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**INTEGRATED NATURAL
RESOURCES MANAGEMENT**

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This instruction implements Air Force Policy Directive (AFPD) 32-70, Environmental Quality, by identifying United States Air Forces in Europe (USAFE) requirements for a natural resources management program. It applies to all USAFE operations. It does not apply to Air Force Reserve Command (AFRC) or Air National Guard (ANG) units. US Air Force Reserve or Air National Guard units. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, Management of Records, and disposed of in accordance with the Air Force Records Disposition Schedule (RDS) located in AF Records Management System (AFRIMS): <https://afrims.amc.af.mil>

SUMMARY OF CHANGES

This interim change updates terminology and deletes references to outdated databases, Air Force Instructions (AFI) and training courses. A margin bar indicates newly revised material.

1. How to Use This Instruction.

1.1. Background:

1.1.1. AFPD 32-70, DoD Directive 6050.16, and the *Overseas Environmental Baseline Guidance Document* (OEBGD) require the implementation of uniform conservation standards for natural resources at DoD installations and facilities in foreign countries. Fundamentally, the standards ensure planning for major actions includes consideration of possible effects on natural resources. The criteria also include the protection and management of natural resources and US or host nation declared threatened or endangered biological species.

1.2. **Concept.** This instruction provides a framework to help installations comply with final governing standards (FGS) requirements.

1.3. Responsibilities:

1.3.1. The Lead Environmental Component (LEC) issues the Final Governing Standard (FGS) and revalidates them on a periodic basis.

1.3.2. HQ USAFE oversees implementation of integrated natural resources programs at USAFE installations.

1.3.3. Installations comply with the FGS, or the OEBGD in countries for which an FGS has not been promulgated.

2. Requirements.

2.1. **Background.** Installations having land and water areas will develop a program for conserving, managing, and protecting natural resources to comply with the FGS.

2.1.1. Incorporate the following areas into the natural resources management program where they exist:

- Land management and grounds maintenance.
- Wetlands.
- Flood plains.
- Fish and wildlife management.
- Threatened and endangered species (TES).
- Forest management.
- Urban forestry and tree city.
- Agricultural out-leasing
- Outdoor recreation

2.2. **Database Management.** Installations will establish an integrated natural resources inventory and use a database for management.

2.3. **Integrated Natural Resources Management Plan (INRMP).** Installations will prepare and maintain an integrated natural resources management plan. Include resources on the installations' geographically separated sites of responsibility. See [Attachment 2](#) for guidelines on preparing an integrated natural resources management plan.

2.3.1. The INRMP is an integral part of the base comprehensive plan (BCP) (see AFI 32-7062, *Base Comprehensive Planning*). Installations shall review and update the INRMP every 5 years and integrate it into the BCP.

3. Assessing Effects and Consulting With Host Nation.

3.1. **Background.** Installations must identify what effects projects might have on natural resources.

3.2. Assessing Effects:

3.2.1. Assess the effects of USAFE undertakings on natural resources by using the Environmental Impact Analysis Process (see AFI 32-7061, *The Environmental Impact Analysis Process*).

3.2.2. If after assessment, the Air Force determines the undertaking will result in an adverse effect to a natural resource, the installation will consult with the USAFE and appropriate host nation authority to determine the proper course of action.

3.3. **Discovery of Threatened and Endangered Species.** Report the discovery of potential threatened and endangered species not previously known to exist on the installation to host nation officials. Protect newly discovered resources according to FGS guidelines.

4. Natural Resources Budgeting.

4.1. Funding Sources:

4.1.1. AFI 32-7001, *Environmental Budgeting*, specifies procedures for obtaining integrated natural resources funding.

4.1.2. Full or partial funding for natural resources projects by the host nation is encouraged and should be explored.

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Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

DoDI 4165.14, *Real Property Inventory and Forecasting*, 31 March 2006
 AFPD 32-70, *Environmental Quality*, 20 July 1994
 AFI 32-7001, *Environmental Budgeting*, 9 May 1994
 AFI 32-7061, *The Environmental Impact Analysis Process*, 12 March 2003
 AFI 32-7062, *Air Force Comprehensive Planning*, 1 October 1997
 AFMAN 33-363, *Management of Records*, 1 March 2008
Overseas Environmental Baseline Guidance Document (OEBGD)

Abbreviations and Acronyms

AFPD—Air Force Policy Directive
BASH—Bird Aircraft Strike Hazard
BCE—Base Civil Engineer
BCP—Base Comprehensive Plan
CEV—Environmental Flight
DoD—Department of Defense
ECD—Estimated Completion Date
ESOHC—Environmental, Safety, and Occupational Health Council
FGS—Final Governing Standard
INRMP—Integrated Natural Resource Management Plan
LEC—Lead Environmental Component
O&S—Operations and Services
OEBGD—Overseas Environmental Baseline Guidance Document
POC—Point of Contact
TES—Threatened and Endangered Species
USAFE—United States Air Forces in Europe

Terms

Adverse Effect—Changes that may diminish or harm a natural resource's integrity in terms of location, design, setting, materials, workmanship, feeling, or association. Adverse effects on cultural resources include:

Physical destruction, damage, or alteration of all or part of the resource.

Neglect of a resource that results in its deterioration or destruction.

Encroachment on a resource through construction or development.

Ecosystem Management—An approach to natural resources management that focuses on the interrelationships of ecological processes linking soils, plants, animals, minerals, climate, water and topography.

Endangered and Threatened Species—Any species of fauna or flora designated by the host nation or United States (U.S.) as threatened or endangered.

Final Governing Standard (FGS)—Country-specific substantive provisions with which DoD components must comply. In the absence of country-specific FGS, DoD components must comply with the OEBGD.

Flood plains—Lowland or flat areas adjoining inland and coastal waters that have a 1-percent or greater chance of flooding in any given year.

Forest Management—Developing, conserving, and protecting forest resources to ensure they provide sustained yield and multiple use.

Geographically Separated Site—Site or facilities detached or off-base from the parent installation.

Habitat—An area that provides the environmental elements of air, water, food, cover, and space necessary for a given species to survive and reproduce.

Improved Grounds—Grounds on which personnel annually plan and perform intensive maintenance activities. These are developed areas of an installation that have lawns and landscape plantings requiring intensive maintenance. They usually include the cantonment, parade grounds, drill fields, athletic areas, golf courses (excluding roughs), cemeteries and housing areas.

Installation—These DoD facilities that have been assigned a unique DoD installation/station code as defined by military department regulations issued pursuant to DoDI 4165.14, *Real Property Inventory and Forecasting*.

Integrated Natural Resources Management Plan—A natural resources management plan based on ecosystem management that shows the interrelationships of the individual natural resources as well as mission and land use activities affecting the basic land management plans.

Lead Environmental Component (LEC)—Component or unified commander designated by the Assistant Secretary of Defense for Acquisition as responsible for developing and publishing the Final Governing Standards for a specific country.

Natural Resource—All living and inanimate materials supplied by nature that are of aesthetic, ecological, educational, historical, recreational, scientific or other value.

Natural Resources Management—Action taken to protect, manipulate, alter, or manage environmental, human, and biological resources in harmony with each other to meet present and future human needs.

Outdoor Recreation—Recreation that relates directly to and occurs in natural, outdoor environments.

Overseas Environmental Baseline Guidance Document (OEBGD)—Implementation guidance, procedures and criteria for environmental compliance at DoD installations in overseas locations. The OEBGD is used by the environmental executive agents to develop final governing standards and, in the

case where no final governing standards exist, provides the compliance criteria for use by the Air Force overseas.

Semi-improved Grounds—Grounds where personnel perform periodic maintenance primarily for operational and aesthetic reasons (such as erosion and dust control, bird control, and visual clear zones). These usually include grounds adjacent to runways, taxiways, and aprons; runway clear zones; lateral safety zones; rifle and pistol ranges; picnic areas; ammunition storage areas; antenna facilities; and golf course roughs.

Undertaking—Any project, activity or program funded in whole or in part by a Federal agency.

Unimproved Grounds—Grounds not classified as improved or semi-improved and usually not mowed more than once a year. These include weapon ranges, forested lands, croplands, grazing lands, lakes, ponds, wetlands, and airfield areas beyond safety zones.

Wetlands—Areas inundated or saturated by surface or ground water at a frequency or duration to support, and under normal circumstance do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Attachment 2

PREPARING INTEGRATED NATURAL RESOURCES MANAGEMENT PLANS

This outline serves as a standard format. Tailor it to your installation's program.

A2.1. General Information.

- Executive Summary.

A2.1.1. **Purpose of the Plan.** Describe the plan as a provisional road map which ensures that the host nation's natural resources are properly managed and integrated into all phases of installation and mission planning.

- Indicate that most actions at Air Force installations impact natural resources and for this reason there must be a conscious and active concern for the inherent value of these resources in all installation plans, decisions, actions, and programs.

A2.1.2. **Authority.** The Overseas Environmental Baseline Guidance Document (OEBGD) and the final governing standards-XX (FGS-XX) require management plans be developed for natural resources such as land (soil and water), grazing and cropland, forest, fish and wildlife, and outdoor recreation, where these resources exist.

A2.1.3. Management Philosophy.

- Explain that the installation's natural resources will be managed in accordance with criteria established in the FGS-XX.
- Explain how the plan integrates with the installation's mission and the base comprehensive planning process.
- Explain that the plan presents overarching as well as specific goals.
- Explain that, whenever possible, host nation natural resources managers should be consulted to ensure installation natural resources management practices are compatible with those of the host nation.

A2.1.4. Approvals and Revisions.

A2.1.4.1. Indicate that the plan has been reviewed and approved by the installation's Environmental, Safety, and Occupational Health Council (ESOHC).

A2.1.4.2. Changes to the plan must be submitted to the ESOHC for approval through the Environmental Flight (CEV).

A2.1.4.3. The plan must be reviewed and updated every five years or as needed to ensure that the plan is useful and current.

A2.1.5. Responsibilities.

A2.1.5.1. The installation commander is responsible for the proper management of the installation's natural resources.

A2.1.5.2. The ESOHC reviews and approves the installation's INRMP. In addition, it ensures the installation's compliance with the plan.

A2.1.5.3. The Base Civil Engineer (BCE) is responsible for the preparation, maintenance, and day-to-day implementation of the INRMP, and is the focal point for all INRMP actions and issues. The BCE also establishes mechanisms to review and analyze the impact (Environmental Impact Analysis Process) of all proposed actions on the natural environment, and makes recommendations based on the analysis to the installation's ESOHC for approval or disapproval.

A2.1.5.4. CEV prepares the INRMP in close coordination with the community planner. The environmental flight provides technical advice on natural resources matters to base units, boards, and the ESOHC.

A2.1.5.5. Commanders of assigned and tenant units are required to be familiar with the content of the INRMP and comply with its provisions.

A2.2. Installation Location and Mission.

A2.2.1. **Location.** Provide a general description of installation location and surrounding communities. Include an area map.

A2.2.2. **Mission.** Describe current military missions, including information on the major units, missions, major tenant units and number of personnel assigned. Also describe the host nation missions and their locations on base if there are distinct separations (host nation vs. US side of the base).

A2.3. Mission Impacts on the Local Environment.

A2.3.1. **Current Major Impacts.** Concentrate on problem areas that have the greatest impact on functioning ecosystems.

- Briefly discuss major pollution concerns and programs, such as: air and water pollution sources; noise problems associated with airfield operations, low-level training routes, or ranges; on-going problems with hazardous waste; ground water contamination.

A2.3.2. **Known Future Mission Impacts.**

- Summarize the potential impacts of projected changes in missions, such as aircraft realignments and other mission elements.

A2.4. General Physical Environment.

A2.4.1. Provide information on the installation's climate, including average temperatures, precipitation, etc. (available from the weather squadron).

A2.4.2. Provide information on the total installation acreage.

A2.4.3. Provide information on topography (elevations and slope), geology (soil types and general geology of the area), watersheds, wetlands, and drainage patterns on the installation. (Show on a map if practical.)

A2.5. Management Issues and Concerns.

A2.5.1. Discuss natural resources constraints to installation planning and missions.

A2.5.2. Develop a composite map of major constraints such as critical habitat, endangered/protected species, wetlands, highly erodible soils, steep slopes, forested areas, etc. (Incorporate into base comprehensive plan).

A2.6. Specific Management Areas.

A2.6.1. **Land Use (Soil).** The objective is to achieve a balance between military mission support, landscape, aesthetics, soil stability and fertility, biological diversity, and sustainability of natural resources.

- Provide information on general distribution of improved, semi-improved, and unimproved grounds (information should be available from the base comprehensive plan). Include the following:
 - Identify forested, grazing, and cropland areas, if they exist. Develop management plans for those areas, e.g., forest management, where required. For grazing and cropland areas list details on use. If resources do not exist, please state this.
 - Describe host nation involvement, including public, private, and government organizations, if applicable.
- Provide information on landscape management techniques (summarize and reference the base landscape plan, if one exists), and whether the host nation oversees/controls management of these resources on base. Include the following:
 - Description of the urban forest program (tree city). If program does not exist, please state this.
 - Installation grounds will be maintained to meet designated mission use and assure harmony with the natural landscape.
 - Native plant species will be used wherever possible.
 - In landscaping design use plants that will thrive with the least amount of maintenance (watering, pruning, and pest control).
 - Protective vegetative cover or other standard soil erosion/sediment control practices will be used to control dust or stabilize sites.
 - Specify whether host nation coordination/permission is needed to remove trees/plants.
- Provide a host nation point of contact (POC), if applicable.
- Land Use (Soils) Improvement Goals: Highlight the improvements required by the FGS by briefly stating the FGS criteria.
 - Develop landscape plan with approved landscaping materials, ECD, Project #xx-xxxxx.
 - Survey base vegetative cover (define improved, semi-improved and unimproved grounds and map), ECD, Project #xx-xxxxx.

A2.6.2. **Land Use (Water).** The objective is to identify, protect, and enhance water resources above and below ground.

- Provide information on waterways, wetlands, flood plains, and aquifers on base (show on a map). If resources do not exist, please state this.

- Provide information on waste water and storm water discharge points (reference existing storm/waste water plans) and their potential effect on water resources.
- Discuss non-point sources of pollution (parking lots, airfields, etc.) to include pesticide and fertilizer usage and their potential effect on water resources.
- Provide information on the installation's spill plan that address potential discharge points to water resources (streams, rivers, drainage ways, soakaways, etc.) in case of a spill (reference existing spill plan).
- Discuss base irrigation plan, if one exists.
- Provide a host nation POC, if applicable.
- Land Use (Water) Improvement Goals: Highlight the improvements required by the FGS by briefly stating the FGS criteria.
 - Develop map that shows waste water and storm water discharge points, ECD, Project #xx-xxxxx.
 - Develop pesticide/fertilizer management plan, ECD, Project #xx-xxxxx.
 - Develop a map that shows waterways, wetlands, and aquifers on base, ECD, Project #xx-xxxxx.

A2.6.3. **Fish and Wildlife.** The objective is to identify and manage all fish and wildlife resources to ensure the sustainability of the wildlife population and to maximize the compatibility of wildlife and Air Force activities.

- List known native wildlife/fish species and their habitats found on base, show on a plan.
- Provide information on hunting and fishing programs. If these do not exist, please state this.
- Provide information on wildlife management techniques and whether the host nation oversees/controls management of these resources on base.
- Discuss local zoonotic disease concerns (Lyme disease, rabies, mosquito-borne encephalitis, etc.) and management techniques.
- Address bird aircraft strike hazards (BASH) plan concerns and management techniques. Summarize and reference existing BASH plan.
- Provide a host nation POC, if applicable.
- Fish and Wildlife Improvement Goals: Highlight the improvements required by the FGS by briefly stating the FGS criteria.
 - Conduct wildlife/fish inventories, identify and locate habitats, ECD, Project #xx-xxxxx.
 - Assess condition of wildlife/fish habitats and develop programs to protect and enhance those habitats, ECD, Project #xx-xxxxx.

A2.6.4. **Threatened and Endangered Species (TES).** The objective is to protect, conserve and enhance known TES and their habitats to the maximum extent practicable.

- Attach host nation list of TES. (List found in FGS cannot be used as the host nation list.)
- List known TESs and habitats (provide location map) found on base. Also discuss management techniques used to protect and enhance these resources.
- Include host nation notification procedures. (Identification of new TES.)
- Provide a host nation POC, if applicable.
- TES Improvement Goals: Highlight the improvements required by the FGS by briefly stating the FGS criteria.
 - Conduct TES installation survey, ECD, Project #xx-xxxxx.
 - Enhance TES habitat, ECD, Project #xx-xxxxx.
 - Request for host nation TES installation survey, Status, ECD.

A2.6.5. Outdoor Recreation. The objective is to manage outdoor recreational resources to provide the greatest possible physical, cultural, and spiritual benefits to the broadest possible segment of the public. **NOTE:** Outdoor recreation is defined as management of natural resources to provide opportunities for outdoor activities. These resources exclude facilities or programs associated with urban development such as athletic fields, golf courses, and playgrounds. Natural resources managers must coordinate closely with their services squadron in the development of outdoor recreation areas for which Services will have responsibility or involvement.

- List outdoor recreation areas and show in a map:
 - State any fees collected. If none, please state this.
 - Parours, jogging, bicycling, and hiking trails.
 - State the user access (only DoD employees?) for each area.
 - Special interest areas such as historic, archeological, nature viewing areas, etc.
- Outdoor Recreation Improvement Goals: Highlight the improvements required by the FGS by briefly stating the FGS criteria.
 - Construct Parours trail, ECD, Project #xx-xxxxx.
 - Construct nature trail, ECD, Project #xx-xxxxx.
 - Develop historic site for public view, ECD, Project #xx-xxxxx.

A2.6.6. Training.

A2.6.6.1. Installation natural resources managers in coordination with the base personnel office shall incorporate basic information on natural resources programs into newcomer briefings: information on outdoor recreational activities and regulations governing these activities, fauna/flora law enforcement and responsibilities of the individual for the natural environment.