

## **DIRECTOR'S ORDER #47: ACOUSTIC ENVIRONMENT PRESERVATION AND NOISE MANAGEMENT**

**Approved:** \_\_\_\_\_  
Director

**Effective Date:** \_\_\_\_\_

**Duration:** This Order will remain in effect until revised or rescinded

This Director's Order, together with Reference Manual 47 (RM 47), supersedes and replaces Director's Order #47 Soundscape Preservation and Noise Management, approved December 1, 2000, and any other conflicting policy guidance. It supplements the National Park Service soundscape management policies in sections 4.9 (Soundscape Management), 5.3.1.7 (Cultural Soundscape Management), and 8.2.2 (Recreational Activities) of NPS *Management Policies* (2006).

The change in title from #47: Sound Preservation and Noise Management to #47: Acoustic Environment Preservation and Noise Management reflects the evolving nature of this topic and updated terms and practices used by soundscape protection, acoustic ecology, and noise management professionals.

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### **1. Purpose**

The purpose of this Director's Order is to supplement and clarify *Management Policies* by providing additional guidance on monitoring, preserving, and restoring the acoustic environment in national parks. This will help the Service meet its obligation under the 1916 NPS Organic Act ([54 USC 100101\(a\) et seq.](#)) to manage and preserve natural and cultural resources and values, including the acoustic environment, in a manner that will leave them unimpaired for the enjoyment of future generations.

## 2. Background

The acoustic environment is a unique and essential national park resource. An important part of the NPS mission is to preserve and/or restore the natural and cultural resources of the parks, which include the acoustic environments and soundscapes associated with units of the National Park System. The Service's obligation to protect natural and cultural park sounds is outlined in statutes, regulations, and *Management Policies*. Park soundscapes are also an integral part of the visitor experience; therefore, the NPS manages park "uses" to protect soundscapes (see *Management Policies*, chapter 8).

Park acoustic environments are:

- Inherent components of "the scenery and the natural and historic objects and the wild life" protected by the NPS Organic Act of 1916;
- Vital to the ecological processes in many parks and provide important indicators of the health of various ecosystems;
- Integral elements of cultural and historic sites, affecting visitors' ability to experience the sites in meaningful and authentic ways; and
- Essential components of wilderness character protected by the Wilderness Act ([16 USC 1131-1136](#)), enabling visitors to experience solitude and "the earth and its community of life....untrammeled by man."

Like other park resources preserved by the American people, the acoustic environment and natural and cultural soundscapes are parts of our Nation's legacy. The tranquility of historic settings; the solemnity of memorials and battlefields; and the sounds of thundering waterfalls, elk bugling, and wind whispering through majestic canyons are inextricable parts of the park experience. The NPS also recognizes that appropriate anthropogenic (human-caused) sounds are inseparable from park purposes, resource protection, and visitor access and enjoyment; thus, appropriate human-caused sounds are also part of the acoustic environment that we protect.

The NPS is concerned about excessive noise because it can impede our ability to carry out the NPS mission, and in some cases may cause impairment of park resources or values. Determining the anthropogenic sound sources and levels that are compatible with park purposes must be based on the best available science and evaluated within the framework of relevant laws, regulations, policies, and public involvement.

## 3. Authority

Authority to issue this Director's Order is contained in the National Park Service Organic Act ([54 USC 100101\(a\) et seq.](#)), and the delegations of authority contained in [Part 245](#) of the Department of the Interior Manual.

This Director's Order is intended only to improve the internal management of the NPS, and is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or equity by a party against the United States, its departments, agencies, instrumentalities or entities, its officers or employees, or any other person.

## 4. Definitions

In recent years, the scientific literature regarding the importance of the acoustic environment and its role in the visitor experience and the protection of natural and cultural resources has evolved. As a result, the terminology we use has become more standardized. Since the NPS protects and enhances both park resources and visitor experiences, it is necessary to distinguish between the physical sound sources and the human perceptions of those sounds. In doing so, the NPS has adopted the following terminology to be consistent with International Organization for Standardization (ISO) standard 12913-1. [ISO/ Final Draft International Standard (FDIS) 12913-1- Acoustics -- Soundscape -- Part 1: Definition and conceptual framework]:

- *Acoustic environment* is the combination of all the physical acoustic resources in a given area as modified by the environment. Note: This term is consistent with the definition of soundscape in *Management Policies*, section 4.9, which describes “park natural soundscape resources” as encompassing all the natural sounds that occur in parks.
- *Acoustic resources* include natural sounds (wind, water, wildlife, weather) and cultural and historic sounds (historic weapons demonstrations, tribal ceremonies, quiet).
- *Soundscape* is the component of the acoustic environment that can be perceived and comprehended by humans. The character and quality of a park’s soundscape influence visitors’ perceptions and overall park experience.
- *Natural ambient* is composed of the natural sound conditions in a park that exist in the absence of any anthropogenic noise.

Making the distinction between these terms will allow managers to identify specific objectives, establish monitoring standards, and establish and carry out targeted and effective strategies for protecting and conserving the acoustic environment and the visitor experience. More definitions may be found in existing NPS guidance (RM 47, *Management Policies*, Natural Sounds and Night Skies Division (NSNSD) Acoustical Monitoring Training Manual) about protection of the acoustic environment.

## 5. Policies

### 5.1 Existing Laws, Policies, and Regulations

Preservation of the acoustic environment and noise management activities are subject to the policies in *Management Policies*. The chapters of *Management Policies* that are most pertinent to this topic are:

- Chapter 1, Introduction
- Chapter 2, Park System Planning
- Chapter 4, Natural Resource Management
- Chapter 5, Cultural Resource Management
- Chapter 6, Wilderness Preservation and Management
- Chapter 8, Use of the Parks

Regulations for general audio disturbances, snowmobiles, and boats are published at 36 CFR [2.12](#), 36 CFR [2.18](#), and 36 CFR [3.15](#).

Recognizing the potential for adverse impacts from overflights of national parks, Congress enacted the National Parks Air Tour Management Act of 2000 (NPATMA) ([49 USC 40128](#)). NPATMA created a cooperative Federal Aviation Administration (FAA)/NPS public planning process to develop Air Tour Management Plans or Air Tour Management Agreements for parks with existing or proposed air tours. The law and the regulations at [14 CFR Part 91](#) and [14 CFR Part 136](#) established policies for managing commercial air tourism over national parks.

## **5.2 Minimizing Impacts from NPS-Generated Noise**

Section 1.8 of *Management Policies* sets forth the NPS obligation to demonstrate and work with others to promote leadership in environmental stewardship. Since noise generated from park administrative functions can contribute to the derogation of acoustic environment, the NPS must lead by example in reducing park-generated noise. (See section 8 of this Order).

## **6. Responsibilities and Delegations**

### **6.1 Director**

Unless otherwise delegated, the Director will:

- Determine national policy changes;
- Authorize, approve, or amend Air Tour Management Plans;
- Recommend legislative amendments to NPATMA;
- Issue any reports to Congress; and
- Sign or amend general agreements between the NPS, the FAA, and other agencies.

### **6.2 Associate Director, Natural Resource Stewardship and Science (ADNRSS)**

The ADNRSS will oversee the NPS program for protection of the acoustic environment. The ADNRSS will:

- Issue, review, and revise, as necessary, NPS procedures for implementing this Director's Order through updates to Reference Manual 47 (RM-47);
- Coordinate with other associate, assistant, and regional directors about how to protect the acoustic environment and soundscapes in parks;
- ;
- Coordinate with the regional directors to implement NPATMA-related activities; and
- Determine when to grant or modify an interim operating authority as required by NPATMA. Specific requirements and limitations are described in these subsections of [49 USC 40128\(c\)](#):
  - Subsection (2)(B) - increases in interim operating authority must be agreed to by NPS and FAA
  - Subsection (2)(F) - interim operating authority shall promote protection of national park resources and visitor experiences
  - Subsection (2)(I) - may allow for modifications of interim operating authority without further environmental review
  - Subsection (3)(A) - may approve interim operating authority for new entrant air tour operator based on professional expertise
  - Subsection (3)(B) - new interim operating authority would not create a noise problem at the park

### **6.3 Natural Sounds and Night Skies Division (NSNSD)**

Delegated by the ADNRSS, the NSNSD serves as the policy and program office for protection of the acoustic environment. As such, the division will:

- Develop Service-wide policy and guidance on monitoring, preserving, and restoring the acoustic environment;
- Develop and maintain RM-47 with comprehensive guidance on management planning and protection of the acoustic environment. RM 47 will include applicable policies, procedures, and technical guidance on planning, inventory, monitoring, impact assessment, and best practices for noise mitigation;
- Coordinate, through the ADNRSS, with other directorates and regions on consistent, Service-wide approaches to acoustic environment issues, including protection, planning, and management of park resources and visitor use;
- Identify and promote use of best available noise control technologies and management practices, Buy Quiet programs, and noise specifications in contracting and procurement activities to reduce or mitigate NPS-generated noise in parks;
- Provide technical assistance to parks for acoustic inventory and monitoring, data collection and analysis, acoustic ambient measurements, noise source characterization and measurement, environmental impact analyses for soundscapes and the acoustic environment, noise mitigation strategies, and park planning efforts;
- Serve as a central clearinghouse and information repository of best practices for adaptive management, acoustic resource protection, and noise mitigation;
- Coordinate, in collaboration with parks and regions, the development of Air Tour Management Plans (ATMPs) and agreements for parks with commercial air tours, as mandated by NPATMA;
- Chair the NPS Air Tour Advisory Council (ATAC) to offer opportunities for Service-wide collaboration and information-sharing about preservation and protection of the acoustic environment of parks from air tours impacts;
- Establish and maintain a NPS Acoustic Advisory Council to advise and assist the Natural NSNSD in fulfilling its responsibilities
- Represent the NPS on the Federal Interagency Committee on Aviation Noise; and
- Serve as the NRSS point of contact on overflight and noise issues that require coordination with the FAA (except issues involving safety, pilot certification, or under the purview of the NPS Division of Fire and Aviation Management, the Department of Defense, State and local government agencies, or other external parties).
- Co-chair the National Parks Overflights Advisory Group (NPOAG), an Aviation Rulemaking Committee mandated under NPATMA, which gives advice, information, and recommendations to the Director and the FAA Administrator regarding implementation of NPATMA.

### **6.4 Other Associate Directors, Regional Directors, and Superintendents**

These managers are also responsible for implementing this Director's Order. They will:

- Coordinate with the ADNRSS on
  - management and planning of the acoustic environment, including development of acoustic resource management plans;

- air tour management planning, military overflights, and other aviation related issues; and
- other actions, including transportation and construction, with the potential to significantly affect the acoustic environment of parks.
- Consider the acoustic environment as an impact topic during NEPA reviews of park planning and management actions, including
  - development of general management plans (GMP), foundation documents, and other planning documents;
  - consideration of new park uses; and
  - other actions with the potential to affect park soundscapes and the acoustic environment.
- Consult with the ADNRSS and relevant regional directors before taking action or authorizing modifications to existing commercial air tour activities. This includes changes to interim operating authorities and approving new air tour entrants.

## **6.5 NPS Advisory Councils**

The Air Tour Advisory Council and the Acoustic Advisory Councils are internal NPS groups that serve as forums for exchanging information and providing input to NSNSD to assist in implementing the operational mission and goals of the Division

### **6.5.1 Acoustic Advisory Council**

To ensure that NSNSD is responsive to and reflects the needs and priorities of parks and regional offices, the NSNSD will establish and chair the NPS Acoustic Advisory Council. The council will serve as a forum for exchanging information and soliciting park and regional office input on new and existing issues that affect acoustic resources, soundscapes, and acoustic environments in national parks. Council membership will include selected superintendents or their designees; regional office representatives; NRSS, Visitor and Resource Protection (VRP), and Park Planning, Facilities, and Lands (PPFL); and other directorates, as appropriate. The council may invite other park managers, regional office or WASO staff, or others to provide expertise on specific issues.

The council will assist the NSNSD to:

- Identify and assess programmatic issues;
- Review programmatic needs and recommend priorities on requests for technical support;
- Provide field perspectives and make recommendations for program direction; and
- Review policy guidance and develop recommendations for new or revised policies.

The council will function until the ADNRSS determines it is no longer necessary.

### **6.5.2 Air Tour Advisory Council**

The ATAC is a standing committee of the NPS convened to develop recommendations and serve as a forum for information exchange associated with the implementation of NPATMA.

The membership of the Air Tour Advisory Council will be determined by the Natural Sounds Program and may include park superintendents or their designees, regional soundscape

coordinators or other regional resource managers as appropriate, representatives of the Solicitor's office, and other NPS leadership or senior staff as determined by the Natural Sounds Program.

The Air Tour Advisory Council (ATAC) will assist NSNSD by:

- Serving as an advisory body of federal employees to the Director of the National Park Service via the Natural Sounds Program on matters pertaining to parks with aviation issues, including implementation of the National Parks Air Tour Management Act (NPATMA) of 2000.
- Assuring the preservation and protection of park resources and values and visitor experience of the national park units with respect to aviation impacts.
- Providing members an opportunity to discuss other noise related issues.
- Providing members an opportunity to participate in developing and implementing policy and guidance regarding procedural aspects of NPATMA and development of ATMPs.
- Formulating recommendations and potential solutions to issues with the Federal Aviation Administration (FAA).

## **7. Planning and National Environmental Policy Act (NEPA) Compliance**

Consideration of the acoustic environment and natural and cultural soundscapes is an important component of the park planning and NEPA compliance process. General management plans and related planning documents should evaluate and establish management objectives and strategies for protecting the acoustic environment, and for preserving and restoring acoustic resources. Other plans, such as wilderness plans, resource stewardship strategies, transportation plans, and commercial service plans, should discuss the acoustic environment and soundscape preservation, protection, and restoration. Superintendents should consult with the NSNSD, as appropriate, during internal and external reviews of NEPA compliance documents prepared by the NPS and other Federal agencies to ensure Service-wide consistency with implementation of related policy.

When appropriate, superintendents should develop a separate acoustic resource management plan. When undertaking acoustic resource management planning efforts, superintendents should coordinate with the NSNSD and follow the processes for evaluating natural and cultural soundscape conditions outlined in RM-47. The basic elements of an acoustic resource management planning process include:

1. Scoping to identify the purpose and need for an acoustic resource management plan and to obtain public input;
2. A description of the park's acoustic environment, including sound sources, levels, and natural and existing ambient conditions;
3. Identification of existing or proposed sources of anthropogenic sounds that are consistent with park purposes, as defined by enabling legislation, authorities, foundation document, GMP, and other relevant laws, regulations, or planning documents;
4. Management objectives, indicators, and standards for protecting the acoustic environment and managing excessive noise;
5. Potential management actions that should be considered to minimize impacts from noise; and
6. A monitoring and adaptive management process to identify trends in acoustic conditions and determine the extent to which objectives and standards are being met.

## **8. Minimizing Noise Impacts from NPS Activities**

Superintendents will ensure that park operations, maintenance activities, and permitted uses that affect the acoustic environment are necessary and will take steps to minimize noise impacts. To help promote best practices for protecting the acoustic environment, superintendents should refer to RM-47 and consult with the NSNSD about successful noise reduction methods that have been used in other parks.

## **9. Engagement and Education**

Success in managing, preserving, and restoring the acoustic environment of parks will require that the NPS reach out to park visitors and the public to:

- Educate people about NPS soundscape responsibilities;
- Share lessons learned; and
- Encourage a cooperative approach to protecting the acoustic environment, acoustic resources, and natural soundscapes in parks.

This may be accomplished by developing education, outreach, and constructive engagement strategies.

### **9.1. Interpretation and Education**

The sounds intrinsic to national parks can instill in visitors powerful emotional, intellectual, and physical connections with park resources. Interpretive and educational programs can facilitate these connections. When relevant, interpretative activities about the acoustic environment and soundscapes should be integrated into on- and off-site programs, and printed, electronic, and social media. (See also [Director's Order #6: Interpretation and Education](#))

### **9.2 Outreach and Civic Engagement**

Superintendents will proactively engage park partners, concessioners, authorized commercial services providers, visitors, and other park users in collaborative efforts to identify and minimize intrusive noise generated in parks.

The NPS has the authority and responsibility to represent a park's interests to protect park resources and visitors from external threats. Thus, in instances where noise generated beyond park boundaries adversely impacts the acoustic environment of parks, superintendents will engage with adjacent and nearby communities, other Federal agencies, and State, local, or tribal governments with direct jurisdiction over nearby lands. Superintendents will work with these parties to take cooperative actions to restore the acoustic environment and to mitigate, prevent, or eliminate intrusive noise sources. (See also *Management Policies* 1.6, 1.7, and 1.8, and [Director's Order #75A: Civic Engagement and Public Involvement](#))

----- *End of Director's Order* -----