Guidelines for Updating and Enhancing Amphibians and Reptiles Sections of Integrated Natural Resources Management Plans

Purpose

The purpose of this document is to provide general guidelines that will assist military installation natural resource managers update Integrated Natural Resource Management Plan (INRMP) sections pertaining to herpetofauna (amphibians and reptiles).

The objectives of these guidelines are to support herpetofauna management and conservation goals which will assist with no net loss in military mission capability for military installation lands while enhancing training and testing capabilities to the maximum extent practicable.

The intent of this document is not to provide formal policy, but rather recommendations and considerations that will assist with enhancing INRMPs and ultimately the planning and management of herpetofauna on military lands. The guidelines proposed below, if implemented, are considered an update to an existing INRMP under DoD policy, and therefore would not require public review or comment. Any changes made to an existing INRMP as a result of implementing these guidelines should be reviewed in accordance with an installation's existing review process as required by the Sikes Act and DoD policy.¹

Background

An INRMP is a long-term planning document designed to guide a natural resources manager in the management of natural resources to support the installation mission while protecting and enhancing installation resources for multiple use, sustainable yield, and biological integrity.

The requirement to prepare and implement INRMPs was created by the 1997 Amendments to the Sikes Act, often referred to as the Sikes Act Improvement Act (SAIA). An INRMP documents the installation mission, baseline condition of natural resources, impacts to natural resources due to the military mission, the management approaches to conserve and enhance natural resources, and a list of specific projects to protect and enhance natural resources on the installation.

It is DoD policy to implement and maintain natural resources conservation programs to ensure access to land, air, and water resources for realistic military training and testing while ensuring that the natural resources under the Secretary of Defense's stewardship and control are managed to support and be consistent with the military mission.

Guidelines

The following guidelines are provided by the Department of Defense Partners in Amphibian and Reptile Conservation (DoD PARC) group to help enhance those sections within INRMPs pertaining to the conservation and management of herpetofauna (reptiles and amphibians). Since

¹ Generally guidelines for INRMP development, content, review and revision can be found in the DoD Instruction 4715.03 (14 February 2011) and Manual 4715.03(25 November 2013).

INRMPs are generally standardized across the DoD Services, we reference section headings that are typically found in the majority of INRMPs.

Current Conditions and Use

- Wildlife or Fauna:
 - We recommend a discussion of the installation's herpetofauna species (confirmed and potential to occur) based on site-specific surveys and desktop analysis. Include site-specific species pictures if available. It is also recommended that non-native herpetofauna and venomous species (if present) be specifically identified due to their ecological importance and potential impact with installation personnel. If these data not available, DoD PARC can assist with the collection of these information.
 - Additionally, we recommend a description of the installation's habitat types occupied by herpetofauna and those species that are common or rare in these habitats.
 - Lastly, we recommend a description of all herpetofauna inventories/surveys (or lack of surreys) conducted on the installation (survey reports to be referenced in the literature cited).

• Rare, Threatened, and Endangered Species or State Wildlife Action Plan:

 We recommend identification of the installation's herpetofauna species (confirmed and potential) that are rare, Endangered Species Act (ESA) listed or State protected. List any surveys or studies conducted on these species and their distribution on the installation, specifically address the habitats in which the species are found. Additionally, discuss involvement in partnerships with state, federal or non-governmental organizations that are working to manage or conserve these species.

Natural Resources Management Actions

- Forest/Vegetation/Management or Wetlands Management Actions:
 - We recommend a description of ongoing or periodic vegetation, forest and wetland management actions that benefit amphibians and reptiles.
 Management actions many include protection or enhancement of wetlands; prescribe burning; removal of invasive plant species.
- Fish & Wildlife Management and Threatened and Endangered Species Protection
 - We recommend a description of management and conservation actions performed on or off the installation that act to prevent the decline common and listed amphibian and reptile species populations. This includes may include surveys, monitoring and disease surveillance.
- Natural Resources Conservation Law Enforcement

 We recommend a synopsis or copy of the state and installation regulations regarding herpetofauna, if applicable. Consider highlighting those regulations typically overlooked by conservation law enforcement and those regulations that may not be well known to traditional law enforcement officers (for example poaching of wildlife).

• Cantonment Fish and Wildlife Management

We recommend a discussion of any issues with human-reptile interactions including your pest management program and interactions with venomous snake species. Discuss conflict avoidance mechanisms. Also discuss any educational or outreach activates/tools such as snake demonstrations or the development of educational materials such as posters or pamphlets.

INRMP Implementation

- Project Development
 - We recommend a list of installation-specific projects that will assist you with reaching your management goals and objectives with amphibian and reptiles. Examples projects can be found within the Partners in Amphibian and Reptile Conservation (PARC) Habitat Management Guidelines series. Examples may include:
 - Conducting periodic herpetofauna inventories and surveys.
 - Monitoring of sensitive and rare native amphibian and reptilian populations.
 - Maintaining or restoring natural hydrological processes through water table and stream flow maintenance and preservation of natural hydrological regimes, such as inundation and desiccation cycles.
 - Protecting natural drainages from degradation through invasive species vegetation clearing, equipment disinfection, and erosion prevention.
 - Restoring and re-vegetating disturbed and degraded herpetofauna habitats.
 - As appropriate, determination of the need to control or exclude non-native amphibian populations.
 - Reducing impacts to herpetofauna associated with roads by closing non-essential roads, enacting seasonal controls, and enforcing speed limits.
 - Conducting projects to maintain habitat contiguity and to encourage reptile population movement (e.g., providing safe crossings for reptiles on roadway projects).
 - Maintaining natural upland habitat buffers for migrating amphibians around wetlands.
 - Developing educational programs or materials about local amphibians and reptiles.