



# NEPA Analysis Guidance Manual

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## INTRODUCTION

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This booklet serves as a quick reference guide for users of the Army's NEPA Analysis Guidance Manual. It contains an introduction to the three levels of analysis to evaluate resources, followed by the quick look questions for the fourteen valued environmental components (VECs) discussed in detail in the manual.

Army NEPA practitioners can use this booklet as a first step when NEPA is triggered. By reviewing the quick look questions, a targeted analysis of direct, indirect and detailed cumulative effects can be completed focusing only on the VECs which have the potential to be impacted. This will save time which is crucial when completing NEPA requirements for a mission-critical project.

## NEPA ANALYSIS

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The level of NEPA analysis is based on Quick Look questions which were initially developed to easily screen subject VECs and ascertain if detailed cumulative effects analysis (CEA) is justified. If the answers to the Quick Look questions imply that the likelihood of significant cumulative impacts is quite small, no further analysis is necessary. However, in practice, many of these questions cannot be readily answered, and more detailed attention is required to address potential effects, using a second level analysis (Analysis and Discussion). Issues that leave definite, potentially significant incremental impacts require more rigorous, analytical analysis (Detailed Analysis).

**The "Quick Look" Level** – If the answers indicate that likely impacts are quite small or can be mitigated and will unlikely contribute to significant direct or indirect impacts on the VEC, an EA-level of documentation is required. This "hard look" need not be extensive or costly; and (per 32 CFR 651) can be quite brief.

**The “Analysis and Discussion” Level** – Additional analyses may be required to thoroughly answer the questions, and should be more thoroughly documented, again at the EA-level of analysis “...in proportion to the nature and severity of the issues addressed; and they should focus on those issues that interest the decision maker and the public” (from 32 CFR 651).

**The “Detailed Analysis” Level** – If the EA-level analyses identify any direct or indirect effects that cannot be mitigated or could contribute to cumulative effects, a more-rigorous NEPA analysis is required and should be evaluated at an EIS-level of analysis. The most detailed level of analysis does not automatically trigger the need for an EIS, but the likelihood of significant effects is greatly increased. The eventual need for an EIS is still determined though the EA process, as the significance of potential impacts is determined.

## 4.1 AIR QUALITY

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Effects on ambient air quality are a major issue of concern for Army installations. This is demonstrated in extensive air quality management requirements associated with the Clean Air Act. “Quick look” questions can be used to determine the need to address the direct and indirect effects of a proposed action on ambient air quality. In addition, they can be used to determine if cumulative effects also need to be considered. Key Army program management components include, but are not limited to, identifying sources, types, and quantities of pollutant emissions; complying with permit requirements; and conducting conformity determinations.

- Is the installation located completely, or partially, in a designated non-attainment area or maintenance area relative to compliance with ambient air quality standards?
- Will the proposed action emit a criteria type of pollutant and/or hazardous air pollutants during its construction and/or operational phase?
- Will such emissions exceed “de minimus” standards, as designated in federal or state air quality regulations?
- Are there any sensitive receptors of air pollutant effects associated with the installation (examples of such receptors include forests, agricultural crops, threatened or endangered plant or animal species, and human beings with breathing difficulties or other respiratory illnesses)?
- Are there wide variations in the monthly and/or seasonal patterns of atmospheric dispersion conditions at the installation? Within the last five years, has the installation been subject to Notices of Violations (NOVs) or fines relative to Clean Air Act requirements?
- Are there any concerns that federal and state source-oriented permits may not be up to date, and are there any specified conditions not being met?
- Is additional cumulative effects analysis needed?

## 4.2 AIRSPACE RESOURCES

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Airspace is defined in vertical and horizontal dimensions, and by time; a finite resource that must be managed to insure equitable allocation among commercial, general aviation, and military needs. Quick Look questions can be used to determine the need to address the direct and indirect effects of a proposed action on airspace resources; in addition, they can be used to determine if cumulative effects also need to be considered. These questions were developed in a CEA field study at Fort Wainwright, Alaska.

- Assuming that airspace designations (e.g., special use airspace, military operations areas, military training routes, etc.) have been previously established for the installation, are these airspaces currently subject to over utilization?
- Are public concerns about airspace usage and environmental consequences (e.g., strikes on migratory birds) being routinely expressed?
- Are there non-military uses of the current airspace, and are conflicts being articulated?
- Will the proposed action cause increased usage of existing airspace, and will such usage cause over utilization?
- Are future actions by non-military and other military entities expected, and would they cause impacts on airspace resources?
- Will the proposed action require new airspace designations or expansions in existing airspace?
- Are the current airspaces over utilized?
- Will the proposed action require new airspace designations?
- Is additional cumulative effects analysis needed?

## 4.3 CULTURAL RESOURCES – HISTORIC PROPERTIES

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Some questions can help determine whether a cultural resource is a source or concern. Answers can determine if a building is historic, or has other cultural resource implications. If so, any actions must comply with Secretary of Interior Standards for Rehabilitation (per the National Historic Preservation Act of 1966, as amended), and mitigation must comply with standards of the Historic American Buildings Survey. “Quick Look” questions can be used to determine the need to address impacts on cultural resources via the Section 106 of the National Historic Preservation Act (NHPA), including the need to consider cumulative effects. These questions were developed in a CEA field study at Fort Wainwright, Alaska.

- Is there an inventory of historic properties (buildings)?
- Is the building 50 years of age or older?
- Is the building eligible to be on the National Register?
- Is the building included in a Programmatic Agreement or Memorandum of Agreement (MOA) or Memorandum of Understanding (MOU) that would govern work items (repair, replace, modernize, demolish) in the building?
- Is the building a contributing resource in a National Register eligible or listed Historic District or Cultural Landscape?
- Is the building a National Historic Landmark or located in a National Historic Landmark District?
- Is the building located near or in the view shed of a National Register eligible or listed Historic Property, Historic District, Cultural Landscape, or archaeological site?
- Is the building located on or near a National Register eligible or listed archaeological site?
- Is the building located in or near a National Historic Preservation Act eligible Native American traditional cultural property site, sacred site (American Indian Religious Freedom Act), or Native American burial area?



- Has the area been surveyed for cultural resources?
- Are prehistoric sites present?
- Have these sites been evaluated for National Register eligibility?  
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- Are any sites eligible for listing on the National Register?
- Are the sites contributing resources to an eligible or listed District or Cultural Landscape?
- Is the project located in or near a Native American cemetery, traditional cultural property or sacred site?
- Is an additional cumulative effects analysis needed?

## 4.3 CULTURAL RESOURCES – ARCHAEOLOGICAL RESOURCES

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An archaeological resource includes any material remains of past human life or activities that are of archaeological interest. This includes pottery, basketry, bottles, weapons, weapon projectiles, tools, structures or portions of structures, pit houses, rock paintings, rock carvings, intaglios, graves, human skeletal material, or any portion or piece of any of the aforementioned.

- Has the area of the proposed project been surveyed for archaeological resources?
- Are there prehistoric or historic sites present in the area?
- Have these sites been studied/evaluated?
- Is the site 50 years of age or older?
- Is the site eligible for or on the National Register?
- Is the site associated with a significant event?
- Is the site a contributing resource in a National Register eligible or listed Historic District or Cultural Landscape?
- Is the site located in or near a Native American cemetery, traditional cultural property or sacred site?
- Is there an MOA in place that applies to the proposed project area?

## 4.3 CULTURAL RESOURCES – NATIVE AMERICAN RESOURCES

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The intent of the Native American Graves Protection and Repatriation Act (NAGPRA) is to protect, identify proper ownership, and ensure the rightful disposition of Native American human remains and cultural objects discovered on federal or tribal lands. NAGPRA requires that certain procedures be followed when there is an intentional excavation or inadvertent discovery of Native American human remains and cultural objects (USC, 1990). The NAGPRA regulations (43 CFR 10) develop a systematic process for determining the rights of lineal descendants and Native American tribes and Native Hawaiian organizations, to certain Native American human remains, funerary objects, sacred objects, or objects of cultural patrimony, with which they are affiliated.

- Has the installation identified all Federally-recognized Indian tribes or Native Hawaiian organizations that are culturally affiliated with the area?
- Has the area of the proposed action been surveyed for funerary objects, sacred sites, or objects of cultural patrimony (objects of ongoing historical, traditional, or cultural importance central to the Native American tribe or Native Hawaiian organization)?
- Are the resources mentioned above present in the area of the proposed action?
- Have these resources been studied and summaries of these collections prepared?
- Have these summaries been provided to lineal descendants and culturally affiliated Native American tribes or Native Hawaiian organizations that may wish to request repatriation of such objects?
- Will the resources that are found within the area of potential effect (APE) require consultation with Native American tribes?
- Is it likely that unevaluated resources will be found in the area of proposed action?
- Are activities (construction, maintenance, or use of the range) conducted as part of the proposed action likely to have an adverse affect on the integrity of the resource?
- Will the proposed action have the likelihood of altering Native American access to any identified sacred sites?

## 4.4 NOISE EFFECTS

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Noise effects are generated by a variety of Army actions, some with analogies in the civilian community and some without. The Army for example, uses fixed-wing aircraft (planes) and rotary wing aircraft (helicopters), and engages a variety of heavy equipment in the performance of the Army mission. These are, generally speaking, the same types of impacts associated with similar civilian activities; from automobiles, trucks, trains, and other common noise sources. Quick Look questions can be used to determine the need to address the direct and indirect effects of a proposed action on noise and, in addition, they can be used to determine if cumulative effects also need to be considered.

- Will the proposed action create noise zones (Zones 1, 2, or 3) that will extend off the installation?
- Does the proposed action increase the level or intensity of military activity?
- Does the proposed action include the use of noisier equipment (or munitions) than that historically used at the proposed site(s)?
- Are there any (1) human populations or (2) populations of sensitive animal species within the noise zones?
- Has the adjacent civilian community (nearest the location of the proposed action) complained about any noise associated with past or on-going activities?
- Are there local or regional controversies over noise levels at the installation that would indicate the need for CEA?
- Is additional cumulative effects analysis needed?

## 4.5 SOIL EROSION EFFECTS

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Soil erosion, a natural process, is accelerated by many military and civilian activities within a given landscape. Soil erosion, and other associated impacts, undermine the ability of the natural environment to support the Army mission; and once the erosion process has started, the direct effects usually cannot be reversed. Quick Look questions can be used to determine the need to address the direct and indirect effects of a proposed action on soil erosion; in addition, they can be used to determine if cumulative effects also need to be considered.

- Does the proposed action involve a new range or maneuver area, or does it extend beyond the existing boundaries of either?
- Is the proposed site effectively managed as part of an installation Integrated Training Area Management program?
- Does the proposed action increase the level of intensity of military activity at the site? Is the site characterized by “gullies” and or/ poor vegetative cover on the site?
- Are there sensitive downstream land uses, and has sedimentation/ pollution been a downstream issue in the past?
- Will permafrost be significantly impacted?
- Is additional cumulative effects analysis needed?

## 4.6 THREATENED AND ENDANGERED SPECIES

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The Sikes Act (USC, 1960) and the Endangered Species Act (ESA) (USC, 1973) are important mechanisms for the management and conservation of natural resources on military lands. The installation training mission can be tied directly to the protection of listed plant and animal species, as well as the maintenance of ecosystems upon which they and the mission are dependent. If the army determines that an action may affect a listed species or critical habitat, then Army must consult either formally or informally with USFWS or NOAA-Fisheries. Documents that can be used to address CEQ's 11-step CEA process include INRMPs, ESMCs, Biological Assessments, Biological Opinions, Case Studies, and the Endangered Species Consultation Handbook.

- Has the installation been surveyed for the presence of federal- or state-listed Threatened or Endangered species (TES)?
- Did the survey reveal presence of any federal- or state-listed TES?
- Are there any proposed species that may be placed on the TES list in the future?
- If TES have been found, has the US Fish & Wildlife Service (USFWS) been consulted?
- Does the installation have an Integrated Natural Resources Management Plan (INRMP)?
- Does the installation have an Endangered Species Management Plan (ESMP)?
- What is the viability, size, and distribution of the TES?
- What pertinent factors adversely affect the TES?
- Is the critical habitat within or adjacent to the proposed project site?
- Would the actions involved in construction, operation, and maintenance of the proposed project affect TES or its habitat?
- What are the immediate and long-term threats to any TES and its habitat according to the Biological Assessment (BA) and/or the ESMP?
- Does the USFWS agree, in writing, with the BA and its determination of jeopardy?
- Does the BA find that the TES could potentially be in jeopardy from

## 4.7 WETLAND RESOURCES

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“Wetlands are areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal conditions do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.” Given the broad nature of these definitions, numerous classifications (and types) of wetlands have been defined. A large number wetland types can be identified across all Army installations, and several types are often found on individual installations. “Quick look” questions can be used to determine the need to address the direct and indirect effects of a proposed action on wetland resources; in addition, they can be used to determine if cumulative effects also need to be considered. These questions were developed in a CEA field study at Fort Wainwright, Alaska.

- Assuming that the locations, types, and sizes of wetlands on the installation have been documented, are these wetland resources now subject to decreases in size and functioning due to activities on the installation?
- Are threatened or endangered species associated with any of the wetlands resources in the vicinity of potential installation proposed actions?
- Are any wetlands in the vicinity of potential installation proposed actions considered by resource agencies to be particularly significant from an ecological perspective?
- Will the potential installation proposed actions cause losses in the sizes, and/or decreases in the functioning, of local wetlands resources?
- Have previous actions in the vicinity of the potential installation proposed actions that would impact such resources?
- Would the proposed action result in a significant impact to wetlands?
- Is additional cumulative effects analysis needed?

## 4.8 WATER RESOURCES MANAGEMENT

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Water resources are inclusive of surface water like that in streams, rivers, lakes, and estuaries, groundwater, wetlands, and floodplains. Water resources management requirements are typically derived from the Clean Water Act (CWA), Safe Drinking Water Act (SDWA), and water rights laws that vary from state to state. “Quick Look questions can be used to determine the need to address the direct and indirect effects of a proposed action on water resources; in addition, they can be used to determine if cumulative effects also need to be considered.

- Is the installation located completely, or partially, in a designated sole source aquifer area, and/or have local surface waters been designated as having water quality concerns relative to compliance with water quality standards or criteria?
- During its construction and/or operational phase, will the proposed action exhibit point and/or non point emissions of water pollutants? Will such emissions exceed standards as designated in federal or state water quality regulations or permits?
- Is the installation located in an area where the available surface and/or groundwater supplies are already stressed due to excessive usage and/or drought conditions?
- Will the water requirements for the proposed action be large in relation to the available surface and/or groundwater supplies?
- Are there wide variations in the monthly and/or seasonal patterns of water usage at the installation?
- Are there any sensitive receptors of water pollutant effects associated with the installation? (Examples of such receptors include aquatic ecological resources, threatened or endangered plant or animal species, and excessive human health risk levels.)
- Within the last 5 years, has the installation been subject to NOV or fines relative to Safe Drinking Water Act or Clean Water Act permit requirements? Are there any concerns that federal and state source-oriented permits may not be up to date, and are there any specified conditions not being met?



## 4.9 FACILITIES

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The Facility VEC encompasses all aspects of Army real property management. Army real property includes lands, facilities, and infrastructure. This includes land (and interests in land), leaseholds, standing timber, buildings, improvements, and appurtenances. Facilities are the buildings, structures, and other improvements to support the Army's mission. Infrastructure is the combination of supporting systems that enable the use of this land and resident facilities. "Quick look" questions can be used to determine the need to address the direct and indirect effects of a proposed action on facilities; and, in addition, they can be used to determine if cumulative effects also need to be considered.

- Is the community undergoing rapid growth, or is the community seeing reductions in growth?
- Does the proposed action add to that trend, or does it reduce (mitigate) that trend?
- Are political stresses evident over the use of community lands or services infrastructure?

## 4.10 SOCIOECONOMICS

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The principal mechanisms for Army socioeconomic effects are Army expenditures and population or employment changes. As the Army increases (or decreases) either expenditures or strength (military or civilian) at an Army installation, these are felt within the three basic components of the local economic region local businesses, local individuals, and local governments. "Quick look" questions can be used to determine the need to address the direct and indirect socioeconomic effects of a proposed action; and, in addition, they can be used to determine if cumulative effects also need to be considered.

- Is the community undergoing rapid growth, or is the community seeing reduction in growth?
- Does the proposed action add to that trend, or does it reduce (mitigate) that trend?
- Is additional cumulative effects analysis needed?

## 4.11 ENERGY

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Energy consumption is perhaps the major infrastructure and budgetary challenge to Army leadership, encompassing both domestic (stateside) challenges and both garrison and tactical challenges abroad. “Quick look” questions can be used to determine the need to address the direct and indirect effects of a proposed action on energy; and, in addition, they can be used to determine if cumulative effects also need to be considered.

- Have energy prices in the region been rising?
- Does the proposed action expand installation demands for regional energy?
- Is additional cumulative effects analysis needed?

## 4.12 LAND USE

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Land use refers to the planned development of property to achieve its highest and best use and to ensure compatibility among adjacent uses. “Quick look” questions can be used to determine the need to address the direct and indirect effects of a proposed action on land use; in addition, they can be used to determine if cumulative effects also need to be considered.

- Is the Real Property Master Plan (RPMP) for the installation more than five to 10 years old and, if so, is the RPMP subject to current updating/modification efforts?
- Are Land Use Controls utilized within the RPMP?
- Is there extensive usage of on-post lands for recreational (e.g., hunting and/or fishing) purposes?
- Has a recent (last five to 10 years) Joint Land Use Study (JLUS) been conducted via a collaborative effort between the installation and nearby towns and cities?
- Is there continuing cooperation and collaboration regarding land usage between the installation and local and regional governmental agencies and other stakeholder groups?
- Are there any historical or current conflicts between the installation and various governmental agencies, and/or stakeholder groups relative to on-post or off-post land usage?
- Is there any evidence of current or anticipated encroachment or urban sprawl that might have implications relative to on-post land usage?
- Will the proposed action(s) require on-post land use classification changes that exceed plus or minus five percent? (See Table 4.12-1 in the Guidance Manual for Army land use classifications.)
- Will the proposed action(s) require land acquisitions and/or disposal of excess lands?
- Is there an existing sustainability program for the installation, and does it address sustainability considerations in site selections?
- Does the installation currently have contiguous buffer zones or conservation easements?

## 4.13 HAZARDOUS MATERIALS/HAZARDOUS WASTES

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The Hazardous Materials/Hazardous Waste (HM/HW) VEC deals with the use of hazardous substances in households, maintenance of facilities and weapon systems, and training and the generation of hazardous wastes through disposal of unused or contaminated material, air and water pollution control (for example, paint booth filters or wastewater sludge), cleanup of spills, and remediation of historic soil and groundwater contamination. "Quick look" questions can be used to determine the need to address the direct and indirect effects of a proposed action on hazardous materials/hazardous waste; and, in addition, they can be used to determine if cumulative effects also need to be considered.

- Will the proposed action occur on an existing installation?
- Are all aspects of the proposed action covered by a Spill Prevention Control and Countermeasure Plan?
- Have project proponents taken steps to eliminate the use and potential release of hazardous materials?
- Are there any existing regional concerns related to chemical contamination of ground or surface waters?
- Are the surrounding counties considered "attainment areas" under provisions of the Clean Air Act?
- Is additional cumulative effects analysis needed?

## 4.14 TRAFFIC AND TRANSPORTATION SYSTEMS

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Transportation systems refer to organized means of moving people and commodities. Principal transportation systems include commercial air carriers, waterway and maritime shipping, railroads, and trucking. Movement of people by privately owned vehicles on a local or regional scale is related to traffic and circulation. "Quick look" questions can be used to determine the need to address the direct and indirect effects of a proposed action on traffic and the transportation system; in addition, they can be used to determine if cumulative effects also need to be considered.

- Is transportation data and the transportation plan for the installation more than five to 10 years old and, if so, is the plan subject to current updating/modification efforts?
- Is there a transportation improvement program for the installation and, if so, will current and anticipated traffic concerns be resolved upon completion of the plan?
- Has a recent (last five to 10 years) regional transportation study been conducted via a collaborative effort between the installation and nearby towns and cities?
- Are there any historical or current conflicts between the installation and various governmental agencies, and/or stakeholder groups, relative to on-post or off-post traffic-related concerns?
- Is there any evidence of current or anticipated encroachment or rapid urban development that might have implications relative to the traffic and transportation system VEC?
- Will the proposed action(s) over the planning horizon cause increases of more than five percent to on-post and/or off-post traffic levels?



