



United States Department of the Interior

OFFICE OF THE SECRETARY
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PEP – ENVIRONMENTAL STATEMENT MEMORANDUM NO. ESM 16-2¹

To: Heads of Bureaus and Offices

From: Mary Josie Blanchard, Acting Director
Office of Environmental Policy and Compliance

Subject: Landscape-Scale Mitigation in NEPA Analysis, Decision-Making and Implementation Monitoring

This memorandum provides guidance to bureaus and offices within the Department of the Interior regarding how to consider mitigation in the National Environmental Policy Act (NEPA) process, consistent with the recommendations of the Energy and Climate Change Task Force report on [A Strategy for Improving the Mitigation Policies and Practices of The Department of the Interior](#) and the Council on Environmental Quality (CEQ) NEPA guidance on [Appropriate Use of Mitigation and Monitoring and Clarifying the Appropriate Use of Mitigated Findings of No Significant Impact](#). Departmental NEPA regulations at [43 CFR Part 46](#) include mitigation provisions, and policy regarding decisions related to mitigation is provided in [516 Departmental Manual \(DM\)](#), [600 DM 6](#), and [522 DM 1](#).

1. Purpose and Scope

This memorandum provides guidance to bureaus and offices about how to consider mitigation through the NEPA process. Specifically, this memorandum provides guidance on how landscape-scale approaches to mitigation can be incorporated into the NEPA process, including how mitigation should be identified and evaluated in proposed actions and alternatives, and how mitigation commitments should be implemented to ensure compliance and effectiveness.

Through its mitigation policy ([600 DM 6](#)), the Department strives to ensure consistency in evaluating and implementing mitigation when carrying out its legal and regulatory responsibilities and in the management of Federal lands, waters, air quality, and other resources under its jurisdiction ([600 DM 6.5](#)), including when complying with NEPA. This guidance is not intended to necessitate bureau or office establishment of new or different NEPA documentation from existing practices, but rather to encourage integration of the consideration of mitigation opportunities as early as possible in the

¹ The guidance in this Environmental Statement Memorandum is being issued under the authority provided to the Office of Environmental Policy and Compliance (OEPC) by [381 Departmental Manual \(DM\) 4.5B](#), to convey instructions and guidance through its Environmental Memoranda Series, and by [516 DM 3.2](#) and [516 DM 1.21](#), which authorizes OEPC to provide advice, assistance, and guidance to the Department on matters pertaining to environmental quality and to oversee and coordinate the Department's compliance with the National Environmental Policy Act (NEPA) and the Council on Environmental Quality regulations.

NEPA process, whether in (a) the formulation of the proposed action, (b) the development of reasonable alternatives and the analysis of impacts in NEPA documents; or (c) any commitments made in decision documents. The guidance addresses mitigation of adverse impacts to resources (including their values, services, and functions) within and beyond the administrative jurisdiction of the bureau or office contemplating a proposed action.

2. Mitigation Definition

Mitigation is a means to limit or offset the potential adverse environmental impacts associated with an action ([43 CFR 46.100](#)). Mitigation is defined in CEQ regulation ([40 CFR 1508.20](#)) to include:

- a. Avoiding the impact altogether by not taking a certain action or parts of an action;
- b. Minimizing impacts by limiting the degree or magnitude of the action and its implementation;
- c. Rectifying an impact by repairing, rehabilitating, or restoring the affected environment;
- d. Reducing or eliminating the impact over time, by preservation and maintenance operations during the life of the action; and
- e. Compensating for the impact by replacing or providing substitute resources or environments.

The Department's mitigation policy defines mitigation consistent with CEQ's definition, but summarizes the elements of mitigation as avoidance, minimization, and compensation (600 DM 6.4 Definitions, paragraph A and B). These elements provide for a hierarchical sequence of suitability where limiting mitigation, such as avoidance and minimization, is generally considered preferable to compensatory mitigation, such as compensation for residual (also known as unavoidable) adverse impacts. While bureaus and offices should consider mitigation measures in this sequence, the mitigation policy recognizes that specific circumstances could exist that warrant departures from this mitigation sequence to achieve better outcomes.

3. Evaluation of Landscape-scale Mitigation in NEPA Processes

A landscape-scale approach ([600 DM 6, section 6.4, Definitions, paragraph E](#)) to mitigation is based in consideration of existing studies, strategies, plans, and previous NEPA documents ([43 CFR 46.120](#)) that have assessed the mitigation of adverse impacts to resources. Relevant information from any such existing studies, strategies, plans, and previous NEPA documents should be incorporated, as appropriate, into the proposed action and its NEPA evaluation.

Such relevant information may be used in either programmatic or project-specific NEPA processes, to assist in identifying feasible and reasonable mitigation measures.^{2, 3}

² See Council on Environmental Quality *Forty Most Asked Questions Concerning CEQ's NEPA Regulations*,

Bureaus and offices are encouraged to use land use, management, or conservation plans developed by Federal, State, regional, and/or local planning agencies to support the development of proposed actions and their evaluation through NEPA, consistent with bureau and office authorities.

The result could inform the evaluation of the mitigation measures under consideration, as reflected in either the proposed action, as a design feature, or in the evaluation of the alternative(s) in the NEPA process. This detailed evaluation could inform how implementation of that mitigation may result in a no net loss or net benefit (600 DM 6, section 6.5 Policy) to one or more resources or how resources, even after action implementation, could be negatively affected. This overall consideration of environmental impacts and the rationale for this consideration and its relationship to a landscape-scale approach should be documented during the NEPA process and reflected in NEPA documentation.

The analysis of the proposed action and any alternatives, whether in an Environmental Assessment (EA) or an Environmental Impact Statement (EIS), must include consideration of the effects of the proposed action or alternative as well the effects of any appropriate mitigation measures that are considered (40 CFR 1502.14(f)). Bureaus and offices may analyze mitigation as elements of the proposed action design or as measures considered in one or more alternatives or sub-alternatives to the proposed action, or a combination of both ([43 CFR 46.130](#)). When considering the proposed action and any appropriate mitigation, bureaus and offices must solicit the participation of all persons or organizations that might be interested or affected, as early as possible ([43 CFR 46.200\(b\)](#)). This input from, and, where appropriate, collaboration with, the applicant (if applicable), the public and other agencies during the NEPA process could result in refinements or other changes to proposed mitigation measures. The bureau or office determination of what mitigation is appropriate as part of the proposed action, as part of the project design and/or implementation, is reflected in the NEPA documentation and the associated decision document(s).

Issues to address in considering mitigation may include, but are not limited to:

- The relevant context of the action proposed within its particular landscape, region, watershed, etc., as appropriate. Federal, State, and local plans, especially regional plans, could be of particular relevance and provide potential landscape-scale mitigation measures for incorporation in the proposed action or alternatives considered in the NEPA process.
- The dynamic character of the environmental context in relation to the action proposed, in particular the impacts of global climate change. For example, when proposed mitigation measures include designs to improve the resilience of resources in a changing climate and help reduce its effects, such as increased

Question and Answer 19a. and 19b. (23 March 1981).

³ Bureau or office guidance may provide additional direction on determining or assessing the appropriateness of mitigation measures.

flooding or drought, then they should be analyzed in anticipation of projected meteorological conditions that are reasonably foreseeable, to ensure mitigation durability and improve resource resiliency.

Through the NEPA process, bureaus and offices should document their consideration of all reasonable mitigation measures for the proposed action being evaluated, even if implementation of those measures is outside the areas of potential effect and/or jurisdiction of the lead or cooperating agencies.⁴ The identification of potential mitigation measures serves to alert the public, and other agencies and officials who could have the authority to implement or require implementation of the measures being evaluated. If appropriate to a particular NEPA process, EISs and EAs may include discussion of mitigation that another entity has committed to implement—even though the mitigation is outside the bureau or office’s authority. To the extent known, information to include could consist of the process, steps, etc., needed for such mitigation to be realized and the time period expected for implementation. In some cases it may be appropriate to reflect the effect of the other entity’s mitigation in the NEPA analysis if it is highly likely to be implemented. However, the NEPA analysis should also reflect the effect of the bureau’s or office’s proposed mitigation alone on which the bureau or office is relying in making a decision, without another entity’s mitigation. Any mitigation commitment where the bureau or office does not have implementation authority or responsibility should be described in the NEPA documentation with a clear notation that the bureau or office is not responsible for the implementation commitment. In this way, it is transparent that the bureau or office decision is not relying upon mitigation whose authorization is outside that bureau’s or office’s jurisdiction.

4. Considering and Determining Mitigation Alternatives and Commitments

When the proposed action is anticipated to result in adverse impacts, and reasonable mitigation measures are not already design elements of the proposed action, the agency must consider reasonable mitigation measures. CEQ has clarified that, “[a]ll relevant, reasonable mitigation measures that could improve the project are to be identified, even if they are outside the jurisdiction of the lead agency or the cooperating agencies, and thus would not be committed as part of the [Records of Decision] RODs of these agencies.”⁵

While other bureau or office specific authorities and guidance could be applicable, some factors in identifying mitigation to evaluate may include (other factors may also be relevant for any given proposed action):

- the relative importance, scarcity, sensitivity, or otherwise suitability to achieve established bureau or office goals of the resource adversely impacted;
- degree of harm to the resource anticipated to result from the proposed action;

⁴ CEQ memorandum [Appropriate Use of Mitigation and Monitoring and Clarifying the Appropriate Use of Mitigated Findings of No Significant Impact](#) (January 14, 2011).

⁵ Although specific to RODs, CEQ’s [NEPA’s Forty Most Asked Questions](#), #19b, should be applied to all relevant NEPA determinations and associated decision documents.

- ability of the proposed mitigation to address the adverse impacts (e.g. effectiveness);
- reasonableness of the mitigation (see above); and
- cost in relation to the expected benefit.

Consistent approaches to evaluating mitigation should be established to ensure predictability and transparency. Factors in considering particular mitigation measures may include, but are not limited to, comparison of the adverse impact with the mitigation benefit and the extent to which implementing the mitigation is within the legal, financial, and resource authorities of the bureau or office and helps to meet bureau or office mission objectives while complying with other environmental laws and regulations.

For compensatory mitigation, “[i]t is important to ensure that the mitigation measures required under different forms of compensatory mitigation actually offset the impacts of the authorized project—that is, ensure that the offsets are comparable to the impacts.”⁶ Application of the [600 DM 6.7](#) Equivalency Principles to proposals for compensatory mitigation measures to address residual adverse impacts should be addressed in the NEPA documentation.

All mitigation committed to be implemented as part of the proposed action or its approval should be reasonably expected to be implemented. Factors in considering whether mitigation is reasonably expected to be performed include: bureau or office authority to oversee, conduct, or otherwise ensure its implementation; and bureau or office expectation that funding, resources, and/or approval conditions provide sufficient means to adequately achieve the mitigation.

5. Decision Documents and “Mitigated FONSI”

Bureau and office mitigation measures selected for mitigating the adverse impacts of the selected action alternative should be documented in the appropriate decision document, such as a ROD, and any related permit or other approval.

When preparing EAs, consideration of mitigation measures may include those that mitigate for potentially significant adverse impacts of proposed actions that would otherwise require the preparation of an EIS. This use of mitigation could allow bureaus and offices to comply with NEPA by issuing an EA and a Finding of No Significant Impact (FONSI) or “mitigated FONSI” based on the certainty that the mitigation supporting the FONSI is implemented. To have certainty, bureaus and offices should only rely on mitigation measures that they can carry out, or ensure are carried out. Mitigation commitments needed to lower the level of adverse impacts to less than significant, so as to avoid the necessity of development of an EIS, should be clearly described in the EA and mitigated FONSI document and in relevant decision documents related to the selected action alternative. For mitigated FONSI it is important to ensure

⁶ [A Strategy for Improving the Mitigation Policies and Practices of The Department of the Interior: A Report to The Secretary of the Interior From The Energy and Climate Change Task Force](#) (April 2014), p. 3.

that mitigation is implemented if needed to lower the level of adverse impacts to less than potentially significant, and if necessary includes monitoring.

6. Implementation and Effectiveness of Mitigation

Mitigation measures included as a component of the selected action alternative considered in the NEPA analysis and committed to in the decision are accomplished through bureau and office program management authorities. As part of implementing the decision, bureaus and offices are to “include appropriate conditions in grants, permits or other approvals and condition funding of actions on mitigation.”⁷ Ensuring mitigation is accomplished is the responsibility of each bureau or office regardless of the type of action and supporting NEPA review and regardless of what entity will implement the mitigation measures: a bureau or office, project proponent or applicant, and/or third party. Bureaus and offices should ensure that mitigation commitments are implemented as described in the NEPA documentation and in the decision. Bureau or office decision documents should identify the specific internal processes established to ensure that mitigation commitments made on the basis of the NEPA process are enforced, and that relevant funding, permitting, or other agency approvals and decisions are made conditional on performance of applicable mitigation commitments.

Bureaus and offices “may provide for monitoring to assure that their decisions are carried out and should do so in important cases” ([40 CFR 1505.3](#)). Mitigation measures should be durable and, where appropriate, include monitoring and adaptive management as elements of the mitigation itself, to ensure these measures meet their intended objectives. In general, bureaus and offices should apply professional judgment and the rule of reason when identifying mitigation that warrants inclusion of a monitoring element, and the type and extent of appropriate monitoring given the potential degree of adverse impacts. Monitoring is particularly important in the context of proposed actions that involve an adaptive management approach to resource management.

Typically, monitoring involves a commitment of personnel and other resources by one or more parties involved in carrying out the mitigation and should be commensurate with the degree of uncertainty concerning implementation and/or the effectiveness of the mitigation. The following questions, with any relevant bureau or office guidance, might assist in determining mitigation monitoring needs:

- Would significant adverse impacts be likely to occur in the near-term that could be remedied to avoid substantial on-going adverse impacts if monitoring was performed?
- Would the monitoring both provide information to determine that mitigation committed to by the bureau or office decision was not being implemented and assist in determining a course of action to rectify a failure of mitigation?
- What are the human health and safety or legal implications of mitigation either not being implemented or not being effectively implemented?

⁷ [40 CFR 1505.3\(a\)-\(b\)](#).

- Is this mitigation necessary to substantially achieve the mitigation commitments made in the document or support a mitigated FONSI?

If monitoring is deemed warranted, bureaus and offices should provide public access to mitigation monitoring information to the extent feasible, commensurate with the importance of the mitigation monitoring, and as required by the Freedom of Information Act. In some circumstances, the public or other entities, such as non-governmental organizations, might contribute insights on mitigation activities and/or assist with monitoring through public-private partnership programs or other agreements, where appropriate. The NEPA process should be used to facilitate public participation in determining mitigation and monitoring activities.

When mitigation is not being implemented as anticipated and adverse environmental consequences cannot be corrected, or mitigation has been implemented but failed to achieve its intended outcome (e.g., unknown or new conditions not already addressed in previous decisions causes unintended and undesirable effects), then consideration of other or additional mitigation options may be warranted. The availability of such options depends on the nature of the agency action and may require further NEPA analysis in support of a change in the authorized bureau or office action. Situations in which to consider altering mitigation measures depend on specific circumstances and whether factors such as lack of funding or potential failure of the mitigation were disclosed or analyzed as a possibility in the NEPA process, whether an adaptive management mitigation approach is being used, or whether a bureau or office decision remains to be made regarding the action.

If a substantial mitigation measure is not implemented and the environmental effects cannot be reasonably corrected, and additional measures available for approval cannot reasonably be taken or will not be effective to achieve desired outcomes, then a determination on whether to make changes to the selected alternative is necessary. For example, it might be important to restore the environment to a pre-action condition, through decision-making supported by additional environmental review given the new circumstances and the new proposed restoration action. When it is determined that changes to the selected action could be beneficial and enable adaptive management of mitigation measures ([43 CFR 46.145](#), [ESM 13-11](#)) to address remaining adverse impacts from the action, and that changes to the action would be timely and provide applicable durability, then additional reasonable mitigation measures should be proposed for implementation and evaluated through the NEPA process. Bureaus and offices should consult the Office of the Solicitor and the Office of Environmental Policy and Compliance in these situations.

Non-implemented or non-effective mitigation commitments are of particular concern for actions approved through RODs where there are significant environmental impacts and in the case of actions subject to “mitigated FONSI” where the mitigation is relied upon to reduce the level of adverse impacts below the significance threshold that supports a FONSI. In situations where there is no remaining bureau or office action and the mitigation has not been substantially implemented or effectively implemented, bureaus

and offices should consult the Office of the Solicitor and the Office of Environmental Policy and Compliance regarding the program implications of such failure of mitigation.

This memorandum is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by a party against the United States, its departments, agencies, or entities, its officers, employees, or agents, or any other person. Additionally, nothing in this guidance is intended to affect the authority and responsibility of the United States Department of Justice with respect to the conduct of litigation on behalf of the United States.