SUBJECT: Natural Resources Management Program

(b) DoD Instruction 4170.6, "Natural Resources--Fish and Wildlife Management," June 21, 1965 (hereby canceled)
(c) DoD Instruction 4170.7, "Natural Resources--Forest Management," June 21, 1965 (hereby canceled)
(d) DoD Instruction 4170.8, "Natural Resources--Soil and Water Management," June 21, 1965 (hereby canceled)
(e) through (u), see enclosure 1

A. PURPOSE

This Directive:
1. Replaces and updates reference (a).
2. Supersedes references (b) through (e).
3. Implements references (f) through (k).
4. Prescribes policies and procedures for an integrated program for multiple-use management of natural resources on property under DoD control.

B. APPLICABILITY AND SCOPE

This Directive:

1. Applies to the Office of the Secretary of Defense (OSD), the Military Departments (including their National Guard and Reserve components), the Joint Staff, the Unified and Specified Commands, and the Defense Agencies (hereafter referred to collectively as "DoD Components"). The term "Military Services," as used herein, refers to the Army, Navy, Air Force, and Marine Corps.
2. Governs DoD management of natural resources in the United States and its territories and possessions for both appropriated and nonappropriated fund activities.
3. Does not govern natural resources management at State-owned National Guard installations. Nothing contained in this Directive nor in implementing documents or agreements shall modify rights granted by treaty to Indian tribes or their members.
4. Does not apply to the civil works functions of the Army.
C. DEFINITIONS

The terms used in this Directive are defined in enclosure 2.

D. POLICY

1. The Department of Defense shall act responsibly in the public interest in managing its lands and natural resources. There shall be a conscious and active concern for the inherent value of natural resources in all DoD plans, actions, and programs.

2. Natural resources under control of the Department of Defense shall be managed to support the military mission, while practicing the principles of multiple use and sustained yield, using scientific methods and an interdisciplinary approach. The conservation of natural resources and the military mission need not and shall not be mutually exclusive.

3. Watersheds and natural landscapes, soils, forests, fish and wildlife, and protected species shall be conserved and managed as vital elements of DoD's natural resources program.

4. DoD actions that affect natural resources in the United States shall comply with the policy and requirements of DoD Directive 6050.1 (reference (1)) and the more stringent of applicable Federal or local laws. DoD actions that influence natural resources in foreign countries or global commons shall conform to requirements of DoD Directive 6050.7 (reference m), applicable laws, treaties, and agreements.

5. Integrated natural resources management plans that incorporate applicable provisions of enclosure 3 shall be maintained for DoD lands.

6. DoD decisionmakers and commanders shall keep informed of the conditions of natural resources, the objectives of natural resources management plans, and potential or actual conflicts between DoD actions and management plans and the policies and procedures herein.

7. DoD lands shall be available to the public and DoD employees for enjoyment and use of natural resources, except when a specific determination has been made that a military mission prevents such access for safety or security reasons or that the natural resources will not support such usage. The determination shall be addressed in the applicable natural resources management plan. To assist in the management, study, or monitoring of natural resources, Federal, State and local officials and natural resources management professionals shall be permitted access to natural resources after proper safety and security measures are taken.

8. The management and conservation of natural resources under DoD stewardship is an inherently governmental function. Therefore, DoD Directive 4100.15 (reference (n)) does not apply to the management, implementation, planning, or enforcement of DoD natural resources programs. However, support to the natural resources program when it is separable from management of natural resources may be subject to reference (n).
9. If natural resources under DoD control are damaged by a hazardous substance released by another party, that party is potentially liable. The funds recovered by the Department of Defense as a result of natural resources damage claims shall be used for restoration, replacement, or acquisition of equivalent natural resources.

10. Enforcement of laws primarily aimed at protecting natural resources and recreation activities that depend on natural resources is an integral part of a natural resources program and shall be coordinated with or under the direction of the natural resources manager for the affected area.

E. **RESPONSIBILITIES**

1. The **Assistant Secretary of Defense (Production and Logistics) (ASD(P&L))** shall:

   a. Establish and monitor implementation of natural resources management policies for DoD properties and actions.

   b. Coordinate the DoD natural resources program with other Federal Agencies.

   c. Maintain the Secretary of Defense Natural Resources Conservation Awards Program established herein and described in DoD Instruction 4700.2 (reference (o)).

   d. Designate a chairperson for the DoD Natural Resources Council (DNRC) established in subsection F.2., below.

   e. Establish policy and direction for the DoD reserve account established by 10 U.S.C. 2665 (reference (h)).

2. The **Director, Defense Research and Engineering, through the Deputy Under Secretary of Defense (Research and Advanced Technology) (DUSD(R&AT)),** shall conduct appropriate research, development, tests, and evaluations to support integrated natural resources management programs.

3. The **Heads of the Military Services and Directors of Defense Agencies delegated land management responsibilities** shall:

   a. Maintain an organizational capability and program resources necessary to establish and maintain integrated natural resources management programs as prescribed in this Directive.

   b. Maintain at all levels of command the interdisciplinary natural resources expertise necessary to implement this program and provide for their continued professional training.

   c. Ensure that effective natural resources management is an identifiable function and is specifically accountable in performance evaluations at each command level.
d. Provide for technical reviews and onsite assessments of installations' natural resources programs at least each 3 years by natural resources management professionals, take necessary corrective actions, and include natural resources programs in management reviews.

e. Develop criteria and procedures for cooperative planning and integrated natural resources management planning processes.

f. Act as trustees for natural resources under their jurisdiction.

g. Maintain records necessary to monitor and evaluate natural resources under their management and provide requested information to the ASD(P&L), other agencies with jurisdiction, and the public.

4. The Heads of DoD Components shall coordinate proposals for new and continuing actions that affect natural resources with the managers of those resources.

5. Installation Commanders shall:

   a. Conduct integrated natural resources management programs to comply with this Directive.

   b. Enter into cooperative plans that may be developed on behalf of the Secretary of Defense pursuant to the Sikes Act (reference (g)).

F. PROCEDURES

1. Procedures shall be established by DoD Components to ensure that current and planned mission activities (e.g., master planning, construction requests, site approval requests, and training exercise plans) are effectively coordinated in a timely manner with appropriate natural resources managers.

2. The DNRC shall advise the ASD(P&L) regarding natural resources issues and shall meet at least quarterly. DoD Components shall participate to carry out this Directive and goals of the DoD natural resources program. The Heads of the Military Services each shall appoint one representative and one alternate to the DNRC. The DNRC shall:

   a. Provide technical support to the ASD(P&L) in natural resources areas.

   b. Recommend policy and program improvements.

   c. Assist in conducting the Secretary of Defense Natural Resources Conservation Awards Program.

   d. Coordinate the natural resources management program among DoD Components.

   e. Conduct periodic natural resources conferences or training opportunities for DoD employees.

   f. Identify and coordinate natural resources research activities and needs and present them to the DUSD(R&AT) each year.
G. INFORMATION REQUIREMENTS

Information requirements of the ASD(P&L) shall be met by the Heads of the Military Services each year by January 15 under Report Control Symbol DD-P&L(A)1485.

H. EFFECTIVE DATE AND IMPLEMENTATION

This Directive is effective immediately. Forward two copies of implementing documents to the Assistant Secretary of Defense (Production and Logistics) within 150 days.

William H. Taft, IV
Deputy Secretary of Defense

Enclosures – 3
1. References
2. Definitions
3. Integrated Natural Resources Management
REFERENCES, continued

(e) DoD Directive 6050.2, "Recreational Use of Off-Road Vehicles on DoD Lands," April 19, 1979 (hereby canceled)
(g) Title 16, United States Code, Section 670 et seq. "Conservation Programs on Military Installations," (Sikes Act) as amended
(h) Title 10, United States Code, Section 2665, "Timber Sales on Military Lands"
(i) Title 10, United States Code, Section 2667(d), "Outleasing for Grazing and Agriculture on Military Lands," as amended
(j) Title 10, United States Code, Section 2671, "Hunting, Fishing and Trapping on Military Lands"
(k) Title 16, United States Code, Section 460(1), "Outdoor Recreation on Federal Lands"
(p) DoD Directive 4165.61, "Intergovernmental Coordination of DoD Federal Development Programs and Activities," August 9, 1983
(s) DoD Instruction 7310.5, "Accounting for Production and Sale of Forest Products," January 25, 1988
DEFINITIONS

1. Agricultural Outlease. Use of DoD lands under a lease to an agency, organization, or person for growing crops or grazing animals.

2. Carrying Capacity (Outdoor Recreation). The maximum amount of recreation activity and number of participants that a land or water area can support in manner compatible with the objectives of the natural resources management plan and without degrading existing natural resources.

3. Carrying Capacity (Wildlife). The maximum density of wildlife that a particular area or habitat will support on a sustained basis without deterioration of the habitat.

4. Conservation. Wise use and management of natural resources to provide the best public benefits and continued productivity for present and future generations.

5. Cooperative Plan. The component of the natural resources management plan that describes how fish and wildlife resources at an installation shall be managed and that has been coordinated with the U.S. Fish and Wildlife Service and the appropriate State agency. It provides for:
   a. Fish and wildlife habitat improvements or modifications.
   b. Range rehabilitation where necessary for support of wildlife.
   c. Control of off-road vehicle traffic.
   d. Specific habitat improvement projects and related activities and adequate protection for species of fish, wildlife, and plants considered threatened or endangered.

6. Critical Habitat. A specific designated area declared essential for the survival of a protected species under authority of the Endangered Species Act (reference (f)).

7. Endangered or Threatened Species. A species of fauna of flora that has been designated by the U.S. Fish and Wildlife Service for special protection and management pursuant to the Endangered Species Act (reference (f)).

8. Forest Products. All plan materials in wooded areas that have commercial value.

9. Game Species. Fish and wildlife that may be harvested in accordance with Federal and State laws.

10. Grounds. All land areas not occupied by buildings, structures, pavements, and railroads.

11. Habitat. An area where a plant or animal species lives, grows, and reproduces, and the environment that satisfies any of their life requirements.
12. **Multiple-Use.** The use of natural resources for the best combination of purposes to meet the needs of the military and the public.

13. **Natural Resources.** Land, water, and their associated flora and fauna.

14. **Natural Resources Management Professional.** Individual with an undergraduate or graduate degree in a natural resources-related science and who has responsibility for managing natural resources on a regular basis.

15. **Nongame Species.** Species not harvested for recreation or subsistence purposes.

16. **Noxious Weeds.** Plant species identified by Federal or State Agencies as requiring control or eradication.

17. **Off-road Vehicle.** A vehicle designed for travel on natural terrain. The term excludes a registered motorboat confined to use on open water and a military, emergency, or law enforcement vehicle during use by an employee or agent of the Government or one of its contractors in the course of employment or agency representation.

18. **Outdoor Recreation.** Program, activity, or opportunity dependent on the natural environment. Examples are hunting, fishing, trapping, picnicking, birdwatching, off-road vehicle use, hiking and interpretive trails, wild and scenic river use, and underdeveloped camping areas. Developed or constructed facilities such as golf courses, tennis courts, riding stables, lodging facilities, boat launching ramps, and marinas are not included.

19. **Sustained Yield.** Production of renewable natural resources at a level when harvest or consumptive use does not exceed net growth.
INTEGRATED NATURAL RESOURCES MANAGEMENT

A. INTEGRATED PLANNING

1. Integrated natural resources management plans shall be maintained for properties under DoD control. These plans shall guide planners and implementors of mission activities as well as natural resources managers.

2. The plans shall be coordinated with appropriate Federal, State, and local officials with interest or jurisdiction in accordance with DoD Directive 4165.61 (reference (p)), and with planners of DoD activities that impact on the natural resources. Conversely, new and continuing mission activities that impact on natural resources shall be coordinated with appropriate natural resources managers.

3. Natural resources management plans shall be continually monitored, reviewed annually, and revised by DoD natural resources management professionals. They shall be approved in accordance with DoD Components' procedures at least every 5 years.

4. The natural resources management planning process shall invite public participation.

5. An integrated natural resources management plan shall meet the following criteria:
   a. Natural resources and areas of critical or special concern are adequately addressed from both technical and policy standpoints.
   b. The natural resources management methodologies shall sustain the capabilities of the natural resources to support military requirements.
   c. The plan includes current inventories and conditions of natural resources; goals; management methods; schedules of activities and projects; priorities; responsibilities of installation planners and decisionmakers; monitoring systems; protection and enforcement systems; and land use restrictions, limitations, and capabilities.
   d. Each plan segment or component (i.e., land, forest, fish and wildlife, and outdoor recreation) exhibits compatible methodologies and goals.
   e. The plan is compatible with the installation's master plan and pest management program under DoD Directive 4150.7 (reference (q)).

6. A determination that the public may not have access to use natural resources under DoD control shall be included and explained in the applicable integrated natural resources management plan.

7. The environmental impact analysis for any proposed activity or project shall include an analysis of the compatibility of the proposal's impacts with affected natural resources management plans and objectives. Only after necessary revisions to management plans are made shall the new activity begin.
8. The planning requirements of DoD Directive 4710.1 (reference (r)) may be met within the integrated natural resources plan.

9. Integrated natural resources management plans shall be a primary consideration during the master planning process and for land use and development decisions.

B. NATURAL RESOURCES MANAGEMENT PLAN

The integrated natural resources plan shall implement the following policies and requirements for each applicable program area:

1. Land Management

   a. DoD lands shall be managed to support military activities, improve the quality of land and water resources, protect wetlands and floodplains and their functions, abate nonpoint sources of water pollution, conserve lands suitable for agriculture, control noxious weeds, and control erosion.

   b. Costs for maintaining grounds shall be minimized by providing the least amount of mowed areas and special plantings necessary to accomplish management objectives and by the use of low maintenance species, agricultural outleases, wildlife habitat, and tree plantings.

   c. Land management is an important use of appropriated funds. Also, pursuant to 10 U.S.C. 2667(d) (reference (i)), revenues from the agriculture and grazing outlease program are available for:

      (1) Administrative expenses of agricultural leases.

      (2) Initiation, improvement, and perpetuation of agricultural outleases.

      (3) Preparation and revisions of natural resources management plans.

      (4) Implementation of integrated natural resources management plans.

   d. When appropriate, land management plans shall address soils, water resources, soil and water conservation, wetlands and floodplains, grounds maintenance, landscaping, agricultural uses and potential, fire management, rangeland conditions and trends, areas of special interest, and management for multiple use.

   e. Soil capabilities, water management, landscaping, erosion control, and conservation of natural resources shall be included in all site feasibility studies and in project planning, design, and construction. Appropriate conservation work and associated costs shall be included in project proposals and construction contracts and specifications. Such studies and work shall be coordinated with appropriate natural resources management professionals and plans.
f. Irrigation shall be limited to areas where it is essential to establish and maintain required vegetation or when an agricultural outlease contract allows it.

g. Appropriate natural resources conservation measures shall be included in outlease provisions.

h. Landscaping shall be functional in nature, simple and informal in design, compatible with adjacent surroundings, and complimentary to the overall natural setting of the area.

i. Land conditions, soil capability, and erosion status shall be monitored for all lands subject to disturbance (e.g., maneuver areas, commercial forest areas, and agricultural outleased areas). The data and analyses obtained shall be used in planning, environmental analyses, and decisionmaking at all levels of command.

2. Forest Management

a. DoD forest lands shall be managed for sustained yield of quality forest products, watershed protection, wildlife habitat, and other uses that can be made compatible with mission activities.

b. Commercial forestry activities shall be commensurate with potential financial returns.

c. Forest products shall not be given away, abandoned, carelessly destroyed, used to offset costs of contracts, or traded for products, supplies, or services. Forest products may be used for military training. Individuals may be allowed to collect noncommercial or edible forest products if that use is addressed in the management plan for the areas involved. Forest products may be harvested to generate electricity or heat only if the Military Department's forestry account is paid fair market value.

d. Planned forest products sales shall continue on land reported as excess until actual disposal or transfer occurs. When forested areas are slated to be public parks or used for outdoor recreation, clearcutting is prohibited. However, thinning, intermediate cuttings, and salvage cuttings shall be accomplished if the management plan calls for such activity within the next 5 years. That portion of the proceeds from sales of land that is attributable to the value of standing timber on the land sold shall be deposited in the Military Department's forestry account.

e. Accounting and reporting for the proceeds and costs of the commercial forestry program are contained in DoD Instruction 7310.5 (reference(s)). Costs associated with management of all forested areas (noncommercial and commercial) are valid uses of appropriated funds as well as proceeds from agricultural outleases and forest product sales.

f. When appropriate, natural resources management plans shall include current forest inventories, conditions, trends, and potential uses; analysis of soil data for forest potential; goals; protection and enforcement methods; maintenance of forested areas and access roads; improvement methods; harvesting and reforestation methods and schedules; and management for multiple use.
3. **Fish and Wildlife Management**

   a. Lands and waters suitable for management of fish and wildlife resources shall be managed to conserve wildlife resources for the benefit of the public. Nongame as well as game species shall be considered when planning activities.

   b. Endangered and threatened species and their habitats shall be protected and managed according to the Endangered Species Act (reference (f)) and implementing U.S. Fish and Wildlife Service (FWS) regulations and agreements. Management plans for installations with endangered species shall include:

   (1) Coordinated protection and mitigation measures.

   (2) Appropriate affirmative methods and procedures necessary to enhance the population of endangered species.

   (3) Procedures and responsibilities for consulting with the FWS prior to funding or conducting any action likely to affect a listed species or its critical habitat.

   c. The Sikes Act (reference (g)) provides a mechanism whereby the Departments of Defense and the Interior and host States cooperate to plan, maintain, and manage fish and wildlife on military installations. Agreement by all 3 parties regarding the fish and wildlife management plan for an installation makes that plan a cooperative plan pursuant to reference (g). A cooperative plan shall be adopted by an installation commander only after ensuring its compatibility with the rest of the integrated natural resources management plan.

   d. Hunting, fishing, and trapping may be permitted within the carrying capacity of wildlife habitats. Harvesting of wildlife from DoD installations or facilities shall be done according to the fish and game laws of the State or territory in which it is located and under 10 U.S.C. 2671 (reference (j)). Special permits shall be issued, in addition to required State and Federal permits or licenses, for fishing, hunting, or trapping on DoD property.

   e. Hunting, fishing, and trapping fees may be collected under the authority of the Sikes Act (reference (g)) to recover expenses of implementing a cooperation plan. The same Sikes Act fee shall be charged for a particular use to all users at a particular installation except senior citizens, children, and the physically handicapped. Exceptions to this policy may be granted by the heads of Military Services. Additional recreation fees may be collected under policies in DoD Directive 1015.6 (reference (t)) and DoD Instruction 1015.2 (reference (u)).

   f. Criteria and procedures for hunting, fishing, and trapping permits and fees shall be included in management plans. Fees collected under the authority of reference (g) shall be used only to defray the costs of the fish and wildlife management program at the installation collecting the fees. Collected fees shall be accounted for and reported according to instructions from the Comptroller, Department of Defense (C,DoD), under a special fund entitled "Wildlife Conservation" -- X5095. Unobligated balances shall be accumulated with current fee collections, and the total amount accumulated at
an installation shall be available for obligation as apportioned by the Office of Management and Budget (OMB).

g. Whenever hunting, fishing, or trapping is allowed on DoD installations, enforcement of wildlife laws shall be addressed in the fish and wildlife management plan and carried out by trained enforcement officials under the direction of or in coordination with the wildlife manager.

h. The suitability of a military installation for fish and wildlife management shall be determined after consulting with the FWS and host State. Each installation shall be classified as one of the following:

(1) Category I -- Installations with land and water resources suitable for fish and wildlife conservation. Each Category I installation shall maintain a wildlife management plan according to this Directive.

(2) Category II -- Installations that lack adequate land and water resources for feasible fish and wildlife conservation.

i. The number of users of fish and wildlife resources may be limited on a daily or seasonal basis. Membership in an organization, including rod and gun clubs, shall not be a prerequisite for or get priority in receiving permits.

j. Habitat management is the basic means of improving wildlife resources. Introduction and reintroduction of species shall occur only in coordination with appropriate agencies and in accordance with a cooperative plan. When predator or animal damage control is a necessary part of natural resources management or mission performance, it shall be accomplished according to the cooperative plan, relevant laws and regulations, and in coordination with adjoining land managers.

k. Fish and wildlife conservation shall be considered in all site feasibility studies and project planning, design, and construction. Appropriate conservation work and associated funding shall be included in project proposals and construction contracts and specifications.

l. Priority shall be given to entering into contracts for services that implement wildlife management or enforce wildlife laws with Federal and State Agencies with responsibility for wildlife conservation.

m. Where appropriate, natural resources management plans shall address habitat management and enhancement, current wildlife and fish inventories and population trends, endangered and other special species management, game and nongame species management, access policy and user program, administration of user fee program, law enforcement, cooperating agencies' responsibilities, and multiple use management.

4. Outdoor Recreation

a. Whenever practicable, DoD lands with suitable resources shall be managed to conserve and use natural resources for the outdoor recreation opportunities of present and future generations. The policies and procedures herein apply to outdoor recreation programs as defined in enclosure 2 and supersedes those in DoD Directive 1015.6 and DoD Instruction 1015.2 (references (t) and (u)).
b. Conservation of outdoor recreation resources shall be considered in all plans, programs, site feasibility studies, and project planning and design.

c. Installations having resources suitable for outdoor recreation other than hunting, fishing, and trapping are encouraged to develop cooperative agreements or plans with other Federal Agencies and appropriate State Agencies to facilitate the development and management of those programs.

d. Public access to DoD properties for outdoor recreation shall be allowed whenever compatible with public safety and mission activities. User fees may be collected to recover expenses of managing natural resources for outdoor recreation, and access quotas may be established to reflect the carrying capacity of the areas involved. Public outdoor recreation opportunities shall be equitably distributed by impartial procedures, such as a first-come, first-served basis or by drawing lots. When public access must be withheld, that determination shall be explained in the natural resources management plan.

e. Off-road vehicle use shall be managed to protect natural resources, promote safety, and avoid conflicts with other uses of DoD properties. Use of off-road vehicles shall be monitored and evaluated regularly by natural resources management professionals. All land and water areas shall be closed to such use unless an environmental impact analysis in accordance with DoD Directive 6050.1 (reference (1)) has been completed and the use is specifically approved and regulated. Specific areas that shall not be used by recreational off-road vehicles are those:

1. Restricted for security or safety purposes.
2. Containing fragile geological and soil conditions, flora or fauna, or other natural characteristics.
3. With significant archeological, historical, or paleontological resources.
4. Designated as wilderness or scenic areas.
5. Where noise would adversely affect other users, wildlife, or adjacent communities.

f. Whenever appropriate, outdoor recreation plans shall address inventories, trends, and management of resources suitable for outdoor recreation; aesthetics; development of opportunities and potential uses; potential user groups and access policy; user fee program; user ethics programs; and multiple use management.

5. Special Areas. Areas on DoD installations that contain natural resources that warrant special conservation efforts shall be identified. After appropriate study and coordination, such areas may be designated as Special Interest Areas. Upon such designation, the integrated natural resources management plan for the installation shall address the special management necessary for the area.