiple development phases for a single project. The herbaceous vegetation must be maintained (mowing, burning, etc.), and pesticides/herbicides should not be used in the recipient area during and following site development. The on-site recipient area should be a minimum of 750 square feet (e.g., 25ft x 30ft), with a minimum width of no less than 10 feet wide. At least half of the on-site recipient area must be located at a minimum of 25 feet away from the edge of clearing /grading, construction activities, and/or vehicular traffic. Photos of the proposed on-site recipient area must be submitted with the permit application to demonstrate habitat suitability based on the above criteria. If the recipient area does not appear to meet these requirements, contact FWC staff or an authorized agent to discuss available offsite relocation options.

Stocking criteria (maximum of four per acre, Table 5) do not apply. Under 10 or Fewer Burrows Permits, higher on-site recipient area densities are allowed where enough suitable habitat will be left untouched during and after site development; up to five tortoises may be moved into pens for up to 10 days (multiple pens are needed to accommodate more than 5 tortoises).

## Temporary Penning of Tortoises to Exclude Them from Development Activities

For the purpose of excluding tortoises from the development footprint (for on-site relocations only), tortoises may be penned for up to 10 days from day of capture. Once trapping activities are complete or 10 days have passed, whichever occurs sooner, penned tortoises must be released and effectively excluded from the development footprint using temporary fencing or other means. Silt fence barriers should be installed around the perimeter of the construction area after all tortoises have been trapped. The silt fence should be buried 8 inches into the ground, so tortoises cannot crawl under it. Recommended materials include Belton Industries #1935 pre-assembled silt fence (a more durable type of silt fence; see *Glossary* for purchasing information).

Pens must provide partial (but not full) shade, forage, and water. Pens must not be smaller than 100 square feet; larger pens are recommended. Pens should be constructed ahead of time, so tortoises may be placed in pens as soon as they are captured. Penning is allowed only when requested in the permit application and the applicant indicates the number of days the gopher tortoise will be penned. The location of the pen must be depicted on the site plan or an aerial photo. Sites that cannot accommodate a recipient area pen of this minimum size or larger will require the applicant to relocate tortoises off-site. Land clearing should occur immediately after all tortoises are relocated out of harm’s way and silt fence barriers that prevents gopher tortoises from entering the construction area is installed. Tortoises trapped and released before clearing has begun may find their way back to the construction site and be injured or entombed there if fencing is not installed and maintained throughout the duration of construction. Tortoises have a strong homing instinct and will try to return to their burrows if there are not barriers that discourage them from doing so. The silt fence barrier should remain around all sides of the construction area until all development activity is complete on the site, including landscaping.

Tortoises captured under Burrow or Structure Protection Permits must be relocated to the permitted on-site recipient area immediately after capture. Penning is not allowed under this permit type.

## Habitat Maps, Soil Map, and Calculated Maximum Allowable Density for Donor and Recipient Sites

Habitat maps, soil maps, and calculated stocking rate (Appendix 3) are not required for this permit application unless gopher tortoises will be relocated to an off-site recipient area, or this information is specifically requested by FWC staff reviewing such applications.

## Vegetation Sampling on Recipient Areas

Vegetation sampling is not required for on-site relocations under this permit type; however, photographs of the on-site recipient area may be required to demonstrate suitable habitat and forage for the relocated tortoise(s). Vegetation sampling is required for all off-site recipient areas (see Appendix 7).

## Marking Gopher Tortoises

When conducting on-site relocations, marking tortoises is not required. However, if tortoises will be marked, marking must be conducted by an authorized agent specifically permitted for this activity. Marking tortoises is required for off-site relocations to permitted recipient sites (see Appendix 5).

## Health Considerations

Health evaluations are encouraged for any relocation but are not required for on-site relocations under this permit type. Off-site relocation requirements are identical to other off-site relocation permits (see Appendix 6).

## Reporting

Within 45 days of capture of the relocated tortoises, the permittee, or authorized agent if applicable, shall submit an after action report using the FWC online permit system detailing the capture/relocation actions. If the permit was not issued via the FWC online permit system, an after action report form will be provided by FWC and must be submitted in accordance with the timeframe above. If the permittee or agent submits an interim after action report, or if no tortoise is captured, a final after action report must be submitted for that permit no later than 30 days after the permit expires. If site clearing for construction is delayed for any reason, FWC recommends that the permittee submit an interim after action report instead of the final after action report. This will delay voiding the relocation permit until clearing commences and they have ensured no tortoises have moved onto the site.

# APPENDIX 12. GOPHER TORTOISE RESTOCKING GUIDELINES FOR PUBLICLY OWNED CONSERVATION LANDS (CREATED NOVEMBER 2011)

## I. Purpose

The original version of the Gopher Tortoise Permitting Guidelines approved in April 2008 did not specifically address restocking public conservation lands. The purpose of the following restocking guidelines is to help bring consistency to the restocking and augmentation of gopher tortoise *(Gopherus polyphemus)* populations on public conservation lands owned, purchased, or managed with funding provided by the State of Florida (including the Water Management Districts and local governments). A team of public conservation land managers representing the Florida Department of Environmental Protection Florida Park Service, Florida Department of Agriculture and Consumer Services Florida Forest Service, the five Water Management Districts, Florida Communities Trust, and Florida Fish and Wildlife Conservation Commission developed these guidelines, in partnership with the Gopher Tortoise Technical Assistance Group, to further the public trust of conserving, restoring, and managing Florida's public lands.

The participants who drafted these guidelines, recognize that the success of gopher tortoise conservation depends both on public and private lands participation. These guidelines do not intend to create unfair competition with privately-owned long-term protected recipient sites but serve as designated restocking sites to further the third goal of the *Gopher Tortoise Management Plan*, to restore and maintain secure viable populations of gopher tortoises throughout Florida. Long-term Protected Restocking Sites will be stocked at a lower density (≤2/acre) than Long-term Protected Recipient Sites (≤4/acre) so that tortoises can expand naturally over time. Public conservation lands established as Long-term Protected Recipient Sites under a perpetual conservation easement qualify for the full site evaluation stocking rate.

Lands under local government ownership and those owned by the State of Florida may choose to become a Long-term Protected Recipient Site for receiving relocated tortoises from development sites. These lands may meet the criteria for a long-term protected recipient site (see Permitting Guidelines) and be eligible for a final site evaluation rate of four tortoises per acre. Lands that are designated by the managing entity for restocking (i.e., where tortoises are depleted or no longer exist) must meet the criteria for restocking public conservation lands outlined in these guidelines. For purposes of the *Gopher Tortoise Management Plan* and Permitting Guidelines, restocking is defined as deliberately moving wild gopher tortoises into protected, managed, suitable habitat where resident densities are extremely low and where the restocked tortoises' future survival and long-term population viability are very likely. We refer to a designated site that meets the criteria for restocking as a recipient or restocking site and is an area of protected, managed, suitable habitat where gopher tortoise populations have been severely depleted or eliminated.

Restocking gopher tortoises to restore severely depleted populations is the preferred population management tool identified in the *Gopher Tortoise Management Plan*, just as prescribed fire is the premier habitat management tool. Restocking allows for the relocated tortoises to naturally

expand into well-managed habitat. Restocking of other imperiled species is generally undertaken with surplus individuals from protected populations. Restocking is a form of responsible relocation; however, tortoises may also be responsibly relocated to sites with resident tortoises where the carrying capacity has been increased through habitat management to provide sufficient forage for additional tortoises. The restocking strategy outlined in the *Gopher Tortoise Management Plan* is to relocate gopher tortoises to sites that can benefit from the restoration of this keystone species. The focus will be on establishing viable populations on protected, well-managed lands.

The intent of these Restocking Guidelines is to ensure that restocking of public lands is consistent with the goals and objectives for which the land was acquired and to provide a high conservation value for gopher tortoises in Florida. Furthermore, restocking efforts should be compatible with the uses described in the agency-approved land management plan (e.g., Acquisition and Restoration Council [ARC] approved management plans).

***Florida Forever Act***

Section 259.105, Florida Statutes, The Florida Forever Act ("Act") as amended by Chapter 2008-229, Laws of Florida, Section 13, directs that "public lands, both existing and to be acquired, identified by the lead land managing agency, in consultation with the Florida Fish and Wildlife Conservation Commission for animals or the Department of Agriculture and Consumer Services for plants, as habitat or potentially restorable habitat for imperiled species, be restored, enhanced, managed, and repopulated as habitat for such species to advance the goals and objectives of imperiled species management consistent with the purposes for which such lands are acquired without restricting other uses identified in the management plan."

Further, Section 259.105, Florida Statutes, the Act states: "As part of the state's role, all state lands that have imperiled species habitat shall include as a consideration in management plan development the restoration, enhancement, management, and repopulation of such habitats. In addition, the lead land managing agency of such state lands may use fees received from public or private entities for projects to offset adverse impacts to imperiled species or their habitat in order to restore, enhance, manage, repopulate, or acquire land and to implement land management plans developed under s. 253.034 or a land management prospectus developed and implemented under this chapter. Such fees shall be deposited into a foundation or fund created by each land management agency under 1s. 372.0215, s. 589.012, or s. 259.032(11) (d), to be used solely to restore, manage, enhance, repopulate, or acquire imperiled species habitat."

## II. Criteria for Recipient Site Selection

***Site Specific Restocking and Augmentation Plan***

Each gopher tortoise restocking or augmentation project on public conservation lands must have a site-specific plan including the duration of the restocking activity ("restocking plan") that will be followed while conducting the project. The FWC will assess this restocking plan during the permit process to determine if restocking is appropriate for the specified site. The restocking plan shall document what caused the lack of gopher tortoises on the site; what has been done to overcome the threat that caused the lack of gopher tortoises; site selection analysis (see below); the restocking process; and post-restocking management, monitoring and reporting. These site-

specific restocking plans must be kept on file by the managing agency and should be used as a tool to communicate the details of a project to future managers of the land.

***Site Selection Analysis***

Specific criteria to consider for selecting potential recipient sites are in the Permitting Guidelines (*Recipient Site Permits*). Additional protocol and considerations for selecting a site for restocking are included in *Protocol for Assessing Gopher Tortoise Densities on FWC Lands Identified as Potential Restocking Sites* (Appendix 7) of the 2007 *Gopher Tortoise Management Plan*.

***Management Considerations***

*Maintain Natural Communities*

The primary means to maintain or restore robust tortoise populations on public conservation lands is to restore or maintain natural communities that provide suitable gopher tortoise habitat in optimal condition. This requires the maintenance or restoration of natural processes including frequent fire, natural hydrology, and control of invasive nonnative species (plant and animal). The best sites for restocking are those where natural communities are in the maintenance phase of management. Tortoises use a number of ruderal communities (e.g., abandoned agricultural fields, farm field borders, utility rights-of-way, roadsides, canopy gaps, and bare ground created in forests or pine plantations following thinning or harvest with ongoing or past disturbances). These ruderal communities may be suitable for restocking under certain circumstances; however, it is preferred that tortoises be relocated to appropriate natural communities.

*Use Frequent Prescribed Fire*

Natural tortoise populations occur in habitat that is fire- maintained. Fire return intervals vary based on natural community and site conditions and must be addressed in the site-specific restocking plan. It is generally accepted that sandhill, pine flatwoods, and dry prairie should be burned on one-year to three-year rotations while scrub, scrubby flatwoods, and coastal strand burn on longer fire return intervals. Fire at recipient sites needs to occur at appropriate intervals to maintain a diverse groundcover, and the restocking plan must address how this will be accomplished. Fire improves the condition of these natural communities by killing non fire-adapted plants, recycling nutrients, clearing out dead and diseased vegetation, promoting plant flowering and fruit production, and fostering new plant growth. The optimal benefits of fire for gopher tortoises are realized when applying prescribed burns in a manner that mimics the natural lightning fire season in early spring.

*Natural Systems Management/Other Imperiled Species Considerations*

Appropriate management of natural communities will generally benefit most imperiled species populations, including gopher tortoises. Natural systems management across the landscape often negates the need for single species management. In rare cases, conflicting management strategies between imperiled species can exist. For example, management of Florida scrub-jay habitat may require longer fire return intervals or less complete (mosaic) burns than would be desired to produce ideal habitat for gopher tortoises. Appropriate management activities should take into account all imperiled species that may be present.

***Ruderal or Disturbed Lands Restoration***

*Desired Future Condition*
To the extent feasible (and excepting infrastructure improvements such as limited roads, buildings, hiking and equestrian trails, camp sites, etc.), the desired future condition for the majority of ruderal and disturbed lands on public conservation lands is restoration to the natural communities that historically occurred on each site. Gopher tortoise restocking and augmentation can be an important part of community restoration since gopher tortoises are a keystone species that provide refuge and nesting habitat for a large number of other species.

*Protect Tortoises During Restoration*
If tortoises are restocked on ruderal lands that will be restored to their natural condition, all due care must be taken to ensure that tortoises and their burrows are protected, per the Permitting Guidelines. Plans to address this must be in the restocking plan.

*Ensure Adequate Forage During Restoration*
Tortoises should not be deprived of adequate forage during habitat restoration. If tortoises reside on pastures being restored to native groundcover, restoration must be done in a manner that ensures tortoises have adequate forage.

***Compatibility of Uses***
Restocking tortoises is not allowed within developed public use areas of management units, or within approved or proposed sites for facilities development (e.g., campgrounds, structures, parking lots).

***Habitat Condition***
Restocking of tortoises may be undertaken on public conservation lands if the habitat is in suitable condition to support them. During the recipient site permitting process, FWC evaluates proposed recipient sites to determine their suitability and the maximum number of tortoises that can be relocated to each site. Site suitability criteria are divided into two classes, *Acceptable* (minimum acceptable standards) and *Desirable* (highly desirable features).

Desirable conditions for tortoises in most suitable natural communities in Florida include canopy cover of no more than 40% and native herbaceous groundcover at 50% cover or greater. Acceptable conditions for tortoises in most suitable natural communities in Florida include canopy cover of no more than 60% and native herbaceous groundcover at 30% cover or greater. Refer to the Permitting Guidelines, Table 5. *Acceptable and Desirable Criteria Thresholds for Recipient Site Characteristics* for additional criteria used to evaluate recipient sites.

Gopher tortoise recipient sites should be of the same or similar habitat type as the donor site (e.g., tortoises should be relocated from a Sandhill site to a Sandhill site). In general, tortoises should not be introduced onto ruderal lands that did not originally support tortoise habitat (e.g., Hydric Hammock converted to pasture).

***Recipient Site Surveys***
Tortoise populations in potential recipient sites on public conservation lands must be surveyed to

determine whether or not restocking or augmentation is warranted. Public land agencies may utilize their own staff if they have the appropriate training and experience to conduct surveys and are authorized agents, or they may contract with Authorized Gopher Tortoise Agents from the private sector. The required survey protocol is outlined in Gopher Tortoise Permitting Guidelines (Appendix 4). Staff of public conservation lands may decide that surveying more than the required minimum (15% of the potential recipient site) is warranted based on the goals and objectives of the restocking effort.

***Population Densities***

Tortoise population densities vary considerably between various habitat types and over time. The goal on public conservation lands is to maintain tortoise populations within natural habitat-specific ranges and to allow natural population fluctuation within those ranges.

Restocking must not be used to attempt to create or maintain population levels at a constant maximum or super-abundance. For this purpose, restocking shall occur at only 50% of the site specific maximum allowable density.

Typically, only areas with suitable habitat conditions and low tortoise densities for designated habitat types shall be considered as potential restocking sites on public conservation lands. Additionally, tortoises should not be stocked into a patch of habitat that is adjacent to or contiguous with a patch that has a moderate to high tortoise density. Exceptions are allowable in special circumstances such as when a donor site is immediately adjacent to a management unit recipient site.

***Stocking Rates for Restocked Areas***

The section, *Types of Permits, Recipient Site Permits* of the Permitting Guidelines, include stocking rates for recipient sites. The Permitting Guidelines Table 5 establishes maximum allowable tortoise restocking rates (Site Evaluation Stocking Rate) for recipient sites having site characteristics that meet "acceptable" or "desirable" criteria. The formula for determining an allowable stocking rate for restocking public conservation lands is different from that outlined for other recipient site permits in Appendix 4. The final stocking rate = (site evaluation stocking rate x 50%) – baseline density for a maximum site density of two tortoises per acre (see Guidelines, Appendix 4). This will allow the population to expand naturally.

The FWC will base the final stocking rate assigned to a management unit on local conditions and objectives. Decisions should be guided by a strategy of establishing stocking rates well below maximum carrying capacity or site evaluation stocking rate and allowing tortoise populations to expand naturally over time. The maximum allowed site evaluation stocking rate in the Permitting Guidelines is two tortoises per acre for *Acceptable* criteria and four tortoises per acre for *Desirable* criteria. However, for restocking public conservation lands, the number of tortoises per acre shall not exceed 50% of the site evaluation stocking rate. One potential strategy for restocking public conservation lands may be to establish a relatively small recipient area within a larger block of suitable habitat that contains a low density of gopher tortoises. This strategy will allow the maximum allowable gopher tortoise density of the recipient block to be clustered in the smaller recipient area as a means to restock the entire block. Agencies may employ different strategies that are more efficient with their management purposes; however, FWC will always

consider the larger block of suitable habitat as the restocking unit to be permitted.

Stocking rates for ruderal lands (e.g., pasture) should be assigned conservatively and should not exceed the final stocking density of the current habitat or of the natural habitat to which it may be restored. Stocking rates for ruderal lands slated for restoration should consider all necessary restoration treatments and the final community composition and structure. At no time should tortoise densities exceed the capacity of the limiting factors of the habitat community.

## III. Standard Procedures During Restocking and Handling Within a Restocking Site

***Restocking Within a Management Unit***
Relocation of tortoises within a public conservation management unit during construction of facilities or for other reasons requires a permit and must be in accordance with the Gopher Tortoise Permitting Guidelines (see *Executive Summary*, *Activities Which Require a Permit*). Permitting requirements depend on the number of burrows to be impacted. A permit for "10 or Fewer Burrows" is required if 10 or fewer burrows are to be impacted. A "Conservation Permit" is required if more than 10 gopher tortoise burrows are to be impacted (Permitting Guidelines, Section IV, *Types of Permits*). Mitigation requirements per gopher tortoise are summarized in Table 2 in the Permitting Guidelines.

***"Routine" Handling***
For the most part, tortoises should be left alone and not handled on public conservation lands unless these actions are associated with a permitted monitoring or development-related relocation project. This does not mean that staff should avoid taking common sense actions to save tortoises under imminent threat, such as moving a tortoise a few feet to remove it from a busy section of road within a management unit. Gopher tortoises should *not* be relocated to other sections of a management unit without an FWC permit.

***Minimizing Disease Spread***
Animals showing clinical signs of disease are not permitted to be relocated except to FWC-permitted recipient sites and shall not be accepted onto public conservation lands. Health screening for tortoise relocation (or rejection for relocation) onto a management unit will be guided by these Permitting Guidelines (see Appendix 6) and the managing agency's policy.

Decisions on how stringent the public land managing agencies should be in efforts to limit introduction of novel diseases or strains of diseases (such as requiring blood samples for URTD testing) should be made on a case-by-case basis by the recipient site manager, using existing knowledge of disease strains within a management unit's (or adjacent conservation land's) existing population.

***Maintaining Donor Site Demographic Conditions***
If warranted by the approved stocking rate, it is required that entire colonies (juvenile through adults) be relocated together into the same management unit or recipient site. When donor populations are too large and require more than one recipient site, a representative subsample that reflects the demographic condition, including sex and age ratio, of the donor site should be

selected for relocation to each recipient site. Benefits of this approach include less stress on the animals and increased site fidelity.

***Relocation Distances***
To minimize stress to animals and conserve local genetic stock, it is preferred that relocated tortoises be moved from a donor site that is in close proximity to the recipient site (e.g., less than 100 miles). To the degree feasible, select suitable donor sites to conserve known genetic assemblages of tortoises in the state (using the best available data).

***Commensal Species***
Many other species depend on gopher tortoises and their burrows. Therefore, consideration should be given to relocating commensal species from donor populations, especially if tortoises have been extirpated (or nearly so) from the recipient site. Decisions to relocate commensals along with "their" tortoises will be made on a case-by-case basis, with recommendations and justifications discussed in the associated site-specific restocking plan. Federal and state law protects various commensal species and provides species-specific guidelines that should be followed when relocating these species to public conservation lands. Commensal species must not be relocated outside their known natural historic ranges or into management units where the species in question is already abundant. Additional information can be found in Appendix 9 of the Permitting Guidelines. Indigo snakes and other federally-listed species may not be relocated without obtaining federal authorization.

## IV. Considerations for Recipient and Restocking Site Management

***Permitting Requirements***
A permit from FWC is required to move or receive gopher tortoises for purposes of restocking. Long-term Protected Restocking Sites must meet the criteria outlined in the Gopher Tortoise Permitting Guidelines (April 2008, as amended). Sites proposed as restocking sites must apply for and obtain a Long-term Protected Restocking Site Permit. Requirements for this permit are similar to a Long-term Protected Recipient Site Permit; but may contain slight differences that are specific to publicly-owned land. Long-term Protected Restocking Sites shall be stocked at no more than 50% of the site evaluation stocking rate. Public conservation lands established as regular recipient sites and under a perpetual conservation easement qualify for the full site evaluation stocking rate. See the Permitting Guidelines for additional requirements and criteria.

*Protection of Land*
Public conservation lands designated as restocking sites must be designated as public conservation lands *or* public lands protected by at least a 50-year conservation easement (with FWC included as a grantee). For lands where DEP is the managing agent on behalf of the Board of Trustees of the Internal Improvement Trust Fund ("BOT") for all State-owned lands, the following is required:

1. A letter requesting the acceptance of gopher tortoises from other public lands must be received from the lead conservation land manager.
2. The land lease will be modified to include a condition recognizing a new lease would be entered into at the time of the current lease expiration, according to 18-2 Florida Administrative Code, as long as all lease terms and conditions were in compliance at the

time of expiration.

3. A letter of request from the lead conservation land manager to add the additional gopher tortoise recipient site to the current Land Management Plan through the Acquisition and Restoration Council negative response process must be received. The Land Management Plan should reference the FWC permit. This process must be complete prior to the execution of a modified lease.
4. A MOU must be executed between the FWC and the lead land management agency to provide a specified timeframe from date of permit issuance when the above requirements will be submitted to DEP and ARC as applicable.

These details, including the specific requirements for financial assurances (below), will be outlined in a Memorandum of Understanding (MOU) between the lead managing agency and FWC. The revisions to the plan and lease shall be completed within a timeframe mutually agreed upon by FWC and the applicant. Approved MOU template language will be provided by FWC.

*Financial Assurances*

Financial assurance requirements for public conservation lands are consistent with those requirements outlined in the Gopher Tortoise Permitting Guidelines (April 2008, as amended). The purpose of creating a financial assurance is to establish a fund that helps to ensure that the property to which the gopher tortoises are moved to for restocking are managed appropriately into the future, should other funding sources no longer be available. Interest generated from a Trust Fund, once fully established, can be used to conduct site management activities; however, the principle may not be spent. The face value of the financial assurance mechanism should be based on the present value of the future expected cost of conducting the required habitat management activities as identified in the Habitat Management Plan and based on the guidelines set forth in Appendix 3-1, as well as supporting worksheets below. Drawdowns from a financial assurance mechanism shall be limited to conduct habitat management within the properties that generated the management costs. Public agencies may establish a Trust Fund held by a 3rd party such as a Citizens Support Organization (CSO) or other non-profit organization.

*Gopher Tortoise Cost Accounting*

For public conservation lands, Gopher Tortoise Cost Accounting (See Gopher Tortoise Cost Accounting template below) must be used and submitted as part of the restocking plan. This accounting method will be used to determine any fee amount the land managing agency may charge to receive tortoises from donor site projects.

*Mitigation Contributions*

Mitigation amounts commensurate with those outlined in Table 2 of the Gopher Tortoise Permitting Guidelines.

*Site Evaluation Stocking Rate*

Long-term Protected Restocking Sites shall be stocked at no more than 50% of the site evaluation stocking rate. Public conservation lands established as regular Long-term Protected Recipient Sites and under a perpetual conservation easement qualify for the full site evaluation stocking rate.

***Guidance on Ground Disturbing Activities***

Permits are not required for bona fide agricultural, silvicultural, and wildlife management activities. For more information about these and other activities that do not require a permit, see Section II., Executive Summary, of the Gopher Tortoise Permitting Guidelines. However, the goal on public conservation lands should be that negative impacts to tortoises and their burrows are minimized during restoration and management. If management activities are found to create negative impacts to tortoises or burrows, the activity should be stopped and reassessed to determine how to reduce or eliminate the impacts.

*Protect Tortoises When Using Heavy Equipment*

When mechanically treating vegetation or harvesting timber with heavy equipment in occupied tortoise habitat, the tortoises and their burrows must be protected to the extent feasible (e.g., by flagging and avoiding burrow entrances). Ideally, heavy equipment use should be scheduled during cooler months (November through March) to minimize direct impacts to tortoises that are active above ground, but these activities may be performed in other months as necessary.

*Avoid Using Heavy Equipment in Tortoise Concentrations*

Gopher tortoises are not randomly distributed on the landscape. Many gopher tortoise populations tend to have clumps of higher densities. Avoid or minimize roller-chopping or use of heavy equipment in areas with high burrow concentrations. An exception would be when no other reasonable alternative is available to achieve vegetation management goals (e.g., reduction of unnaturally dominant saw palmetto).

*Protect Tortoises When Mowing*

In general, when mowing vegetation in natural areas occupied by tortoises, blades or cutters should be set no lower than 18 inches above the ground to avoid injury to tortoises. Mowing of turf grass on road shoulders in tortoise habitat should be kept to a minimum width, and close attention is required to avoid injuring tortoises or damaging their burrows.

***Monitoring and Reporting***

Recipient site managers are required to submit a summary to FWC of habitat management conducted, and the results of habitat monitoring and tortoise population surveys (see Appendix 7). Monitoring techniques will be outlined in the site-specific restocking plan and should follow guidelines and recommendations in the Gopher Tortoise Permitting Guidelines and the *Gopher Tortoise Management Plan*.

## *Gopher Tortoise Cost Accounting*

**WORKSHEET 1. Categories of long-term, ongoing land management costs**

| Upland Activities | Cost/Acre | Cost/Acre/Year | Assumptions/Frequency |
|---|---|---|---|
| Burning | $ | $ | |
| Fencing | $ | $ | |
| Firelines | $ | $ | |
| Security | $ | $ | |
| Vegetation management | $ | $ | |
| Roads | $ | $ | |
| Administrative | $ | $ | |
| Invasive Plant & Animal Management | $ | $ | |
| Monitoring and reporting | $ | $ | |
| Vegetation monitoring | $ | $ | |
| Equipment (If not already included in other costs above) | $ | $ | |
| Payment in Lieu of Taxes ("PILT" as applicable) | $ | $ | |
| Other (as specified by the land managing agency) | $ | $ | |
| Total | | $ | |

Annual Cost Figuring a % split uplands to wetlands $
Endowment required figuring a 4% return on investment $

**WORKSHEET 2. Long-term *and* one-time costs compiled (example)**

| Acres | | Total |
|---|---|---|
| Land management endowment/acre (*long-term/ongoing costs carried over from Worksheet 1*) | $ | $ |
| Easement value/acre | $ | $ |
| Temporary enclosures | $ | $ |
| Other fencing | $ | $ |
| Authorized agent permit | $ | $ |
| Recipient/restocking site permit (incl. permit app prep) | $ | $ |
| Mark, transport, release or GTs (either by consultant or agency) | $ | $ |
| Loss of opportunity (silvicultural, recreation, etc.) | $ | $ |
| Administrative | $ | $ |
| Per acre total cost | $ | $ |
| Total | $ | $ |
| Land managing agency fee per tortoise considering 2 gopher tortoises per acre | $ | $ |

# APPENDIX 13. CRITERIA FOR GOPHER TORTOISE RECIPIENT SITES TO QUALIFY AS RESEARCH SITES (CREATED NOVEMBER 2009)

The FWC has historically issued Scientific Collecting Permits through the Protected Species Permit Coordinator for research projects. The gopher tortoise permitting program has similarly allowed approved recipient sites to be used solely as research recipient sites for tortoises relocated from developments. Research recipient sites were not specifically addressed in the *Gopher Tortoise Management Plan* ("Plan") or in the original version of the Gopher Tortoise Permitting Guidelines ("Permitting Guidelines"). This document outlines the criteria and process for research projects obtaining Research Recipient Site Permits and Scientific Collecting Permits for the relocation of gopher tortoises displaced by development.

The Research Recipient Site Permit option is available when a previous or concurrent Scientific Collection Permit has been issued for research that requires relocations to an unpermitted recipient area.

## Criteria for Issuance of a Gopher Tortoise Research Recipient Site Permit

- Gopher Tortoise Research Recipient Site Permits will only be issued to sites specified as part of a research project permitted under a previously issued or concurrently issued Scientific Collecting Permit.
- Recipient Site permit applications will be required for Research Recipient Site Permits and will subsequently be entered into the online permitting system by FWC staff.
- Research recipient sites should meet acceptable size and habitat criteria for recipient sites protected by a perpetual conservation easement; however, certain criteria may be waived according to the research needs outlined in the Scientific Collecting Permit application. Appropriate documentation (e.g., soils and habitat maps) is required unless the research design demonstrates the need to waive such criteria. Like all other recipient site permit applications, a site habitat management plan is required (Permitting Guidelines, Appendix 3) and must be submitted as part of the permit application, (e.g., specific requirements regarding property size or conservation easements).
- The number of tortoises relocated to research recipient sites will be limited to the final stocking densities outlined in the Permitting Guidelines for recipient sites. Final stocking densities exceeding the two-per-acre standard (with 0.5 per acre for each site characteristic that is satisfied, up to a maximum of two additional) will be considered only if the applicant can demonstrate in the research proposal that the scientific design of the research depends on an increased density. If an increased final stocking density is permitted under the Scientific Collecting Permit, FWC staff may require that tortoises be relocated upon completion of the project to achieve a sustainable final stocking density, or the permittee may be required to provide additional adjacent acreage for tortoise dispersal upon completion of the research project.
- As for other recipient site permit applications, the standard mitigation contribution will be required for this permit.
- As with other recipient sites, an Authorized Gopher Tortoise Agent is required to perform initial surveys and monitoring associated with Research Recipient Site Permits.
- The Research Recipient Site Permit does not authorize an individual to conduct research.

This permit authorizes the landowner to accept relocated tortoises for scientific purposes. Multiple research projects (each with separate or the same Scientific Collecting Permit) may be allowed on a single research recipient site.

- Landowners accepting tortoises under the Research Recipient Site Permit will be required to submit monitoring reports of management activities for recipient sites, as outlined in the Permitting Guidelines.
- Only gopher tortoises that are designated as part of a permitted research project will be accepted to a research recipient site.
- When the permitted research is concluded, or the Scientific Collecting Permit has expired or becomes invalid, the research status is no longer afforded to the recipient site. If the landowner wishes to continue to receive gopher tortoises and has capacity to receive additional tortoises following the conclusion of the research project, the property owner must apply for, and receive, a new recipient site permit prior to accepting any additional tortoises.

## Requirements for Scientific Collecting Permits that Involve Research Recipient Sites

Any Scientific Collecting Permit application submitted for research involving a Research Recipient Site Permit must demonstrate that the proposed research project coincides with the needs identified in the list of research topics in the Plan, or that the research project otherwise contributes to the broader management plan goals and objectives. The FWC has the discretion to limit the number of research recipient sites for a particular study topic.

- Funding sources for research project(s) must be secured prior to issuance of a Scientific Collecting Permit authorizing receipt of relocated gopher tortoises.
- A letter will be required from the landowner that acknowledges and allows this research on the specified property.
- Applicants for a Scientific Collecting Permit involving the use of gopher tortoises relocated from development sites will be required to submit a copy of either the application for the Research Recipient Site Permit or a letter of intent from the landowner to apply for the Research Recipient Site Permit.
- Applicants for a Scientific Collecting Permit involving research recipient sites will be required to submit a summary of the proposed relocations for each designated unit.
- Individuals working with relocated gopher tortoises under a Scientific Collecting Permit will be required to submit progress reports to FWC over the course of the project. Upon completion of the research project, a final report must be submitted to FWC along with any publications resulting from the permitted research
- Gopher tortoises cannot be relocated to a research recipient site until both a Scientific Collecting Permit and a Research Recipient Site Permit have been issued by FWC.

## Process of Issuance of a Research Recipient Site Permit

Generally, the initiation of a research project begins with the submission of a Scientific Collecting Permit application to the Protected Species Permit Coordinator. Because of the additional coordination required to issue a concurrent Scientific Collecting Permit and Research Recipient Site Permit, the applicant for the Scientific Collecting Permit may be advised to submit a waiver of the statutory application processing time requirements as part of a request for

additional information (RAI).

- The owner of the potential research recipient site submits an application using the FWC Online Permit system.
- FWC staff will ensure that the applications for both permit types meet all regulatory requirements and Plan research goals during the review period.

Issuance of a Research Recipient Site Permit (or associated Scientific Collecting Permit) does not imply that FWC will be providing any funds to support gopher tortoise research conducted at that site.

## Mitigation Contributions for Relocations to Research Recipient Sites

The FWC recognizes the conservation value of new scientific findings regarding the management and relocation of gopher tortoises. The value of the research may be considered in determining the mitigation contributions for displaced tortoises relocated to a gopher tortoise research recipient site. The mitigation contributions associated with these sites may follow the mitigation structures of recipient sites with conservation easements or other enhanced conservation value to encourage, or at least not financially hinder, relocations to research recipient sites.

# APPENDIX 14. SCIENTIFIC COLLECTING PERMITS: CRITERIA FOR GOPHER TORTOISE RESEARCH, WAIF RECIPIENT SITES, AND EDUCATIONAL USE (REVISED AUGUST 2019)

Gopher tortoises, including their eggs, parts thereof, and burrows are protected under Rule 68A-27.003, F.A.C. (see Appendix 1). Handling and/or possession of gopher tortoises, their eggs, or parts thereof, or conducting activities that may impact burrows is prohibited without a Scientific Collecting Permit or a FWC-issued permit for relocation purposes (see *Types of Permits*). Scientific Collecting Permits are intended for educational or research purposes. Research that requires relocation of gopher tortoises to an unpermitted recipient area must obtain a Research Recipient Site Permit in conjunction with a Scientific Collecting Permit (see Appendix 13). Scientific Collecting Permits are also issued for waif recipient sites, which assist with restoration efforts (see below for more details). Activities that require a Scientific Collecting Permit for educational and research purposes are listed below, followed by a list of activities that do not require a Scientific Collecting Permit.

## Activities That Require a Scientific Collecting Permit

Activities below require a Scientific Collecting Permit if they are not associated with a FWC relocation permit (see Types of Permits for permits that allow temporary possession of tortoises for relocation purposes).

- Possession of a gopher tortoise.
- Establishment of a waif gopher tortoise recipient site.

Any activity, including biological sampling, that may cause take (see 68A-27.007 F.A.C for definition of "take").

- Any activity that requires handling, capturing, or trapping of a gopher tortoise.
- Any activity that requires an object be placed in, on, or through tortoise burrows or burrow aprons (e.g., burrow scoping, burrow measurement with calipers, collection of soil from the burrow or apron).
- Activities related to other burrow occupants (e.g., commensal species) that would impact tortoises, or research that may result in incidental capture of a gopher tortoise.

## Activities That Do Not Require a Scientific Collecting Permit

Passive sampling methods including but not limited to habitat sampling, burrow surveys without scoping or internal burrow measurement, and remote sampling (e.g., trail camera) do not require a permit provided observers take care not to impact or collapse burrows or impact habitat. Educational activities which do not directly or indirectly cause take of a gopher tortoise or burrow, such as passive viewing of wild gopher tortoises (i.e., interpretive nature walks).

Applications should clearly explain how the proposed activities will provide a scientific or conservation benefit for the species; permits will be issued if the proposed activity is consistent with the overall goal of the Gopher Tortoise Management Plan (see Introduction) or addresses an identified data gap important for the conservation of the species. See below for descriptions of Scientific Collecting Permit issuance criteria. A checklist that clearly outlines the information required to complete an online application for a Scientific Collecting Permit for research,

educational, and waif recipient site purposes is available. Visit the protected wildlife permits page for information about applying for a permit and guidance on how to use FWC's online permit system.

Permit provisions may vary based on requested activities. However, all issued permits require: Any mortality to be reported to the FWC within 48 hours, and FWC staff will provide guidance on proper disposal of specimens in the permit conditions.

A final report be provided to the FWC in the format specified in the permit conditions. Permit amendment and renewal applications must be "stand alone" (i.e., include all relevant information on objectives and methods); review and revise previously submitted information for the complete application and required attachments.

Criteria for Issuing a Scientific Collecting Permit for Research Purposes
Scientific Collecting Permit applications for research-related activities must include a research proposal that clearly states the objectives and scope of work of the project, including a justification of how the project will result in a conservation or scientific purpose that benefits the species. The proposal must also include a thorough description of the project's methods, duration, sample size(s) for each proposed activity, capture/handling procedures, and final disposition of all individuals. The applicant's previous experience conducting requested activities must also be documented; see below for guidance on documentation of experience and minimum qualifications required by the FWC for gopher tortoise research.

## Documentation of Experience

Applicants must have prior documented experience with gopher tortoises or similar species, or partner with someone with such experience, and applicants must have complied with all conditions of any previously issued FWC permits. Applications for Scientific Collecting Permits for research purposes must include detailed qualifications or training for all individuals. Experience may be obtained by conducting work under a FWC-permitted Authorized Gopher Tortoise Agent or experienced researcher, or by completing a FWC-approved training course in lieu of, or in combination with experience. Minimum qualifications for common research activities are listed below.

Unless additional documentation is required for an activity (specified below), documentation may be provided in a bulleted list within the applicant's proposal or in the form of a resume/curriculum vitae which includes: a description of specific experience acquired with approximate number of animals/surveys, date(s) the experience was obtained and the specific location(s) where acquired, and the name and contact information of the scientific researcher, course instructor, or authorized agent who was responsible for the project and their associated organization/agency. Additional documentation may include records of prior permits under which activities were conducted, or other form(s) of documentation of the requisite experience.

## Minimum Qualifications for Common Research Activities

***Gopher Tortoise Burrow Scoping***
Applicants should have experience scoping at least 5 gopher tortoise burrows under the supervision of an experienced person (e.g., Authorized Gopher Tortoise Agent or scientific

researcher), or completion of a FWC-approved training course, prior to conducting scoping independently. Application(s) must state survey methodology/purpose for burrow scoping (e.g., population survey, burrow occupancy).

***Line Transect Distance Sampling (LTDS)***
Applicants must demonstrate previous training for LTDS survey implementation; training may include completion of at least one LTDS survey under the supervision of an experienced person or completion of a FWC-approved training course, prior to conducting LTDS surveys and analyses independently.

***Blood/Tissue Sample Collection***
The applicant must have completed, under the direct supervision of a qualified veterinarian or other appropriately authorized person, the successful collection of at least 10 blood or tissue samples from gopher tortoises or other turtle/tortoise species of similar physiology. Methodologies for any collection of tissue such as blood should be clearly described, including measures taken to reduce stress/injury to gopher tortoises.

## General Provisions for Common Research Activities

***Trapping and Capture***
FWC requires noninjurious traps for tortoises be checked at least once per day but recommends checking traps twice per day to reduce risk of stress and/or mortality of gopher tortoises and non-target species within traps. Live wire traps or flap traps are recommended over bucket traps as wire traps result in minimal impact to gopher tortoise burrows and aprons.

***Temporary and Permanent Marking***
Gopher tortoises may be marked using non-toxic water-based paint. Gopher tortoises may be permanently marked via PIT (Passive Integrated Transponder) tag, drill, or notch following methodology specified within Appendix 5.

***Radio Telemetry and Data Loggers***
Any equipment attached to a gopher tortoise's carapace must be removed at the end of the study. Permit applications should provide a plan for transmitter removal prior to signal loss or completion of the study.

***Passive Sampling Methodology***
Passive sampling equipment such as trail cameras should not be placed in a manner that would impact gopher tortoise activity around the burrow or apron. FWC recommends passive sampling equipment be placed ≥1 m from the burrow entrance to minimize potential impacts to gopher tortoise and commensal species behavior.

***Captive Possession***
Disposition involving captive possession of gopher tortoises for any period must demonstrate a clear scientific and/or conservation benefit to the gopher tortoise and a full explanation of whether the facility has the appropriate resources for accomplishing the objectives and for maintaining the animals in a safe and humane manner.

## Guidelines for Accommodating Waif Tortoises

The gopher tortoise is a widely distributed species that occurs in parts of all 67 counties in Florida. Gopher tortoises are adaptable to their environment and can co-exist with humans in areas where historically we would not expect to find them, such as yards, neighborhoods, and utility corridors. The FWC understands that people's compassion for wildlife can be a wonderful conservation tool, however sometimes a person's actions can result in a negative impact on the individual or species of interest. When encountering a gopher tortoise, the best option is usually to leave the tortoise where it is found. It is illegal to possess a gopher tortoise without authorization from FWC. However, a tortoise that is noticeably injured should be taken to a local veterinarian or wildlife rehabilitator. Contact the Gopher Tortoise Conservation Program (MyFWC.com/GopherTortoise) for information on permitted wildlife rehabilitators who treat gopher tortoises or call FWC's Wildlife Alert hotline (toll free: 1-888-404-3922) after hours and on weekends to receive guidance.

A "waif" gopher tortoise is a tortoise that has been removed from the wild but is not associated with a relocation permit and is generally from an unknown location. Some examples of scenarios that could result in a gopher tortoise being classified as a "waif" include removing a tortoise from an undeveloped natural area; retrieving a tortoise from a suburban area where remnant grassy areas still exist; or placing a tortoise in a vehicle to rescue it from a roadway.

In cases where locality information is available (e.g., GPS location or mileage to a notable landmark) it may be possible to return these tortoises to their origin. The FWC strives to keep wild gopher tortoises in the wild within their home range, and to prevent displaced tortoises from being released into an established tortoise population outside of their home range. Doing so may disrupt the resident tortoise population or cause disease to spread among the tortoises. Keep in mind the following recommendations when encountering a tortoise to prevent it from becoming classified as a waif:

- Do not remove the tortoise from the wild if it appears healthy. If suitable habitat does not exist where the tortoise was found, contact FWC. Suitable habitat includes open, grassy or vegetated areas with well-drained soils, including urban and suburban habitat.
- To move a tortoise out of a roadway, always place the tortoise in a grassy or vegetated area in the same direction it was traveling.
- Return the tortoise to its origin when the location of where the tortoise was captured from is known and contains suitable habitat.
- Minimize the amount of time the tortoise is held in captivity.
- If capture location is unknown or suitable habitat does not exist where the tortoise was found, contact FWC to locate an established and permitted individual or entity that is authorized to possess waif tortoises.
- Contact FWC to receive educational materials to learn what appropriate actions should be taken when encountering tortoises on the roads or in urban areas.

## Placement Options for Waif Gopher Tortoises

The FWC's goal is to return gopher tortoises to the wild whenever possible. If a tortoise that is removed from the wild cannot be returned, it may require placement in captivity, where it will remain for the remainder of its life. Therefore, the FWC has classified these "waif" tortoises as

either “releasable” or “non-releasable.” See Table A5 for summary of placement options for releasable and non-releasable waif tortoises.

Table A5. Summary of Placement Options for Waif Gopher Tortoises.

| Type of Waif | Circumstance | Placement Option | Requirements |
|---|---|---|---|
| Releasable | Unknown origin with no signs of illness*. Able to survive on its own without human intervention | Eligible for FWC-permitted waif recipient site or FWC-permitted restocking site | Suitable gopher tortoise habitat with a severely depleted population (each site will be evaluated independently) |
| Group of Releasable (3 or more) | Unknown origin with no signs of illness*. Able to survive on its own without human intervention | Eligible for FWC-permitted waif recipient site or FWC-permitted restocking site | Suitable, protected gopher tortoise habitat with a severely depleted gopher tortoise population |
| Non- releasable | Exhibits signs of illness* and/or requires human intervention for survival | FWC-permitted educational facility, zoo, nature center, or similar | Fully enclosed indoor or outdoor enclosure (requirements for each tortoise will be on case-by-case basis) |

*Refer to Appendix 6 of the Gopher Tortoise Permitting Guidelines for information on Cursory Health Evaluations

## Criteria for Issuing a Scientific Collecting Permit for Waif Recipient Sites (Releasable Waif Gopher Tortoises)

“Releasable” tortoises are those that may be released in permitted wild, natural areas, known as waif recipient sites. These tortoises must: show no visible signs of illness, not need continued medical treatment (tortoises may have received previous medical attention), not require human intervention for continued survival, and not have been exposed to diseased tortoises or non-native species of tortoises while in captivity. Gopher tortoises that have previously been kept in captivity may be considered releasable if they display natural burrowing and foraging behavior, regardless of the amount of time held captive; these tortoises will be assessed on a case-by-case basis. Hatchling and juvenile tortoises hatched in captivity must be released to the wild if they are able to forage and burrow without human assistance.

The FWC coordinates with public and private landowners to identify and establish recipient sites for releasable waif tortoises to receive individuals or small groups of waifs that can be accommodated in natural areas. Waif recipient sites are generally established on properties that may not meet the required criteria for establishing a recipient site as outlined in the Gopher Tortoise Permitting Guidelines. Landowners interested in establishing a waif recipient site should understand that receiving waif tortoises does not provide the economic benefits normally associated with the relocation of tortoises displaced from development sites. Providing a variety of placement options for waif tortoises is important to help reduce unauthorized releases that could adversely impact wild populations.

Sites for releasable waif tortoises must be suitable areas that are not disturbed by construction activities, and that provide the tortoise with a safe environment. These areas should be isolated from other tortoise populations and either have a low-density resident gopher tortoise population or no gopher tortoises present. These areas must provide gopher tortoises with the following:

- sufficient areas of forage (herbaceous and low-growing plants including native broadleaf grasses, legumes [bean/pea family], asters, blackberries and other fruits, prickly pear cactus, and a variety of other non-native grasses, except cogon grass);
- sandy, well-drained, open (minimal tree canopy), sunny sites for burrowing and basking;
- and protection from dogs, cats, other predators, human harassment, and busy roads (e.g., fencing).

## Documentation of Experience

Prior documented experience is not required for the augmentation of waif recipient sites using releasable waif gopher tortoises.

## Minimum Criteria for Waif Recipient Site Properties

To receive a FWC Waif Gopher Tortoise Recipient Site Permit, candidate properties should meet the following site suitability criteria for size, soil, and habitat. Landowners who meet the basic criteria for a waif gopher tortoise recipient site are encouraged to contact the FWC Gopher Tortoise Conservation Program to schedule a pre-application site visit. A preliminary site visit allows FWC staff to evaluate the suitability of the habitat on the proposed site. Staff may provide information on measures that may be undertaken prior to completing an application for a FWC Waif Gopher Tortoise Recipient Site Permit, and assistance programs that may aid the candidate property in meeting the site suitability criteria for a waif recipient site. The pre-application site visit can help identify and address potential issues in advance, so the permit application (once submitted) can be processed more efficiently.

### *Size*

Waif recipient sites must contain a minimum of 5 acres of contiguous suitable upland gopher tortoise habitat that meet the criteria for soil and vegetation. Smaller sites in highly developed counties, particularly southern Florida, will be evaluated on a case-by-case basis, and will be allowed if they are instrumental in retaining the local tortoise resource or are instrumental in addressing the volume of waif gopher tortoises expected for a particular area.

### *Soils*

Soils that are considered suitable for waif gopher tortoise recipient sites have a midpoint of the upper limit of the water table (DWT) value of 45 centimeters (18 inches) or greater. Soils for waif gopher tortoise recipient sites should be listed as "moderately suited" or better when using the Natural Resources Conservation Service (NRCS) Web Soil Survey to obtain site-specific soil information. Acreage that includes soils listed as "less suited" by the NRCS Web Soil Survey will be assessed on a case-by-case basis and may be considered suitable gopher tortoise habitat acreage provided that the proposed site contains augmentation features, is drained by ditches, etc., and there is evidence of past or current use by tortoises. Soils listed as "unsuitable" will not be included in suitable habitat acreage when assessing properties for a proposed waif recipient site.

### *Vegetation Features*

Waif recipient sites should include habitat features that contain at least 30% average herbaceous cover and average canopy cover of 60% or less. Sites that include improved pasture must include a minimum of 10% patchy shrub cover (e.g., saw palmetto, fennel, pines, oaks, blackberry,

blueberry, pawpaw) to provide shade and refuge from predators.

These minimum habitat conditions must remain after tortoises are relocated to the site. The herbaceous vegetation must be maintained (mowing, burning, etc.), and pesticides/herbicides should not be used in the release area unless absolutely necessary (e.g., management of certain fire-resistant invasive species, such as cogongrass).

## General Provisions for Waif Recipient Sites

***Monitoring and Reporting Requirements***

Waif recipient site operators are required to monitor the recipient site for the duration of the permit. Waif recipient site operators must submit a summary of the habitat management and tortoise population monitoring activities conducted, including the results of any habitat monitoring/vegetation and tortoise density surveys, in a report to FWC every 3 years (i.e., every 3 years from date of permit issuance to permit expiration or renewal); this report may be submitted in conjunction with an application for permit renewal, and in addition to the final report upon permit expiration. A waif recipient site monitoring report form that outlines the information required for monitoring report submission will be provided to the permittee upon permit issuance. Waif recipient site operators that wish to continue to monitor the tortoise population past the permit expiration date must renew their Scientific Collecting Permit for monitoring authorization. Triennial monitoring reports must be uploaded to FWC's online permit system per the deadline specified in the permit. Any incidents of disease, injury or mortality of gopher tortoises must be reported to WildlifePermits@MyFWC.com and GTPermits@MyFWC.com within 48 hours, and should also be uploaded to FWC's online permit system.

***Soft Release***

Restraint of tortoises inside a temporary enclosure at the waif recipient site is required for all relocations. This process is called "soft release." Studies have indicated that site fidelity is enhanced by temporarily enclosing tortoises. All tortoises relocated to a waif recipient site shall be released into a temporary enclosure and should be retained within the enclosure for a period of not less than six months and no more than twelve months. Soft release enclosures at waif recipient sites may be stocked at 1.5 the approved density for the waif recipient site (e.g., 3 tortoises per acre for sites with an approved density of 2 tortoises per acre). Upon approval, temporary enclosures may be of any material that prevents the passage of tortoises of all sizes released to the site. Natural or artificial boundaries may be used to restrain tortoises (e.g., coastlines, major rivers or large lakes, existing fencing that prevents the passage of all tortoises released at the site). Temporary fencing must be buried at least eight inches into the ground to prevent tortoises pushing beneath the enclosure and must be at least two feet high and of sufficient robustness to prevent tortoises pushing or climbing over. Temporary enclosures should be regularly monitored (at least once monthly) by the waif site manager or a designee to ensure that damage is repaired, and the integrity of the temporary enclosure is maintained. Any damage to the enclosure must be repaired and the integrity of the enclosure maintained prior to releasing tortoises to the enclosure. Temporary enclosures shall provide gopher tortoises adequate shade and cover from predators (minimum 10% patchy shrub cover). The same area should not be included in a soft release enclosure more than once. If the same area of the waif recipient site is used more than once for the soft release of tortoises, the area should be surveyed for an estimate

of gopher tortoises present prior to enclosure reinstallation to inform enclosure stocking rates.

***Maximum Allowable Stocking Density***
The maximum allowable density is two tortoises per acre of suitable tortoise habitat for waif recipient sites. Juvenile tortoises (<130 mm [5 inches] straight-line carapace length) are not considered in the maximum stocking density because of their low survivorship and minimal effect on the release site forage base. Smaller, fully-enclosed sites must be restricted to single sex, to prevent overpopulation of the site beyond carrying capacity.

***Temporary and Permanent Marking***
Permanent marking of gopher tortoises released to waif recipient sites is prohibited. Waif recipient site managers that wish to temporarily mark gopher tortoises released to the site may request authorization to mark tortoises in the permit application. Marking the carapace using a FWC- approved, non-toxic paint may be approved to assist with monitoring of the tortoise population on- site.

## Using Waif Tortoises to Assist with Population Restoration

Assisting with population restoration efforts is another option for releasable waif tortoise placement under appropriate circumstances. Such placements may occur when groups of waif tortoises need placement at one time; this is the most difficult type of waif placement, encumbering significant FWC resources. One option is assisting with population restoration efforts by placing groups of waifs on protected lands where gopher tortoise densities have been severely depleted. Details for such restoration efforts will be outlined in a Scientific Collecting Permit and could include periodic post-relocation burrow surveys, and, preferably, initial intensive follow-up using mark-recapture or radio-telemetry.

## Criteria for Issuing a Scientific Collecting Permit for Educational Use (Non-Releasable Gopher Tortoises)

"Non-releasable" tortoises are those which cannot be released into wild, natural areas. These tortoises may have one or more of the following conditions: exhibit clinical signs of illness, require ongoing medical treatment, be sufficiently disabled to prevent successful burrowing or foraging, have been exposed to diseased tortoises or non-native tortoise species while in captivity, or require human intervention to survive. Whenever possible, non-releasable gopher tortoises should be placed with established and permitted educational facilities.

Adequate options must be available for the placement of non-releasable waif tortoises that will ensure their safety, survival, and contribute to the overall conservation of gopher tortoises. The FWC provides a no-cost Scientific Collecting Permit for individuals or facilities seeking authorization to possess a non-releasable gopher tortoise for educational use. After obtaining a permit, education facilities can use non-releasable tortoises to help educate local residents about the importance of this species.

## Documentation of Experience

Prior documented experience is not required for educational possession of gopher tortoises or parts thereof.

***Minimum Criteria for Educational Use***

*Facility and Enclosure(s)*
Applicants that wish to possess live tortoises for education purposes must have an adequate facility to accommodate captive gopher tortoises, including: an enclosure(s) that meets the specifications of the FWC caging requirements for tortoises (68A-6.004, F.A.C.); the ability to separate male and female tortoises (if applicable), and; cold weather accommodations for tortoises unable to burrow (location dependent). Non-releasable tortoises may be kept in indoor or outdoor enclosures. The enclosure must be completely secure to prevent the tortoise from leaving, and tortoises unable to dig their own burrows must be provided a pseudo-burrow or a starter burrow.

*Education Plan*
Scientific Collecting Permit applications for educational use of gopher tortoises must provide an education plan that demonstrates the applicant's ability to conduct educational activities, their history of performing such activities (if applicable), and resources for housing gopher tortoises.

*Carcasses and Parts Thereof*
For possession of deceased gopher tortoises or parts thereof, an applicant must meet the definition of appropriate educational use provided above, except that specimens may be housed in a manner appropriate for their preservation.

***General Provisions for Educational Use***

*Authorization for Educational Use*
Gopher tortoises used for educational purposes must be deemed non-releasable by the FWC.

*Appropriate Use*
Appropriate educational use means that the gopher tortoise, or parts thereof, must be housed at an educational facility, or at the personal property of a designee thereof, and must not be displayed for commercial purposes (i.e., any manner that implies personal use or that promotes or endorses any product, merchandise, good, service, business or organization).

# APPENDIX 15. CRITERIA FOR SUSPENSION, REVOCATION, OR NONRENEWAL OF AUTHORIZED GOPHER TORTOISE AGENT PERMITS AND REGISTERED AGENT AUTHORIZATION (CREATED MARCH 2020)

Authorized Gopher Tortoise Agents and Registered Agents are responsible for their actions associated with FWC-permitted activities and other activities that impact gopher tortoises and gopher tortoise burrows. Authorized agents are also responsible for the actions of their assistants (including a person permitted as an Authorized Gopher Tortoise Agent or a Registered Agent but acting as an assistant under a specific permit). Compliance with rules related to gopher tortoises, FWC-approved guidelines, and permit conditions ensures protection and safety of the gopher tortoise. Any act or omission that does not comply with statutes or rules related to gopher tortoises, FWC-approved guidelines, or permit conditions is cause for an infraction to be issued. Infractions are categorized by (1) whether or not the permit violation risks and/or causes injury or mortality of gopher tortoises, and (2) whether or not the permit violation was self-reported to FWC. Infraction categories include Non-risk, Risk Category I, and Risk Category II and are defined within this appendix. The first infraction earned per category may be remedied on day of infraction issuance; subsequent infractions earned per category will have a minimum suspension requirement of 10, 30, and 60 days for respective Non-risk, Risk I and Risk II categories. Otherwise, consequence and remedy requirement vary by infraction category (see Table A6); however, all remedies to permit suspension involve taking a course and passing a Gopher Tortoise Permitting Guidelines test with 100% correct answers. The Gopher Tortoise Permitting Guidelines test is located at: https://learningmyfwc.remote-learner.net/. Authorized agents cannot remedy more than one infraction in a single day and separate remedies are required for each infraction. Risk category infractions are issued on a per-tortoise basis unless the violation is implementation of improper survey methods. In this case, a risk category infraction will be issued for each improperly conducted survey. Suspensions, revocations, and remedies apply to the authorized agent listed on the permit under which the violation occurred. Infractions committed by an authorized agent carry over when conducting activities as a Registered Agent. Similarly, infractions committed by a Registered Agent carry over when conducting activities as an authorized agent. Criminal and non- criminal violations pursued by law enforcement may occur outside of these guidelines and in addition to the infractions below.

## Infraction Categories

**Non-risk Category**: Agent is responsible for total of three permit violations that do not risk or cause gopher tortoise(s) injury or mortality.

> *Examples of Non-risk Category permit violations (not fully comprehensive):* Untimely submission of after action report; commencing relocation without providing local government approval; not notifying FWC of relocation commencement in compliance with the permit condition; not supplying 100% burrow survey to FWC in compliance with the permit condition; providing incomplete or incorrect information on an application or after action report; not having a signed copy of the relocation permit or authorized agent permit during relocation activities; failure to submit a complete and

accurate monitoring report by the report deadline.

**Risk Category I (Self-reported violation)**: Agent is responsible for a permit violation that risks or causes gopher tortoise(s) injury or mortality; agent self-reported this permit violation to FWC.

**Risk Category II (Violation not self-reported)**: Agent is responsible for a permit violation that risks or causes gopher tortoise(s) injury or mortality; agent did not self-report this permit violation to FWC.

*Examples of Risk Category I and II permit violations (not fully comprehensive):* Using a backhoe bucket with teeth; implementing an improper survey method, not providing shade for bucket traps; not drilling holes in the bottom of bucket traps; using an unauthorized capture method; unsupervised backhoe excavation; holding gopher tortoises longer than 72 hours without prior FWC approval; capturing gopher tortoises when the forecasted low temperature at the recipient site is not above 50° for three consecutive days [72 hours] after release; possessing or relocating more gopher tortoises than authorized by the permit; not reporting an injury or mortality of a gopher tortoise during a relocation in compliance with the permit condition; not conducting a 100% survey of the project site that is within 90 days of relocation commencement; conducting relocation activities under expired authorized agent permit; failure to meet soft release requirements (e.g., ensuring proper installation, maintenance/repairs, and regular monitoring of the soft release enclosure), but also tracking release of tortoises, maintaining records of soft release enclosure locations/maintenance timeframe.

Table A6. Infraction category consequences, remedies, and timeframe conditions.

| | **Non-risk category** | **Risk category I (Self-reported)** | **Risk category II (Not self-reported)** |
|---|---|---|---|
| **Consequence** | Permit suspension until remedied* | Permit suspension until remedied* | Permit suspension until remedied * |
| | May work as an assistant under another authorized agent's permit during permit suspension. | May work as an assistant under another authorized agent's permit during permit suspension. | May not work (even as an assistant) during permit suspension. |
| | -- | Registered agents obtain AA permit | Registered agents obtain AA permit |
| **Remedy** | Takes FWC e-learning course (no cost) | Takes FWC-approved Course | Takes FWC-approved course |
| | 100% Pass FWC quiz [1] | 100% Pass FWC quiz [1] | 100% Pass FWC quiz [1] |
| **Timeframe condition**** | Can only 100% pass quiz once every 10 days | Can only 100% pass quiz once every 30 days | Can only 100% pass quiz once every 60 days |

*The first infraction earned per category may be remedied on day of infraction issuance; subsequent infractions earned per category will have a minimum suspension requirement of 10, 30, and 60 days for respective Non-risk, Risk I and Risk II categories.

**Applicable when more than one infraction issued in relevant timeframe; as a result, agents cannot remedy more

than one infraction in a single day and thus disincentivizes the accrual of multiple infractions.
[1] The Gopher Tortoise Permitting Guidelines test is located at: https://learningmyfwc.remote-learner.net/

## Permit Revocation Criteria

In an effort to conserve gopher tortoises and ensure compliance with permit conditions and guidelines, FWC maintains the right to revoke a permit when deemed necessary. Criteria for permit revocation include:

- Conducting permitted activities under permit suspension;
- receiving 5 risk category II infractions (this is a per tortoise/improper survey basis, not by permit);
- and those criteria found in rule 68-1.010, Florida Administrative Code, Florida Statutes (e.g., falsifying information)