

Department of the Interior Departmental Manual

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Part 604: Landscape-Level Management

Chapter 1: Implementing Landscape-Level Approaches to Resource Management

Originating Office: Office of Policy Analysis

604 DM 1

1.1 **Purpose.** This chapter establishes Department of the Interior (DOI) policy and provides guidance to bureaus/offices on implementing landscape-level approaches to resource management (herein described as landscape-level approaches).

1.2 **Scope.**

A. The policy in this chapter applies to all bureaus/offices responsible for the management of resources, including but not limited to water, lands, air quality, natural, scenic, recreational, and cultural, and infrastructure under the jurisdiction of DOI. This chapter does not replace existing authorities or regulations.

B. This chapter does not apply to:

(1) Office of the Inspector General, or

(2) where the Secretary does not have discretionary control over, or otherwise lacks authority to manage, the resources in furtherance of this chapter.

1.3 **Authorities.** The Authorities for the policy in this chapter are provided in the Appendix.

1.4 **Definitions.**

A. Landscape. For the purposes of this chapter, as well as related DOI efforts, a “landscape” is as an area encompassing an interacting mosaic of ecosystems and human systems characterized by a set of common management concerns. The landscape is not defined by the size of the area, but rather by the interacting elements that are relevant and meaningful in a management context. The term “landscape” is not exclusive of areas described in terms of aquatic systems, such as watersheds, which may represent the appropriate landscape scale (*600 DM 6, DOI Public Land Policy, Landscape Scale Mitigation Policy*).

B. Landscape Goals. For the purposes of this chapter, landscape goals are broad statements of present and desired future landscape condition, developed in coordination with stakeholders. Goals could include desired conditions for commercial or economic development or resource extraction, provision of key ecological services to communities, or protection and conservation of habitats or species. Critical attributes that are crucial to the landscape goals can then be identified and managed across multiple scales.

C. Landscape-Level Approach. For the purposes of this chapter, as well as related DOI efforts, a landscape-level approach (sometimes called a landscape-scale approach) is a structured and analytical method that informs resource management decisions at multiple spatial scales, typically when diverse stakeholders seek multiple social, environmental, and economic goals. Landscape-level approaches identify landscape goals and critical attributes, assess resource availability, condition, and trend, and identify explicit resource objectives at multiple scales and often across administrative boundaries and political jurisdictions. Landscape-level approaches then identify threats and/or opportunities to achieve resource management objectives, and can be used to prioritize actions to best achieve such objectives. Landscape-level approaches are encouraged in order to better inform land and resource policy and management decisions. For the purposes of this policy, ‘landscape-level approach’ is a generic term to include landscape-level strategies and plans and/or the utilization of such a method in the absence of landscape-level strategies or plans. These approaches are applied to inform bureau and office work processes, such as development and approval of plans, issuance of permits and authorizations, establishment of mitigation priorities, production and delivery of science and data, efficient and effective management of resources, and budget allocation.

D. Resource Management Objectives. For the purposes of this chapter, resource management objectives provide measurable and quantitative descriptions of a desired outcome for a particular resource at multiple scales within a landscape.

1.5 **Policy**. It is the policy of DOI to utilize landscape-level approaches, when appropriate, to achieve landscape goals at multiple spatial and temporal scales. The ultimate objective of this approach is to integrate the management of resources across spatial and temporal scales, often across administrative boundaries and political jurisdictions, to enable efficient and effective resource management. Bureaus/offices should work together (and work with other federal, state, tribal, local, and private partners and stakeholders, where appropriate) to deploy landscape-level approaches to manage resources under DOI’s authority, in order to enhance opportunities to best achieve the missions and goals of DOI. These approaches should largely be accomplished through the development of integrated landscape-level strategies or plans that inform management decisions and work processes. Bureaus/offices should implement landscape-level approaches through collaborative and multi-jurisdictional mechanisms and structures including, but not limited to, the DOI Landscape Conservation Cooperatives.

A. Consistent with existing laws and regulations, it is DOI’s policy to advance landscape-level approaches that promote:

(1) Meaningful coordination with diverse stakeholders. Landscape-level approaches will require engagement from partners and stakeholders across multiple jurisdictions and sectors that collectively represent the diversity of interests in resource use and condition at multiple-scales. Providing opportunities for participation in structured, inclusive processes is essential to promote transparency and coordination to identify and achieve shared goals.

(2) Use of high quality information. The DOI is committed to incorporating best available science and other high quality information into decisions and will develop scientific information and tools, as necessary, to provide better information in areas of greatest uncertainty. This includes development, maintenance, and utilization of geospatial information systems and a common set of data and tools, and the training necessary to promote their effective use in development of landscape-level approaches.

(3) Consideration of multiple scales. Wherever appropriate, bureaus and offices should consider resource management at multiple spatial and temporal scales as a means to achieve key social, ecological, and economic goals. Landscape-level approaches should consider how decisions at one scale (a) may affect resources at other scales; and (b) can inform and achieve multiple resource objectives.

(4) Interdisciplinary, science-based understanding of landscape dynamics. Changes in resource conditions and uses associated with such drivers as climate change, emerging invasive species and disease, and changes in human population and demographics are intertwined and can be best understood with a systems approach. This understanding can help managers evaluate the outcomes and long-term ramifications of decisions, and compare the potential impacts of various scenarios. The application of this interdisciplinary approach will require the use of the best available science and other high quality information from multiple sources, and the integration of this information into a suite of tools useful to managers and decision makers.

(5) Integration of science, management, and monitoring and evaluation efforts. Landscape-level strategies or plans should be based upon best available science and high-quality information including (a) synthesis of the best available science; (b) identification and prioritization of outstanding questions that merit scientific investigation; (c) a strategy to implement research efforts to address priority questions; and (d) establishment of a structure for delivering or reporting timely science and data. Monitoring and evaluation frameworks should use standard, quantitative indicators to consistently report on resource condition and trends at multiple-scales across the landscape. Bureaus and offices should evaluate the effectiveness of management actions using these monitoring indicators to determine if management actions are achieving desired outcomes and, if not, to determine the causative factors in order to inform changes in management actions to achieve the desired outcomes.

(6) Resilience to environmental change. Landscape-level approaches are a means for decision-making processes to improve the resilience of multiple resource values in the face of social, environmental, and economic changes, such as those driven by climate change.

It is Departmental policy (523 DM 1, *DOI Climate Change Adaptation*) to advance practices that help mitigate the impacts of climate change, including:

- (a) protect diversity of habitat, communities and species;
- (b) protect and restore core, un-fragmented habitat areas and the key habitat linkages between them;
- (c) anticipate and prepare for shifting wildlife movement patterns;
- (d) maintain key ecosystem services and functions;
- (e) monitor, prevent, and slow the spread of invasive species;
- (f) focus development activities in ecologically-disturbed areas when possible;
- (g) avoid ecologically-sensitive landscapes, culturally sensitive areas, and important wildlife corridors;
- (h) identify and avoid investments that are likely to be undermined by climate impacts, such as investing in infrastructure likely to be adversely affected by repeated floods or inundation, or planting/introducing species vulnerable to changes in temperature or precipitation patterns.

B. To advance this policy and initiate implementation, the Department will:

- (1) Foster a community of practice by establishing a Department-wide Landscape-Level Working Group (LLWG) comprising experts from each of the bureaus and offices subject to this policy;
- (2) Work with the LLWG to deliver a guidance document or handbook for the landscape-level approach;
- (3) Work with the LLWG to identify landscapes to test and improve landscape-level practices that are geographically specific and include multiple bureaus;
- (4) Work with the LLWG to establish goals and indicators that may be useful for multiple landscapes;
- (5) Integrate landscape-level approaches into Departmental strategic plans and budget submissions where appropriate; and
- (6) Encourage relevant bureaus and offices and other departments and agencies (e.g. U.S. Department of Agriculture, National Oceanic and Atmospheric Administration, the Environmental Protection Agency and Department of Defense) to participate in the LLWG.

1.6 **Responsibilities.**

- A. Deputy Secretary. Provides Departmental oversight.
- B. Assistant Secretary – Policy, Management and Budget. Provides staff support to monitor implementation of the policy and requirements in this chapter. Oversees coordination of budgets and practices that support a landscape-level approach.
- C. Program Assistant Secretaries oversee implementation of this policy in their respective bureaus/offices.
- D. Heads of Bureaus and Offices.
 - (1) Ensure bureau compliance with this policy.
 - (2) Ensure effective bureau participation in interagency landscape-level working groups, such as Landscape Conservation Cooperatives (LCCs).
 - (3) Identify an individual or individuals to participate in the LLWG and incorporate that role into their performance plan. Responsibilities include:
 - (a) Developing and periodically updating bureau/office policy and guidance to address landscape-level approaches; and preparing an annual report, if appropriate, on the application of this policy as it relates to bureau/office-specific missions and authorities, consistent with existing Departmental performance metrics.
 - (b) Working collaboratively with other bureaus/offices and with the Department to develop, use, and institutionalize policies and practices to implement this chapter, including efforts to conduct a periodic review of the execution of this policy.
 - (c) Working with appropriate officials to ensure that persons conducting landscape-level approaches and related management activities have the appropriate experience and training to implement this policy. Where appropriate, include the application of landscape-level approaches in employee performance appraisal plans.

1.8 **Legal Effect.** This policy is intended to improve the internal management of the Department. It does not create any right or benefit, substantive or procedural, enforceable at law or in equity by any person against the United States, its agencies, its officers or employees, or any other person. It does not alter or affect any existing duty or authority of individual bureaus or offices.

Appendix

Authorities

This chapter is consistent with Federal laws and other authorities, including the following:

- A. National Environmental Policy Act (NEPA) of 1969, 42 U.S.C. § 4321 et seq.
- B. Federal Land Policy and Management Act (FLPMA), 43 U.S.C. § 1701 et seq.
- C. Endangered Species Act (ESA), 16 U.S.C. § 1531 et seq.
- D. Mineral Leasing Act of 1920, as amended, 30 U.S.C. § 181 et seq.
- E. Clean Water Act; 33 U.S.C. § 1251 et seq.
- F. National Landscape Conservation System (NLCS, Organic Act), 16 U.S.C. § 7202 et seq.
- G. National Historic Preservation Act (NHPA) – 54 U.S.C. § 300101 et seq.
- H. National Indian Forest Resources Management Act of 1990, 25 U.S.C. Ch. 33, P.L. 101-630, Title III, 104 Stat. 4532.
- I. Archaeological Resources Protection Act of 1979, 16 U.S.C. § 470aa-mm.
- J. Clean Air Act, 42 U.S.C. § 7401, et seq.
- K. Native American Graves Protection and Repatriation Act, 25 U.S.C. §3000-3013.
- L. National Park Service (NPS) Organic Act of 1916 and General Authorities Act of 1970, as amended, 54 U.S.C. § 100101.
- M. National Wildlife Refuge System Administration Act, 16 U.S. Code § 668dd, et seq.
- N. National Wildlife Refuge System Improvement Act of 1997 (P.L. 105-57)
- O. Outer Continental Shelf Lands Act (OCSLA), 43 U.S.C. §§ 1331 et seq.

- P. Paleontological Resources Preservation Act (PRPA), 16 U.S.C. § 470aaa, et seq.
- Q. Federal Power Act; 16 U.S.C. § 791-828c.
- R. Fish and Wildlife Conservation Act, 16 U.S.C. § 2901-2912.
- S. Fish and Wildlife Coordination Act (FWCA), 16 U.S.C § 661-667(e), as amended.
- T. Migratory Bird Treaty Act (MBTA), (16 U.S.C. § 703-712.)
- U. Bald and Golden Eagle Protection Act of 1940, as amended, 16 U.S.C. § 668-668c.
- V. Reciprocal Fire Protection Act of May 27, 1955, 42 U.S.C. § 1856.
- W. Robert T. Stafford Disaster Relief and Emergency Assistance Act, P.L. 93-288.
- X. The Wyden Amendment, 16 U.S.C. § 1011.
- Y. Council on Environmental Quality (CEQ) NEPA Regulations, 40 CFR § 1500-1508.
- Z. Department of the Interior (DOI) NEPA Regulations, 43 CFR Part 46.
- AA. Bureau of Land Management Planning Regulations, 43 CFR Part 1600.
- BB. Executive Order 13604, *Improving Performance of Federal Permitting and Review of Infrastructure Projects*, issued March 22, 2012.
- CC. Executive Order 13186, *Responsibilities of Federal Agencies to Protect Migratory Birds*, issued January 17, 2001.
- DD. Executive Order 13653, *Preparing the United States for the Impacts of Climate Change*, issued November 6, 2013.
- EE. Executive Order 13112, *Invasive Species*, February 3, 1999
- FF. Executive Order 13751, *Safeguarding the Nation from the Impacts of Invasive Species*, December 5, 2016
- GG. Presidential Memorandum – *Modernizing Federal Infrastructure Review and Permitting Regulations, Policies, and Procedures*, issued May 17, 2013.
- HH. Presidential Memorandum – *Transforming Our Nation’s Electric Grid Through Improved Siting, Permitting, and Review*, issued June 7, 2013.