

Species and Habitat Conservation— Industry Fundamentals

API BULLETIN 4565
FIRST EDITION, NOVEMBER 2022



American
Petroleum
Institute

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Introduction

The species and habitat conservation fundamentals presented in this bulletin are processes and practices used by the oil and natural gas industry to manage potential risks of project-related impacts on wildlife and habitats while responsibly developing the nation's oil and natural gas resources. The industry employs a wide variety of operational practices in conjunction with environmental site screening and baseline environmental surveys to identify and mitigate adverse impacts during the exploration and production project life cycle. These processes and practices represent a continuously improving evolution of industry's exploration and production activities with regard to species and habitat conservation.

Oil and natural gas operators' business management efforts during exploration and development activities inherently support effective species and habitat conservation practices by emphasizing extensive planning and scheduling. Industry has adopted the key concepts of the mitigation hierarchy into its business planning and operating practices; however, to be most effective in applying species and habitat conservation practices, the regulatory policies and requirements addressing conservation should be fit for purpose, readily allow innovation, and, to the extent possible, encourage voluntary actions by operators and landowners.

Operators should foster broad stakeholder engagement through every phase of project development, and should include land and mineral owners, state and federal regulatory and wildlife agencies, and the public in the communities where oil and natural gas operations occur. Oil and natural gas development activities should be aligned with local and regional concerns and grounded in responsible practices and lessons learned from species and habitat conservation experience.

Species and Habitat Conservation—Industry Fundamentals

1 Scope

This bulletin is intended to provide oil and natural gas operators with information on conservation measures to support planning and execution of onshore oil and natural gas projects in the United States for conventional and unconventional (shale) developments. The processes and practices described herein are aimed primarily at industry professionals responsible for managing the potential risks of project impacts on biodiversity, but may also be used by contractors, sub-contractors, and vendors. The benefits of employing consistent conservation practices include increased conservation efficiency and stakeholder acceptance.

Oil and natural gas operators acknowledge that activities associated with the development of oil and natural gas resources have the potential to impact wildlife and habitats. These activities can include, but are not limited to, field exploration and production work (such as geophysical and seismic surveys), drilling operations, well completion activities, operations/production activities, construction of well production facilities and related infrastructure, and produced water management facilities.

This bulletin provides flexible and adaptable strategies, acknowledging that the application will vary between operators and environmental settings. Many operators already apply the same or similar practices or processes within their operations. The use of this bulletin is at each individual operator's discretion.

This document provides a brief explanation of the typical technology, practices, and processes employed by the oil and natural gas industry to identify, explore, develop, and produce hydrocarbon resources. Conservation processes and practices used by the oil and natural gas industry are discussed in more detail.

This document provides general discussion of exploration, construction, development, production, and facilities operations, but does not provide an extensive discussion of applicable local, state, and federal regulatory requirements. It is the responsibility of the operator to review local, state, and federal regulatory requirements applicable in their areas of operation, and, if needed, consult with third parties that have appropriate regulatory, scientific, technical, and legal expertise. Operators should consider referencing other available industry standards and guidance that can provide additional information.

In addition to this document, API has developed other environmentally related standards specifically applicable to shale development, including:

- API 51R ^[1], an environmental guidance document for use by the oil and natural gas industry;
- API 100-1 ^[2], which contains recommended practices for well construction and fracture stimulation design and execution as it relates to well integrity, groundwater protection, and fracture containment for onshore wells;
- API 100-2 ^[3], which contains recommended practices regarding the management of the environmental aspects of shale development during planning site selection; logistics; mobilization; rig-up; demobilization; and well stimulation operations;
- API 100-3 ^[4], which contains recommendations for engaging the communities where oil and natural gas development occurs.

2 Normative References

This document contains no normative references.